How do medical students' perspectives of socially accountable professionalism inform an integrated socioscience pedagogy?

By

Kingsley James Whittenbury

MB.BS, Grad.Cert.(Family Planning), Grad.Cert.Ed.(Higher Ed.)

Thesis
Submitted to Flinders University
for the degree of

Doctor of Philosophy

Medicine and Public Health
June 2021

CONTENTS

LIST OF FIGURES

LIST OF TABLES

Index of Acronyms

AHW	Aboriginal Health Worker
ATSI	Aboriginal & Torres Strait Islander
BPM	Biopsychosocial model of health
CC	Critical Consciousness
CPD	Continuing Professional Development
F-i-F	First in Family
HE	Higher Education
HPE	Health Professions Education
KM	Knowledge Management
LCT	Legitimation Code Theory
LGBQTI	Lesbian, Gay, Bisexual, Queer, Transsexual, Intersex
NCD	Non-Communicable Disease
PHC	Primary Health Care
SA	Social Accountability
SDE	Social Determinants of Equity
SDH	Social Determinants of Health
SES	Socio-economic status
WHO	World Health Organization
WP	Widening participation
UHC	Universal Health Care insurance
UK	United Kingdom
US	United States of America

SUMMARY

This thesis reports a mixed methods study of the social identities, perceptions and discourses that medical student participants, at the start and completion of basic medical training, applied to constructs of social justice and social accountability in health care. The study question asks: how do diverse medical students perceive the value of social justice to medical practice; and how can students' critical capabilities be harnessed into socially accountable professional practices? Results inform a novel, socioscience pedagogy.

The study sought to compare First and Final Years at two South Australian medical schools; graduates at Flinders University and undergraduates at Adelaide University. Flinders, but not Adelaide, belongs to a network of medical schools supporting social equity actions. Other comparisons were based on participant identity: socio-economic and equity status; and insider/ outsider status to traditional professionalism.

Participants' perceptions of social justice as a requirement of the Charter of Medical Professionalism (2002) are theorised to inform a new professional contract, to enact undefined practices of social accountability. The Charter implies need for an outcomes-based pedagogy that effectively integrates humanism and bio-science in medical mindsets; and values societal improvement above physician self-interest.

A gap in the higher education literature was students' transformation to a social justice perspective of society. Past studies indicated female and ethnic minority students are marginalised from medical culture. Student-led curricula of prosocial medical student groups were hypothesised to protect members from socialisation to a 'hidden' curriculum that subverts students' humanist intentions, capabilities, well-being, and training choices.

A multi-theory framework primarily employed Bourdieu's theory of practice and Sen's capability theory to the study the empowerment of prosocial professionalism. Methodology posed critical questions of social inequity in semi-structured interviews; multiple choice questions sought demographic data and 'critical' logic. The study attracted forty participants with high diversity of social identities, over two years of data collection. Participants' equity identities were sought from observation and interview, and calculated from demographic data collected in an online survey. Devalorised social equity identities were grouped as none,

one, or more than one (or intersectional); with outsider status to traditional medical professionalism assigned to those with marginalised identities.

Survey questions revealed strong general support for social justice learning and practices in medical education, and adequate knowledge of social determinants of health (SDH). Flinders participants held higher expectations of learning to act on the SDH than was taught. All Year groups correctly identified the main groups suffering health disadvantages in Australian society. Semi-structured interview questions tested conceptual acuity of the social 'health-illness dialectic' – perception of how social conditions 'get under the skin' to cause illness; and drew on the diverse learning contexts that students bring to medicine. Clinical questions involving sexuality, chronic illness, and Indigeneity were devised to engage participants' critical reasoning and ethical responsiveness to topics of social accountability.

Participants' discourses revealed variance in sociological knowledges and critical perceptions that can inform pedagogy for social accountability. Participants with intersectional identities and situated learning in contexts of social disadvantage displayed greater reflexivity on patients' circumstances; yet, those with a single equity identity signalled greater intention to practice in an area of health need. Year group and medical school differences were of secondary significance. Students' social equity identities conferred a sociological lens for health equity, but need capacitating; a finding that supports the WP agenda. Equity in health care was a threshold concept in all Year group cohorts; and health production concepts were poorly imagined. Non-critical discourses were rare, but revealed practices of didactic patient education and mis-recognition of the contextual realities of social stigma and external determinants of health. International Asian participants were more reflexive of the need to tailor health care to Indigenous population needs. 'Know-do gaps' included critical understanding of devalorised patient lifeworlds; advocacy training for practice of accountability to the SDH; and anxiety reduction related to expectations of intercultural care.

A knowledge management system and 'becoming to know' framework are recommended to guide an integrated socioscience pedagogy, informed by diverse sociological insights and Legitimation Code Theory. A biosemiotic paradigm of medical education may satisfy a comprehensive basis for professional reforms.

DECLARATION

I certify that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signed

Date 14/07/2020

ACKNOWLEDGEMENTS

I dedicate this study to the memory of Dr Simon Bridge; a courageous and exemplary primary health care physician, colleague and friend.

Prof Paul Ward provided supervision throughout the doctoral journey, initially as secondary supervisor, then primary. I thank him for his guidance, particularly with sociological theory, and his readiness to engage in discussion, written feedback and encouragement. Special thanks are owed to a sequence of primary supervisors; Prof Ray Peterson (Adelaide), Prof John McMillen (Flinders), and Prof David Hunter (Flinders).

At Flinders University, I thank medical education colleagues, and research students at the Prideaux Centre for Research in Health Professions Education, for valuable seminars, mentoring and camaraderie. I thank Associate Prof Ben Wadham for introducing me to the concept of reflexivity in educational sociology. At The University of Adelaide, special thanks are owed Dr Michelle Knight for generously agreeing to test my interview questions.

A number of colleagues that strongly influenced my clinical orientation to rural public health deserve my deep appreciation. They were Prof Fred Hollows, Prof Ernest Hunter, Prof Kerry Kirke, Dr Hillary King, Prof Sabina Knight, Dr John Thompson, Assoc Prof Mark Wenitong & Dr Barry Whittenbury. Prof Ted Cleary at The University of Adelaide Medical Education Unit, and Prof Jon Jureidini at The Women's and Children's Hospital in Adelaide, were valuable sounding boards for my pedagogic ideas regarding the scholarship of medical professionalism. Many Indigenous and non-Indigenous people, patients, students, physicians and friends across Australia were invaluable mentors along my career path.

I also benefitted from numerous thesis-related conversations and wish to recognise Prof Fran Baum, Dr Katherine Browne-Yung PhD, Dr Lisa Davies PhD, Dr Anne-Marie Murray PhD, academic and administrative staff, and doctoral students in the College of Medicine and Public Health and the Southgate Institute of Health Equity and Society at Flinders University. Prof Tara Brabazon and her HDR team are commended for their excellent organisation, communications, and equitable motivation of candidates along their doctorate journeys.

CHAPTER ONE: INTRODUCTION

1.0 The Charter of Medical Professionalism

This mixed methods study aligns my long-term interests in medicine, social justice, and the inculcation of 'medical professionalism' to students during their medical education. The study refers to an international Charter of Medical Professionalism, issued in 2002, that signalled a change in medical professional ethics to include actions of 'social justice' (ABIM Foundation 2002; ACP-ASIM; European Federation of Internal Medicine). An American-European venture, the 'Medical Professional Project' enjoined physician leaders of western medicine in the production of a global consensus statement for the new millennium.

Hereafter referred to as 'The Charter', this statement addressed the profession's concerns about a lack of humanism in the modern practice of medicine and called for greater *social accountability* (SA) in health care. The Charter presented an opportunity to re-emphasise professional roles, provide guidance for decision making, and re-calibrate societies' expectations of professional trust. It was a 're-statement of professional responsibility'; re-iterating *service to others* in counterpoint to a 'corporate mentality' (Sox 2002:243). In this assessment, the profession needed to make an ethical stance against external challenges within societies that maldistributed health; and to achieve global congruence of purpose. Feedback from professionals included widespread endorsement, and some disagreement based on ideological differences; as detailed in the Literature review [Chapter 3]. However, the pragmatism of physicians acting alone without health system support became evident. Health system dysfunction can effectively prevent physicians from acting in accordance with the Charter (Egener et al 2017). Looking to a business model, Egener et al (ibid) reported research by Kanter (2011) that claimed;

> an expressed commitment to social responsibility creates a buffer against uncertainty, evokes positive emotions, and stimulates motivation amongst employees
>
> (ibid:1092)

The Charter projects an eye to the future of the medical profession; to meet its social contract with society, and respond to dynamic changes in the ecology of human health during the ‘anthropocene’ era. Material consumption and production increased hugely during 20C, but left many in society bewildered by ‘future shock’: the instability inducing fear of an uncertain future (Fernández-Armesto 2019:356). New anxieties arose in response; among them solastalgia related to climate warming and environmental degradation; and need for adjustment to rapid technological changes, including losses of autonomy and privacy related to digital communications (ibid).

More sceptical views of The Charter regarded the medical enterprise a business model in pursuit of social capital to underwrite physicians’ enduring power and success. Yet, nearly *eighty percent* of variation in health outcomes are attributed to societal actions than to direct clinical care (Fried et al 2019). The Charter is positioned in the study as a discourse that is evaluated by ‘next generation’ physicians for perceived professional legitimacy of ‘social accountability’ (hereafter SA*)* to emerging practice needs.

The following segment of The Charter was shown to participants to read prior to interviews; to consider the formal wording of the SA concept and its meaning; and to orient them to the purpose of the study.

Charter of Medical Professionalism (ABIM Foundation 2002)

Principle of Social Justice

The medical profession must promote justice in the health care system, including the fair distribution of health care resources. Physicians should work actively to eliminate discrimination in health care, whether based on race, gender, socioeconomic status, ethnicity, religion, or any other social category.

A distinction can be drawn between two conceptions of medical ethics. The first refers to ethics applied in health care decisions (or bioethics). The second concept, a subject of this study, refers to the moral commitments of health care professions (Rhodes 2002). Each requires a different pedagogy to convey its philosophy, legal requirements, and logic of practice.

Prominent medical educators have reinforced the significance of ‘A Global Consensus on Social Accountability of Medical Schools’ (GCSA 2010) to elaborate the concept and its purposes. Charles Boelen (2018) called for commitment to SA from medical schools, restating the aim of medical education for SA; “to contribute to effective, equitable, and sustainable health system development” (:26). This concerted, globalised and historical effort planned to accomplish previously sporadic and uncoordinated reforms of health systems and medical education: to provide ‘health for all’ (WHO, UNICEF 1978). Although interpreted differently between nations, the catchcry inspired ‘an aspirational goal’ of equity or fairness in the distribution of health (Health for All 2008).

Implications of SA professionalism for medical education have been debated in the medical literature, enacted in innovative curricula, and evaluated in medical education programs. This thesis questions assumptions about differences in perceptions of these changes among medical students according to participants’ social identities, dispositions, Year level, and Medical School ethos; as outlined later in the study design. The thesis inquires, in effect, about the culture of a new professionalism movement in medical students’ meaning-making of social and global health needs. It also responds to a gap in the higher education (HE) literature that questions how *transformation* to a social justice ethos takes place [**Fig. 3.2**].

Complicating the inquiry is the signifying status of medicine in HE and society. While vocation and spiritual belief can drive altruistic (or prosocial) ambitions for public service, competition for entry to medicine can also reflect the esteemed status of medical science and physicians in modern societies. Entry can represent a means of enhancing social status and income by ‘outsiders’ to the professions; yet can serve to maintain and reproduce the capital advantages of students from privileged backgrounds. This aspect of the sociology of medical education is in tension with the sociology of health production; ironically increasing social inequality and health inequity within societies. Social advocacy actions to reduce health inequity are viewed as the moral solution that the health professions can and should instigate, by pedagogical means that remain uncertain.

The study question, formulated by a multi theory framework [Chapter 5] asks;

How do diverse medical students perceive the value of social justice to medical practice; and how can their critical capabilities be harnessed into socially accountable practices?

Cues to a learning theory that may inform a suitable pedagogy for social accountability, and a more sustainable medical professionalism, can be drawn from the study conclusions.

The ‘skill set’ medical educators are advised to develop, to promote SA in Continuing Professional Development (CPD) includes;

1. Advocacy of social issues affecting health,
2. Social relevance of medical practice - improving health outcomes,
3. Professional relevance of medical practice – in partnership with communities,
4. Maintaining trust and credibility with the public, free of medical industry obligations,
5. Assuring competence – maintaining and evaluating physicians’ CPD,
6. Focussing on the values of relevance, quality, cost effectiveness and equity

(Thompson & Davis 2008:34).

Experienced primary care educators recommend the following five steps for medical schools “to align their training with societal need” (Wen et al 2011:e12);

1. produce an explicit social mission
2. integrate community learning into the curriculum
3. emphasise primary health care
4. exchange free education for needs-based service
5. engage students in social accountability throughout their education.

[Specific terms such as *social justice*, *prosocial* and *equity* are defined and contextualised when familiarising the reader with the background of the study.]

This shift in goals for CPD requires our graduates become more community focussed, and open to a critical, sociological understanding of health production in our rapidly changing, multicultural, and increasingly inter-connected modern societies. This shift in CPD applies a problematising lens that poses three core questions. The first is *philosophical* (What are the purposes of the health system?); the second, *moral* (What values should guide professional reforms?); and third, *pragmatic* (How can health outcomes be improved in ways that the existing paradigm of health care has failed to achieve?).

A central interest of this study relates to the potential impact on professionalism, and the culture of health systems, of the identities and professional discourses of participants from diverse, non-traditional backgrounds; students entering medicine the result of HE policies of 'widening participation' (WP). The goals of widening the entry criteria to study medicine, from academic merit alone, aimed to produce physicians that 'match what [pluralistic] societies need' (Aretz 2011:608). The 'Widening Participation Agenda' (WPA) was projected to improve trust and access to health services among underserved and stigmatised groups;

enacting the professional competencies of *patient-centred* care and *equity* (Hutchings & Rapport 2012). Studies reporting outcomes of the modern WP agenda, and historical reforms that reproduced a hegemonic culture of professionalism via medical education, are outlined in Chapter 2.

To begin, I contextualise the ‘social accountability’ movement in contemporary societal settings, where studies locate evidence of unequal health outcomes.

1.1 Societal contexts of health production

Recent rapid societal changes have posed challenges to pre-existing hierarchies of power. Open to contest and (uneven) change, are historical norms of social relations related to gender, race or colour, religion, sexuality, gender and (dis)ability; macro relations of sovereignty, ownership, access, industry and economy; and, stewardship of species and natural environs (Barry 2009). Human progress, as well as unfair inequalities in the social and environmental conditions of living that affect quality of life and longevity, continued into the new millennium. Globalising forces, including climate change and novel epidemics added complexity and uncertainty to healthy futures for exposed populations; while the global capitalist system avoided any vision of the social good, making *individuals* responsible for adaptation to stressors created in the body politic (Purser 2019).

Reducing these complex changes into a framework for teaching medical professionalism could be a mammoth task. Yet, moral reasoning by health students to elucidate matters of social injustice relevant to health care and health production may benefit from invocation of ‘sociological imagination’ (Mills 1959) of the patient’s *lifeworld* - the material conditions of everyday life (Williams & Popay 2001:31). Sociological imagination refers to an ability to gain insight to the machinations of societies; a ‘lens’ or ‘gaze’ by which sociologists study social life. It can elicit awareness of *how* social status differences between individuals or groups; coupled with constraints imposed by policies, ideologies and institutions; shape societies and reproduce inequalities that maldistribute wealth, health, and survival (Therborn 2013). This skill set, termed *critical literacy*, as ‘literacy’ suggests, involves learning the grammar that communicates social inequity as a lived experience.

A ‘critical’ sociological lens can reduce health determination to an equilibrium of power; between freedom of human *agency* and the fairness of *structural* constraints. However, discerning one’s social position between these states is a form of critical literacy that is not universal. Many oppressed peoples throughout the world remain *unconscious* of how their freedom to lead a life of value is limited by unfair social arrangements: indeed, some may identify with their oppressors (Freire 1973). The freedom to act in one’s own best interests was considered, at minimum, to allow the individual the *capability* to act (Sen 1995). Yet, repeated use of rigid and indefensible social discriminators such as gender, race, rural origin and immigrant status, can create durable inequalities that have intergenerational effects on health (Tilley 1998; Little 2012). Agents that internalise an ideology of white dominance can remain unconscious or uncritical of its potential harms (Muzzin & Mickleborough 2013). Yet, a consciousness can develop in people, including students, sensitised by the moral emotions of compassion, empathy and justice that enables ‘recognition’ and rational ‘critique’ of the unfairness of social exclusion and inequalities. They may then comprehend the complexity of the problem and become *motivated to act* (Freire 1973; Mustakova-Possardt 2004; Kumagai & Lypson 2009; Santos 2007).

Clinical vignette – *misrecognition*

An example of misrecognition from the investigator's own clinical experience draws on the sociology of Indigeneity in 1970s Queensland society. Arriving at morning handover in the Emergency Department of a regional hospital, we were told the middle-aged Aboriginal man sleeping on a mattress on the floor of a cubicle was brought in by police during the night. He was found unconscious on the roadside, 'sleeping off a binge of alcohol'. His clinical observations were stable, and he could leave when he awoke. When examined he was unkempt in appearance, had sweet smelling breath, was dehydrated, and comatose. The main findings on finger prick blood testing was severe hyper-glycaemia and ketosis; and chest examination revealed a pneumonia. There was no evidence of alcohol ingestion. We surmised the man was an undiagnosed diabetic, possibly homeless, who had become ill. Assumptions about 'drunk Aboriginals' and 'blacks in trouble with police' likely informed the disempowering discourse that led to the night staff's failure of critical thinking, compassion, and routine investigation of this man's condition. Colonial history of dominance, conflict and displacement of Indigenous peoples continues as structural violence in Queensland society (Watson 2010).

1.2 Restoring humanism to medical professionalism

Early, when deciding the topic of research, I named it the CHAMP study; Critical Health and Medical Professionalism. In French, 'champ' means 'field' and was the term used by French sociologist Pierre Bourdieu (1993) to signify the broad contexts of cultural production and reproduction in society. Medicine in the health sector, and law, are two such *fields*. The study will be of interest primarily to educators of medical professionalism seeking to transform students' thinking about the value of the social context to health outcomes; and to inculcate responsibilities concordant with the profession's social contract. For prosocial (or altruistic) students 'becoming' the professional required by The Charter, professional validation rather than transformation may be required. Yet, when students' capabilities for socially accountable practice remain unrecognised and under-developed in the professional culture, their potential impacts on population health may be lost.

Participants in the study were students sourced from the Adelaide (undergraduate entry) and Flinders (postgraduate entry) medical schools. In particular, the study investigated First and Final Year medical student participants' perceptions of social justice as a component of professionalism in the contemporary context of social epidemiology of health inequalities; and contemporary understandings of social health production. While not the same cohorts, the study of First and Final Years at each school allows comparisons that may reveal a shift in prosocial intentions across a program, and clues to understanding why. This may include the influence of dialogical features of a school's professional culture on agency for prosocial medical practice. The influx of students of diverse social identities and backgrounds into a traditionally conservative profession, draws the investigator's interest to how participants' social identities may provide insights to dynamic societal conditions modulating health.

The forms of practice that arise from The Charter will inform an agreed set of *ethical* behaviours in the new professional *doxa* (or majority consensus). Gioia, Corley & Hamilton (2013) make this distinction;

> ethical behaviour can be defined as professional agreement regarding ethical behavior whereas moral behavior can be construed as adhering to some high standard of right and wrong.
>
> (:28).

The need for an integrative theory of medical professionalism is highlighted by past reforms that brought ‘scientism’ to medical education (Flexner; Freidson 1970). Reform essentially regulated medical discourses and professional reputation away from ‘quackery’. However, as with scientism, the discourse of social accountability

> runs the risk of hyper-segmentation and diffusion of the arguments surrounding roles and responsibilities of medical educators. There is an ironic parallel with the previous century’s clinical specialisation and fragmentation.
>
> (Woollard 2006:304)

Innovative medical education programs and ‘socially accountable’ medical schools were conceived; including at Flinders University of South Australia. South Australia has two major medical schools, Adelaide and Flinders, with different provenance and academic standing in the national and global order. Adelaide has a traditional medical program and provides a standard to compare Flinders’ SA innovation; for the purpose of studying medical students’ social justice perspectives.

In the absence of an integrative theory of medical professionalism to test lay (moral) and physician (ethical) perceptions of the practice required by The Charter, I resorted to my own experiences as a medical professional and educator to arbitrate a theoretical framework for inductive reasoning of the empirical data. Similarly, I used medical *phronesis* (or clinical argument) to construct a deductive process for collecting data; semi-structured interview questions, short answer and multi-choice questions [Appendices 4A-4F].

A mixed method analysis followed, to obtain theoretical propositions from shared concepts distributed in the dataset. Thematic analysis, by triangulation of qualitative and quantitative data, was synthesized and compared as participant *vignettes* [Chapter 8 and Appendix 9] to respond to the research question and produce Discussion [Chapter 12].

Study participants answered an online invitation seeking ‘your views about social justice in medicine.’ Observational, demographic, and interview data collated from First and Final year participants allowed comparative analysis of perspectives pre- and post- socialisation into the culture of their Medical School. Medical Schools were conceptualised as ‘situated’ by a set of four curricula (formal, informal, hidden and silent); each with discourses and epistemologies that may unequally empower students’ aspirations for prosocial practice. Features of the four curricula, like well-worn pathways to forms of medical practice, are fleshed out in more detail in the literature review [Chapter 3].

The broad aim of this thesis is to learn how diverse medical students conceptualise ‘social justice’ or ‘social accountability’ (SA) to the practice of medical care; knowledges of social health production students from diverse social positions bring to professional practice; and, how transformation to a social justice perspective of health takes place. It was postulated that paradigm change to greater values-based practice, one that strategises from a broader knowledge ecosystem (Jakubik 2011), requires transformative learning. The components of this cognitive skill set to SA phronesis of medical practice, are important to pedagogy for professional development. However, transformation can also rely on *capability* (Sen 1995). Empowerment of students' capabilities can refer to the activation of their social capital or advantages for valued positions in the field (Bourdieu 1990). Correspondingly, medical field conditions (systems sustaining the existing professional culture) that disfavour social justice practices can inhibit students' capabilities, intentions and motivations for SA practice.

The thesis employs a theoretical framework based primarily on the *sociology of practice* elaborated by Pierre Bourdieu and the *capability theory* of Amartya Sen to analyse dialogical characteristics of medical students' habitual moral dispositions and discourses for enacting social justice in their future professional roles. In brief, Bourdieu's educational theorising (1984) was originally concerned with the persistence and reproduction of class domination in society through education, and how this may change. He observed change "arising out of changed class habituses entering a field" (Bernstein 1999:171). This suggested students with different sets of 'class' dispositions (tastes and pretensions or *habitus* (Bourdieu 1996)) to the traditional intellectual class, could exert a deforming force on the established order to effect culture change.

The WPA in education for the professions is now well established in western universities, and brings students of diverse social, economic, ethnic, religious, gender, sexuality and linguistic backgrounds into the medical community. Bourdieu's social theory of practice

(1996) suggests the knowledges and discourses diverse students bring to medical education have the power to change the dominant professional culture. Yet, in a powerful profession, the field can also exert a transforming power on new entrants.

Of interest to this study is the reciprocity that may result from inclusion of students from non-traditional backgrounds in medicine; their potential for promoting prosocial changes, justice, and authentic patient-doctor relationships in health care (Risdon & Edey 1999). It suggests medical student diversity can result in a more prosocial professionalism. Yet, active *participation* in medical education cannot be assumed simply by enrolment of applicants from non-traditional backgrounds. Participation also necessitates ‘curricular justice’ to allow the voices of diverse active *learners* to be heard (Bernstein 1996). Similarly, voices of diverse *patients* from socially disadvantaged *groups* can be validated and included in curriculum to advance SA practices (Maton 2014). A change in critical *consciousness*, to comprehend and initiate actions for SA, may require students to problematise their own ideologies and institutions, and how these shape their perceptions of societal structure (Kegan 1994).

The means of transformation Bourdieu endorsed; to shift the social relation of knowers to knowledge of the social world, and avoid *misrecognition* of valid knowledge claims; he termed ‘epistemic reflexivity’ (Bourdieu 1990: Maton 2003). This questioning approach to knowledge investigates *who gains and who loses* by inclusion and validation of particular knowledges in curricula. Karl Maton (2014) directed the problematising lens of ‘epistemic reflexivity’ to ask *which knowledges* are excluded; recognising through semiotic evaluation of discourses how power can be *more fairly* distributed by legitimate knowledge claims in professional pedagogy. This pedagogic theorising, to validate SA practices and a more prosocial and sustainable professionalism, is elaborated in relation to the study results in Chapters 11 and 12.

The study results inform the enculturation of an integrative socially accountable praxis in health professions education; to correct false consciousness inherent to the previous biopsychosocial (BPM) model. Overarching and future-facing concerns include health system organisation, productivity, sustainability, and adaptability; to improve health outcomes and restore public trust in the social contract of medical professionalism.

1.3 Structure of the thesis

In Chapter Two, I sketch contextual features of medical professionalism; changes in social health needs in Australian and global health contexts; and efforts to overcome a mismatch between the medical workforce and modern pluralist societies. These factors may inform participants' understandings of physicians' social justice responsibilities under The Charter. The decision to compare First and Final Year participants at Adelaide and Flinders medical schools is explained in terms of student selection, curriculum legitimation of SA, and shifts in justice orientation expected from differences in curricula, programs and university structures.

In **Chapter Three**, a literature review outlines a critical history of medicine as a classic profession; the paradox of professional social dominance and societal health production necessitating social justice actions; and, gaps in the medical education literature on the transformative learning of humanitarian values and skills for professional practice.

In **Chapter Four**, I theorise how change in practice to a more diversity responsive medicine is conceived by prominent 20C French sociologist of higher education, Pierre Bourdieu. Amartya Sen's capability theory is hypothesized to motivate WP students' capabilities to align prosocial values with future medical practice. Together, these theories may provide the study with explanations of capability of diverse students to aspire to prosocial practice, and know-do gaps that require pedagogic reparation.

In **Chapter Five**, critical, transformational and semiotic theories of learning; to illuminate the diversity of social values, identities and knowledges participants bring to the study; are investigated to assist elaboration of the study question and design. Theories are discussed in relation to contemporary demands on health systems; and need for active learning of equity reasoning to motivate physician responsibility for improving health outcomes.

In **Chapter Six**, the study design is sketched as a mixed methods process; collecting data from demographic, survey and semi-structured interview questions. The ethics approved mode of sampling, collecting and collating of data is described; and investigator reflexivity on potential bias in the study is examined. Rational abstraction on social knowledges is identified as a reflexive, semiotic, critical thinking skill for reading human contexts of illness.

In **Chapter Seven,** a novel method of data analysis is described, in which mixed methods triangulation of data was applied in participant *vignettes*. Demographic and survey data, and interview transcriptions, were analytically combined to hypothesise habitus, aspirations and critical consciousness for SA. Vignettes allowed sociological similarities and differences in identity, formative learning experiences, and sociological insights to be compared; before

(First Year) and after (Final Year) socialisation in medical programs at the two schools. Vignette analyses are located in Appendix 9.

In **Chapter Eight**, results of data triangulation [Appendix 9] are brought back into the thesis to demonstrate how participants' gazes and reflexive reasoning are based on relative social position to the macro structuration of western societies. Signs of observed injustice were itemised and classified as Bourdieusian critical *recognitions* and *mis-recognitions* of equity related concepts. Critical acuity was then related to participants' plural identities as social beings and 'becoming' physicians. Responsibility for SA emerges from (mostly female) social equity identity and intersectionality, rather than School or Year group. Participants' social equity identities predicted reflexive ability to 'read' (semiotically) social system malaise generating internal illness; but differently predicted the intention to practice in underserved settings.

In **Chapter Nine**, I explore participant observations relating micro structuration of health demands to inequities in macro health systems, including known social health determinants. Anecdotes reveal critical thinking in relation to study questions in which contextual human realities, and the history lessons of medical professionalism, were generally undervalued. Trans-cultural perspectives; service learning in rural, remote and international settings (and possibly student-led organisations); may be valued sources of prosocial learning.

In **Chapter Ten**, The study question is examined in light of the results, and discussed in terms of semiotic communication of meaning related to participants' social identities. The theoretical background and suitability of a novel semiotic pedagogy to unify socioscience codes in medical education is examined. Reflexivity on the *stance* structured in pedagogic discourses, in relation to geographic health needs, can assist program managers to gauge need of professionalism reform.

In **Chapter Eleven,** I reflect on the study design, and postulate the key skills of humanist epistemology from the study. The literature on regulation and instruction of professional discourses shows how democratic governance of stance can be controlled in pedagogy to support SA professionalism, to meet students' aspirations, and changing geographic needs.

In **Chapter Twelve**, I synthesise a pedagogic model for socially accountable professionalism from critical recognitions and misrecognitions in participants' discourses. Semioethics is introduced as a paradigm for coding professional responsibilities in medical education.

CHAPTER TWO: BACKGROUND

2.0 Introduction

Medical education, “the mechanism by which the medical profession perpetuates itself” (Ritz, Beatty & Ellaway 2014:152), has been particularly resistant to culture change (Bloom 1998; Wilkes et al 2013). Yet, change is a constant in our contemporary, ‘liquid’, modern, and globalised world (Bauman 2000). While medicine has made extraordinary biotechnical progress in the treatment of disease during the past 50 years, potential gains to human health and illness from research in sociological sciences have been relatively neglected. Western medical education has been subject to a consumerist discourse related to the powerful biopharmaceutical industry, which can marginalise broader patient health needs, and counter structural reforms to the medical workforce. Contesting claims to expertise, and fatal errors of medical malpractice, have led the classic profession into public disrepute. Growing evidence of unfair socioeconomic inequalities in multicultural societies are now recognised as major drivers of unmet health needs (Marmot et al 2008).

A broader intake to medicine, inviting the participation of students from non-traditional social backgrounds, aimed to overcome cultural and social health deficits and produce physicians that ‘match what societies need’ (Aretz 2011:608). The Charter of Medical Professionalism (2002) assigned responsibility to all physicians in the profession to enact SA in health care. To medical educators, it signalled need for a pedagogy applying justice values to clinical phronesis, and broadening of the profession’s social contract to treat individuals *and* promote the social conditions of community health. Medical students from cultural backgrounds traditionally admitted to medicine (known as ‘insiders’), were expected to have fewer dispositions for social justice and perceptions of the changes needed to reform medical professionalism compared to ‘outsiders’; students from backgrounds once excluded from medicine. In the study, early (First Year) student impressions of the *legitimacy* of SA ‘knowledge claims’ to medical practice – what physicians ought regard essential knowledge – will be compared with Final Year participants’ perceptions, after transiting their school’s formal and informal curricula.

To probe these potential differences, I first provide an overview of how changes in the global social order of societies made necessary a widening participation (WP) agenda; progress studies of the WP agenda; past attempts at medical professionalism reform; and the intractable problem of integration of biomedical and humanist sciences in the medical imagination. I then outline the local, national and global social contexts of contemporary health problems; and argue for a semiotic paradigm of medical education to bring the medical and social sciences onto a more even footing. Finally, the aims of the study, and the structure of the thesis, are described.

2.1 Inclusive education and the instrumental fallacy

An important clarification is necessary early in the thesis to distinguish the purpose of The Charter from *the instrumental fallacy* - claiming education ought serve the needs of society. The inclusion of students from diverse backgrounds in HE, including medicine, is incidental to the social accountability emphasis of The Charter, as the following section seeks to explain.

Students of all social backgrounds entering medicine are subject to The Charter's reforms, as a novel condition of the professional contract. The study may help educators understand how differently situated students, with diverse social identities, may conceptualise the purpose and tasks of the new professionalism; and re-purpose professional development to accommodate broad societal concerns. The patient- and community-centred agenda is termed *social accountability* (SA), and the student-centred agenda is *curricular justice*.

Education of professionalism has long been tasked with inculcating an ethical stance.

> According to the perspectives of the sociology of professions, higher education is meant to train professionals into a specific knowledge base and to socialise them into a professional community with a certain ethical codex.
>
> (Smeby & Vågan 2008:160).

This statement points to the centrality of *values* in guiding knowledge management in health praxis; to improve health outcomes through SA.

At the outset, I clarify this study's ideological commitments vis à vis the instrumental fallacy in education. The instrumental fallacy has pervaded educational policy for centuries. While unrelated to neoliberalism, it often refers to education as serving the dominant ideology; obliging all members of society to contribute to the nation's economic prosperity (Korsgaard 2018). In contrast, SA may require physicians to critique policies and economic structures that unfairly mal-distribute health outcomes, and become policy change advocates.

The major concern of the fallacy, in all education, is foreclosure of students’ vision of their place in the world; and, autonomy to create a meaningful life and free human society. In a democracy, power is an instrument of government; and the sequestering of power by non-governmental entities is unjust. Both forms of power can distribute health unevenly; exacted through the social, political and commercial *determinants* of health (Baum 2018) . Education then becomes the instrument of social justice for students seeking to restore democracy and human rights.

2.2 Medical education for social justice practice

Following the 1995 resolution of the World Health Assembly to make medicine more socially accountable to society, Boelen & Heck (1995) defined social accountability by medical schools as

> the obligation to direct their education, research and service activities towards addressing the priority health concerns of the community, region, and or nation they have a mandate to serve
>
> ` (Ritz, Beatty & Ellaway 2014:153).

A key principle from The Charter decrees,

> …the medical profession must promote justice in the health care system, including the fair distribution of health care resources. Physicians should work actively to eliminate

> discrimination in health care, whether based on race, gender, socioeconomic status, ethnicity, religion, or any other social category.
>
> (Medical Professionalism Project 2002:244)

The wording of The Charter responds to various critiques of the troubled *status quo* of medicine at a time of rapid global changes affecting health. Critiques include the excessive biomedical and commercial focus of the medical industry (Hafferty 2006); lack of public accountability in health planning and distribution; unsustainable national health budgets; and the maldistribution of funding toward biotechnical specialties and away from primary care services. The latter is known in public health as 'the societal error' (Stone 2010). An 'inverse care law' persists globally: the greater the health need, the less health information and services are available (Tudor Hart 1971). Other long-standing critiques centre on *medicalisation* of the social context of health (Engel 1977), *commodification* of health care (Coulehan 2005), and the want of a paradigm of medical education that can achieve SA (Boelen 2008). The concept of *need* in health and health care services can respond to any and all these parameters. While *felt* and *expressed* needs (Bradshaw 1972) are regarded important to SA and autonomy, a pragmatic conception - 'objective needs' is proposed; as "'health needs' and 'autonomy' are not only two basic human needs, but universal human rights" (Asadi-Lari, Packham & Gray 2002:35).

At its foundations, the obligation to maintain and improve health was considered by Aristotle to rest on the ethical principle of "human flourishing" (Ruger 2004). Amartya Sen (1995) built on this ethic to describe a 'human capability' approach to health, recognising a person's functional 'agency' as "the ability to lead a life one has reason to value" (:1075). This condition is enjoyed by a majority of the world's population, including Australians, although Indigenous peoples in particular, endure chronic health disadvantages.

The Australian Indigenous concept of *health* has a more collective phrasing;

> not just the physical well-being of an individual but the social, emotional and cultural well-being of the whole community in which each individual is able to achieve their full potential as a human being
>
> (National Aboriginal Health Strategy 1989).

In this thesis, I refer to both *general* capabilities or opportunities for socially disadvantaged people to lead a valuable life, as well as *professional* capabilities of medical students and physicians to contribute to human development (Mclean & Walker 2016:142) through SA actions.

Opportunities for such 'public-good professionalism' most often arise in primary health care settings, but not exclusively. 'Primary health care' (PHC) in Australia refers to first 'point of contact' care for individuals, and health production in diverse community settings (Keleher 2001). The PHC service model is essentially a form of public health practice which aims to provide "personal care with health promotion, the prevention of illness, and community development" (PCRIS 2015). Social justice is a core value in primary health care; an ethic comprising

> the intersecting principles of equity, access, empowerment, community self-determination and intersectoral collaboration…[and]… encompasses an understanding of the social, economic, cultural, and political determinants of health
>
> (PCRIS 2015 np).

The term ‘intersectoral’ refers to public and private *sectors* of the economy that together have fundamental impacts on human health. Policies and administration of public housing, welfare, transport and infrastructure, childcare, education, healthcare and employment are SDH (Baum 2018).

Traditional conceptions of ‘distributive’ social justice as a professional ethic of medicine, in which ‘gaps’ in health outcomes are identified and acted upon, do not fully meet the challenge set by new evidence of inequities found to underlie SDH. Equal access to health services is termed ‘horizontal equity’ or “equal access for equal need” (Mooney 1996:100). However, as Mooney (1996) observed, ‘vertical equity’ is required to close gaps in health outcomes *between* particular groups (e.g. Indigenous and non-Indigenous Australians). Yet following discovery of systemic *gradients* in economic, social and cultural disparities within societies, the closing of ‘gaps’ of social health inequities requires a process of ‘levelling up’ (Whitehead & Dahlgren 2006). Individuals positioned highest in a social hierarchy, such as a workplace, have greater social power and health; while *at each step lower* in the hierarchy, the less power and freedom a worker has, the higher their risk of premature death (Marmot et al 1978). This social health gradient brings into focus society-wide social inequalities such as poverty, education, discrimination, housing policies and legislation; powerful ‘structural’ limitations on living conditions that render inequalities enduring and intergenerational (Hatzenbuehler & Link 2014).

A greater focus on ‘emancipatory’ social justice and ‘egalitarian’ justice appears to offer a more effective, fair and economically sustainable direction for both medical professionalism and western health systems. Egalitarianism promotes justice as equality: ensuring health resources are distributed on the basis of need, to achieve *equality of health outcomes*. This can shift resources to community prevention and primary health care, to assist vulnerable groups to overcome their social disadvantages. Emancipatory justice is served when health practitioners advocate the empowerment of the autonomy, aspirations, capacities, and opportunities for oppressed individuals and groups to gain greater control of the factors affecting their health and wellbeing (Tsey et al 2010). Social health advocacy is directed at *communal* health protection and production; such as improving rental housing conditions for children with asthma (Nerlinger et al 2018), instead of often practiced health promotion measures targeting *individuals*. Research can uncover contested power claims on public freedoms otherwise invisible to the populace. ‘Critique’ of *who benefits* from existing arrangements; for example, in matters of land use, law, and infrastructure; is the central feature of *critical theory* linking ecologic, social and political systems to health (Stone 2010). For example, recognition of Indigenous status and land rights are significant, critical health issues for Indigenous Australians.

The machinations of *power* at local, national and global levels, in shaping societies and the well-being and health of citizens, is described in critical theory as ‘social structuration’

(Stone 2010). Significant advances in 'social medicine' achieved in Latin America last century have arisen from a critical vision of the *health-illness dialectic*. This concept "expresses the fluid, complex relationship between the normal and the pathological" (Anderson, Smith & Sidel 2006 np), and embraces *social* epistemology. A *dialectic* is a method of thinking and acting that ascribes new knowledge production to a context of learning (Jakubik 2011). It suggests "society should promote health through individual *and* social means" (Anderson, Smith & Sidel 2006 Italics added), recognising the health significance of the maldistribution of social power. Using a critical theory lens on society can bring into view "the often covert power that social inequalities exert in undermining health" (Whittenbury 2016:15). Post-modern critical theory adds a political perspective to social problems "by situating them in historic and cultural contexts" (Lindlof & Taylor 2002:49). In this view, patriarchal and colonising discourses are problematised as features of the social patterning of health; contributing to chronic, intergenerational illness for Australia's Indigenous peoples, the poor, disabled and socially marginalised groups. Among criticisms is the *bourgeois science* (Hoffmeyer, in Kull & Velmezova 2003:374) doctrine of biomedicine; as it is viewed by anti-capitalists. Understood ethically, bourgeois science serves the existing economic order, rather than the social *good* of societies.

The medical profession wields considerable power in western societies and strenuously defends its autonomy, remuneration, and dominance in the field of health (Allsop 2006). Power is expressed through 'knowledge claims', creating a *jurisdiction* separating the medical profession from others; nursing, for example, in the prescription of medications (Cooper et al 2011). Equally, boundaries may be symbolically erected around professional knowledge claims by deferring 'social' matters to social workers or occupational therapists.

Physicians opposing social justice as a requirement of medical professionalism regard it a 'category mistake' and argue egalitarian social justice makes claims on physicians as citizens, not as medical professionals (Huddle 2013). Traditionally, physicians' commitments to the poor were held "out of beneficence or humanitarianism rather than justice" (:376). This viewpoint, centred in the North American context of re-vitalised capitalism termed *neoliberalism*, regards acts of "charity, benevolence and humanitarianism" rather than emancipation and empowerment, as appropriate responses to "the less fortunate" (:376). Neoliberal discourse rejects the "radical social criticism of the sixties" (Grunwald & Thiersch 2009:132): activism in the 1960s questioning the role of social workers helping people to *adapt to* the "alienating and exploitative circumstances" (:132) of late capitalism. In this view, efforts by liberals to call out public racism, sexism, and forms of 'free speech' were met by conservatives with jeers of 'political correctness' and 'virtue signalling' (The Ethics Centre 2017). Ideological viewpoints contra conservatism were liberal, socialist and anti-capitalist; recognising how global ecological, economic and social health crises arose from growing inequalities, the result of excesses of global, neoliberalised markets (Katz 2010).

Previous efforts to broaden the professional repertoire of medicine beyond its biomedical knowledge focus toward 'social health' were largely unsuccessful. Armstrong (1987) likened the battle to a *territorial* claim on the 'lesion': the indeterminate abnormality as the site of illness, located in the body. Physician 'autonomy' was equated with ownership of the right to determine the cause; but with the medical gaze fixed on the sick body, decontextualized from its social determinants. Interlinked with professional autonomy are the social status of privilege and responsibilities of power that ensue (Woollard 2006). Allied with medical power is the power of science-based knowledge claims; although these are shown to be in tension with the social construction of knowledge revealed by sociological research (Jordanova 1995).

Uncertainties inherent in current and future global health challenges require medical education to produce graduates with the capabilities to flexibly deal with *uncertainty*; to have the metacognitive capabilities for analysing complex social and ecological changes for potential health impacts; and, to collaborate and respond creatively in multi-disciplinary teams (Barradell & Kennedy-Jones 2015; Fried, Shipman & Sessums 2019). In brief, the want of a sociological theory of medical professionalism education required deep understanding of the relation of the sociology of societal change to biophysical and environmental sciences that impact on human health (Kasper 2014).

In 1977, George Engel observed the biomedical model of illness “leaves no room in its framework for the social, psychological and behavioural dimensions of illness” (Armstrong 1987:1213). Engel had devised the ‘biopsychosocial model’ (BPM) in response to growing consumer concerns “that health needs are not being met and biomedical research is not having sufficient impact in human terms” (ibid). Yet, the BPM, patched into the systemic framework of western biological medicine, appeared to only strengthen the dominance of “traditional biological reductionist medicine” (ibid:1213). Despite gains in the detection and treatment of medical illness from biomedical research, both the targets of research and distribution of innovative medical goods remained inequitable for most of the world’s population (Barry 2009). Moreover, while integration is implied by the term *biopsychosocial*, the frames and codes for concepts in the BPM model do not interconnect; “especially in exploring the mutual translation of the mental and the physical" (Goli, Rafieian & Atarodi 2016:12). In practice, the biomedical frame assumes dominance. Both the mental and the physical or 'bodybrain' (Hoffmeyer in Kull & Velmezova 2019:376) are believed impacted by long-persisting signs in societies of colonial pasts that communicate stigmatising messages.

'Social justice' holds different meanings to people in ways that reflect socially constructed learning from families, experiences, culture, religion, and political orientation, among others (Barry 2009). Health practitioner sensitivity to social justice for patients requires empathy, compassionate concern for the welfare of others, and a sense of fairness based in the common humanity of all cultures. However, several medical student studies have shown transformative *unlearning* of these prosocial qualities takes place in a 'hidden' curriculum socialised in the workplace among physicians and educators, which increasingly distances them from patients (Hafferty 1998; Bleakley 2008:92). Bleakley (2008) related humanist unlearning to the strongly 'biomedical' focus of early training, the 'atomized gaze' of bio-molecular science, and a *mechanised* view of human physiology. Notably, biochemical mechanisms of disease elucidate sites of action of pharmaceutical products; an interface with powerful pharma industries and their marketing strategies (Jureidini & McHenry 2020).

While efforts to improve empathic communication skills with real and simulated patients are introduced early in students' medical education, studies suggest student sensitivity to emotional cues is often lacking (Morton et al 2006). Critical insights to this problem suggest medical students were "being encultured not only into a profession, but also into particular systems, practices and structures of health care" (Mayes et al 2016:257), and specifically "into a neoliberal health system" (ibid:257). Students' social justice values were at risk, as neoliberal contexts of health care “tend to undermine *collective* thinking, action and responsibility” (Mayes et al 2016:266 *Italics* added). Educators founding a social justice curriculum in their medical school indicated this transformative task was more amenable with values alignment across campus; to counter the destructive effects of cynicism (Smith et al 2007; Preston et al 2016). Similarly, conflicts of interest arise when public health services are co-funded by private industries, producing “a corrosive effect on medical graduates’ compassion and ethical reasoning” (de Zulueta 2013:119).

Resistance to these potential moral harms, and survival of pre-existing social justice values students professed on entering medicine, may predict greater patient-centeredness, social justice advocacy and possibly, social activism. This shift, if collective, could take medicine ‘outside the tent’ to need-led, SA health care and equitable patient outcomes (Boelen & Woollard 2011). Physicians can be powerful change agents in the communities where they live and practice, and the implications of this type of prosocial professionalism for bioethics education are well understood (Stone 2010). It would be valuable to medical educators to learn the scope of this prosocial (or altruistic) *mindset* among the cohorts of Australian medical students who participated in this study; the scope of the concept, and common misconceptions of the social justice ethic of the new medical professionalism. The broader diversity of student identities socialising professional values in medical schools may drive expectations of a more humanist profession, in which embodied social knowledges and values meet the public’s justice and care needs.

An expert panel at the Association of Medical Education in Europe (AMEE) developed key concepts of *excellence* in SA medical schools. One set of concepts defines expectations of health care people claim as rights: *quality, equity, relevance and effectiveness* (WHO 1996; Boelen & Woollard 2011). Another set of SA concepts questions whether the school's "'products' (graduates, service models or research findings) were being used in the best interests of the public" (Boelen & Woollard 2011; AMEE 2015:2). Institutions would measure *conceptualisation, production activities and usability of graduates* to assess effectiveness (ibid). 'Products' and 'usability' seem unfortunate terms for the qualities, knowledges and agency potential diverse students bring to SA practices; but it was these outputs the study aims to clarify.

Related to rights are health *needs*, as distinct from health *demands*. In the latter, adults are assumed to be capable of recognising and expressing early signs of illness; having trust in the health system, being autonomous in means for accessing medical and preventive care, and making informed decisions. In reality, constraints exist at each level of action for less privileged citizens. Bradshaw (1972) referred to four *types* of need: normative, comparative, expressed, and felt need. Health supplies too, including health screening and prevention services, can remain mal-distributed in western demand-led public health systems. Chronic illness outcomes can progress from curable to incurable in the absence of evidence-based, early interventions and norms of quality medical management. Social privilege, in which an ideal citizen has basic needs met; is informed, capable, can access basic social goods and services, and achieve their human potential, is the motivational goal in Maslow's 'hierarchy of needs' (Maslow 1943).

In view of multiple interpretations of The Charter by various commentators, discussed in greater detail in the literature review [Chapter 3], it was important to know how the next multicultural, multi-classed, 'feminized' and sexuality-diverse generation of physicians may agree and differ in their approaches to the implementation of The Charter's professional requirements. Bourdieu's critical studies of higher education suggested power was central to success; representing a conflict for WP students. The accumulation of social capital (power) in the medical field can benefit WP students' equity of success (or capability) in traditional professional goals and social hierarchy. However, the reward structure of the medical hierarchy can favour a motivational goal for 'types of medical professionalism' (Castellani & Hafferty 2006) seemingly at odds with aspirations for SA.

Bourdieu (1977) conceived forms of power in the social field as types of 'capital'. Knowledge (or learning) is a form of power, and sub-disciplinary ('specialist') biomedical knowledges and skills confer high symbolic capital in the medical field. Yet, in the 'new' professionalism, WP students with embodied knowledge of SA, may have capital advantages over non-WP students. Castellani & Hafferty (in Wear & Aultman 2006), discuss historical shifts in the sociology of medical professionalism and provide a matrix of seven professionalism 'types', drawn from research of U.S. physicians. These were labelled *Nostalgic*, *Entrepreneurial*, *Academic*, *Lifestyle*, *Empirical*, *Unreflective and Activist* [See Appendix 7]. Only in the 'Activist' type was social justice regarded 'most important' to professionalism; relegating lifestyle, commercialism and professional dominance to the 'least importance' rating. Types of medical professionalism, viewed as different forms of consciousness, may reveal the developmental trajectories medical students' moral orientations may take.

Students’ ways of ‘seeing’ and knowing (*epistemes*), and the meanings they bring to their medical *praxis*, has the potential to either reproduce or change the *status quo* of medical culture. A sociological meaning of ‘culture’ refers to “a common set of norms and values shared by social actors” (Jenks 2002:24). The term *praxis* refers to ‘agency’ or a person’s capacity to take action, in which there is “close alignment between theory and practice” (Anderson, Smith & Sidel 2006 np). The requirement for social justice praxis in The Charter signals a paradigm shift in rationale from medical science to social science; and embraces greater public consultation in the provision of health services. Commentary on The Charter signified a shift in the ‘type’ of political economy; “the politics of medical services and the ‘purposes’ of medicine” (Pickstone 2000:2), from those characteristic of 20C.

Health production in 21C, as a means to achieving health equity between sub-populations, is viewed as a *response to*, not a reflection of, the prevailing (global, neoliberal) economies, exposing greater social inequities within and between societies (Baum 2018). Health *production* is underrepresented in medical education, as students’ imaginations of health (or illness) are thought dominated by biomedicine at the expense of sociological imagination (Baum et al 2009).

Other predictions for structural change in the practice of medicine reflect the impacts of the global technological revolution, and envisages greater consumer power, and greater health advocacy roles for medical graduates (Susskind & Susskind 2015). The study examines the perceptions of cohorts of medical student volunteers, many of whom have benefitted from WP equity policy opening access to the profession of a demographic diversity of applicants.

2.3 Widening participation to higher education and medicine

2.3.0 Introduction

Here, I provide a brief historical overview of attention given to humanism in medical education, in which students' trajectories of acculturation to professional learning are moulded from their individual dispositions.

Bourdieu (1977) termed the individual's set of dispositions and their alignment to the medical field, *habitus*. Clearly, habitus, and the emotion work of adapting to medical responsibilities differs between insider and outsider (WP) students. For WP students in medicine, social position and identity transform during training; from their initial class background, occupation, or family socioeconomic status (SES). The power of adaptation, or capital embedded in *habitus* varies according to each student's 'fit' to the expectations of the professional field (Martin 2018). Developments in medical education, charged with taking account of empowerment needs in clinical training, are regarded "critical to driving change in the philosophies, policies and practices" (Nicholson & Cleland 2017:478) of the WP agenda. These equity measures, and the types of professionalism that may result, need to be discussed in relation to ethical structuration of the medical training context.

2.3.1 Configuring an equitable medical workforce

The establishment of health as a basic human right in the late nineteenth century, brought to western industrial states the need for organised health services and formalised medical education (Bloom 1989). Citizens lowest in social status were observed at greater risk of illness and premature death (Virchow 1848); a global inequity that remains a social and political injustice. The professional expectation of democratic responsibility is for physicians to judge health equity needs of disadvantaged populations, and act morally.

However, during the twentieth century, new technoscientific specialties and hospital-based practice became more popular with graduates than community-based general practice. This structural change amplified the professional social hierarchy and led to socialisation with clinician-researchers (Bloom 1989). Medical education then struggled to produce the ‘manpower’ [sic] with the requisite professional attributes to match societies’ needs (ibid). In pluralist societies such as the U.S., patients showed greater satisfaction with treatment by physicians of concordant race and ethnic background (LaVeist & Nuru-Jeter 2002). The WP agenda sought to assure fairness in patient access to services, equity of health outcomes, and to address the political narrative of *inclusive education* (Nicholson & Cleland 2017).

Eligible WP students remain under-represented in Australian medical school intakes and graduations (Palmer, Bexley & James 2011); a social inequality Nicholson & Cleland (2017) related to ‘subjugation of personal agency’ among students with low social capital. Competition for selection to medical school, and to a preferred position in post-graduate training, is very high; and can powerfully signal preparatory behaviours many years earlier to streamline a student’s chances of success (Palmer, Bexley & James 2011). This required alignment between outreach, engagement and selection practices with eligible secondary students (Palmer, Bexley & James 2011). To better understand the barriers and enablers faced by WP students compared to medical ‘insiders’, Nicholson & Cleland (2017) analysed an amalgamation of datasets from three U.K. studies using qualitative interpretation. Successful WP participants found a ‘weak tie’ or connection to a medical professional or student enabling greater access to information and resources insiders took for granted. The theoretical terms *bridging capital* (Putnam 2000) and *linking capital* (Halpern 2005) refer to the social capitals granting WP students access to networks of powerful people, positions and progress in the field (Nicholson & Cleland 2017). Within medical schools, 'vertical' Year groups were established to facilitate peer-assisted learning (PAL) and socialisation; linking each Year group with the Year group above (Kam et al 2015).

Quotes from interviews published by Nicholson & Cleland (2017) indicate WP participants were aware of their relative disadvantages. This suggests a stronger *awareness* of social position and social injustice among students with diverse social identities. However, we cannot assume WP students' aspirations for success in medicine and for social justice activism are coterminal. To re-iterate, equitable progress in a medical career can result in successful *status quo* professionalism; a type in which social justice and humanitarianism are less valued (Wear & Aultman 2006).

If achieving *capability* or the freedom to practice one's chosen 'type of professionalism' is the goal of equitable medical education, this theorising presents a conflict for a SA project. Only where medical education is supportive of SA professionalism, or when 'linking capital' to mentors or community of practice (COP) are available to prosocial students can they engage, participate, and mobilise their capitals.

Innovative strategies were trialled to overcome the loss of humanism in medical school. Humanities modules were introduced to clinical training to position SA as 'the art of medicine' (MacNaughton 2000); a popular but largely ineffective strategy. The essential problem, of resistance to change in the organisation of medical education, is considered a clash of values socialisation. On one hand, was the rational or *bioscientific*, and on the other, the psychosocial or *humanist* paradigm of medical professionalism (Bloom 1989). Observers refer to Descartes' philosophy of 'body-mind dualism' as source of this false consciousness, although a general tendency to dualistic classification (x / non-x) has long provenance in the history of thought (Fernandez-Armesto 2019:88). The dominant paradigm is focussed on the sick body; its genetics, and reductive 'mechanisms' of biochemical signalling, physiology, homeostasis and pathology (ibid). This likely brings the powerful corporate *ideology* of the science episteme into alignment with the social hierarchy of professional groups; but in conflict with the SA purposes of medical education.

In summary, the task of bringing social sciences into the tent of medical professional education, to value SA, may require ideological and paradigmatic changes.

2.3.2 Configuring a social ecology in medical professional education

Despite rapid, technoscientific advances in twentieth century medicine, progress in medical education research to elucidate 'the *what* and the *how*' of good medical practice remained static and underfunded (Bloom 1989). Didactic teaching, rote learning habits and standard assessments of the human body and disease, continued until late in the twentieth century (ibid). Problem-based learning (PBL) of common patient and public health topics was then introduced (Neufeld & Barrows 1974). The 'PBL approach', conducted in small student groups, aimed to organise active learning of holistic patient problems and design of multi-disciplinary plans for patient-centred care and medical management. The *social ecology* philosophy (Bloom 1989) of PBL promoted developmental learning principles, prioritising socialisation and dialogue between student peers. Students' communication of scientific and humanistic reasoning could be observed, assessed and improved by feedback from trained facilitators. In addition, social ecology values promoted medical student selection based on values of 'caring as much as curing' and 'transcending personal interest' ((Bloom 1989:231) which resulted in greater feminisation, internationalisation and diversification of the medical workforce. Yet, the reform impacts of student diversification, and humanistic programs in medical education, have historically been disappointing (Bloom 1988).

From the 1950's, 'comprehensive care' programs were introduced in America; at Cornell, Colorado and Western Reserve universities, with the aim of producing more holistic doctors. Students were required to follow families in the community, and received integrated pre-clinical, clinical, and social sciences training (Merton et al 1957; Rothstein 1987). Bloom (1988) attributed the failure of these programs to the socialisation of resistance to change, structured by an ideology prioritising the institution's medical research activities. A rupture occurred between those devoted to the *what* of medicine (reductionist science information) and those focussed on the *how* (social ecology or humanism) (ibid:298). Students needed to be "kept abreast of the continuous flow of biomedical information" (Pellegrino 1978; Bloom 1998:298) was the argument of the bioscience community. Primacy was given to *genetics* in the prolonged 'nature versus nurture' debate of disease causation, until outcomes could be explained by the complex *interplay* of genes and environmental factors (Sapolsky 2005). Yet, the tacit knowledges and social capital for humanist discourses WP students brought to medicine went unheeded. A gap analysis between these positions inferred a

> social ecology orientation focuses on how medicine should be practiced in relation to the needs of those it serves
>
> (Bloom 1988:296).

The ‘in relation to’ or contextualising element of values ratification was where an ethical codex of SA could emerge.

Medical sociologist Brosnan (2011) explored the hegemonic nature of ‘science’ in U.K. medical education; showing how it acted as ‘symbolic capital’ to distinguish the merit of different schools. In a British Medical Council (BMC) survey there was divergence between stakeholders about the extent of science knowledge and understanding students should learn, when much was redundant to clinical practice needs (Brosnan 2011). Agreement was reached about the need to integrate clinical (patient-centred care) and biomedical science knowledges, previously separated in traditional curricula (ibid). Looking behind the scenes at the contest between medical schools utilising Bourdieu’s social theory of practice (1996), Brosnan (2011) conceptualised how institutions shaped their curricula to attract funding, researchers, students, and prestige to assure a successful niche in the field. Particular knowledge was prioritised to align with institutional goals; and to build market recognition as a destination for students’ career progress. This implied a *relational* quality to knowledge in which scientist agency was stressed ahead of *structural* understanding of legitimate forms of knowledge for (humanist) medical practice (Brosnan 2011:321). Medical sociologists saw these purposes to benefit goals other than social equity.

In medicine, the unequal distribution of knowledge claims favours laboratory studies and quantitative research; assigning less legitimacy to *qualitative* research evidence in the social sciences. *Science* was the most sought after knowledge form among students and staff in a UK study conducted by Brosnan (2011). This was true at both schools studied, despite their different knowledge claims; one signalling strong grounding in biosciences, the other - an 'integrated curriculum' (ibid:323). The "relative emphasis on science or clinical work" (:324) paralleled long-standing arguments of the relative benefits of theory and practice. Brosnan (2011) recorded staff comments calling integrated curriculum reform 'dumbing down' and 'dangerous' (:326); suggesting UK reforms to produce a more humanist profession had failed. However, seen as resistance from traditional institutions, these comments were predictable (Bloom 1998). Scientific competence has great symbolic importance to students, providing confidence for achieving successful futures as clinicians or clinician-researchers. Passing assessments is prioritised; given the massive financial, time, cerebral, linguistic and emotional stakes in graduation.

Following WP reforms in Canada, Beagan (2000) found student diversity was gradually subsumed into a hegemonic version of 'The Doctor'; creating "socially-neutral physicians" (:1253). This outcome was attributed to socializing forces, and an objectifying mindset in clinical science training, in which *reason* values "the impartial knower" (:1262). Support for the professional culture was observed in U.K., by female and minority ethnicity students, despite being marginalised within the culture (Lempp & Seale 2006). Much is now known about HE support needs to aid successful inclusion and completion of the WP student journey (HEFC 2013). The responsibility of academic educators, examiners and medical school regulators is to warrant development of each student's professional identity, their competencies, and accountability to the public’s trust. However, the findings of student conformity with the existing culture does not auger well for the project of inculcating a prosocial, humanistic professionalism. Nor do institutional statements provide a blueprint.

As an example, the British Medical Council (BMC) paper ‘Tomorrow’s Doctors’ (BMC 2009) was devoid of the term and sentiment of ‘social accountability’. ‘Good medical practice’ was composed conventionally as ‘patient-centred care’ and evaluation of ‘patient perspective’ without regard to sociopolitical and environmental impacts on equity needs (Hutchings & Rapport 2012). The global health disruptions of human overpopulation and displacement, pandemic infections, the imminent ecosocial crises of climate change and geodiversity loss, were not expected drivers of reform (Bradshaw et al 2021). Macro influences on health at societal and global levels were opaque, or at least, un-integrated in the medical imagination.

How can the knowing *what* and knowing *why* be integrated in a single medical imagination? ‘Playing doctor’ or learning by *simulation*, in which a layperson role-plays a patient for the purpose of medical student rehearsal of clinical skills in a ‘near-authentic’ clinical setting, was evaluated in qualitative research (Underman 2015). Success of student socialization (or habitus-shaping) in simulated learning was attributed to the role of managing emotions; how *real* it made students feel. Underman (2015) argued an unconscious process of enculturation of habitus, to embody the dominant professional culture, takes place. The idea of habitus in medical education studies, and particularly *social capital* - the power to make connections with others - has helped understanding how physicians conceptualise “ways of negotiating their identities within the medical hierarchy and structure” (Luke 2003 :xiii).

In the study, I positioned The Charter as a novel medical structure of moral import, and compare features of social capital for SA in participant data *before* exposure to training and socialisation (among First Years), and *after* (among Final Year participants).

In past medical education research, responding to the erosion of patient-centredness in medical professionalism, much has be made of medical student *attitudes.*

> Exploring attitudes during medical education remains critical, because observation of performance alone doesn't provide insight to students' intentions or inner growth.
>
> It is important to recognise, however, that the isolated measurement of attitude is uninformative because other factors such as *social influence* (e.g. role models) and *self-efficacy* have been shown to be powerful determinants of students' behaviour.
>
> (Bombeke, De Winter & Van Royen 2014:559)

Reforms have sought to redirect students' social influences to contexts external to the hospital/laboratory culture; to community-based primary care physicians, and the patients and communities they serve. In effect, students are exposed to social discourses of health discordant with a solely biomedical imagination of health and illness. The inculcation of sociological imagination in medical education, to reduce blindness to the social organisation of health, returns attention to WP students in medicine. Their 'ways of knowing and being' are likely to facilitate greater 'epistemic connection' to patients with similar social profiles

(Battalova et al 2020). The WP agenda may bring to medical learning contexts students with *embodied* knowledges of social injustice; from lived proximity to constraints on societal freedoms more privileged citizens enjoy. In sociology, regardless of a student's background, or organisation of their education, perspective or stance is always directed from a social position (Maton 2003:60).

However, the primary habitus a student has on entry to medicine undergoes more or less habituation by professional socialization to a secondary, 'medical habitus' (Underwood 2015:181). By Final Year, and at graduation, a student-physician's social *position* has risen; but change in social *stance* can depend on the extent of their habituation to professional norms or 'rules of the game' (Bourdieu 1977). Here, we confront a gap between the WP graduate's social capital for progress in the field and dispositions for social justice. Primary and secondary habitus are at odds if the WP student adapts to the social ecology of the professional status quo (Bloom 1989).

The focus of reform activities returns to the mythology of the professional culture; and, bearing in mind Pierre Bourdieu's observation of *reproduction* of the societal status quo, to what is valued and regarded legitimate knowledge in medical education. Studies of the semiotic structuring of pedagogy, explored in Chapter 12, show how legitimate social and biotechnical knowledges, and meaning, can be controlled in medical education to inculcate an ethical medical praxis.

Presently, the intertwining of legitimate knowledges into ethical practice relies on student engagement in near-authentic clinical settings. Clinical learning in longitudinal integrated curricula (LIC), has medical students live and learn in a community setting; and gain from closer relations to the health system, mentors and patients. Gaufberg et al (2014) noticed

> longitudinal clerkships created space in which to learn from longstanding relationships with patients, *experts of the lifeworld*
>
> (Bombeke et al 2014:559 Italics added).

Lifeworld is a semiotic concept, describing the *meaning* each person interprets from signs in their surroundings: the objects of perception of our human sensorium (von Uexküll 2001). In the final chapter, I discuss lifeworld and the biosemiotic paradigm of human health as a guide to education of sociological imagination.

Medical students too, are experts of their own classed, gendered, and unequal lifeworlds; but WP students can find different medical schools welcoming, or not. Perceptions of the medical school's academic status, whether it contains 'people like us' (Bourdieu 1990) can matter to WP students (Reay 2010:109). Expectations of conduct, as part of the cultural capital of a school, can be unwelcoming to outsiders; affecting belonging and learning (ibid).

2.3.3 Comparison of medical professional education at two schools

In the study, two schools in Adelaide, South Australia were chosen for sourcing participants.

Adelaide medical school is situated in an Oxbridge-styled city university, while Flinders is a modern, open university located in the Adelaide foothills. Flinders also has provenance of social solidarity with the South Australian community. In South Australia, capable school leavers from low SES settings apply to Adelaide (a *direct entry* program) or follow a separate career path, and later transfer to Flinders (a *graduate entry* program). Differences between the medical schools, selection procedures and curricula make them attractive for a study of professional development of *ethos*; the affective rationality of practices taught, and the stance of the school toward SA. I compare the SA perceptions of First and Final Years to gain insight to shifts in student development of SA conceptions of care across each program, and test stereotypes of the academic reputation of the schools. Adelaide's high academic profile derives from international reputation for bioscientific research, while Flinders is a member of a network of socially accountable medical schools (SEnet). However, these traditions were disrupted by recent university defunding and neoliberalisation of higher education. These structuring factors are discussed in greater detail in the study design [Chapter 6].

Both schools select WP students and are engaged in medical education discourses of equity to students' diverse adjustment needs in the higher education. 'Cultural safety' is the term inferring 'felt needs' of belonging are met; best achieved by changing inflexible medical school structures (Brosnan 2010). Sociological evidence of the identity transformation WP applicants experience on entering high status professions suggests a problematic process for some individuals. Identity ambivalence can result when students struggle to reconcile their new status with their background class loyalties, and embodied ways of being (Reay, Crozier & Clayton 2010). Despite having learning capabilities, they can lack the social and cultural advantages of higher status students in professional courses (Sommerlad 2007). Selection based solely on past academic performance has not produced the 'best' doctors (Parsell & Bligh 1995). Structural changes may be necessary to accommodate student diversity; e.g. more women means women's toilets are needed. Students with faith, disability, cultural, linguistic and learning support needs can require cross-disciplinary or targeted approaches (HEFC 2013). Interviews with young people from deprived and migrant U.K. families, revealed medical education was a means for regaining cultural, economic or symbolic status families previously enjoyed; anticipating a better future (Robb et al 2007). In a 2006 census of UK medical schools, demographic change was evident, but uneven (ibid). While 53% of applicants were female, and 48% from minority ethnic groups, those from the professional class continued to be over-represented (Robb et al 2007:739).

Social changes since Bourdieu's studies on class reproduction through education have seen traditional views on educational attainment and service to society replaced by greater individualisation and career choices *unaligned* to family traditions (Robb et al 2007). This shift in alignment may signal a change in the direction of students' aspirations and outlook toward future possibilities (Archer 2012). How these changes manifest in students' ethical mindsets, their moral sensitivity to SA professionalism and its knowledge claims, are of interest to this study, discussed further in the literature review.

Martin (2018) reported WP students were less aware 'talking to people with mental problems' was a common physician role. However, in health communications, and in grasping the ways social constraints like poverty affects health, WP students with similar demographic profiles to public patients may have an advantage over their peers. Yet, despite WP selection policies and innovative medical schools in the U.K, Brosnan (2007) found "humanistic and social knowledge were marginalised in both the traditional and the innovative school" (:iii), by what *students* deemed legitimate knowledge (the bioscientific and clinical). This finding agreed with theories of enculturation of imagination (Baum et al 2009); and implied 'innovative' medical schools were simply positioning their courses in the (neoliberalised) higher education market (Tredinnick-Rowe 2015).

Early in the 20C, education reformer Abraham Flexner was contracted to improve medical education teaching standards, then lacking consistency in American and Canadian schools, and advised they anchor the medical content in *science* (Flexner 1910; Kopelman 2014). In Brosnan's (2011) study of stakeholders' conceptions of the significance of science in medical education, she reached a poignant conclusion about what counts as 'science'.

> Science has come to represent a kind of *black box* in medical education – rather than describing specific knowledge or skills they thought they needed, medical students and staff referred to science as a quality with which some schools were more endowed than others.
>
> (ibid:330 Italics added).

The black box is portrayed as a value *heuristic*; a meaning code guiding one's consumption of education and the cultural goods on offer, rather than a philosophy for a professional 'community of practice' (COP) – a group with the same public interests (Lave & Wenger 1991). Science comes to represent a false certainty in an uncertain world. Goods in the scientific swag include a. peer recognition of one's 'scientific capital' (Bourdieu 2004) – credentials earned by scaling the stratified field of empirical research conferred disciplinary status; and, b. 'social capital'; the valued resources of the social network of actors in the global field; including power, wealth and cultural influence (Limaye et al 2011). Viewed from the neoliberalised marketplace, a career in ‘social’ medicine seems undesirable. Yet, a social network of physicians engaged in outreach and social health advocacy; a community of practice (COP) organised by the values of SA to achieve positive health outcomes; is also conceivable.

The hegemony of bioscience on students’ humanistic identities (and presumably, attitudes) was attributed to a *hidden* curriculum (Hafferty 1998) in which the randomised controlled trial (RCT) – epitome of objectivity in clinical studies – forms a boundary between medical science and pseudo-science (Savransky & Rosengarten 2016). By this reckoning, pseudo-science is defined by what complementary and alternative medicine (CAM) practitioners do. However, about fifty percent of western populations find the something CAM practitioners do has value; and this may have more to do with humanism than science. Commitment to mechanistic science ontology, according to Savransky & Rosengarten (2016), can lead physicians to heuristic confusion between the ‘effectiveness’ of treatments and what in reality *health* means to the patient. This suggests *medical* outcomes can marginalise *health* outcomes.

This conundrum, related to the symbolic value of science in medical education, can either be taken as granted or become the subject of reforms; the ‘black box’ opened to greater scrutiny. The strong relational nature of science-based medical professionalism suggests reform may be a generational process. At stake are science-infused meanings of medical activities; as the careers, statuses, funding, products and profits sustain *biopower* (Foucault 1990). The ‘black box’ of scientism in medical education (Brosnan 2011) appears to serve as the central ideological metaphor organising the medical community of practice; proxy to an ethos of care and justice. While purporting to protect patients from un-tested practices, and physicians from liability, many harms from human and system errors are reported yearly (Roughead, Semple & Rosenfeld et al 2016). This ideology can also protect a network of worldviews supporting the existing unsustainable, neoliberal order; and curricular reforms that reproduce social inequity (Bourassa 2011).

Beyond the WP agenda, reforms to medical education to include social or community medicine were pioneered in regions of health need in South America, Africa, and the southern United States (Anderson, Smith & Sidel 2005). Most often ‘social medicine’ refers to the success of the Cuban medical education system, in which physicians were trained “to promote health through individual *and* social means” (ibid np Italics added). Cuba’s Latin America School of Medicine has trained thousands of physicians from underserviced regions of the world, free of charge, in needs-based primary health care (PHC) (Wen et al 2011). Policy focus on early childhood provides ‘comprehensive care for the first 1000 days of life’ (Esquivel-Lauzurique et al 2019). In Cuba, policy alignment between government and health care provides universal health insurance during pregnancy, paid maternity leave from 34 weeks’ gestation, and family and community involvement in early child care (ibid). Health outcomes are reported as economically sustainable and comparable to western systems (Wen et al 2011:e12). This biosemiotic approach to improving outcomes of adult health, by intervening “earlier in the causal cycles” of illness (Giese 2003), employing interdisciplinary actions, was advocated for Australian Indigenous health by Professor Fiona Stanley. Cuba’s deliberate social justice education occurs through students’ close engagement within an underserved community (Butin 2007).

As Bell (1997) observed, social education

> begins with people's *lived experience* and works to foster critical perspective and action oriented toward social change
>
> (:14 Italics added).

Here, I highlight 'lived experience' or lifeworld as the source of meaning that people interpret and internalise. In this way, un-deserved societal oppressions can become internalised conversations constraining people's health. Liberatory pedagogy, termed 'education for critical consciousness' by Freire (1977), aims to empower capability to critique the political structuration of one's disadvantage and take corrective action.

Physicians can learn actions to effect change in oppressed mindsets, capabilities (Sen 1999), and social and economic circumstances – to produce situations where health can flourish. Improvements at the societal level include actions on the SDH that effectively reduce demand on health services. Current health system framing around reductionist biomedical science is now challenged;

> by a transformation of worldview in which the objective of understanding nature by breaking it down into ever smaller parts is supplanted by the objective understanding of how nature organizes itself.

(Laughlin 2005:76)

Biosemiotics is the study of the life of signs; describing how life has progressively evolved from the logic or meaning-making of signs in the changing environment (Hoffmeyer 2010). It is evidential as a “theory of meaning that reflects the deep dynamics of life itself” (ibid:386). From a biosemiotic perspective, the science of social health is not dissimilar to molecular biochemistry, except that interactions and effects occur at different levels of complexity (Wheeler 2006). As examples of this difference, Wheeler compares the flight of a solitary bird with the swarming of a flock. In society, gestures of racism and internalisation of social stigma, are ‘differences that make a difference’ (Bateson 1979) semiotically communicated to people’s existence; obstacles that can complexly result in chronic illness and premature death.

The implications of complexity science and biosemiotics to medical education is under-recognised (Tredinnick-Rowe 2015); perhaps obscured by the organisation of medical *scientism*. Semiotic (sign-based) organisation in biology (or biosemiotics) takes account of how the human organism establishes “a vital information exchange with its environment” (Musso 2020:449) termed *exosemiosis*; and within the body, “among each of the different biological complexity levels of the body: cells, tissues, organs and organ systems” (:50), termed *endosemiosis*. In this holistic paradigm, science remains at the centre of the medical endeavour, but the medical gaze shifts from effects to processes; to observe the dynamic exchanges between organic bodies, human lives, and changing environments. Mental and physical symptoms *emerge* from the complexity of information exchange, rather than mechanical ‘cause and effect’ processes (Musso 2020). Hence, in the biosemiotic worldview, current contradictions and misunderstandings of the relative value of molecular interactions to the emergent quality of ‘health’ are resolved.

Reflexivity on the science paradigm may provide insights to the organising principle of a hidden curriculum of “simplistic and un-examined belief systems” (Butin 2007:180). The hidden curriculum defines ‘the rules of the game’ (Bourdieu 1977) in the medical field, and can vet types of professionalism more physician- than patient-centred (Hafferty & Franks 1994). Positive outcomes of physician-centredness include a sense of autonomy, mastery and purpose. However, lack of patient-centredness can misunderstand the value of the patient’s lifeworld to the practice logic of problem-solving illness. Student diversity via the WP agenda envisages change in professional values, knowledges, and patient-centredness.

In the literature review (Chapter 3), factors shaping the hidden curriculum are investigated, and sought in participants’ replies to the study questions and professionalism discourses. The educator’s challenge is to change the hidden curriculum organising professionalism, and integrate humanist values. In this regard, social justice *service learning* – reflective learning within a disadvantaged community setting - is regarded ideal as both a process and a goal (Bell 1997).

Insights from complexity theory in science and education may provide clues to transforming professional mindsets; including how values guiding ethical medical practice are *dialogically* communicated in medical education.

2.3.3 Configuring critical reflexivity in medical professional education

Concern for the fate of tacit knowledges, of patients and WP students, also extends to formal medical knowledge. In the neoliberal university, a regime of ‘techno-managerialism’ has overtaken education in the form of online simulations and modules. However, loss of group learning advantages can reduce knowledge to a commodity (Holmes & Lindsay 2018). This *banking* approach to learning was criticised by Freire (1973), for stressing knowledge acquisition ahead of a questioning or *critical* examination of knowledge claims *in relation to* the patient’s health problems. This mode of learning impacts *understanding* essential to ethical practice with patients, including justice and care. Understanding, in Ryle’s distinction between ‘knowing that’ and ‘knowing how’, and the contextual ‘knowing why’ of reflection, is marginalised (Holmes & Lindsay 2018:5).

In community service learning, students are removed from de-contextualised (text-based) settings, to “an ambiguous and open-ended situation” (Butin 2007:181).This is a human, sign-filled world “that makes visible the complexities of the process and goals” (ibid:181) of justice learning. This shift appears to meet requirements for developing student physicians’ ‘sociological gaze’ or social imagination of health. The physician’s *reflexivity* on the patient’s behavioural responses to sociological adversity in their lifeworld is a practice of empathic appraisal of the human predicament, and a moral guide to SA actions. Clinical focus on the biosemiotics of both the patient’s *external* meaning making of their unique lifeworld and the embodied *internal*, biochemical disorder (illness), provides a more unified paradigm.

Biosemiotics could form the basis of a unified approach to medical education; a knowledge management system for teaching and learning how concepts and experiences integrate; as they are now regarded in molecular physics and social health production (Laughlin 2005).

In the final chapter, I return to semiotic paradigms in biology (biosemiotics), education (edusemiotics) – specifically Legitimation Code Theory (LCT); and professionalism (semioethics), to compare potential advantages against existing integrative socioscience teaching strategies. Signification of the responsibility to care; coded in the doctor-patient relation as medical semiotics or 'symptomatology'; is termed 'semioethics' by Petrilli (2014). Semioethics situates power and responsibility in the doctor-patient relationship, and focuses on interpretation of meaning from symptomatology. A semioethics understanding of SA befits the overarching goal of the thesis.

There can be difficulties initiating a culture of SA across health professions without shared understanding of the concept and its consequences for practice. Problem-based learning (PBL) in small group tutorials with experienced tutors, is a widely accepted mode enabling integration of theoretical, clinical practice, and students' tacit knowledges for problem-solving patient illnesses (Smeby & Vågan 2008). PBL cases can be written to portray patient contexts in which justice ethics apply; and the knowledges and skills for problematising the patient's social lifeworld to evaluate risk of illness, role-modelled. A course concept map can scaffold progressive learning of social health competencies across course curricula; and pedagogy can bring real world relevance to learning by engaging students with people representative of diverse social positions.

Pedagogical benefits are envisioned by inviting heterarchical voices to the design of curricula, with the aim to shift epistemology (Baron 2018). In education, this refers to the 'citizen-scholar' and the role of mentors in joining "voices and values in the engagement interface" (Rosaen, Foster-Fishman & Fear 2001:10). The process of developing 'diversity-responsive' medical education, reported in The Netherlands (Muntinga et al 2016) embeds *intersectionality* – positional perspectives afforded by learners' varied social identities - into curriculum content, with the aim of developing in students the habit of critical reflexivity.

2.3.4 Information overload and reforms to knowledge management

Further architectural reforms to medical education were introduced between years 1990 and 2010. Information overload, and contesting claims for disciplinary prioritisation in the formal curriculum, led to reform in knowledge management. In small group PBL tutorials, and simulated clinical communication with patients, students were encouraged to critically evaluate competing knowledge claims and apply to the context of a clinical problem (Brown 2008). Knowledge content in undergraduate curricula were integrated with professional behaviours; students advised to learn from history but adapt to changing needs (Kopelman 2014). An emphasis was placed on learning clinical communication skills, with more equal sharing of patient and physician agendas (Brown 2008). Accreditation of medical teachers was introduced to improve quality of learning.

Future medical practice, based in healthcare teams, required continuous updating and supervision of professional knowledge, behaviours, and skills (Brown 2008). Programmatic assessment of clinical competence was devised to drive contextual learning to value students' differences instead of their deficits (Schuwirth & Ash 2013). Yet, against these positive reforms are new societal norms that can be internalised and negatively influence students' moral dispositions for SA. Forces of neoliberalisation, professional socialization, and consumerism present significant obstacles to health workforce reform.

Brown (2008) reported neoliberalism a major external political reform affecting universities, medicine and health care. Neoliberal policy stressed individualism, self-reliance, and choice; shifting fiduciary duties and efficiencies from government to private service providers (ibid). However, the move to personal responsibility, self-sufficiency and a limited safety net can diminish medical professionalism by routing accountability to the public in the treatment and prevention of chronic illness (Charmaz 2019). In the U.S., neoliberalism has exacerbated negative moral judgements of stigmatised citizens and closure of social assistance programs that empowered peoples' health prospects (ibid). These structural weaknesses in U.S. and global health systems would be exposed in the COVID-19 pandemic.

Adopted into healthcare culture, a neoliberal mindset can unfairly stigmatise and isolate patients with chronic illnesses and disabilities (Charmaz 2019). Through privatisation and reduced public spending, neoliberal policy can expand social inequality and health gaps (Horton 2007); serving physicians and industry more than patients and society. The neoliberalisation of university education produced user-pays policies and efficiencies in financial resourcing of medical education. As noted earlier, the effect of these changes has reversed the WP agenda for students from low income families; returning the demographic profile of the medical workforce to higher social class status.

In established professions, the tasks of paradigm change are compounded by the existing dominant culture; normalised in institutions, policies, the social behaviour of members, and power of cultural stakeholders (Hafferty & O'Donnell 2015). The modern profession faces a moral conflict related to the rapid growth in medical knowledge and technologies, in which

> the qualities of predictability, measurability, efficiency, productiveness, cost-effectiveness and objectivity have come to assume a priority equal to, if not exceeding, older professional qualities of compassion, avoiding harm, service, altruism, and reverence for life.
>
> (Rabow et al 2010:310)

Furthermore, inherent to the *demand-led* model of western health economics, is relative exclusion of actions reducing impacts of the ecosocial environment on *collective* health; whence patients come, and once treated, they return. These societal contexts of health production; the shaping of health by structural inequalities that impose unfair differences on social groups, are detailed in the literature review [Chapter 3]. A 'future-facing' pedagogy projects expectations of alignment between the conceptual *map* of medical curriculum and the changing contextual *territory*. This calls for pedagogy to develop critical and creative physician problem-solvers, capable of tracking sociological responses to emerging health crises that contribute to inequitable health outcomes. A real-time, geographic approach to health is envisaged.

The Charter of Medical Professionalism (ABIM 2002) informs medical educators of a novel professional reform requirement - social accountability - in need of pedagogy. Diversity of student orientations to social justice is expected to influence the choice of pedagogy, and suggests a *liberatory* method, valuing student voice (Freire 1973). The methodology to achieve student learning outcomes requires suitable theory and stepwise development of knowledge, understanding and skills. Medical education experts refer to *professional formation* as requiring

> experiential and reflective processes, use of personal narratives, integration of self and expertise, and candid discussion within a safe community of learners.

(Rabow et al 2010:310)

Here, *safety* implies communal discussion is supportive of patient and student diversity, and learning equity needs, to avoid unfair stigmatisation. Candid discussion can inform students of patients' expectations of physician conduct, and ready them for the moral dilemmas they inevitably encounter. Physician actions across multiple levels of health structuration, from the biochemical to the sociological, and related complexity of duties, are now important developmental realisations in becoming a physician.

In the final chapters of the thesis, I show how capitalising students' diverse social stances, and the meanings patients interpret from their lifeworlds, can combine with biomedical knowledges in an integrative *biosemiotic* pedagogy. The pedagogy proposes to facilitate students' learning the praxis of 'reading the world'; using critical 'sociological imagination' to perceive, interpret, understand, and respond to changing health and illness needs of diverse patients; and the structural vulnerabilities of disadvantaged groups to chronic illness and premature death.

2.4 Relevance of the study: Social justice requirements in medicine

2.4.0 Introduction

A Physician's Charter signalled a moral obligation "between the profession and society" (Ritz, Beatty & Ellaway 2014) to do more to improve social living conditions. The present study aims to clarify the often invisible "generic attributes, qualities or capabilities" (Prideaux, Lindemann & Cottrell 2013:71) diverse medical students possess and develop in training contexts that contribute to the profession's 'social ecology' (Bloom 1989). The requirement for social justice in the practice of medicine is held important to problem solving actions for improving equity of health outcomes; and supportable in several ways. The following section outlines features of four topics of social *injustice* of present-day relevance to medical professionals. A brief discussion follows of the goals of social justice practice in health care and health production.

2.4.1 Professional autonomy and harms

The *first* injustice was the failure of medical professional autonomy, encoded in the Latin phrase *primum non nocere* (first do no harm), to protect the public from avoidable harms (Sokol 2013). The culture of modern western medicine has valued a hierarchy of specialist hospital practice and the financial rewards of demand-led private practice over community health care needs and health promotion (Coulehan et al 2003). Too often the result was poor patient safety, with harms related to overtreatment with toxic pharmaceuticals and invasive technologies (Sokol 2013; Huang, Newman & Schwartzstein 2014). Service coordination was poor, and perceived as more provider-centred rather than patient-centred, eroding public trust in the medical profession (Coulehan et al 2003). Harms also followed the failure by health services to identify patients with disadvantaged status; for example, Indigenous peoples, a group with a health risk profile significantly greater than non-Indigenous Australians (Schütze, Pulver & Harris 2017). [The social identification of patients is a critical SA practice tested in the study (Question 7, Appendix 5)]. Harm is done when Indigenous patients are given treatment *equal* to non-Indigenous patients; when more frequent, high quality, or intensive treatment is needed. To serve *equity* and achieve comparable health outcomes, more rigorous follow-up screening, support, ongoing care and education may be necessary.

2.4.2 Social determinants of health

A *second* imperative for social justice in medicine is producing physicians capable of positive impacts on unmet health needs resulting from unfair inequalities (or *inequities*) in imposed conditions of the social environment; the SDH (Allen et al 2013). A *determinant* is defined as "a factor which decisively affects the nature or outcome of something" (OED).

Medicine, focussed on acute and chronic care, has been criticised for being 'the ambulance at the bottom of the cliff' while *remediable* reasons for individuals (extending the analogy) 'falling off the cliff' of prevailing sociopolitical structures, were largely ignored (Barry 2005). Genetic and primary medical mechanisms of disease are two health determinants valued in medical education; yet by 'nature via nurture' these determinants are invariably subject to social determinants acting in the patient's lifeworld (Hernandez & Blazer 2006). The SDH were formed by social inequalities in living conditions, and acted at all stages of the life cycle to harm health (Marmot 2005).

Observations of population (or social) rather than individual determinants of health were made by Virchow (1848) during a typhoid epidemic. Durkheim (1851) found the extant suicide rate "an expression of social determinants" (Marmot 1998:58). Rose (2001) found evidence of 'sick populations' producing 'sick individuals'. Marmot (1991) extended our understanding of SDH with epidemiological research of the social stratification of illness. A gap in life expectancy was found to exist for those lower in the income strata, related to behavioural risks for coronary heart disease and other chronic illnesses (Marmot et al 1991). Although lifestyle 'risk factors' for disease could be identified; such as obesity, poor diet, smoking and alcohol consumption; it was the stressful conditions of living related to the SDH; identifiable "causes of the causes" of chronic non-communicable diseases (NCD) (Marmot 2005:1102). Marmot listed these conditions as poverty, stress, early life, social exclusion, work, unemployment, addiction, social support, food and transport (ibid:1102).

The SDH for Indigenous people living in remote areas of Australia and the Torres Strait, include levels of intergenerational trauma, early childhood disadvantage, incomplete education and literacy; communications; roads and means of transport; employment and income; language and social identity; housing, accommodation and social support networks. How transport, for example, affects health could be determined by the distribution of, and access to various health services; including screening, surveillance and prevention. Diabetes is highly prevalent in the Torres Strait Islander Indigenous population, and requires team-based care (McDermott et al 2007). Transport infrastructure was essential to distributive justice in a vast and sparsely populated country like Australia. Roads, boating, fuel and availability of emergency air transport, are essential for maintaining food supplies, housing, infrastructure, and access to specialist health services. Vehicle ownership and possession of a driver's licence is a SDH for remotely located Indigenous people (Freeman et al 2014).

The traditional focus in medical education and practice, on *proximal* health risks, with little consideration of the SDH as *distal* and 'fundamental' causes of physical and mental illness, can unjustly medicalise distressing social problems (Baum & Fisher 2010). Harmful health behaviours such as alcohol addiction and physical inactivity are proximal health risks, determined "in complex interactions with many factors over time" (Hernandez & Blazer 2006:12).

In Australian society, the quality of life among historically stigmatised groups; Indigenous peoples, migrants, the homeless, the poor, elderly, and those with intellectual and mental disabilities, remains relatively ignored (AIHW 2008). Physical violence, abuse and neglect of children, women and elderly citizens are regularly reported in the media. Other groups 'marginalised' in society by their devalued social identities, or belonging to subordinate minorities, are subject to *symbolic violence*. This critical theory term denotes harm, "the process whereby the dominant class imposes their ideology on the dominated" (Buchanan 2010). Internalising inferior social status, dominated groups become vulnerable to prolonged social distress, poor nutrition, reduced immunity, and chronic illnesses (NCD) (Hertzman & Boyce 2010). Unequal health outcomes can also result from poor distribution and quality of health care (Braveman 2006). Arguably, at a minimum, physicians have a duty to ensure universal access to healthcare, and effective health protection and promotion programs (Atkinson & Cottam 2011).

2.4.3 Environmental crises

A *third* social justice concern for medicine is *global* health impacts on populations derived from inter-connected global crises. Global health problems can impact at local, national and international levels. Concerns have been expressed about features of the existing culture of medical practice weakening the preparation of new graduates to meet dynamic, emerging changes in global health needs (Benatar, Daar & Singer 2003). National comparisons of highest and lowest life expectancy at birth indicate a global difference of 48 years (Marmot 2005); and within nations e.g. The United States, about 20 years (ibid). Such unequal differences, based on where one is born and raised, is a social injustice targeted by the United Nations Organization (Marmot 2005).

Ecosocial changes affecting global health include the increasing human population - now more urbanised and burdened by a growing aged sector; rising transnational migration and inter-cultural tensions; and the multiple, unequal impacts on health of climate change (Benatar, Daar & Singer 2003). The emergence of new infectious diseases and antibiotic resistance; persisting high rates of chronic non-communicable 'lifestyle' diseases; and widening gradients of social and economic inequality are known determinants of health and premature mortality (Benatar 2005). Impacts of the global economy, including powerful and exploitative transnational corporations, contribute to this desolation (Horton 2015). In neoliberal economies, it is claimed, social problems are unfairly *de-politicised* and *individualised* by a 'self-responsibility' discourse (Grunwald & Thiersch 2009). Likewise, policy actions on modifiable social inequalities that generate 'gaps' in health status remain under-resourced; while unsustainable health budgets in developed countries are not linked to better health outcomes (Berwick & Finkelstein 2010).

2.4.4 Lateral violence

A *fourth* perceived need for a social justice paradigm in medicine relates to conflicts arising from the hierarchy of power existing in health systems; between medical personnel, and between patients and health staff. Tensions between and against health staff can escalate to become what is termed 'lateral' violence; evident in a mounting epidemic of emotional and physical abuse inflicted by co-workers and patients (St-Pierre 2012; Trudge 2012). Critical insights to how institutional culture and contexts contribute to inter- and intra-professional violence in multicultural health care settings provide sobering insights to the detrimental effects on health services (ibid).

Poor communication (both direct and the *meta-communication* of semioethics), and subconscious bias by practitioners against some patients and co-workers based on differences in socioeconomic status, race, gender, sexuality, beliefs, and educational or occupational status; unfairly compound inequalities in their health (Young 1990; Gonzales, Kim & Marantz 2014). This situation is known as 'interactional' injustice (Havig 2013). Discriminatory impacts on nursing staff and medical trainees can lead to emotional disorders and reduced productivity, producing stress fatigue or 'burnout' (Trudge 2012). Tragically, permanent exit from the health workforce due to illness or suicide can follow. Fried, Shipman & Sessums (2019) relate burnout to physicians feeling "powerless in the face of systemic or structural barriers that affect our patients' health" (:2297). Health system operations can inflict *symbolic* violence on marginalised patients in the form of perceived victim-blaming.

Some commentators believe lateral violence between Indigenous Australians and governments; and within Indigenous communities an expression of “entrenched and unequal power relations” (Social Justice Report 2011:65). Others believe conflicts would resolve if basic human needs were met. The Social Justice Report (2011) regards ‘basic needs’ as distributive justice, safety and security, belongingness, identity, self-esteem, personal fulfilment, cultural security, freedom and participation (:67). Many of these needs are unmet aspirational goals for Indigenous peoples, globally.

2.4.5 Solidarity

Arguably, a *fifth* purpose for the medical profession to engage in social justice activism is *solidarity* with patients (ter Muelen 2015) in the ongoing democratic project of creating a socially just society. The idea of a fair society can also be served by a values-based approach - for civil society to treat marginalised groups (such as prisoners) with *equality* and *mutuality* (Mackie 2010). These values can serve both local and global public health.

2.5 Social justice and the ‘new public health’

Social justice, considered ‘the foundation’ of public health, recognises how

> societal patterns of disease and death, of health and wellbeing, … intimately reflect the workings of the body politic
>
> (Krieger & Birn 1998:1603).

Prominent justice theorist, John Rawls (1971) recognised our common humanity regardless of race, ethnicity, sexuality and gender, to arrive at a social contract of ‘justice as *fairness’*; in the distribution of the greatest possible personal liberty on one hand, and on the other, the greatest possible equality of opportunity of all people to function freely. Sen’s concept of freedom as *capability* is resonant. Rawl’s substantive economic principle was attended by a ‘principle of difference’ requiring social and economic institutions be arranged to benefit maximally those worst off; a balance between equity and efficiency (Rawls 1971). Regarding disability, Rawls’s theory “takes seriously the social process of exclusion and inequality that are products of factors outside the individual's control” (Smith 2001:21).

Recent conceptions of social justice take account of the social epidemiology of health in large populations, which observed distribution of health according to social inequalities judged to be *unreasonable* (Baum 2016). A number of invisible social forces including government and free market policies contribute to these health inequities; many being reversible (ibid). Global economic crises produce a destabilising effect on socioeconomic living conditions within and between nations (Wallerstein 2006); while a widening income gap between rich and poor is a known driver of health inequalities (Therborn 2013). Nations without social safety nets, such as universal health insurance, leave millions of citizens at risk of poverty and premature death (ibid).

The basic principles of social justice in promoting human *health* include; provision of equal *access* (“greater equality of access to goods and services”), *equity* (“overcoming unfairness caused by unequal access to economic resources and power”), *rights* (“equal effective access to legal, industrial and political rights”), and citizens’ *participation* (“expanded opportunities for real participation in the decisions that govern their lives") (Australian Department of Health 2004). A basic definition of social justice in medicine is "equality in access to and quality of health care and the right to health of everyone" (Hixon 2013:161). Social justice in *health care* has been described as

> equal access to health care for people in equal need; equal treatment for people in equal need; and equal outcomes for people in equal need
>
> (Ward 2009:51).

In effect, 'social justice' signals and enacts the systematic prioritising of resources and services to meet health *needs* over health *demands* in society. Resourcing of multiple health related sectors is necessitated by the primacy of the SDH; and the strong link between education and health. Furthermore, maximizing principles in public health require health *care* to be distributed such that each community receives maximum benefit; not just for immediate ill health, but in proportion to lifetime capacity for health and well-being (Cookson & Dolan 2000).

Ward (2009) sought to differentiate the terms used in the public health literature to describe social disadvantage for health improvement and health care services – variously termed 'disparity', 'inequality', and 'inequity' - arguing only 'inequity' refers to a lack of fairness or social justice (:50). While not all differences in health between persons are unjust, social justice required everyone

> should have fair opportunity to attain their full health potential, and more pragmatically, no-one should be disadvantaged from achieving this potential if at all possible
>
> (Stapleton et al 2014 np).

The goal of equity in healthcare is to "closely match services to health need in the community" (Ward 2009:50); best achieved in general medical practices or primary health care teams.

In formulating their own perceptions of social justice, medical student participants may reflect on some or all of these practice-related and democratic purposes – believing the best society for all that live in it, has the best social contract (Ellis 2019:246). Yet, they may not understand the ways all people are under internal coercion of "false consciousness and self-deception" (ibid:247) to power and wealth. This realisation gives reason for physicians to continually improve and *evolve* the social contract the medical profession historically sought with society. The public's *trust* in the profession, implied by the historical social contract, is to responsibly serve all. Yet, trust and risk have come to be seen as defining features of late modern society (Ward 2006). In medical practice, patient distrust and scepticism are found to be layered and systemic; embracing science, locum General Practitioners (GPs), and the national health care system as a whole (ibid). Physician social advocacy is a proposed solution to these concerns; for public health institutions to benefit community members.

A new way of thinking about health knowledges, interpreting health care praxis, and reflecting on the purpose of medicine in relation to contemporary and emerging social health risks, is supported by The Charter. For medical education, the knowledge informing SA actions lies in the social realm. Marginalised knowledge derived from the critical gazes of patients, medical students, and health related disciplines can also inform practice.

> The process of interpreting marginalised narratives from multiple perspectives has the power to expand individual understandings and draw us towards more socially accountable actions
>
> (Sandhu 2014:23).

In summary, a false consciousness of economic and democratic accountability to the populations served by the medical profession, has exposed serious social inequities affecting health. A suitable practice of social justice, focussed on achieving health equity, requires physicians and health teams employ a sociological lens to patients and their communities; to judge inequities and identify at-risk groups. New knowledge can result and inform health actions. Physicians have power in their societies, and can advocate for health service and policy changes to deliver intersectoral actions for health improvement. Critically reflecting on medical professionalism in the twentieth century, this study enquires about the possibility of inculcating a significant culture change in a powerful health profession, notoriously resistant to change (Wilkes et al 2013).

The study was set in the Australian context of medical education and societal health, which I turn to next, as the majority of study participants were expected to be Australian, or would become physician graduates in the Australian health care system.

2.6 The Australian context

In a 2008 publication for the Australian Government titled ‘What makes for success in medical education? A synthesis report’, the authors referenced the health outcome measures used to compare Australia with the other five OECD countries.

These health system variables included

- quality care, described as care that is effective or ‘right’, safe, coordinated and patient-centred
- access, described as the ability of patients to obtain affordable care in a timely manner and cost-related access problems
- efficiency, described as ‘a system that seeks to maximise the quality of care and outcomes given the resources committed, while ensuring that additional investments yield net value over time’
- equity, described as the provision of care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location and socioeconomic status …. and
- healthy lives, which was seen as the ‘goal of a well-functioning health care system’ … and was a measurement based on the indicators of mortality amenable to health care, infant mortality and health life expectancy at age 60.

(Commonwealth of Australia 2008:27)

While Australian health measures were high, and comparable with United Kingdom, Canada, New Zealand and Germany, the United States was well behind (ibid). Of note, however, the report held to a concept of equity as equal *treatment* rather than equal *outcomes*. Affordability, access and equity outcomes were significant problems for millions of citizens in America’s mostly ‘user pays’ system of health care. The report’s rather static vision of health service needs, to inform medical education, also lacks a global perspective. Others contemporary drivers of change in medicine with implications for medical education include

> changing demographics and revision of health priorities, social determinants of health, changing dietary patterns, obesity versus malnutrition, impact of rising costs, improving health literacy and global health, and breaking down inter-professional barriers and gaps in health care and education.

(Bhugra 2013:517; Lueddeke 2012)

The Australian Medical Education Study (2008) acknowledged a “strong history of quality medical education” (:8), challenged by “significant and profound contextual, societal, educational, economic and operational changes” (ibid). Much of this report was focussed on managing practice sustainably and meeting future needs. Challenges relevant to SA practice included;

- supply of healthcare workers in areas of need, such as general practice, rural and remote areas and indigenous areas;
- rapidly accelerating changes in the doctors' scope of practice and in the medical curricula

(Commonwealth of Australia 2008:8)

On the first point of 'supply of healthcare workers in areas of need', the study resorted to physician virtues. Other than 'academic' success, no pre-admission characteristics, such as 'usability' (Boelen & Woollard 2011:618), were identified to inform selection of medical students to meet the existing shortfall in healthcare needs. Reference was made to "quality of motivation, cognitive style, interpersonal style and communication style" (:8). What little attention was paid to social justice, the AME study viewed as *healthcare* professionalism, involving "'respect for others, integrity, altruism, accountability, duty, composure and sensitivity to diversity' (AMES-3, p.158)" (ibid:70). The report regarded the heart of 'success' in medical education 'motivation to learn' and 'taking responsibility'; while readiness to practice required 'self-insight', ethical behaviour, assertiveness and self-care skills (ibid:71). Missing in this account of future medical professionalism are 'justice sensitivity', empathy, reflexivity, and motivation to secure health equity for all Australians.

On the second point, of rapid change in doctors' scope of practice and in curricula, Iedema et al (2004) made insightful comments about reform in medical education. They first offered critical acknowledgement of *which* and *whose* knowledge matters.

> We must now accept that knowledge is constructed and maintained to serve specific needs and interests; it is not only *surrounded* by contesting discourses, but is itself most likely shot through with probabilistic and sometimes even contradictory meanings.
>
> (Iedema et al 2004:8 *Italics* in original)

This statement asserts all claims to particular knowledge are therefore political; and, therefore these scholars argue, medicine is “morally, politically and practically obligated” (ibid:8) to acknowledge and “engage with the myriad ways of knowing reality” (:8).

> Only by acknowledging difference and allowing and encouraging critical reflexivity will medical knowing evolve, and will our medical curriculum be able to make space for the contextualised, ethical and practical ways of knowing and doing that are increasingly being demanded of clinicians.
>
> (Iedema et al 2004:8)

This assertion opens a pathway for curriculum reform to do justice to a diversity of student ontologies, knowledges and practice orientations; directed to the diversity of dynamic and uncertain contexts of health. It would also appear to require an integrative pedagogy for mediating between contesting discourses and contradictions. Commenting on learning for an unknown future, HE academic Ron Barnett (2012) endorsed an ‘ontological turn’ in HE:

change in one’s relationship to the world, placing greater reliance on “human qualities and dispositions” (:68). Critical reflexivity appears the most suitable generalist skill for this challenge.

‘Critical reflexivity’ refers to the ethical exercise of questioning the value of existing arrangements and practices, in order to benefit all concerned. Adam and Groves (2011) theorise from feminist theory our responsibility to future generations; by “understanding a diversity of values that are constitutive of a worthwhile life” (:17). Their premise states “the future is not simply beyond the present, but is a latent and ‘living future’ *within* it” (ibid:17 Italics included). This accords with biosemiotic argumentation; and the universal structure of *representation* that includes the learning process (De Tienne 2000). The future of medical care, invested in the values and capabilities of diverse medical students, is an aspect of professionalism this thesis aims to edify.

Attention is drawn to the social knowledges and meanings students with equity identities bring with them in habitus. It involves a literacy quite apart from the jargon of expertise and physician identity in the ‘academic tribe’ (Geertz 1983) of medical disciplinary culture. For ‘outsiders’, the difficulty of bridging these cultural and linguistic differences is likened to being an ‘illegal immigrant’ (McKenna 2004:276). Motivating learning involves the outsider *investing* capitals in the new identity;

> integrating the new identity with those of the individual’s current multiple identities such that they ‘weave … into a single coherent narrative’ (Cameron 2002,5)

(McKenna 2005:276).

This aspect of professional development brings attention to the dissonance experienced by some outsider (WP agenda) students entering their chosen school's professional culture, and its particular structuration by biomedical and humanist discourses.

2.7 Social accountability and the widening participation agenda

Medical education reforms to meet community expectations of health care produced a widening participation (WP) agenda, inviting medical entry to capable students from non-professional backgrounds. Many are First-in-Family (F-i-F) to attend university, from socially disadvantaged groups with equity identities; female, disabled, Indigenous, migrants and low socio-economic status (SES) (Southgate et al 2017). While the WP agenda has been largely successful, the dominant medical culture and neoliberal 'user-pays' HE policies have posed significant structural, adjustment and retention problems for some F-i-F students (ibid).

SA requires the profession to be representative of the population it serves (Brosnan et al 2016). Expected benefits of the WP agenda to SA reforms relate to the moral dispositions of students from similar sociocultural backgrounds to their patients. This is not to suggest each WP graduate *be tasked with change* in the professional culture but each could contribute 'as nodes' to complex adaptive change and an emergent prosocial professionalism (Decoteau 2013). A student's equity identity may impart an objective social positioning or *stance*; to allow critical 'readability' of diverse sociopolitical conditions, and moral judgement of fairness. In the vernacular, they know 'where patients are coming from' (Southgate et al

2017). Yet, newcomers to a field from ‘outsider’ backgrounds can suffer ‘imposter syndrome’: the anxiety of feeling inauthentic or not belonging, that can reduce their prosocial capabilities (Sen 2009).

Brosnan and colleagues (2016) sought to understand holistic experiences of F-i-F students entering the elite medical profession. Gaps in enablement between F-i-F students and the demands of the medical education field were analysed using Bourdieu’s concepts of capital and field. Semi-structured interviews revealed perceived ‘asset gaps’ (capitals) during F-i-F students’ paths through medical school; of “the kinds of capital F-i-F students were able to access and those they perceived as being valued in the medical education field” (Brosnan et al 2016:845). Lack of ‘social capital’ persisted after admission, and left F-i-F students feeling isolated and relatively unsupported, energising contrasts with students whose parents were doctors. Some F-i-F students compensated by seeking to wheedle themselves into insider circles and access ‘cultural capital’. Others remained passive, but disadvantaged by being unaware of how medical careers were structured. Struggles with finances (economic capital) restricted the ability of F-i-F students to participate in student social activities, learning placements and even, to afford meals. The differences reflect observations in Canada by Beagan (2005) of the ‘classed’ structuration of medical schools. These moral conflicts are known to affect professional formation: the capability of students “to stay true to their core service values and the core values of the profession” (Rabow et al 2010:310).

An Australian study of F-i-F student experiences revealed reflexive awareness of their social mobility and value of their background status to humanising medical practice (Southgate et al 2017). Some found status mobility to middle class troubling; felt ambivalent about class loyalties and identity change, or anxious about the symbolic distance between themselves and more privileged peers. Most needed to do 'emotion work' to fit in and find a place in medical school culture. Indigenous medical student participants were reflexive of being stigmatised by a 'deficit narrative' of their capabilities; yet saw themselves as role models for Indigenous youth, and expressed a desire to serve the health needs of Indigenous communities (ibid:251-2). This 'recognitive social justice' (Fraser 1998) is important in the Australian context;

> a concept that describes the power of marginalised social groups to recognise their own strengths and gain a sense of their agency in addressing oppression (Gale,2000)
>
> (Southgate et al 2005:255)

There was a strong imperative for WP to Indigenous students. Statistics informing a narrative of 'need' for equity in treatment and preventive health services to the Indigenous population are compelling. In 2018, the Indigenous 'burden of disease' was 2.3 times the non-Indigenous rate (AIHW 2018). The social determinants of Indigenous health are often compound, and include forms of racism (Paradies et al 2015). In 2011, 64% of the Indigenous disease burden was attributed to chronic diseases (ibid); emergent from multiple, long-standing SDH, and scandalous historical and political inequities, including systematic massacres and mistreatments (Reynolds 2006). Compounding the traumas of colonisation were policies of miscegenation and displacement of Indigenous people from ancestral lands, that contributed to contemporary intergenerational trauma, chronic illness and institutional mistrust (Broe & Radford 2018). Training of local Aboriginal Health Workers

(AHW) to assist western health care providers in rural and remote areas was common in the 1980s, and active recruitment of Indigenous students to medicine commenced the following decade (Australian Indigenous Doctors Association).

[In this thesis and in academic texts, the terms Aboriginal, Indigenous and ‘First Nation’ are used interchangeably; although I have adhered to the preference of Australia’s Aboriginal and Torres Strait Islander (ATSI) peoples to be known as ‘Indigenous.’]

In 2004, the Committee of Deans of Australian Medical Schools (CDAMS) produced an Indigenous Health Curriculum Framework. Developed with Indigenous academics, the framework was a blueprint for nationwide curricular activities across the spectrum of training. Communicative justice was regarded imperative for culturally safe clinician-patient interactions: a non-formulaic and complex skill set. Avoidable harms to trust and developing therapeutic relationship with Indigenous patients required cultural sensitivity, security and humility (Australian Human Rights Commission 2011). Forms of racism, miscommunication, and externally developed or ‘top down’ programs (lacking Indigenous input) all harmed trust (Freeman et al 2014). A ‘social view of health’ that attends to the SDH, is considered suitable to Indigenous health contexts (ibid).

Australia is a multicultural but institutionally western society situated in Asia; so cultural respect strategies for indigenous populations have relevance to other groups in society. In pre-clinical training, virtual and real clinical simulations with actors allow students to *reflect*, get feedback, and improve their communication skills. Students are also made aware of a need to be reflexive of their own intrinsic biases toward particular patients, and to take responsibility for meeting each patient's health needs. Equity concepts and practices, to off-set social disadvantage (AMEE 2018), were proposed for undergraduate medical training; now taught in SA medical schools, including Flinders University (Worley & Murray 2011). Situated medical learning in LIC curricula (Poncelet et al 2014) successfully places students in the community to learn primary health care (PHC) principles; from patients, diverse health practitioners and academics.

In summary, change in medical education and professionalism has responded to research indicating high prevalence of chronic NCDs attributed to inequities in the social conditions of living and inequities in sociocultural health care. Innovations have led to review and broadening of entry to medicine for students of diverse backgrounds, and the benefits of situated medical learning in LIC curricula. A national Indigenous health curriculum responds to high equity needs for health resources to improve Indigenous outcomes. An innovative pedagogy is needed to neutralise a neoliberal 'consumerist' mindset in society, higher education and health services that weakens social cohesion and solidarity with underserved populations. In the Australian context, a priority for medical education is the professional preparation of students to respectfully interact and collaborate with people of Indigenous and migrant cultures; to respect diverse ways of knowing; to develop the habit of critical reflexivity, and integrate sociological and medical health data in medical phronesis. SA requires physicians become patient advocates; working toward improved communal health conditions and equity of health outcomes. SA by medical educators involves enhancing the social capital of students with equity identities (F-i-F and WP students) to enable the full realisation of their dispositions, capabilities and participation in the medical endeavour.

In the next section, I expand the rhetorical scope of The Charter to include preparation of resourceful medical graduates, ready to flexibly respond to future, emerging health needs.

2.8 Medical professionalism for a sustainable future

The profession's responsiveness to changing contexts of health, in an era of rising global concerns for biosystem sustainability, is the current 'big question' for medical education. Global economic, ecological and social (or ecosocial) changes drive inequalities that unfairly distribute human health (Marmot et al 2008; Krieger 2001). Sustainable professionalism refers to an innovative paradigm change to medical education, practices and research prioritising equity outcomes (Awosogba et al 2013). Magnussen, Ehiri & Jolly (2014) reported that a selective model of primary care with a disease focus; chosen by world health leaders over more expensive PHC targeting health equity actions; had failed.

Ideally, paradigm change to value SA practices would align inter-sectoral health policies with supportive university culture and medical professionalism education. Practically, a 'critical' vision of health sustainability projects reform towards a multi-level, values-based approach to health management and professional education. A new theoretical conceptualisation of practitioner knowledge and agency is required, integrating 'upstream' and 'downstream' health contexts; and collectively responsive to community health needs emerging from the complexity of dynamic, global health pre-conditions.

2.9 Aims of the study and normative expectations

The study aims to evaluate the nature of a social contract for medical professionalism held by diverse medical students, in relation to reforms introduced by The Charter (2002). The requirement for social justice and SA to patients is the focus of the inquiry. The ontologies, epistemologies and axiologies of participants are candidate entities for the transformative learning of the new professionalism.

Participants from contexts closer in proximity to societal disadvantage are expected to be more perceptive of the mechanisms of societal health and illness production. In a profession with high cultural status, participants' identities, dispositions and empowering capitals are considered *agentic* (Bourdieu 1977); motivating actions for SA. However, students' intentions for social justice practice face inflexible doxic structures in society, the medical school, and the culture of a classic profession. Curricula and pedagogies for developing professional competencies are structuring forces that need consideration in values transmission. Formal curricula were theorised by Bernstein (1990) to be structured by a 'contextualising principle' coded into pedagogy that influenced professional stance. This leverage has direct relevance to SA reforms, summarised in the final chapter.

Hence, in the study, Final Year participants are compared with First Years to elucidate the use of discourses that either support, oppose, or integrate management narratives of (social) illness with (medical) disease. Based on previous studies [Chapter 3] Final Year students are expected to diverge from the prosocial values held by First Years toward the status quo of the dominant professional culture. Flinders Final Year participants are expected to retain social justice values, supported by the structuration afforded by the school's SA ethos. Participants with multiple social equity identities are expected to have clearer insights to social health production than low equity participants; and more likely to choose a ‘type’ of professionalism serving social justice to deprived community groups.

2.10 Structure of the thesis

The thesis refers to the teaching, learning and practice of contemporary public health ethics, responding to the international Charter of Medical Professionalism (ABIM 2002). The study enquires about diverse medical students’ sense-making of The Charter’s requirement for ‘social justice’ in the practice of health care. Features of participants’ identities, values, and critical meaning-making (learning) of social health epistemology are hypothesised to inform pedagogy for The Charter’s medical professionalism.

The first part of the thesis attends to the literature on medical professionalism and social health justice; the education methodology of situated and transformative learning; research paradigms of ‘professionalism’ in medical education; and the forms of curriculum guiding students’ moral orientations to future medical practice.

A multi-theory framework is proposed for constructing a mixed qualitative/ quantitative investigation of study participants’ background characteristics, funds of *knowledge* of the social lifeworld, meaning-making *perceptions* of clinical dilemmas involving social health facts, and *capabilities* for prosocial action. ‘Capability to aspire’ - to act on own values, is the central frame for analysis. Raw data from interview questions was subject to qualitative interpretation, to compare framings of social justice practices by participants located in four key contexts of South Australian medical training: First and Final Years at the two schools. Quantitative testing of social knowledges and professional preferences was conducted using online multi-choice (MCQ) and short answer questions (SAQ). Participants' social identities were compared to test Bourdieu's theory of practice (Bourdieu 1977) and social capital conferring the capability (Sen 2009) to act on preferred values. Discussion relates the findings to medical education reform to meet future, emerging local and global health needs [Chapter 12].

2.11 Chapter Summary

The projection of professional responsibility into social domains of health production sees a need for physicians with social justice values, able 'to read' the lifeworld critically, and enabled to enact SA. The capacity to judge fairness in social arrangements and advocate; first, for equity in health distribution and SDH to achieve egalitarian justice; and second, to empower the agency of the public to achieve emancipatory justice; may involve developing students' understanding of the social 'health-illness dialectic' (Anderson, Smith & Sidel 2006) linking societal conditions to illness. Societal tensions redistributing health include rapid social changes, increasingly pluralistic societies, and inequities in the SDH.

False consciousness of the purposes of medicine and its professional contract with society, and insensitivity to the fundamental causes of illness in the social lifeworld, may require critical reflexivity by physicians on knowledges linking social inequity to health outcomes. A social constructivist approach to professional development vets change in praxis (agency) to critical consciousness (CC) of social health inequity; pitted against (structural) conservatism of powerful professional traditions, the false certainty of science, and the pervasive political economy of neoliberalism. However, Increasing participation of non-traditional, 'outsider' or WP students; with social identities proximal to those in pluralist societies, and values aligned with SA; offers the possibility of prosocial change in professionalism.

In the following chapter, I produce a literature review aiming to elucidate prior research on professional development of medical students' prosocial values; structuration of the WP agenda; and hypotheses informing professional reform to an integrated health paradigm. The literature review is followed by exposition of the main social theories informing medical education and practice change [Chapter 4].

CHAPTER THREE: LITERATURE REVIEW

3.0 Introduction

A key realisation underpinning the literature review for this study is the position of the topic at the nexus of sociology of education for medical professionalism and the sociology of human health and illness. In essence, SA can be considered an ethical or syntactic practice of joining together social and biological discourses. While both sociological fields are extensive and complex, to do justice to the context of the study, the following literature review is comprehensive, yet scaffolded to manage the multifaceted contributions of each.

The timeframe chosen for the literature search is 1960 to 2019, as there are limited articles published on the sociology of medical professionalism and just a handful of books on this topic prior to this date. Peer-reviewed articles were sought from the Scopus database, Google, Google Scholar, PubMed and Eric. The focus of the Scopus database is the fields of science, technology, medicine, social sciences, education and the humanities. Specific sites for medical education scholarship include Academic Medicine, Medical Education, Medical Teacher, Medical Ethics, and BMC Medical Education. More specific writing on social justice and equity in health care were sourced from library sourced books, e-books and websites; and journals of public health, bioethics, and sociology. Common sources of the latter include the Social Science & Medicine, Cambridge Quarterly of Healthcare Ethics, The Lancet, Medical Ethics, Medical Humanities and The Medical Journal of Australia (MJA). Google© and Google Scholar© were helpful for accessing blogs, ‘grey’ literature, and for writing not accessible through a university library.

The following initial search terms were recorded.

1. “medical student” AND humanism/ habitus/ prosocial/ association / “service learning” / service/ “widening participation” / professionalism / motivation/ “social determinants” / ”medical culture” / “critical consciousness” / “social justice” / resilience/ “social network” / “moral imagination” / imagination / “formative experience” / culture / symbolic / advocacy / “non-traditional” / “make a difference” / AND “social justice” OR equity AND “critical consciousness”

2. “hidden curriculum” AND resistance / AND medicine AND subculture

3. “medical education” AND “social contract” / “sociological gaze”

4. “social justice” AND professionalism / “moral development” / “critical consciousness” / imagination / motivation

5. student-led AND medicine AND Australia

6. medicine AND activism / complexity / “ethic of care” / “social accountability”

7. “social justice” AND “critical consciousness” / “conceptual change” / pedagogy / attitude/ motivation / disgust/ professionalism / “student engagement” / “perspective taking” / AND concept AND medicine /

8. “social capital” AND “peer group”

9. “medical professionalism” AND “critical perspective”

10. “service learning” AND definition / medicine / assessment / evaluation

11. “medical profession” AND boundary

12. “critical consciousness” AND assess / competency

13. “social inequality” AND “perspective taking”

14. “determinants of health” AND clinical / “social ecology” / indigenous

15. “social history” AND purpose AND medicine

16. “social capital” AND “widening participation”

The literature review is structured to revisit complex concepts, at first in simple terms and later in greater detail, in order to build conceptual clarity. This style of writing continues into discussion of the theoretical framework for data analysis.

3.1 Background

The wording of the 2002 Charter of Medical Professionalism responded to various critiques of the troubled *status quo* of medicine at a time of rapid global changes in health needs. Critiques included a. the excessive biomedical and commercial foci of the ‘medical industrial complex’ (Hafferty 2006); b. lack of public accountability in health planning and distribution; c. unsustainable national health budgets; and, d. the maldistribution of health funding and health services toward the biotechnical tertiary health sector away from PHC services. An ‘inverse care law’ persisted globally: the greater the health need, the less health services are available (Tudor Hart 1971). Among other long-standing critiques were the commodification of health care (Coulehan 2005); the habitual medicalisation of the social context of health (Engel 1977); the misrecognition of addiction as solely a behavioural or social problem; and the want of a paradigm of medical education for achieving SA (Boelen 2008). Within medical culture, a ‘hidden curriculum’ socialised through medical education reproduced unreflexive forms of medical professional conduct; benefiting physicians rather than patients (Hafferty 1998). The profession had an ‘exclusive’ image, “perpetuated and maintained by its competitive and high stakes entry processes” (Gore et al 2018:228); making ‘outsiders’ from low socioeconomic backgrounds and F-i-F to study medicine, feel like imposters. Other aspiring entrants were motivated to restore their family’s “lost cultural capital” (ibid:228) in the social hierarchy. Yet, medical schools accepted the WP agenda, and recognised

> the need to reduce bias and discrimination in selection processes and better reflect the diversity of the population that future practitioners will treat.
>
> (Gore et al, 2018:228)

Wright (2015) examined differences in support for medical school selection between private and public secondary students in the U.K. Applicants’ personal statements were the subject of thematic qualitative analysis employing Bourdieu’s social theory concepts of field and capital. Results helped explain reasons WP or public high school applicants performed less well in the admissions process. A higher level of support, including insider information of the admissions process and access to work experience, helped private school applicants appear more motivated and suitable. Equity of support was recommended for WP students in the admissions process.

In Australia, to better understand under-representation of F-i-F and low SES background applicants Southgate, Kelly & Symonds (2015) conducted focus groups. Appadurai's theory of 'capacity to aspire' proved useful to understanding the advocacy needs of these academically capable students to overcome barriers to inclusion (ibid).

Yet, they revealed the expectation in their narratives

> the knowledge, language and dispositions derived from social and cultural backgrounds will be of great value when the student arrives at their new destination, the medical profession.
>
> (Southgate et al 2017:255)

A number of models of SA education, practice and evaluation have been produced (Boelen & Woollard 2011; Schiff & Rieth 2012; Sandhu et al 2013; Awosogba et al 2013). However, equity of health outcomes remains an ideal. No fairness in distribution of health resources or health outcomes exists in Australia, nor worldwide. Ongoing debate asks whether health professionals should "include working for social justice and worldwide equity, or whether their role is confined to distributing the resources that are already available" (Kerridge, Lowe and Stewart 2009:82). The concept of *equity*, and implications of equity for health care and social health improvement are often under-appreciated by physicians, who can collectively hold "a biomedical imagination of health and care" (Baum et al 2009:1968).

Progress in medicine in 20C was dominated by the management of illness, not of health.

Yet situations of social injustice resulting from social inequalities adverse to the health of individuals and social groups, resulted in sickness, prolonged disability and early death (Marmot et al 2008). The existence of group inequalities suggests “they derive from social rather than natural (for example genetic) factors, and may thus be avoidable through public intervention” (Anand 2002:487). The quality of conditions in which people are born, live and work; the SDH, are unequally and often unfairly distributed in societies, and among nations (Therborn 2013). Conditions of health inequity are created by policy decisions, institutional procedures that include some while excluding others, and social prejudices; perpetuated by health systems, and physicians in interactions with patients (Marmot et al 2013).

In recent times, a broad coalition of health advocates has conceptualised moral need for social health improvements at local, national, and global scales. Improvements in the social contexts of health through actions on the SDH held the potential to prevent chronic ‘non-communicable diseases’ such as diabetes and cancer; deliver more economically sustainable health care; and reduce unfair inequalities in human societies represented by gaps in the rates of citizen morbidity (illness) and mortality (early death). The medical SA agenda, a social change project aimed at integration of medicine and public health, inspired this study.

The WHO (2008) produced this definition of integrated care.

> The management and delivery of health services so that clients receive a continuum of preventive and curative services, according to their needs over time and across different levels of the health system.

(Primary Health Care Research & Information Service [PHCRIS] 2013:79)

In the following section, I provide a brief overview of the historical background and key changes in medical education and medical practice suggesting how the discourse of medical professionalism for social justice was viewed in the past century.

3.2 Internal and external changes to medical culture

At the turn of 20C, reforms introduced by Abraham Flexner in the United States emphasized greater standardization, regulation, and quality of medical training; grounded in evidence from both peer-reviewed scientific research and physician experience (Berwick & Finkelstein 2010). The biomedical revolution resulting from Flexner's reforms achieved high impact in demand-led internal medicine worldwide; positioning the medical profession as the dominant power among the health professions (Friedson 1970). Yet, Flexner recognised accountability to the social context of health care and health improvement as paramount; explicitly linking the professional value of service to 'the public interest' of individuals and populations (ibid). However, a SA ethic was not regulated in pedagogy.

In an anthropological study of UK medical students, Simon Sinclair (1997) exposed structural abuses of power within the institution of medical education, that unfairly distribute distress on the basis of students' gender and race: rules of the game with lasting negative effects on mental health. Sinclair also revealed the way particular medical disciplines were favoured or maligned. Dominant student perceptions assigned lowest status to general practice, psychiatry and geriatrics compared to other career paths (ibid). Statistics, the backbone of the evidence based approach, was also maligned.

Bioscience evidence was inserted into the doctor-patient encounter in the last decade of the twentieth century (Mykhalovskiy & Weir 2004). Evidence-based medicine (EBM) purported to be “an approach to clinical activity based on careful review and application of the best and most current clinical research literature” (ibid:1059). Despite the remarkable success and global uptake of EBM, early sociological analysts’ reports of ‘unwanted side effects’ indicated EBM had not found its correct place in the medical panoply (ibid).

First among these was neglect for the role of the patient and their lifeworld as sources of evidence; and second, the invisibility of the consultation as a valued site of patient-physician interaction and humanism (Ibid:1062). EBM fostered a heuristic (or mental shortcut) that assumed ‘sameness’ of patients with the same medical condition. In practice however, variation is the rule; and there may be multiple health determinants (underlying causes) active in the same clinical presentation. EBM focused on “how knowledge is *used* rather than *how* knowledge is *produced*” (Rowley 2003:261 Italics in original; Taylor & White 2000). Medical knowledge was abstracted from studies of the body while social health knowledge was drawn from the conditions of living between groups in societies. The introduction of EBM and Internet computing into the clinic at a time of rising consumerism challenged the autonomy of individual physicians, and the traditional basis of medical professionalism. This tradition recognised a need for *personalized* clinical reasoning and the ‘co-construction of meaning’ in the doctor-patient interaction (Schutz 1967; Brown 2015), related to the inherent uncertainty of patients' illness presentations (Armstrong 2002) and the growing cultural diversity of populations (Awosogba et al 2013).

Critics of the call for social justice professionalism lamented a 'profession under siege'. Rapid, externally imposed, abstract changes were perceived to disregard the ethics of the clinical encounter and agreed collective culture of professionalism (Twohig & MacDonald 2004). These authors viewed the move an attempt to protect the profession more than the patient; yet neglected evidence linking social inequalities to poor public health outcomes.

In the opposite camp, physicians 'speaking out' declaimed the growing lack of trust in the medical profession related to rising self-interest and self-enrichment (Coulehan 2005). In this view, doctors were reproached for lacking in humanity; providing expensive, unsafe, and fragmented health services, to allow a growing asymmetry between the servicing of health demands and 'closing the gap' on basic health needs of vulnerable groups in society (Coulehan 2005; ATSI Social Justice Commissioner 2005). Like other social contracts cast-off during the modern era (Rubin 2012), the profession's duty to 'serve all' in society was neglected, and the importance of PHC to realising equity of health outcomes was devalued (Cruess & Cruess 2008). Strategies for improving population health were allocated minimal funding in runaway health budgets servicing an increasingly biotechnical and bureaucratic form of healthcare (ibid). Large sections of global population remained underserved due to the absence of universal health insurance and mismatching of health care services to health needs. In the U.S. context, growing commodification of medical goods and the vulnerability of universal health provision, led one public health physician to declare;

> Medicine has never been an entirely value-free discipline. It has inevitably reflected and reinforced the beliefs, values, and power dynamics of the society at large
>
> (Donohoe 2012:123).

In the U.K., the profession's reluctance to lose their cultural authority followed state-imposed curbs on expanding health budgets, and consequent administrative deference to government (Allsop 2006). In view of this resistance to change, the discourse of professional renewal through social justice activities would appear doomed. Simplistic conceptions of physician adherence to professional ethics prescribed 'self-regulation' (White 2014). Others viewed change as the confluence of different discourses.

Fox (1994) defined *discourse* as

> written, spoken or enacted practice organised so as to supply a coherent claim to a position or perspective
>
> (:161).

Yet, as Bleakley and colleagues argued, citing Foucault (1969), "conditions of possibility are formed by the interaction of different discourses" (Bleakley, Bligh & Browne 2011:246), and discourses may "produce the object of which they speak" (ibid:246). This suggested quality health care could be differently construed by diverse stakeholders.

> Medical education can be seen as the construction of a number of related discourses – medicine, education, science and public, for example.
>
> (Bleakley, Bligh & Browne 2011:246)

This suggests as the discourse of medical education becomes more human- and social lifeworld-centred it may constructively engage with the discourse of SA. It signals a shift in academic and practice orientation from solely clinical sciences to include social science of the patient's 'everyday lifeworld' (Grunwald & Thiersch 2009). This new 'situation definition' for SA health, a *qualitative* shift, was thought to be best mediated by dialogue (Fernyhough 1996:55). Both dialogue and *dialogical* communication, the latter being signified rather than spoken, are proposed to expand students' understanding (learning) of social knowledges. This draws attention to how pedagogy is *linguistically* structured; to help students make meaning of medical knowledge in diverse human contexts; a topic of educational theory investigated in more detail in the theoretical framework for the study (Chapter 6).

Using the same precept, it could be argued, the discourse of social health needs is a *public* discourse: one that could include medical students. Some medical students are likely predisposed to prosocial perspectives and actions on social health injustice and may be receptive to a more encompassing discourse (and practice) of SA. Wynia and colleagues (1999) include "patient and public health advocacy and activism" (Rogers & Ballantyne

2010:251) as core tenets of the new medical professionalism, but argued students *not be* "assessed as to whether they *are* altruistic or adopt a certain philosophy of social justice and advocacy"(:251).

In Australia, the student equity framework 'A Fair Chance for All' (DEET 1990) has been in operation for thirty years. A shift in the demography of medical student cohorts followed, with selectors hopeful of graduates with prosocial dispositions to "match what communities need" (Aretz 2011:268). In 2009, an Australian government education report identified

> economic, social, and environmental sustainability as a national priority for preparing students for the twenty-first century
>
> (Whiteside et al 2017:324).

Recognising the need for students to manage "stress, change, complexity, and uncertainty to be better prepared for their future" (ibid:325), and their own wellbeing, required social "skills, knowledge, and values that enable people to problem solve, adapt, and change in a complex world" (:325). The projected teaching challenge required "deep learning whereby learning is problem-based and teachers are 'proactive learning partners'" (Fullan & Scott 2014:7; Whiteside et al 2017:325).

Members of the International Federation of Medical Student Associations (IFMSA) endorsed the shift in emphasis of professional discourse toward 'health' and formation of a social justice movement, with the following comment.

> Ultimately, health is an outcome of how society distributes multiple determinants of health, and thus a general indicator of social injustice
>
> (Guinto et al 2012:e20).

Likewise, achievement of 'health for all' is the global goal of physicians seeking social justice in the health sector.

Quality improvement to achieve SA required a medical school to "enhance its potential to influence the planning, production and use of the health workforce" (Boelen & Woollard 2011:614). This required a means of evaluating the *conceptualisation, production* and *usability* of "the kind of professionals society needs" (ibid:618). This introduces the WP reforms that have aimed to diversify physicians' social identities to align with the composition of pluralist societies. The values, dispositions, knowledges and capabilities of diverse medical students to perceive social injustice, and transform medical responses to contexts of social health need, are the 'usability' foci of this study.

The importance of these factors to educational reforms is outlined in the following sections.

3.3 Medical education for global health

The terms 'international' and 'global' health have risen in medical education in recent decades; responding first, to health risks of infectious diseases when travelling to under-developed nations; then to the global pandemic distribution of communicable conditions like HIV, avian influenza and coronavirus; and, to chronic non-communicable conditions including diabetes, obesity and cancer.

An expanded definition of global health refers to three principles of collective action on the health of all peoples (Garay, Harris & Walsh 2013);

> *health for all* (for all people worldwide) *health by all* (by a representative range of stakeholders and actors) and *health in all* (multi-sectorial efforts to increase health, with special attention to social determinants of health)
>
> (np, Italics added).

The Lancet Global Commission, established in 2010, promoted equity or fairness as a ‘central organising principle’ for resourcing health, recognising the need for combined reform of global health systems *and* health professions education; with the vision

> all health professionals in all countries should be educated to mobilise knowledge and to engage in critical reasoning and ethical conduct so they are competent to participate in patient and population-centred health systems as members of locally responsive and globally connected teams.
>
> (Frenk et al 2010:1924)

Important educational implications of this vision include; *first*, the development of critical reasoning skills to recognise the impact of social injustices on health; *second*, validation of social emotions to motivate ethical responses to social injustice; and *third*, endorsement of moral imagination for global actions on health inequities. Coeckelbergh (2007) claimed,

> a key moral role of imagination… is that it allows us to envisage alternative possibilities and new ways of structuring common life
>
> (:112).

The rational function of imagination is *creative design*; here, harnessed for future health care innovations and directed to equity outcomes (VicHealth 2015). The three skills for SA practice are elaborated below.

3.3.1 Critical reasoning

The need for critical reasoning skills is to discern and problematise current social inequities, and signals a need for transformation in medical students' critical thinking in order to achieve more equitable health outcomes. The better known and more common 'technical' mode of critical thinking in biomedicine claims logical objectivity related to empirical evidence and applies a clinical approach reducing body systems into component parts (Wasserman 2014; Davies & Barnett 2015). The other, social form of critical thinking' refers to the ability to 'critique' power imbalances in society that unfairly limit opportunities for healthy life maintenance and improvement by socially disadvantaged individuals and groups. Employing critical awareness of this kind corresponds to the clinical practice of ‘close reading’ of the patient’s illness narrative. A different way of ‘seeing’ the patient emerges – viewed as a person negotiating society’s complex, dynamic web of political, social and historical forces - to which we are variably exposed. This skill has been described as ‘symbolic competence’ – a “flexible capacity to read people, situations and events based on a deep understanding of the historical and subjective dimensions of human experience” (Kramsch 2008:391). It represents an ‘emancipatory’ form of critical thinking; systematically exposing embedded political goals limiting human rights and opportunities for health among oppressed or subjugated groups (Kahlke & White 2013). The patient and physician, having different class backgrounds and perceptions, need to engage through *dialogic praxis* (Béhague et al 2020): the physician helps the patient to understand the sources of their distress.

Learning of this ‘critical’ kind can be transformative when students are situated in relation to Indigenous people and observe how they are disenfranchised from health opportunities by the subordinate status of their race, culture, geography, history, social living conditions, employment, language, and health literacy (Davy et al 2016; Benson et al 2014). This evokes Freire’s ‘critical consciousness’ - a term that conveys a moral way of seeing the world (Andre 1992). Freire’s work on ‘critical pedagogy’ (1973), focussed on education as empowerment of oppressed Brazilians, may also be applied to *patients* and *students*; a reciprocity facet of this thesis included in the theoretical framework (**Figure 3.2**).

Instead of being domesticated by their education into “learned intellectual and social passivity” (DasGupta et al 2006:248); an education that purports to objectivity but risks reproducing the dominant status quo (Rogers 2004); a *critical education* can be liberating.

“Students experience education as something they do, not as something done to them” (DasGupta et al 2006:248).

There is ample evidence that critical actions on inequality, including advocacy, self-management and empowerment strategies, improve individual and community health outcomes (Wallerstein 2006; Béhague et al 2020). Empowerment of ‘outsider’ medical students within the medical culture; developing their latent human values, capabilities, knowledges and dispositions for social justice; may be of mutual benefit to students and to SA medical praxis.

The collective nature of early socialisation suggests a socially constructed *pre-reflexive* foundation for modern identities (Farrugia 2013). Later reflexivity on these “unconscious assumptions” and generative or ‘creative’ use of pre-reflexive dispositions in new fields or in modern ‘moments of crisis,’ Farrugia argues, can help to explain how reflexivity becomes embodied in identity. The frequency of modern ‘moments of crisis’ may explain *habitual* reflexivity; a ready ability to ‘read the world’ - observed in young people by sociologist Margaret Archer (Archer 2012; Farrugia 2013).

3.3.2 Empathic reasoning

A *second* implication of the 2010 Lancet Global Commission relates to the development of students’ empathy; considered a ‘fundamental goal’ of ethics teaching

> because empathizing is implicated in perceptive capacities that enable us to recognize moral problems as moral problems
>
> (Maxwell & Racine 2010:434).

Haidt & Graham (2007) argue the long evolution of social cooperation and reciprocity to produce mutual altruism was not oriented towards equality of outcome or status, but *fairness* (:105). Empathy for unfair disadvantage is observed in well-constructed ‘service learning’ programs; arrangements engaging students in authentic community led activities (Mitchell 2007). However, a key distinction to be signalled by educators, is to assist students to channel their motivation from an intuitive desire ‘to help’ - to actions that expose and mitigate the *power relations* perpetuating inequalities (ibid).

> Critical service-learning programs not only challenge students to ask why [is this happening?], but support students in understanding the causes of injustice and encourages students to see themselves as agents of social change
>
> (Mitchell 2007:102).

A supportive pedagogy for maintaining students’ empathy and motivation for justice and care in medical education is highly desirable, and is elaborated in the Discussion chapter.

3.3.3 Global health reasoning

A *third* reality relevant to the 2010 Lancet Global Commission relates to the medical epidemiology of health inequalities: impacts of cultural, commercial and SDH do not stop at national borders. The globalised world confronting graduates in the first century of the new millennium is in a state of dynamic, unprecedented change. Rapid social changes linked to global business arrangements are untethered from, but impact heavily upon sovereign states; and add uncertainty to systems of governance and to income distribution within nations (Barry 2005). Even within wealthy nations, gradients of income inequality and poverty have increased, with negative impacts on rates of illness and life expectancy (ibid). Policy valorising 'aspiration' for social mobility acts simultaneously to create a 'deficit discourse' around the social problems of those left behind (Zipin et al 2012). Ironically, the observed "rapid increase in global human interdependence" (Kasper 2014 np) in recent times has consequences that continue to emerge.

While economic growth was the "biggest single contributor to population health since the Industrial revolution" (Egger 2009:78), it is also linked by air pollution from combustion of fossil fuels to global climate change (McMichael & Hayes 1997). Climate warming is of sociological interest as its outcomes rest on collective changes in human patterns of resource production and consumption. Climate warming impacts health through the generation of extreme weather events, which in turn alter water supply (causing drought, fires or flood); affecting food production and nutrition; resulting in heat and cold stress in the young and elderly; increasing spread of infectious and water-borne diseases; and forcing the displacement of human populations (McPherson 2014). Vulnerable communities in the 'Global South' are disproportionately impacted by the big carbon emitters in the wealthy 'Global North' – a situation of 'climate injustice' (Pellow & Brehm 2011:236). Expansion of the human population and lifespan, and subsequent economic growth, compound climate and food production problems (ibid). Knowledge of these large scale political, ecological and social factors affecting health, need to be accommodated in the structure of the new professionalism, which I turn to next.

3.4 Medical education for social accountability

The importance of social justice in health care is underpinned by explicit knowledge of the effects of social injustices on human health; which then becomes cultural capital for medical students, health practitioners, and educators. The transformation sought in medical education, requires a re-imagining of the medical curriculum and graduate attributes (Celletti et al 2011). Guided by the World Health Organization (WHO), a SA agenda to produce healthier societies was adopted by selected medical faculties (Worley & Murray 2011; THEnet framework 2010; Boelen & Woollard 2011). At the time of the study, the medical course at Flinders University, but not Adelaide University, had a SA ethos.

The proposed aim, was for the medical profession to orient

> education, research, and service activities toward priority health concerns of the communities, regions or nations it has a mandate to serve
>
> (Boelen & Heck 1995:3).

In a 'socially accountable' medical school, academic scholarship bridges to community needs; graduates reflect the cultural diversity of the population; and more pluralistic perspectives of social justice are expected than are defined by the term 'distributive justice' (Young 1990). As an example, the colonised Indigenous population has the direst health statistics of any group in Australia (AIHW 2020). Indigenous peoples have claims related to human rights for "recognition, respect and reconciliation" (Howitt 1998); which include land rights; and the aspiration to 'close the gap' of relatively poor health compared to non-Indigenous Australians resulting from historical, political and social injustices. Consequently, what ought to be the beneficiary of social justice in health care is constituted in *recognition* of distributive, egalitarian, emancipatory and rights-based claims that form gaps in health outcomes between people.

One account of the production of health inequalities suggests, in the globalised 'neoliberal' economy, a 'zero sum game' is in play, creating winners and losers (Therborn 2006). Gradients of socioeconomic inequality adversely affecting health exist both within and between countries, and often within the same city (ibid). A paradox of this finding is that in the United States, one of the wealthiest countries in the world, life expectancy is lower than predicted by health expenditure per capita; higher than any other developed nation (ibid). As a global political economy, neoliberalism induced "a crisis of thinking, feeling and doing" within learning institutions (Singh & Cowden 2013:3). The world into which our medical students graduate faces mounting crises in environmental, social, political and economic ways that requires new ways of thinking and acting (ibid:5).

The binds created by students' financial, bond and time debts (medical programs are often four to six years long), may also mitigate the humanising values of the new professionalism movement (Singh & Cowden 2013:6). They can result in "loss of connectedness to others"

(:7) and moral relativism for others' misfortunes. Internalisation of neoliberal values can induce fatalism, according to Freire's critical pedagogy, until learners discover their 'agency' – the will to act against such prevailing oppressive 'structures' in their lives (ibid:8).

In order to achieve social health outcomes, educators argue, the BPM model that Engel introduced requires new competencies: *structural* competence and *cultural* competence (Metzl & Hansen 2014). Structural competence refers to competencies above the level of the individual; recognising how overpowering social and economic forces shapes patients' clinical presentations (ibid). Cultural competence also takes a wider view of the doctor-patient relationship to include the contextual factors; habits and beliefs about health unique to the patient's culture (Paul, Hill & Ewen 2012). Understanding culture is considered essential to understanding communication needs and egalitarian health needs; to achieve health equity outcomes (ibid). Preparing Australian medical students to *critically reflect* (the term 'reflexivity' may be interchanged here) on their attitudes and beliefs about Indigenous people is an important, transformative step in multicultural awareness and communication training. Educators often employ a framework known as 'cultural humility', a principle that;

> incorporates a life-long commitment to self-evaluation and self-critique, to redressing the power relationships in the patient-physician dynamic, and to develop mutually beneficial and non-paternalistic clinical and advocacy partnerships with communities
>
> (Tervalon & Murray-Garcia 1998:118).

However, cultural competency training programs can produce counterproductive attitudes if learners are not reflexive of their own cultural dominance; and how they may reinforce stigma by ‘othering’ and stereotyping minority cultures (Paul, Hill & Ewen 2012).

> Ideas of ethnocentrism and racism, where the underlying idea implies that the problem is due to the difference, are abandoned.
>
> (Yeager & Bauer-Wu 2013:252)

Similarly, the importance of learning the “context of Aboriginal history to health” (Murray et al 2012:2) is emphasised by Aboriginal leaders; to avoid the development of “’unrealistic expectations… and intolerance based on lack of understanding’” (ibid:2).

The medical school in the College of Medicine and Public Health at Flinders University of South Australia is a member of a group of SA medical schools named the *Training for Health Equity network* or THEnet (Murray et al 2012). The Draft Evaluation Framework for THEnet tabled a set of ‘values underpinning social accountability in health professional education’ (THEnet framework 2010). Values included; equity, quality, relevance, efficiency/ cost-effectiveness, social justice, community engagement and partnership, inter-professionalism, cultural sensitivity, mutual transformation, access to education, responsiveness and altruism (ibid). In effect, the values and their meanings define and project a new culture for the health professions in Australia, and for the communities THEnet schools serve.

Reflecting primary health care goals, SA expands the physician’s role.

> All health professionals working with Indigenous peoples should not only provide treatment, they also need skills in advocacy to assist individuals and communities in crises, and with housing, legal, employment and other issues.
>
> (Murray et al 2012:2)

Individually, students entering medicine (First Year) can be expected to express value judgments based on universal values, such as justice as fairness; although these may at first be habitually formed through the student's family background, class, culture, and education (Bourdieu 1993). While it may not be feasible to expect medical students prior to graduation to have gained a sophisticated understanding of arguments justifying health care priority setting (Clark & Weale 2012), the SA agenda in medicine sets expectations for graduating students to reason beyond stereotyping. The basic tasks are to identify injustice and rationally apply advanced thinking to 'take account of' evolving health and social needs (Pálsdóttir & Neusy 2011). This suggests a semiotic (sign recognition) mindset; social perspective-taking of various interactions that 'communicate' unjust disadvantages to health (Commons & Rodriguez 1990).

3.5 Gaps in the literature on social justice learning

Acquisition of a social justice gaze has been studied in a number of ways in the pluralist context of teacher and student education in the United States. Relevant to this study is medical students' learning to practice with *justice* and *care*. A central task may be the communication of critical discourses - to challenge students' accepted modes of thinking about health. I briefly outline academic approaches to the study of moral thinking, obstacles to moral reasoning, and what remains to be known.

Kohlberg (1981) reported six developmental stages during the transition to adulthood, of principled moral reasoning of *justice*. Gilligan (1982) studied moral reasoning of *care*; showing people communicated with a justice *or* a care ‘voice’ or ‘orientation’ when “discussing their experience of morality” (Self, Jecker & Baldwin 2003:55).

> Persons who exemplify a justice orientation view relationships in terms of inequality versus equality and in terms of mutuality and reciprocity. One who adopts this orientation asks what is fair for all involved in a situation. Justice thus connects vulnerability with oppression. A justice orientation is concerned with issues of fairness, individual rights, and adherence to standards and principles. From this framework, morality requires following the universal ethical principles of justice, autonomy, reciprocity, equality, and respect for all human beings.
>
> (Self, Jecker & Baldwin 2003:55)

Ethical reciprocity refers to “the capacity to grant equal moral weight to others” (Gross 2001:389); or the ability to “recognise the moral perspective of an opponent” (:388). Together with ethical sensitivity to recognise moral dilemmas, ethical reciprocity is a precondition for moral dialogue and ethical argumentation. In a survey of medical ethics educators (Gross 2001), the affective skills of ethical sensitivity and reciprocity were rated of highest importance (ibid). In global health ethics, *solidarity* with others based in human rights was considered a guiding moral concern (Benatar, Daar & Singer 2003).

Attempts have been made to develop measures of moral reasoning for evaluating student progress (Self, Baldwin & Wolinksy 1996), although the validity of a one-dimensional quantitative conception of morality has been challenged by Burack (1996). Self's team recorded interviews with graduating medical students discussing a real life moral dilemma they had experienced and how they dealt with it; and recorded students' justice and care orientations (Self, Jecker & Baldwin 2003). While the authors provided no critical discussion of social inequalities, the study supported previous research showing male graduates tend to use a *justice* orientation, and females a *care* orientation to resolve moral dilemmas (Ibid). Curiously, although most participants were able to identify justice and care arguments in their dilemmas, less than a third used this information when attempting to resolve the conflict.

Critics argue universities are not ideologically neutral enterprises (Freire 1976). The role they play in supporting the status quo makes them unsuitable places for learning about social justice (Christopher & Taylor 2011). Others argue HE assumes an essential role in developing students' critical thinking and moral decision-making capabilities in preparation for roles in society (Davies 2015). Yet, although social justice is a medical professionalism theme, it receives little attention in medical ethics instruction (Glenn 2012). In one study, First Year students initially had unsophisticated perceptions and definitions of what social justice means (Fuentes, Chanthongthip & Rios 2010); and entered a culture of commercially commodified medicine, structured toward cost effective managerialism rather than justice (Komerasoff et al 2013).

Transformative change of students’ perspectives of the relationship between social injustice and medicine may require developing their critical thinking skills in the early years of HE; as “67% - 90% of critical thinking skills are developed in the first two years” (Reason, Terenzini & Domingo 2006:150). Innovative medical electives in disadvantaged communities; and ‘service learning’ projects in which students volunteered to provide free health care, immunisation and health education within underserved and disadvantaged communities, were put forward as transformative means for instilling social justice values in health students (Cipolle 2010).

However, educators warn of potential obstacles to achieving CC when ‘service’ is wrongly misconstrued in neoliberal terms as ‘charity’ or ‘helping’ (in which power is retained by the service provider). Instead, service can mean opportunities to provide advocacy *for*, and capacity-building *with*, and in a power sharing *relationship to*, oppressed individuals and communities (Ritz, Beatty & Ellaway 2014; Fane & Ward 2014). Without guidance, students may also retain a wholly ‘biomedical imagination’ and fail ‘to see’ the social precedents of health problems (Baum et al 2009). Service learning can instead be an opportunity for social studies learning of human rights; the “agreed upon standards for fundamental human life and dignity” (Armaline 2010:156); and, a “space for critical discourse on the *fundamental* assumptions upon which… ideologies and social structures are based” (:152).

A Canadian study examined medical students' attitudes to free universal health care (UHC) as an indicator of their sociopolitical attitudes (Maheux & Beland 1987). Participants' attitudes become more conservative during training, in both traditional and socially oriented medical schools; and their background characteristics were *four times* more powerful in explaining variation in students' sociopolitical attitudes than variables relating to professional medical training (Ibid:623). The social embodiment of background characteristics, in what Bourdieu (1977) termed *habitus*, is explained more fully in later theoretical discussion [Chapter 5].

Torres-Harding and colleagues in Chicago reported a study of 'definitions of social justice' provided by university students from various faculties; finding a remarkable degree of consistency in responses (Torres-Harding et al 2014). Torres-Harding's team were wary of the 'theory of a just world' fallacy in students' responses: a mindset that perceives no injustices, but equal *opportunities*; claiming disadvantaged people had only themselves to blame for their lack of progress in society. This maps onto the 'responsibility' argument when discussing lifestyle and health; agency is determined by individual *choice* of lifestyle. Instead, the challenge is to *problematise* the extent to which people are autonomously responsible for their choices and health outcomes when there are inequalities in their social environment for which they are clearly not responsible, and have little agency to change (Andersen et al 2013). This reflexive challenge in health care is tested in the study.

Students in the Chicago study were asked about social justice promotion activities they engaged in, with about 40% reporting one of a variety of group and individual actions; plus "having been a member of an organisation, engaging in political activism," (Torres-Harding et al 2014:59), and “volunteerism, research, advocacy” (:59). Participants’ activities focussed on ‘helping others’; not collective actions, shared decision making, empowerment of others, or self-reflection on one’s own privileged status (Ibid:63). Another fallacy impeding accurate empathy is the belief that everyone’s social position is a matter of luck; an opinion known as ‘luck egalitarianism’ (Coeckelbergh 2007:109). Torres-Harding et al (2014) recognised how as university students their study participants were more privileged; and commented

> it is possible that being a member of this privileged group made it harder to acknowledge issues of power and power differentials which might lead one to focus on power-sharing as a way to extend social justice to disadvantaged groups
>
> (ibid:64)

In another U.S. study [**Figure 3.1**, below], analysis was conducted of written ‘reflective’ essays by first year medical students; of their perceptions of physicians’ responsibilities to the underserved – before the Obama Government’s introduction of UHC (Ross et al 2010).

Results indicated participants held good knowledge of, and agreement with the practice of *pro bono* health care in the U.S.; although some understood that competing demands on physicians’ time was at issue, affecting access and quality of care provided. A minority of students presumably adopted a critical stance to *pro bono* arrangements and argued *against* this practice in favour of more comprehensive health policy reform. The majority of students “strongly supported” inclusion of social justice health issues into their curriculum

(Ross et al 2010:764). Support for social justice in South Australian medical curricula is sampled in this study.

Researchers	Research instrument	Study participants
Self, Jecker & Baldwin, 2003	Interviews	Graduating medical students
Crandall et al, 2007	Validated survey	First, Second & Final Year medical students
Crandall et al, 2008	Validated survey	First, Second & Final Year Medicine & Pharmacy students
Curling et al, 2007	Postal Survey	Practicing physicians
Ross et al, 2010	Reflective essays	First Year Medical students
Sommers et al, 2010	Questionnaire	First & Final Year Medical students
Wayne et al, 2010	Validated self-report survey	Pre-clinical Medical students

Figure 3.1 Studies of Social Justice Orientation in Medicine

In a study by Crandall et al (2007), a commitment to caring for the underserved was greater when students entered medical school in both traditional and problem-based learning curricula than when they graduated; and in a study by Curlin et al (2007), caring for the underserved was not more commonly reported among religious physicians. Students exposed longitudinally through the curriculum to underserved patients reported more favourable attitudes; and, while more female practitioners cared for patients who were poor, this may be because more female graduates go into general practice (Crandall et al 2007).

An American study of medical student participation in service learning activities, although flawed by small study size, showed the majority had academic scores in the middle quartiles of class rank (Brush, Markert & Lazarus 2006). Given the relationship of pre-tertiary service participation with later careers in primary health care, the authors questioned why this activity and leadership was not rewarded in student evaluations. I return to this question in the Chapter Twelve, to consider organisational management models for achieving SA praxis that draw on students' diverse social interests,.

There was a relative lack of sociological reports in the medical education literature on medical students' moral orientation and practical facility with bioethics in their professional practice (Sommers et al 2011). Sommers and colleagues in Germany employed online surveys, interviews and participant observations, and found their medical students gradually lost their initial *care* orientation and used more *justice* arguments in bioethical dilemmas as a result of professional socialisation (ibid).

Major obstacles to professional reforms are attributed to a 'hidden curriculum' of medical professionalism, and recruitment of students from traditional (upper and middle class) backgrounds to medicine. Reform, perceived as a shift in these structural factors, can refer to the fostering of student characteristics, socialisation of values, and validation of powerful knowledges, to effect change in the hidden curriculum. However, external societal changes may drive students' need-to-know SA praxis to develop physician competence in the real world.

3.6 The aims of professional reforms

The hidden curriculum in traditional medical training tends to reinforce a *status quo* of dominance of specialist over generalist health care; scientific objectivism over sociological inquiry; biomedical expertise, and hierarchies of power and income over humanistic needs-based care (Hafferty 2006). The de-humanising effects of this curriculum in medical training was reported to tacitly objectify patients by cultivation of a scientific or 'medical gaze' (Foucault 1994). Unaccompanied by a social way of 'seeing the patient', this gaze can result in the replacement of cynicism for the initial idealism for patient care students profess on entry to medicine (Hafferty & Franks 1994; Wasserman 2014). Research has revealed students progressively lose the humanitarian concern they had on entering the course (Albanese 2000; Carufel-Wert et al 2007; Hilton & Slotnick 2005); for homeless people (Masson & Lester 2003) and for patients' social contexts; with males showing more erosion of empathy than females (Woloschuk et al 2004; Wayne et al 2010).

Identity theories of professional development can provide insights to students' early orientations and adjustments to the field of medicine. Monrouxe (2009) studied the identification process of becoming a doctor by examining the audio diaries of medical students. Monrouxe (ibid) analysed, coded and labelled students' narratives as the *Privilege* narrative, the *Gratitude* narrative, the *Certainty of Medicine* narrative, the *Good Doctor* narrative, the *Healing Doctor* narrative, and the *Detached Doctor* narrative (:45). The dominant narrative of modern biomedical medicine she labelled the *Certainty of Medicine* narrative (Monrouxe 2009); which runs counter to the reality of *uncertainty* in the complexities of social and health care systems. However, this discourse gives comfort to learners and practitioners seeking security in biomedical science, using the critical thinking required for clinical logic, but lacking 'sociological imagination.' A 'privilege narrative' can undermine the particular values medical educators hoped to instil; such as humility, and self-reflexivity; to prepare students for dealing with disadvantaged patients (Yardley et al 2013).

Comments on the aims of professional reforms included the need for medical graduates to learn "to engage in critical reasoning and ethical conduct" (Frenk et al 2010:1924); and to "match what societies need" (Aretz 2011:608) by enacting social justice in health care and health production. As Trede (2009) argued, health professionals need to recognise the

> uncertainty, diversity, and complexity that underpins and will continue to underpin health care practice in the future;
>
> (:4)

and, to "cultivate the habit of thinking that informs doing" such that "accountability is owned and lived" (:4). Trede (ibid) advocated for 'change itself' to be accommodated in medical professionalism; to maintain the relevance of health services to problems posed by changing ecosocial configurations in human societies.

The aphorism ‘doctor, first heal thyself’ has relevance to the ontology of modern physicians. Educators have examined ‘self-concept’ as a psychological construct of relevance to moral professionalism (Yeung et al 2013). ‘Self-concept’ is defined as “

> a theory that a person holds about himself or herself as an experiencing, functioning being in interaction with the world
>
> (Turner 1982:3).

This seems a worthy goal for physicians; for well-being and protection against burnout; to practice reflexivity on ‘the Other’; for inclusive communication and counselling skills; and, to develop confidence and agency for prosocial leadership.

Concerns for the loss of humanism during medical training, and the call of The Charter to respond to social inequities in education and health, has driven research for parsing a moral orientation to social justice in health care. Findings by Monrouxe (2009) of a ‘privilege’ narrative and a ‘certainty of medicine’ narrative in student discourses run counter to SA discourses. These obstacles inform researchers of gaps in the literature regarding students’ transformation to a social justice mindset [**Fig. 3.1**]. The dialogical communication of meanings from culture to student are denoted in *cybersemiotics* (Rafieian 2010); which I discuss in the final Chapter, when theorising a pedagogy validating SA professionalism.

Broader concerns about the future of professionalism respond to past, current and future issues of *trust*, and physicians’ responsibilities for emerging health needs.

3.7 Renewal of the profession's social contract

The arrival of the second millennium presaged a significant moment for philosophical reflection and evaluation on the status of medical professionalism.

The 'renewal of professionalism' discourse amplified the need for change in the culture of medicine *to be more to those more in need*: more sustainable, and more humane (Coulehan 2005). It returned the spotlight to social or public health, and need of 'ecosocial changes' to health systems; to enhance the sites of health *production* for individuals, marginalised groups and large populations (Krieger 2001). A global health ethics treatise by Benatar, Daar & Singer (2003) proposed an 'extended bioethics discourse' to involve the public and establish "a new social contract between science and society" (:110).

In medical journals, the corresponding discourse centred on medical education curricula, the teaching and assessment of medical professionalism, and development of professional identity. Building the social capital of WP students, and easing the structuration of medical education to enhance WP students' equity of progress, is an ongoing project (Brosnan et al 2016). The overarching discourse of *change*, in values and practices, shifts the focus to development of graduates' professional agency. Further considerations to claims for agency to transform the practice of medicine are explored next. This questions *whose* agency, and *which* knowledges ought be validated in educational discourses of SA.

As Luke (2003) reports (citing Jordanova, 1995), "[k]nowledge in itself is a certain discourse which is produced in and through the social" (:45). The knowledge driving perceived need for change in health systems likely derives from three main sources. The *first* centres on unsustainability to government budgets of financing modern demand-led health care; a problem for which it was claimed medical schools owe some responsibility (Boelen & Heck 1995). As some argued, in western health systems *value* was under-appreciated; “financial incentives lie with illness not wellness… [causing]… “wasteful overservicing” (Braithwaite 2016). *Second*, data demonstrating health disparities correlated with distressing social inequalities felt by diverse individuals and groups; reflecting deficits of equal respect, care and justice (McNall 2016). *Third*, a ‘global health’ movement emerged from an improved understanding of *health production*; which recognised the complex inter-relatedness of worldwide systems of power producing socioeconomic inequalities (Barry 2005). In effect, the *determinacy* of the social and global environments has displaced psychological theories as the leading driver of health behaviours, illness, and premature death.

Another claim argued the role of social science research in health improvement suffered as sociology became beholden to the hegemony of the *quantitative* science episteme (Tsey & Hunter 2002). Yet, both the natural and social sciences can bring value to health research: “’where natural science is weak, social science is strong and vice versa’” (Flyvbjerg, Landman & Schram 2012:246). Health sociology practiced as *episteme* (analysis), *techne* (technical knowledge), and *phronesis* - “making judgments and decisions based on values” (Tsey & Hunter 2002:84), can fruitfully uncover assumptions in health policy, and better answer questions of power, process, and social change to inform health system advances (ibid). The term *phronesis* describes practical wisdom; or practice with value. Aristotle’s problematising definition of phronesis was “reasoning ‘that is capable of action with regards to things that are good or bad for men [sic]’” (Tsey & Hunter 2002:108).

In summary, it is with applied phronesis or "practical wisdom in dealing with both routine decisions and unexpected contingencies" (Flyvbjerg, Landman & Schram 2012:4) the future medical workforce will need to approach emerging health problems. The renewal of medical professionalism debate challenges assumptions that monetise health care and devalorise findings linking social science to societal health. It responds to emergent human crises and promotes progressive health improvement.

A new social contract is proposed; co-constructed with communities and answerable to them; respecting diverse epistemologies; more sustainable and humane.

3.8 Medical professionalism competencies and culture

The Latin meaning of the word *profession* is 'speaking out' (Wynia et al 1999), and the approach of a new millennium saw an outpouring of articles published in medical journals on 'professionalism.'

A Scopus literature search of "medical professionalism" from 1985 to 2013 produced 486 documents, and 'professionalism' AND "medical education" resulted in 1,992 documents. 'Professionalism' topics include a range of definitions (Rogers 2011; Coulehan 2005), lists of abstract characteristics (Wear & Kuczewski 2004), aspirations (Rogers & Ballantyne 2011), national ethical guidelines (AMIB 1995; GMC 1995; CanMEDS 2005), an evolutionary history (van Mook et al 2009), pedagogies (Swick et al 1999; Coulehan 2005; Francis 2004; Clandinin & Cave 2008; Carufel-Wert et al 2007), and evaluation and assessment models (Frenk et al

2010; Stern 2005). Even the term ‘medicine’ has been critiqued “with it’s pernicious illusion that unitary enterprise exists” (Frank 2004:10).

Professional education takes place in HE settings; and professional development supports graduates’ continued learning aims; to enable

> individuals to autonomously and responsibly perform complex and often evolving tasks within evolving and often complex practice settings
>
> (Fellenz 2016:267).

A number of interpretations of The Charter of Medical Professionalism were voiced in the years since its global publication. Egener (2017) argued it was developed to guide physician decision making in the context of rapidly changing societies; and to improve the distribution of high quality health care. Shanafelt et al (2019) charged The Charter with healing of the professional culture. Tawfik et al (2019) charged medical culture itself, together with the organisation of health services, with poor physician well-being. The perceived need for systemic healing and improved physician well-being indicated change was overdue; forced on the profession by external events. The demand philosophy of medical care was no longer fitting for changing times.

The dynamic realities of modern medical work is set against the more static, traditional portrayal of what constitutes ‘a good doctor.’ A ‘good doctor’ is expected to enact the ethical principles of *autonomy* (respect the patient’s right to determine their own health choices), *beneficence* (to act in the best interests of the patient's welfare), *non-maleficence* (avoid harms), and *justice* (distribute care fairly to all) (Kerridge, Lowe & Stewart 2009:79). The good doctor can reflect on the uniqueness of each clinical context, link personal values to medical ethical principles, adjust for cultural concerns, and enact a reasoned ethical response.

However, there are flaws in this depiction of medical ethical phronesis. Medical practice is viewed as broad and ideal, centres on individual patients (excluding communities and social conditions), and fails to encompass the complexity of the health-illness dialectic that could inform SA practices. Knowledge sets informing health actions corresponding to patients' lifeworlds are undervalued. Furthermore, professionalism education has failed to recognise value differences in the *capitals* (Bourdieu 1986) and *capabilities* (Sen 1995) students bring to their medical training. The interplay of intrinsic (or tacit) and extrinsic learning is evoked in *embodied* knowledges and *values* (orientations or moral stances) students bring to medicine. Formal *activation* of social justice agency and SA phronesis in medical training is often weak or absent; or neglects contextual factors (Berkhout et al 2018). In the Chapter 12, I re-examine the topic of curricular activation of prosocial agency; the importance of context in accounting for the social; and, in pedagogy, the entwining of concepts and contexts to model ethical reasoning.

In medical education, the competencies of medical professionalism are often limited to issues arising in the 'local moral world' of the doctor-patient clinical encounter; patient-centred communication skills and the ethics of informed consent, patient confidentiality, the doctor-patient relationship, and duty of care (Katz & Alegria 2009). Yet, social justice competencies aim at “a view of medicine that encompasses its role in the betterment of society at large” (Hixon, Yamada, Farmer & Maskarinec 2013:166); to shift the focus of health care

> above the hospital and clinic setting and provide a framework to evaluate the dynamic interaction between socioeconomic forces and health
>
> (ibid:166).

This macro/micro *socio-science* conceptualisation of medical professionalism more clearly resonates with the social justice aspirations of the ‘new professionalism movement’ (Frenk et al 2010). A further concern centres on the occupational *well-being* of proto-professional students. Few contributors to the professionalism reform debate recognised how medical students were treated may impact on how they treat patients. Educators point to the excess of idealistic tenets of professionalism, however desirable these may be, in textual discourses of ‘the good doctor’. Yet there remained a *lack of discourse* regarding

> professional development, a curricular theory of professional development, the learning environment for professional development, and the duty of a profession to advocate for the well-being of society.
>
> (Wear & Kuczewski 2004:2)

Furthermore, critics argued, the language of professionalism discourse needed to value training structures more compassionate and considerate of the family lives and obligations of physician trainees: giving them both voice and choice in when and how they fulfil their service obligations (Wear & Kuczewski 2004). Conceding medical schools never developed "a system of education around the concept of professionalism" (ibid:4), these educators recommend a curricular theory of professional development centred on trainee experiences in the educational environment.

> Educators should enlist medical students and residents in developing a theory of professionalism through reflection on the activities these groups see as important to fostering their professionalism.
>
> (Wear & Kuczewski 2004:3)

Such collective self-organisation suggests the "education of consciousness" (Mason 2008:4); a suggestion in accord with *biosemiotic theory* (life as a system of signs) (Hoffmeyer 2008), and cybersemiotics (communication of signs) (Rafieian 2010). A dedicated study of medical student groups may shed light on their importance to medical professionalism.

The environment of medical training has too frequently been abusive towards medical students. 'Lip service' is paid to inequalities in gender and culture; unreflective of the role of organised powers, yet blaming students' professional attitudes (Wear & Kuczewski 2004; Beagan 2001; Becker et al 1961; Allen et al 2008). The collective will to scrutinise any false consciousness of the medical status quo in relation to societal needs has been nascent.

Now, in a “hypercomplex world where nothing is certain” (Fellenz 2016:271), the continuing professional development (CPD) spotlight is on forming an adaptable *being*, capable of lifelong learning, and developing “situated knowledge, deploying it in local, contextualised practice” (:71). Yet, the culture of medicine and medical education often sees itself as “a culture of no culture” (Taylor 2003:557) claiming medical knowledge and competence to be ‘real’ and therefore beyond culture. This aspect of the hidden curriculum can produce an internalised narrative among students that devalues or excludes the social lifeworld of the patient. As Taylor (2003) made clear, medicine does have a culture; and medical institutions

> are integrally a part of the broader sociocultural order in which they are embedded, and tend to reflect its patterns of thought and social action
>
> (:558).

Taylor (2003) asserts; for medical students of diverse background to become professionals “involves at least two processes of acculturation - one to the dominant culture and the other to that of the profession” (:558). This suggests an unfair burden on students recruited for their ‘usability’ in the profession. Fox & O’Maley (2017:2) noted how *discourses* or ‘ways of being in the world’ are believed to be always social and historical. This discursive view attests to a potential for ‘medical culture’ to be multiply contested by the interactions of those who enter it, in a *cybernetic* manner (Rafieian 2010). Cybernetics is the “study of control and communication in the [human] animal” (ibid:8); the abstract principles of organisation in complex systems; or ‘complex adaptive systems’ (CAS) science. However, in the modern professional culture there appears to be no driver of critical literacy – how western thought and knowledge carries values – allowing medical students to 'read' a mismatch between their training and societal health needs. The third millennium was the starting gun for post-modernism; yet 'communicative action' (Habermas 1987) on health needs by medical professionals has been patchy and belated.

Bioethicists have attempted to prioritize the foundational professional values particular to medicine and upheld by pedagogical practice (Rhodes et al 2004). They identify *fiduciary responsibility*, "the commitment of physicians to act for the good of their patients and their society" as primary (:21). In recognising the special vulnerability of patients, and physicians' "knowledge, power and privileges," physicians and institutions of medicine must "seek trust and make themselves deserving of that trust" (ibid :21).

In an assertive endorsement of The Charter, educators proposed for physicians 'to live up to' its tenets, "it must become an organizing principle of medical education" (Jotkowitz, Glick & Porath 2003:5). Ethics educators were encouraged to develop pedagogy for transforming students' attitudes to empathy and 'medical humanism' (Marcus 1999; Burks & Kobus 2012); and counter negative effects of the 'hidden' curriculum on students' moral development (Jotkowitz, Glick & Porath 2003; Hojat et al 2004; Patenaude, Niyonsenga & Fafard 2003; Burks & Kobus 2012). However, medical ethicists observing the counterculture of professionalism evident in hidden curricula, attribute 'ethical failure' to a focus in medical education on producing 'good technicians' rather than 'good doctors'.

> The socialization process that occurs during medical training conflicts with, and tends to

> diminish, many of the attributes and values usually associated with good doctoring—for example, compassion, reflectivity, curiosity, altruism, self-effacement, and social responsibility.
>
> (Coulehan et al 2003:21)

The long hours and stresses of medical training includes growing student debt, and can create a sense of entitlement. This de-moralising process has been investigated for answers. Medical educator Johanna Shapiro reviewed the puzzling lapse in students' empathy during clinical training, despite multi-faceted educational efforts to prevent this outcome (Shapiro 2008). Medical colleges and students regarded empathy for patients a key professional goal of medical education. Shapiro prioritised the behavioural component above the virtue. Her review goes to the heart of human interactions in western culture and philosophy, to accept "the universal human vulnerability" (Shapiro 2008:1) confronting humans faced with the decay and disarray of illness, disability and finally, death. Shapiro (2008) proposed an epistemological paradigm for reducing trainees' anxiety for distressing human conditions; to accept imperfection in others and allow students to come close to, not distant and detached from, their patients and themselves.

Referring to the changes in empathy in medical undergraduates, Shapiro noted how students in First Year medicine strongly identified with the patient, and then in the third year

> they are motivated to counter-identify with patients, and instead are drawn to the doctors whom they have idealized as healthy, invulnerable, authoritative, skilled, and effective individuals who possess powerful and still somewhat mysterious knowledge and skills.
>
> (Shapiro 2008:2)

This change can occur at the time students begin to distinguish their individual trajectories (or secondary habitus) from the group; investing greater capital in the physicians they wish to emulate and training programs they compete to enter (Balmer, Devlin & Richards 2017). Previous discussion referred to the conflicts WP students can face, between their primary (social) and secondary (socialized medical) habitus. The habitus for competition and success as students gain entry to medicine may appear to favour careers more than vocations, and competition rather than cooperation; a problem needing a creative solution.

Medical educators Jotkowitz, Glick & Porath (2004) suggested students' native altruism be tested at admission, then supported and developed by initiatives bringing students into clinical contact with underserved communities. Bishop & Rees (2007) proposed the term 'prosocial' replace 'altruism' in the professionalism discourse, as the latter includes notions of *selfless* service; a quality contrary to sustainable medical practice. 'Service learning' programs; popular initiatives in western medical schools, engage students, some for the first time, with socially disadvantaged people in a local community (Eyler & Giles 1999). These provided opportunities for developing students' sociological gaze of health, and embodied cognition, endorsed by 'embodied learning theory' (Skulmowski & Rey 2018).

Other educators summarised the arguments against teaching altruism as a professional goal in medicine. They favoured empirically tested methods of teaching *empathic acuity* as the underlying motivator and promoter of a desired culture of humanist behaviours in clinical practice (Burks & Kobus 2012). This skillset involved reaching a more refined understanding of how the other's existence may be vulnerable to stressors. U.S. medical ethics educators argued for a more 'reflexive' form of professionalism to be modelled. Physicians should demonstrate social responsibility to the community in which they live, as if it was 'another patient' (Coulehan et al 2004). Lewis (2006) cited a lack of concern for social justice and emphasised the need for a mindset of prosocial (or altruistic) concern among medical professionalism educators;

> Some respondents approach medicine through… a "sociological imagination" and some do not. This makes a tremendous difference because whether one works with a sociological imagination or not alters radically one's perception of medicine and professionalism.
>
> (Lewis 2006:152)

This idea of 'schooling the imagination' refers to the principle of constructive alignment for effective teaching (Biggs 1996); and to role modelling of social justice values across learning pathways.

A cognitive framework for sociological analysis of health problems has four interrelated factors, credited to Australian sociologist Evan Willis.

> 1. *historical factors*: how the past influences the present;
> 2. *cultural factors*: how culture impacts on our lives;
> 3. *structural factors*: how particular forms of social organisation affect our lives;
> 4. *critical factors*: how we can improve our social environment
>
> (Germov 2018:7).

The same framework could feasibly be applied to the problem of shifting the student gaze to the formative contexts of health in people's lifeworlds. However medical education has its own pace of reform; situated dependently within diverse national and state political economies and regulators. In the present era of 'academic capitalism,' as some critics argue, the fate of critical pedagogy as champion of democratic ideals of social justice has been subverted; as

> depoliticized forms of critical thinking have been integrated into university programs oriented toward shaping the 'entrepreneurial' student-subject
>
> (Amsler 2013:66-67; Ridley 2017:66).

The United Nations report of the Global Independent Commission on Medical Education, titled *Education of Health Professionals for the 21st Century* (Frenk et al 2010) recommended reforms, not only to medical professional education, “from informative, to formative, to transformative learning” (:1952), but to ‘harmonisation’ between the institutions of Education and Health, with the participation of patients and the community. The goal of reforms is “transformative and interdependent professional education for equity in health” (ibid:1952), and recognises

> the animation, motivation, and empowerment of the next generation in shaping reforms will be vital for effective implementation
>
> (Frenk et al 2010:1952).

While personal and professional development is fundamentally about behaviour change (Gordon 2003), the preferred goal of medical education is to produce graduates that *embody* rather than *enact* professionalism (Monrouxe 2011). This hints at complexity theory, and the non-linear production of consciousness around value nodes or *codes*. Embodied social justice dispositions are expected among those who have experienced social injustice; which draws attention in the study to ‘outsider’ participants from the WP agenda; those with social equity identities. A means for transformation to a social justice mindset among those *without* equity identities remains uncertain.

3.9 Transformation to a social justice mindset

A line of thinking informing research on instilling ‘othering’ values for health professions, including actions on social injustice, is summarised here. I begin with given definitions, conceptualise the values and actions necessary to medical ethics, and explore shifts in thinking about transformative learning.

In medical ethics, the principle of justice “suggests concepts such as fairness, rightness and equity” and is distinguished from legal concepts of justice (Kerridge, Lowe and Stewart 2009:80). Social justice in terms of one’s living conditions, or ‘material’ justice,

> targets the social circumstances and skills that facilitate social participation. It uses distributive justice as a means to secure equality of opportunity.
>
> (Grunwald & Thiersch 2009:132)

‘Health equity’ implies fairness is enacted by providing services, resources and policies to allow the underserved and disadvantaged in society to achieve the same level, quality and distribution of health enjoyed by the most advantaged. The concept of ‘equity’ is distinct from ‘equality’ or sameness, with which it can be confused (Braveman & Gruskin 2003). Equity in health care, may require *more* time, care services, resources, and expenditure inputs are provided to a disadvantaged individual or group to achieve the same health outcomes enjoyed by more advantaged community members. The concept holds specific implications for clinical practice, with an increasing number of patients worldwide with chronic or persisting organic illness the result of complex mechanisms of unremitting social distress (McEwen & Gianaros 2010; Naqshbandi et al 2008). Hence, the implications of equity and social justice for health mark it a ‘threshold concept’; one that can transform the learner’s ‘meaning perspective’ of their health practice in an irreversible way (Cousin 2006).

One of these concepts relates to graduates' professional responsibilities.

> To be trusted by others as a competent, professionally responsible actor, the individual requires an ability to act in certain approved ways, based on his or her capacity to make moral and self-reflective choices that relate to other people's needs and interests.
>
> (Solbrekke & Englund 2011:857)

To recognise health inequity and empathise accurately requires a human consciousness critically aware of how powerful social, ecological, political, and commercial forces can unfairly diminish the power and autonomy of people to shape healthy conditions for living and raising families (Kickbusch 2016). At a population level, medical professional obligations of care and justice may require a mature moral imagination, communication of meaning, and critical reasoning; both evidence-based and cognizant of the maldistribution of health vulnerabilities among different groups within human societies (Benatar 2005).

Some medical students may already be instilled with the required knowledge and values, informed by 'critical experiences' and a 'critical' way of seeing the world; a particular 'gaze'. While much is made of changing *attitudes* in medical professionalism, this construct seems better served by change in *consciousness* (Dirkx 2012). Here, learning is viewed as *self-formation* in the way ancient Greeks saw the purpose of education: "*educare* – is to bring out that which is within" (ibid:402). In this view, self-formation seeks to "address self-deceptive practices" (Dirkx 2012:402) while also nurturing what is innate in the psyche to unfold to a “more integrated and authentic self” (:402). To become critically aware of ‘the Other’s’ social struggles can require the learner practice *self-reflexivity* – deep examination of the way one’s culture, history, family life, preoccupations and achievements are made possible by favourable structural factors in one’s environment. As some may learn, with uneasy realisation, this advantage came at the expense of fairness to others.

Inui (2003) referred to medical education as “a special form of personal and professional formation” (:5). He suggested attention to the self-formation of each medical student be supported during the process of practice, in the presence of virtuous teachers. In the ‘critical pedagogy’ promoted by Paolo Freire (1973), the doctor becomes an instrument of change by empowering change in her patients; helping them realise their own power or capacity to improve life circumstances. In addition to medical technical competencies, observable (hence measurable) prosocial behaviours toward others can be practiced, rewarded, and become part of the student’s ethos (Bishop & Rees 2007).

The idea of ‘transformative learning’ developed by Jack Mezirow and others, centres on “meaning perspectives, frames of reference, and habits of mind” (Illeris 2014:148); but is criticised for being focussed on cognition at the expense of transformation of personal *identity*. Illeris (2014) theorises identity as

> explicitly including the combination and interaction between the individual and the social environment and how this influences the development of the individual
>
> (:152).

Identity he claimed, was what is formed and transformed, rather than self, personality or competence (ibid). Identity provides

> a direct connection to the current conditions and frames of society that create both the growing need for and conditions of the transforming processes
>
> (ibid:153).

'Self' has been depicted as an exclusively individual and mental phenomenon, although a more recent conception of self

> is presented as being profoundly shaped by social factors such as interactive experiences with significant others, group membership, along with the roles and positions each individual occupies in society.
>
> (Stetsenko & Arievitch 2004:477)

This may be significant when considering study participants' memberships of prosocial groups organised outside of, and parallel to, the formal medical curriculum. It also lends value to the future physician the student is *becoming*; and the diverse social insights each brings to their practice.

What else is transforming? Change in society has become a constant: a depiction captured in Zygmunt Bauman's phrase 'liquid modernity' (Bauman 2000; Illeris 2014:159). In Anthony Giddens's conception, the modern identity needs to be constantly reflected upon, adapted, and yet simultaneously stabilized to achieve functional coherence (Giddens 1991; Illeris 2014:159). While identity formation was usually complete by young adulthood, any further transformation of identity requires strong motivation, as Illeris states.

> The key challenge of promoting transformative learning is to find and connect to the psychological and practical, internal or external potentials in the learners' existence, and life world [sic] that are so strong that they can justify the exertion involved in a transformation.
>
> (Illeris 2014:159)

Here, transformation is hypothesised to require expenditure of energy (or capital); while identity *defences* are needed to protect against *negative* transformation to withdrawal or regression (ibid:160). This suggests participants with low capital reserves; those (F-i-F) from outsider backgrounds to medicine, may find transition difficult. This group more often have 'equity identities': devalorised or oppressed subjectivities the result of marginalised status in society. This may be because of poverty, skin colour, gender, age, disability, sexuality, ethnicity, and other disadvantaging stigmata. As 'outsiders' to the professions, students may find themselves culturally incompatible and lacking the *habitus*; sociologist Bourdieu's term explaining how lifeworld bestows a natural fit to a new *field* – experienced as a 'feel for the game' - of 'insider' individuals (traditionally white, male and middle class) groomed for the professions (Sommerlad 2007). Prosocial group membership and voluntary service learning experiences may be protective; sustaining students' humanist empathy for patients (Shapiro 2008).

Psychological explanations of transformation to a social justice mindset refer to its precepts. Analysing 'justice sensitivity' as a psychological construct, Baumert and Schmitt (2016) reported 'affective reactivity' or one's emotional responsiveness to perceived injustice did not meet the conditions of a personality trait. Instead, justice sensitivity changed across the lifespan; and emotional and behavioural reactions to injustice differed both qualitatively and quantitatively depending on the perspective a person took: as "victim, observer, beneficiary, and perpetrator" (ibid:165). This analysis suggests students with personal or familial experience of social injustice, and those with intersecting socially stigmatised identities (e.g. female and black), may have stronger perceptions, discourses and responses to social injustice. Tensions in the habitus when a non-traditional ('outsider') student entered the medical field, were likely produced "in interactions with significant others" (Aarseth, Layton & Nielsen 2016:151). *Conflicts* in the habitus among students from non-traditional, low socioeconomic backgrounds can generate the critical "potential" (Illeris 2014) or "effort of transformation" (Aarseth, Layton & Nielsen 2016:151) for pursuing practice in areas of high health needs. The purported sociological mechanisms for this transformation will be dealt with in more detail in the Theoretical framework [Chapter 6].

Wasserman (2014) described medicine as having its own identity crisis, referring to the frequent claim of medicine being 'a science and an art,' when in effect, the importance of social 'science' in the medical encounter had long been neglected. The historical failure of physicians to integrate these two ‘contradictory’ epistemologies - the *physiological* being abstract and reductionist, and the *sociological* being holistic and plural - into clinical judgments and conclusions, has confounded critics (Wasserman 2014:283). Held partly responsible is the cognitive overload of expanding volumes of biomedical information (Lucey 2013). Medical educators considered ‘development of the professional self’ as promoting critical reflection on the moral validity of their students’ beliefs. Discussion of ethical quandaries, conducted in safe, small group settings, aimed at “internalization of the professional values and virtues of medicine” (Kumagai & Lypson 2009:285; Delany & Watkin 2009). Other educators suggested students best learn from reflection on critical interactions with *patients*; by learning ‘to read’ the patient *as a text* (Bleakley & Bligh 2008:103). The latter, *dialogical* approach (a method of thinking and acting) may signal a positive direction for development of professional identities; away from negative role modelling by peers that reproduces a ‘hidden’ curriculum (ibid).

However, this suggestion is located in the doctor-patient interaction, and appears to leave open the question of how students’ meaning-making of the *critical context* of health production can occur without them gaining social and political insights to the lifeworlds of their diverse patients. A lexicon needs to be acquired, effectively through meaningful interactions and communication with ‘native speakers’, as if learning a second language. This form of knowledge creation, known as *extended epistemology*, accepts multiple paths of ‘becoming to know’ (Jakubik 2011:374). This framework aspires to explain simultaneous transformation in knowledge (epistemology) and identity (ontology).

‘Treading lightly’ (Sveiby & Skuthorpe 2006) and ‘quiet advocacy’ (McKivett nd) are two means of ‘becoming to know’ emblematic of Australian Indigenous culture. A similar claim is made for ‘*cultural* competence’: without practical insights, the *social* drivers of poor health in migrants’ backgrounds can be obscured (Green, Betancourt & Carrillo 2002).

3.10 Consciousness of global health inequities

3.10.0 Introduction

In *systems theory*, internal change in a complex system such as ‘medical professionalism’ often depends on changes in the external environment (Wear & Aultman 2006:6). Growing consumer empowerment, responding to escalating costs of health care, fed negative public perceptions of physicians as self-serving gatekeepers of medical knowledge (Berwick & Finkelstein 2010). British analysts portend the key drivers of future health system change as; a. unsustainability of health care costs, b. maldistribution of health care, c. public demand for greater health literacy, d. market globalization, and e. digital communication tools (Susskind & Susskind 2015). Enterprise solutions may cover systemic shortfalls, see medical expertise ‘democratised,’ and the professions dissolved (ibid). Alternative trajectories and bifurcations for the future culture of medicine include bioethics based on a ‘global state of mind,’ or what Benatar (2005) calls a ‘moral imagination’ for global health determinants.

The claims for *identity change* as a leading activity in the new medical professionalism may need to take into account the process of diverse adult learners *having* or *developing* the right *capitals* i.e. social and cultural powers (Bourdieu 1986) and *capabilities* (Sen 1995). Despite students’ career choices following graduation, a social justice ethos necessitates students’ prosocial dispositions and intentions (the capacity to act and create value) be oriented towards the social contexts of illness production. In a hopeful vein, German sociologists Hennig-Schmidt & Wiesen (2014) characterised the current generation of young people in medicine, as ‘Gen G’: *global* in outlook and *generous* in their concern for others compared to non-medical students. This global health ‘gaze’ is examined next.

3.10.1 Globalisation and health

Interconnected global relations of power are recognised to have critical impacts on health and human development.

British sociologist Anthony Giddens referred to globalisation as

> the intensification of worldwide social relationships which link distant localities in such a way that local happenings are shaped by distant events and, in turn, distant events are shaped by local happenings.

(Giddens 1990:64)

Global health, Horton (2019) claimed, was a sociological “way of looking at our world” (:720); “about power and poverty, violence and exploitation, oppression and silence, and collusion and exclusion” (ibid). He wrote this to dismiss the impression ‘global health’ was mostly about HIV/AIDS.

The depiction of global-local or 'glocal' change comprehends dynamic macro forces that complexly reshape patterns of ecology, economy, and social relationships, to unevenly impact on human health within and between societies. Sociologists studying the root causes of this global disorder regard social inequalities; generated by the commodification of environment or land, money, labor, and knowledge (termed 'fictitious' commodities); to have been at the cost of civil society (Burawoy 2014). A responding paradigm in global health ethics stresses *solidarity*: a mindset respecting "the reciprocity and interdependence that characterize community" (Benatar, Daar & Singer 2003:131); and defends against a mindset of "moral nihilism and radical individualism" (ibid:131).

Momentous implications for the interpretation of justice as fairness in the distribution and practice of health care arose from research findings in the sociology and epidemiology of population health. The SDH generate either health or illness across the human lifespan independently of health care services; although health systems and service interactions can perpetuate these disadvantages (Marmot et al 2013). The SDH are touted as the 'causes of the causes' of poor health, while individual health behaviours such as tobacco smoking, poor diet, and lack of exercise are thought to mediate illness more proximately; as stress responses to the SDH (Marmot 2005). While indicators of human wellbeing and longevity are now the best in recorded history, progress has been uneven (Pinker 2018). Alarming gaps in life expectancy, varying between and within countries, have led public health physicians to issue iconoclastic declarations. The Commission on Social Determinants of Health (2008) reported: "Health inequity is killing people on a grand scale". In their final report, the Commission advocated justifiable action.

> Where systematic differences in health are judged to be avoidable by reasonable action they are, quite simply, unfair. It is this that we label `health inequity'. Putting right these inequities – the huge and remediable differences in health between and within countries – is a matter of social justice.
>
> (CSDH Executive Summary 2008)

This 'landscape of care' continues to change; increasing numbers of patients have chronic non-communicable health problems requiring lifelong care (Erickson & Grove 2008). Yet ironically, health services are asked to "align egalitarian models of care with competitive models of economic efficiency" (ibid:704); the former referring to justice, the latter to neoliberal economic policy.

It is into this dynamic, globalised, health and illness generating world medical graduates and health teams need to adjudicate fair and appropriate actions.

3.10.2 Moral development of critical consciousness (CC)

While there is currently no definitive understanding of how to motivate justice sensitivity, the psychological process of moral development from early childhood to maturity has been closely studied (Hoffman 2001). The discussion centres on perceptions; but is confined to those aspects relevant to the medical professional's moral role of enacting social justice. The key step in recognising the humanity and suffering of another, as if looking at oneself through a mirror, is the practice of *empathy*.

Empathy, considered an essential affect by health service providers, is distinguished from *sympathy*, which refers to shared experiences or 'fellow feeling' with others. In some clinical situations, such as emergencies, sympathy complicated the need for the health worker to respond dispassionately; whereas accurate empathy can guide appropriate patient-centred care, for instance in relieving pain. *Apathy*, an absence of feeling, is considered anathema to care and justice perceptions.

Two types of perception or 'consciousness' required for clinical work result in distinct types of 'critical' thinking. The *first* form of critical thinking employs clinical logic. The patient's symptoms and their development are problematised: the physician uses critical thinking combining knowledge and experience in the inductive logic of clinical diagnosis and management (Huang, Newman & Schwartzstein 2014). This aspect of the physician role is accompanied by a biomedical way of seeing the patient and observing their progress. A well-known study of medical students showed how they learn the 'affective distance' from the patient expected of a physician; with the purpose of enacting scientific objectivity and establishing authority (Smith & Kleinman 1989). However, similar studies have shown how such inauthentic 'emotion work' can result in emotional dissonance and harm students' personal relationships (Wharton 2009:158).

A *second* form of perception informs the critical thinking of moral evaluation, bioethical judgement and health related decision-making. It requires perception that reflects upon itself, and is a form of moral consciousness in clinical encounters enabling the practitioner to see *this* patient, not with an atomized medical gaze, but with critical discernment of the psychosocial identity and ecosocial context of the whole person. An informed, *critical* perception of justice in health needs, to take account of the ways social structures unfairly distributed privilege and oppression in a society; can promote or limit a healthy existence (Young 1990). This form of critical thinking is a feature of CC (Kumagai & Lypson 2009). Hence, critical thinking using an 'intersectionality lens' has been proposed for health professional education (Muntinga et al 2016). This 'lens' aims to direct the student gaze to *sociological* mechanisms of health production; to understand how all people experience privileges and disadvantages based in categories of race, gender, ethnicity, class, and indigeneity; an interlocking system of status inequalities (Ewen, Barrett & Howell-Meurs 2016). This rather concrete, binary approach to learning CC can be challenged by an edusemiotic approach to clinical ethics [Chapter 12].

Hence, CC informs a *moral* lens for social injustice, in the sense of morality defined as

> prescriptive norms regarding how people should treat one another, including concepts such as justice, fairness, and rights
>
> (Yoder & Decety 2014:4161).

An individual's concern for justice is a personality disposition of research interest. Hence, 'justice sensitivity' relates to

> stable and consistent differences in individuals' readiness to perceive injustice and in the strength of their cognitive, emotional and behavioural reactions to injustice.

(Baumert & Schmitt 2016:162)

While a test and quantitative scale for comparing participants' justice sensitivity was available, qualitative methods for comparing prosocial perceptions were considered more appropriate to the present study.

In a ground-breaking neuroscience imaging study, Yoder & Decety (2014) showed how participants with other-oriented 'justice sensitivity' dispositions first appraised a morally charged situation *cognitively*; they applied reasoning before assigning a subjective moral *value* of right (praise) or wrong (blame). Mintz (2013) observed private emotions of disgust often accompanied compassion when health students identified social injustice in the harsh realities of patients' lives. For compassion to bridge to the patient's suffering it was right for students to reflect on their own "privilege, responsibility and complicity" (:222) in power underlying structural inequities for patients. This critical reflection can induce suffering in privileged students; while compassion can be empowering for those who recognise racism, oppression, and discrimination in their own lives (ibid).

Compounding the learning of compassion and justice in the clinical setting and ontology of the medical life - the surroundings of white bed sheets, antiseptics and facemasks can have the opposite effect on the student psyche. Avoidance reactions to certain patients can arise. A form of psychopathology related to an evolutionary warning system for the smells and sights of infection, can spill over to distaste for patients themselves (Skarlicki et al 2013). Most people attending public hospitals, for instance, are poor or socially disadvantaged and have poorly self-managed, chronic illnesses and disabilities. They can emanate smells for a broad range of reasons: hygiene, occupation, diet, environment, alcohol use, infection, and chronic disease. Homeless people, in whose faces are etched the hardship of life subsisted on the street, and people living with HIV/AIDS, can suffer this discrimination in health care. Similarly, moral distress among students during medical training is common and often silent; and should be explicitly dealt with by educators in order to restore students' patient-centred sensitivity (Berger 2013).

In order to respond to the moral distress of others experiencing pain, discomfort, or injury, the physician needs to become a mature observer and a mature empathizer. As Hoffman (2011) explained,

> for a person to experience mature empathic distress, he [sic] must have a clear distinction between what happens to others and what happens to himself, and an understanding of how feelings are expressed and how they are shaped by events
>
> (:63).

This statement informs the proposal for health practitioners to possess a 'sociological imagination' and 'critical moral consciousness' for the threats to human wellbeing posed by emerging ecosocial crises and social discrimination (Mustakova-Possardt 2012). Normally, this development milestone is reached by the age most undergraduates enter medicine, although individual differences can be 'enormous' (Hoffman 2011:64). Attainment of this moral evaluation 'toolkit' must then be modulated to match specific contexts; to avoid the twin dangers of *over-empathising* (e.g. leading to bias) or *under-empathising* (e.g. having a callous, or prejudicial attitude) that could complicate a graduate's motivation for delivering appropriate care and justice (Coeckelbergh 2007).

'Critical consciousness' (CC) as a sociological lens has applications in diverse disciplinary fields. A literature review of Scopus and Google Scholar databases, between years 1960 - 2015, located several articles in education, psychology, philosophy, theology, nursing, and social work journals; but just one article in medical education about the development of CC for social injustice. Kumagai & Lypson (2009) specifically addressed CC, social justice and medical education; arguing CC "of self, others, and the world" (:783), rather than *cultural* competence (knowledge, skills, and attitudes affecting communication with people from diverse cultures) was more conducive to "a commitment to addressing issues of social relevance in health care" (:782). For students to become advocates and agents of social change (Frenk et al 2010), they need to discern 'upstream' societal conditions as the locus of fundamental *causes* of poor health, rather than 'downstream' behavioural risk factors such as smoking and inactivity, the common *responses* to social stressors.

However, previous research has shown moral reasoning in medical students develops atypically compared to young adults of comparable age; from an initial idealistic, humanist perspective in the first year, to one devoid of concerns for equity and justice in the third and fourth years of the course (Patenaude, Niyonsenga & Fafard 2003). Recent attempts to reverse this trend regarded Freire's 'education for critical consciousness' "highly agentic" (Mustakova-Possardt 2004:258): powerful in motivating students' intentions to correct injustices. The evaluation of students' progress toward CC can be made against observed criteria; and was incorporated into curriculum at the University of Michigan (Kumagai & Lypson 2009). It was regarded *a skill* that

> places medicine in a social, cultural and historical context and which is coupled with an active recognition of societal problems and a search for appropriate solutions
>
> (Metzl & Hansen 2014:131).

Yet, some moral discussion and reasoning about health inequalities takes place *outside* of the formal medical curriculum. Medical student organisations provide opportunities to serve and support peers, and volunteer to serve health needs in local, national and global communities (Fox & Bonning 2008; Veronesi & Gunderman 2012). The extracurricular activities of medical student organisations can “serve as catalysts for students to work with one another, with faculty and administration of the medical school, with the community” (Veronesi & Gunderman 2012:226); to develop leadership capabilities. For some students, these groups may fill gaps in ‘formal’ curriculum to maintain their dispositions for valued humanitarian causes (Ambrose et al 2014); acting as a prosocial, student-led curriculum. Hypotheses for participation in such groups refer to Bourdieu’s theory of practice and to sociological meta-reflexivity (Archer 2012). Bathmaker et al (2013) regard these activities driven by the global competition for jobs; and learning ‘the rules of the game’ as capital raising to “stay ahead of the game” (:725). Potential implications of this hypothesis suggest WP students may fall into the ‘opportunity trap’ (ibid:245); and compete all the way to highly paid biotechnical specialist jobs, away from any prosocial vocation.

Archer (2012) found evidence that ‘millennial’ university students were highly reflexive of their family upbringing, and more *future facing* than previous generations. Uncertain about the sustainability of family traditions of production, they can have “an exploratory outlook toward the social” (:208). Accordingly they seek otherness, vocation and opportunities. In one study, students involved in more clubs on campus were found to have a greater sense of belonging to a community and more social justice attitudes (McAuliff, Williams & Ferrari 2013). In Chapter 5, I discuss theoretical differences between sociologists Bourdieu and Archer regarding structuration of reflexivity on the social order of societies. In Discussion [Chapter 12], I discuss components of reflexivity study participants applied to social contexts of health to develop CC for socioscience problem solving. A semiotic approach to learning CC and SA is proposed.

Widening participation in medicine to ‘outsider’ students makes assumptions about the prosocial skill-sets that diverse students bring to their practice. The mixed benefits of WP policy for graduates’ intentions to work in low socio-economic and medically under-served areas have been qualified in a study by Griffin, Porteli & Hu (2017). A key argument for the WP agenda is an assumption that ““like would treat like”” (ibid:493). Evidence for this has been found in a systematic review of intentions to practice in rural areas by Australian medical students from rural backgrounds (Laven & Wilkinson 2003). Griffin, Porteli & Hu (2017) found a lower intention to work in medically underserved locations among medical students from very high and very low socio-economic status (SES) backgrounds; with the same result generally for males and students from non-English speaking (NES) backgrounds. A gap in understanding is the intention to work in medically underserved locations among students with mixed equity identities.

Medical education initiatives to endorse or enhance students' justice competencies are rare. Kumagai & Lypson (2009) reported their experiences of developing 'the habit' of CC in their medical school, for students and academics, and endorsed CC as an 'overarching theoretical framework' for multicultural education. How habitual CC is pedagogised is not stated, but anecdotal. Critical consciousness may only be achieved when learners, through the use of 'reflexivity' or critical reflection on their "own biases, privileges and assumptions" (Kumagai & Lypson 2009:785), located their own *responsibility* (capacity to respond) or *vocation* (desire to make a wider contribution to society). Empirical researchers of adult CC (Mustakova-Possardt 2004), and CC among stigmatised youth (Thomas et al 2014), attested to a developmental process that arose from a need to de-construct *false* consciousness of social inequalities.

I reflect on this, discussing Bourdieu's educational theory in Chapter 6; but next look to possible sources of transformation in the pedagogic contexts of medical learning; where identities, values, knowledges, and forms of critical thinking congregate.

3.10.3 Critical reasoning in clinical phronesis

There are abundant opportunities for critical reflection on social inequalities during medical training, with mental distress one of three most common disorders presenting to health services; and a rising incidence of chronic non-communicable disease (AIHW 2018).

The human stress response describes the homeostatic mechanism accommodating the body to real or perceived threats (McEwen & Gianaros 2010). Pedagogically, the stress response can be viewed as situated between external and internal bodily environments. Stressors in the external sociopolitical environment (including stigma and SDH) are hypothesized to ‘get under the skin’ by altering homeostasis in the body’s internal milieu (Hatzenbuehler et al 2013). Stress hormones, internally produced over prolonged periods, can complexly alter internal homeostasis and genetic activity, and produce chronic illness.

Compassion for patients experiencing social distress may be felt by students, yet may not easily be processed into a coherent medical axiology based in care and justice values. Transformation to CC can be rapid or slow, with long periods of hesitancy in a liminal zone where it may remain as ‘troublesome’ knowledge (Meyer & Land 2005). This developmental delay has been attributed to curriculum effects (Hafferty 2006; Coulehan 2005), to non-curricular effects of the medical culture (Cohen et al 2009), to emotional distress (Benbassat 2014), and to structural limitations for WP students in medical education (Brosnan 2009). Resort to dark humour may distract and relieve students and physicians of their compassion fatigue (Hafferty 2006). A less healthy response is signalled by changed valence of physician-patient relational discourses; when empathy for disadvantaged patients is withdrawn. A sustained, and physician-sustaining, discourse or practice then becomes necessary to maintain social justice values. The cognitive and emotion work of patient care and social empathy can be rationalised into a praxis for SA; but whether effective SA praxis requires physicians to possess CC is uncertain. Also uncertain is the reliable transfer of SA praxis through pedagogy, without professional identity development of CC.

In Bourdieu’s theory of practice, change in one’s habitual repertoire of actions on entering a new field is regarded a slow, cognitive process (Bourdieu & Wacquant 1992). The problem-posing context of medical case-based learning (CBL) tutorials structures learning with peers. Students use tacit intuition and explicit knowledge to propose hypotheses and test solutions to medical problems. Features of the patient's identity, social circumstances and mental state cue students' empathic and ethical reasoning. Naidu & Kumagai (2016) suggest the problematising mental processes of *cognitive disequilibrium* (uncertainty about how to integrate new knowledge) and *reflexivity* (critical reflection on social inequalities), allow concepts like *equity*, *oppression,* and *social justice in health* to develop entirely new and transformative meanings. This becomes important in clinical contexts, where students are confronted by numerous uncertainties that do not fit the scientific paradigm of medicine.

> Reflexivity involves the practitioner engaging in introspection, intersubjective reflection, mutual collaboration, and social critique, as well as placing taken-for-granted beliefs and assumptions under a critical lens
>
> (Naidu & Kumagai 2016:317-8).

A 'critical lens' permits a gaze of sociological and political *powers*; social structures that *determine* living conditions and therefore health. Equity may be a 'threshold concept' for CC; understanding the concept being essential to realising its consequences, and a gateway to critical actions. 'Threshold' concepts are found within all disciplines; are *troublesome* (students can get stuck in their thinking), yet once traversed are *integrative*; "exposing the previously hidden inter-relatedness of something" (Meyer & Land 2005:373). An *irreversible* paradigm change can follow (ibid). Meyer and Land (2005) saw the resulting shift in the learner's perspective mediated through language, and result in a change in identity (ibid).

> We would argue further that as students acquire threshold concepts, and extend their use of language in relation to these concepts, there occurs a shift in the learner's subjectivity, a repositioning of the self.
>
> (Meyer and Land 2005:374)

This transformative learning theory suggests in bioethics education, progressive negotiation of threshold concepts acts as a ratcheting mechanism that shifts critical learners to the next stage of their moral development. This represents a constructivist theory of learning, in which: "meaning is not predetermined but actively constructed in the minds of individuals" (Lewin et al 2019:4). In the final Chapter, I discuss the combination of learning theories of 'threshold concepts' and biosemiotics to assist students' meaning-making of SA professional responsibilities (Kamel-ElSayed & Loftus 2018). To better understand the nature of thinking required for SA reasoning, I now turn to the social construction of cognition, in which the emotion of empathy is engaged.

3.10.4 Cognitive capacities for critical consciousness

In this section I introduce various hypotheses informing cognitive transformation of moral learning relevant to medical professionalism for social justice.

Lev Vygotsky's social development theory (1978) indicated children's cognitive development was nurtured by social interaction in relation to new situations or more knowledgeable others - in a 'zone of proximal development'; scaffolding new learning at the entry level of learners. Hence, the learning of professional values in medicine was theorised to be a process of ‘social constructivism’ (Vygotsky 1978) within training programs; reproducing the dominant culture of medicine (Luke 2003). Empirically, social justice ideology developed among students (or was retained from ideals held prior to entry into medicine) from informal learning experiences or in special interest groups external to the formal curriculum.

Kegan (2000) proposed a constructivist model of adult perspective transformation that rationalised a sequence of multiple lenses the learner is ‘subject to’ (Lewin et al 2019). Kegan’s model posits a dynamic trajectory of progressive and transformative meaning-making of identity.

> Transformation to a new lens occurs as the individual is confronted with situations where the previous lens has proved to be inadequate. The new lens subsumes the previous one, which becomes an object available to be held in the mind and examined; this transformation which brings new capacities is the “subject-object move”
>
> (Lewin et al 2019:24).

The ‘subject-object move’ describes a pivotal moment of perspective transformation when what was present but unseen, becomes visible and known; and can be acted upon. Kegan (2000) theorised the mechanism as staged adult *development* of social consciousness. A similar cognitive skill that employs perspective change is *supersubjectivity*. Supersubjectivity is described as a capacity that allows a symbolic reading of a narrative; a perspective that takes an overview of the social reality of patients, to then evaluate an ethical response

(Macken-Horarik 2003). Perspective shifting in relation to new dilemmas gives cognition a dynamic quality lacking in the 'threshold concepts' framework. The transformative learning processes of the subject-object move and supersubjectivity are examples of reflexivity; the essential physician skill for respecting the rights and needs of diversely abled patients and colleagues (Samra & Hankivsky 2021). Reflexivity on the ways people's belonging, progress and health are disadvantaged by existing arrangements alludes to *semiotic* (sign-based) logic; recently re-introduced to medical education by Tredinnick-Rowe (2015).

The age-dependent development of systematic thinking (Commons & Ross 2008) matures during students' undergraduate years; and may be stimulated and legitimated during patient-centred discussions in small group tutorials. Going beyond this stage in Kegan's developmental theory, advances one's capability for problematising taken-for-granted norms. Having sociological imagination (Mills 2000), can allow students to empathically visualise how oppressive and exclusionary societal practices unfairly locate individuals and groups *lower* in enduring and psychologically troubling hierarchies of power; in ways that fundamentally disadvantage their physical and psychological health (Fisher & Baum 2010). One's social identity, being embedded in social contexts of disadvantage, can be the source of knowing injustice; while unstructured interests, or work or travel experiences, can be additional sources of situated knowing (Barron 2006). This has implication for the study; allowing distinction between participants on the basis of extended, critical epistemologies of patients' disadvantaged lifeworlds.

Classic examples of critical systematic discourses include; *first*, at the individual level, stigmatization of women, race, sexuality, HIV status, obesity, disability, addiction, and mental illness. Defined sociologically, stigma is “the co-occurrence of labelling, stereotyping, status loss, and discrimination in a context where power is exercised” (Hatzenbuehler et al 2013:2). Stereotyping serves practical purposes,

> stifling social changes and preserving comfortable views, and ultimately lifestyles and practices of certain dominant groups and individuals
>
> (Stetsenko & Arievitch 2004:499).

Secondly, oppression at the structural level referred to “societal conditions that constrain an individual’s opportunities, resources and wellbeing” (Hatzenbuehler et al 2013:2). How unfair structural conditions in society caused internal change in human physiology and health is the subject of much speculation and research. Psychoneuroimmunology studies have provided evidence of psychosocial mechanisms by which interpersonal conflicts cause organic disease (Agnew & South 2014). Causative mechanisms for other SDH, such as social stigma and exclusion based on race or gender identity, were being clarified (Hatzenbuehler & Link 2014). These findings align with the ‘minority stress model’ (Meyer 1995) proposing how chronic social distress produced poor health outcomes in stigmatized sub-groups of society (Lea, de Witt & Reynolds 2014). Wallerstein (2006) suggests, for students to imagine ‘social health’ requires an understanding of how society is structured by policies, planning, and programs in ways that can hinder or empower multisectoral health advances where they are most needed. Moreover, the reality that political ideologies and institutional norms affect social protections, social cohesion, health service provision, and health impacts of environments, inevitably bring politics into social imagining of health (Sales & Schlaff 2010).

In response, educators located in the neoliberal context of HE are encouraged to adopt *deliberate* (rather than reflective) practices of critical pedagogy: to expressly

> redress the balance between thinking, doing and relating to others that exists in the notion of critical thinking with its focus on individual capacity to the detriment of collective thinking *and* doing
>
> (McEwen & Trede 2016:244, Italics included).

Researchers	Kumagai & Lypson, 2009	Mustakova-Possardt, 2004	Thomas et al, 2014
Field	Medicine	Adults	Youth
Object	Moral orientation to social justice in health & health care	Moral motivation	Moral orientation of stigmatised youth
Key feature	Perspective transformation, emancipatory	Highly agentic	Social identity development
Practical	Critical knowledge, cognitive skill set for medical students	Skill set for civic engagement	Skill set for deconstructing false consciousness
Measure	Professionalism Cultural competence Medical ethics Doctor – Patient relationship PHC outcomes	Qualitative	Quantitative
Formation	?	Developmental	Developmental
Transformation	?	Lifelong	Early
Role of Education	1. Develop critical self-awareness, 2. Social, societal awareness, 3. Reflective practice, 4. Critical theory, 5. Post-formal cognition, 6. Early in curriculum	1. Cultivating a moral sense of identity, 2. Sense of responsibility & agency, 3. Deep sense of relatedness on all levels of living, 4. Sense of meaning and life purpose	Not stated

Figure 3.2 Critical consciousness development: a comparison of three studies

* Shaded area indicates gaps in the literature on medical students.

In **Figure 3.2** (above) three studies of critical consciousness compare medical students, adults and youth; the same groups recruited to the present study. In the non-medical studies, CC was considered developmental; yet no stratification of participants' social identities was performed. Bourdieu's sociological theory and Sen's capability theory question the precepts of development that fore-shadow critical social perceptiveness.

The following discussion centres on evolved differences in moral and political values that can distinguish medical students responses to social justice. While the study was not structured to evoke participants' political responses, it was expected that ideological support and resistance to social justice would be expressed.

3.11 Moral emotions and political conceptions of social justice

Moral learning, in the cognitive developmental model, begins in the 'proper upbringing' of the child (intensively studied by Jean Piaget), and continues through six stages of moral maturation identified by Lawrence Kohlberg and colleagues (Haidt & Graham 2007).

Recognising the relationship of emotions to moral cognition, Haidt and colleagues revised Kohlberg's work and developed Moral Foundations Theory, which identified six intuitive moral values and their opposites that have evolved in humans through cultural mechanisms (ibid). The theory incorporated Carol Gilligan's feminist assessment that *care* is a separate ethic to *justice*; and accords with the axiom that "morality is about protecting individuals" (ibid:100).

Moral Foundations Theory depicts six dyads of social emotions and their opposites: Care /Harm, Fairness /Cheating, Liberty /Oppression, Loyalty /Betrayal, Authority /Subversion, Sanctity /Purity (Haidt & Graham 2007:99). While only the first two of these dyads have salience for those with liberal political ideology, *all six* dyads are important moral concerns to political conservatives (ibid). Relevant implications of these findings suggest that an individual's political ideology determines how 'morality' is perceived; and by implication, 'social justice' in a given context may be weighed differently against competing values by liberals and conservatives. An example related to social welfare; political conservatives may disagree with 'affirmative action' programs because they "sometimes violate the principle of merit" (Haidt & Graham 2007:101). The 'merit' or 'desert' argument is a fundamental difference in how conservatives and liberals view *fairness*. *Conservatives* consider the opportunities to participate and compete in free markets open to all citizens, with success equally available to all, if only one works hard enough. The fact that a person fails can conversely result in victim blaming. *Liberal* ideologues tend to view the market as an un-level playing field, one that creates winners and losers; and argue that impartiality to outcomes is no excuse for lack of humanity. Howard (2003) contends that the conservative view fails to recognise that inequities in living conditions, such as poverty, are there at the starting point and tend to accumulate over time. Equity issues need to be addressed for 'merit' to be served. As Howard (2003) notes,

> If people begin from markedly different circumstances, with markedly different valued goods, impartiality will not address these prior inequities.
>
> (:5)

Conversely, for people with first-hand experience of poverty and social disadvantage, social justice can seem like ‘common sense and compassion’ (Maguire 2016). Disregarding political and moral conceptions, social justice thinking benefits problem solving for human health.

3.12 Medical education as cultural reproduction and renewal

Abraham Flexner’s scientific reforms to medicine brought great discipline to the study of disease and illness; produced many medical goods, and explosive gains in biomedical knowledge (Freidson 1970). It positioned medicine as the dominant health profession. However, rapid accumulation of knowledge in different medical and surgical specialties (and sub-specialties) now represents an acknowledged crisis in medical education. Around mid-20C , the first sociological study of medical student culture at an American medical school described students’ strategies for learning impossibly large volumes (Becker et al 1961). In students’ strategizing, medical knowledge was roughly divided into categories of ‘need to know’ (examinable), ‘nice to know’ (interesting) and ‘expendable’ (not examinable, not interesting). Social historians too, found the term ‘medicine’ problematic, claiming it was “unthinkingly treated as another form of science” (Jordanova 1995:362); and,

> implicitly marginalizing not only healing practices, but the whole range of behaviour and representations associated with health
>
> (ibid:362).

Students' longitudinal experience of medicine was studied by Eron (1958), to reveal similar rates of anxiety between First and Final Years; but a loss of humanitarian affect. Eron (ibid) attributed this loss to growing cynicism and anxiety among the majority of students toward the end of their undergraduate course. Additionally, the proliferation of biotechnical knowledge of relevance to clinical practice became unmanageable for any single physician to assimilate. Knowledge management systems (KMS) and interdisciplinary clinical teams were two adaptive responses to this logistic crisis (Bordoloi & Islam 2012).

Yet, organisational competency is only achieved when individual capabilities are empowered.

> Capabilities are potential core competencies, and sound KM practices are required in order for that potential to be realized.
>
> (Dalkir 2005:17)

Social health knowledge (such as structuration of health inequities) and SA practices can feasibly be integrated in a knowledge management system: to improve clinical decision support, knowledge sharing, and social health improvements (Sveiby 2009; Harris, Kidd & Snowden 2008). I return to this discussion in Chapter 11.

Maintaining the status quo is the symbolic power exerted by medical professionalism discourses at each medical school; operationalised by "the types of capital and legitimation processes" (Watson & Widin 2014:2) that can be traced through government policies, to HE rankings, and extensive national and international investments in the field. Reforming this hierarchy, such that patients and the health of their environments are legitimated, ought be a goal of SA pedagogy. These pedagogic processes are revisited in Chapter 12.

Medicine as an occupation has a unique role in society, yet through its organization into a profession “with unique specialized knowledges” (Luke 2003:49), training can be seen to have hegemonic power in the values, discourses or ideology that it transmits to graduates. Dominant discourses signal current power relations normative within a society. Watson and Widin (2014) examined the symbolic violence of dominant discourses on the heterodox student intake to English and Australian HE institutions; comprising

> the challenges of accumulating relevant capital, the struggles encountered and the positions and trajectories of individuals and groups within the fields
>
> (:2).

Research by van Dijk (1993) has shown that *perceptions* derive from cognitive structures that interface between dominant discourses and societal structures. Here, *dominance* is defined as

> the exercise of social power by elites, institutions or groups, that results in social inequality including political, cultural, class, ethnic, racial and gender inequality
>
> (:250).

This social aspect of medical practice, the reproduction of a particular culture (knowledge, skills and attitudes) “enforced by training institutions” (Luke 2003:47) in the single enclosure of a (dominant) professional body, is of particular interest to sociological researchers.

> Sociologists need to constantly evaluate the change in the understanding of a profession, the role of professionalism, and also how rules about medical work reach the doctor and govern the way medical work is conducted (Hafferty & Light, 1995)
>
> (Luke 2003:47).

In a case study, Watson & Widin (2014) critically examined ‘tensions between espoused and enacted values’ of British and Australian HE policy and rhetoric. The opening of Australian HE to international students that involved “students and money flowing from poorer into wealthier countries” (ibid:5), signalled the sector was seen essential to Australia’s economy. Similarly, unreflexive discourses employed in biomedical training can marginalise the value of primary and public health practices, as the next paragraphs attempt to illustrate.

In medical education, the salience of life-threatening medical and surgical conditions that should alert practitioners to the need for urgent investigation and treatment, such as acute meningitis or peritonitis, is given emotional weight through the symbolism of a ‘red flag’. A ‘red flag’ or *rubric* describes an alarming symptom or physical sign that may be observed in presentations of physiological and psychological dysfunction, such as fever in a child, or suicidal thoughts in adults with depressive illness. ‘Red flags’ are clinical developments in patients; signs of life-threatening disturbance in internal homeostasis prioritised ‘not to be missed’, that comprise part of the ‘emotion work’ of practicing medicine. Emotion work, as McNaughton (2013) explained, is “emotion as a form of competence related to skills and abilities” (:71). ‘Red flags’ are also applied to social health concerns for example, when infants present to a clinical practice with conditions such as slowed growth and excessive bruising that may result from carer neglect or physical abuse.

Yet no ‘red flag’ is applied to the social health inequities ‘killing people on a grand scale’ (Boelen & Heck 1995). The medical gaze sees ‘the patient’ but the lifeworld of ‘the person’ can remain external, fragmented or invisible in the clinician’s mind. Health demands and ambulance ramping at hospitals escalate; urging unreflexive calls for more hospitals. In hospitals, medical staff cynically apply the faux Latin diagnosis of ‘acopia’ to adult patients identified as ‘social admissions’ (Whittenbury 2016). This pseudo-Latin label is applied to adult hospital patients with chronic illnesses and low social capabilities. They are deemed ‘unsuitable for discharge home’ due to an inability to independently cope (hence *a-cope-ia*) in their existing social circumstances (Kee & Rippingale 2009). Health sector rationale can construe people with social care needs as *burden* within a dysfunctional system that relies on ‘getting rid of patients’ to free up beds (Mizrahi 1986).

Similarly, medical students can privately hold beliefs and judgments that include sexism, racism, ageism, and gender discrimination ‘naturalised’ in their family and social circles. Perpetuation of pejorative attitudes is anathema to ‘patient-centred’ care and justice, and to inter-professional teamwork. It underlines the need for a transforming pedagogy in medical ethics education; to alter the emotional and rational discourse that is constituted in the social and political contexts of health (McNaughton 2013:77). For health practitioners and students, the health organisation is the locale around which *knowledge*

> is socialised (converted from tacit to tacit among individuals), externalised (from tacit to explicit), combined (explicit to more complex explicit), and internalised (explicit to tacit)
>
> (Nonaka & Konno 1998; Federman 2010-11:14).

In the organisation of western health care, transformation of discourses to meet the values inscribed in A Physician's Charter may only occur "once our epistemological thought stance changes" (Federman 2010-11 np). A 'thought stance' that is both person- and context-related needs to account for knowledge of dynamic ecosocial changes in society, and the complex dynamism of human interactions. Learning, as sense-making of the complexity of the world, also requires collaboration with others; and the suggestion is that educators may need to

> invite our learners' experiences, circumstances, histories, contexts and cultures into our classrooms in combination with our sources and syllabi to enable the collaborative construction and emergence of complex and diverse knowledge.
>
> (Federman nd:2).

In summary, a false consciousness of pragmatism in response to a dysfunctional health system can degrade the social contract of medical professionalism. A hidden curriculum reproduces dismissive mindsets toward the ‘social’ and the complex conditions of health production in societies. A new, inclusive discourse, that integrates diverse medical students and their moral stances toward the social into medical education, may serve to instil in graduates the responsibilities for social justice required by The Charter. A shift in stance from individualist to communal discourses of health is proposed a feature of the new professionalism.

3.13 Reflexivity and responsibility in medical professionalism

The Charter of Medical Professionalism (2002) is positioned in physician training as an internationally agreed mandate responding to public concerns; a set of fundamental principles and professional responsibilities “to which all medical professionals can and should aspire” (ABIM 2002:244). In effect, The Charter updated the long-standing social contract between physicians, the profession as a whole, and society (Cruess & Cruess 2004); recognising how societal requirements of the contract had changed.

In the study, I position The Charter empirically, as an intervention. The Charter defines the ideological status of a ‘new professionalism movement’ in medicine; one that prioritises practice competencies in *patient autonomy*, *patient welfare*, and *social justice* (Medical Professionalism Project 2002:520). Constructed as a joint consensus statement, by the profession for the profession, The Charter seems to convey great hegemonic power as a ‘truth claim’ meant to change orthodox medical training programs around the globe.

In 2010, an international gathering of medical educators adopted guidance from a research project, a Global Consensus Statement for Social Accountability in Medical Schools (Boelen

2011). A concept analysis of SA for medical education (Abdolmeleki et al 2017) [**Table 3.1** below] and core teaching objectives for sustainable education (Teherani et al 2017) were produced. Yet, a model for teaching and learning of The Charter's ethical principles, competencies, and actions towards enacting SA was not mandated. Threshold concepts were not identified. Educators can choose to either construct a heterodox topic of medical professionalism, or rely on orthodox pedagogical approaches of medical education to plan and inculcate these skills. This ambiguity presents both risks and opportunities, depending on the assumptions underlying the change of medical discourse. On the risk side, the neoliberal regulatory discourse of *responsibilisation* "seeks to achieve congruence between a 'responsible and moral individual' and an 'economic-rational actor'" (Hartung 2017:20). Dharamsi et al (2011) endorse this claim;

> [t]he particular ways that social responsibility is interpreted can either enhance or establish limits on how it will appear across the curriculum of medical education and practice.
>
> (:1108)

In a 'responsibilisation' discourse, young people can unfairly be held answerable as global citizens for both individual self-determination and "complex worldwide ethical problems" (Hartung 2017). Yet, the economic policy logic of neoliberalism appears at odds; consisting of

> human capital emphasising efficiency, accountability, target chasing and global rankings rather than flourishing and non-market educational goods
>
> ` (Wilson-Strydom & Walker 2015:2).

Table 3.1 Defining attributes of social accountability in medical education
(Reproduced from Abdolmeleki et al 2017:111 Table 1.)

Domain	**Concept attributes**
Goal	• Resolve problems of social health
Process	• Receive & prioritise community signals • Community responsive education • Visionary leadership of health care system • Community engagement • Community participation
Requirement	• Shared vision • Integrated structure • Functional integration
Outcome	• Accountable, health focussed, community oriented, quality health care practices
Evaluation	• Impact assessment

On the opportunity side lies the possibility of a multi-disciplinary pedagogy of social health justice within the *university*; a shared vision that affirms solidarity of equity values and knowledge between patients, populations and practitioners (Abdolmeleki et al 2017). This possibility relies on having the political economy of social health production legitimised as medical orthodoxy.

Accountability is then on medical educators, the profession and medical regulators, to mentor prosocial students into SA practices in the formal curriculum, and as graduates. Which curriculum captures the interest of students is likely to affect the outcomes of SA pedagogies. The focus then returns to *discursive power* embedded in pedagogy. In thesis discussion [Chapters 11 & 12], I propose pedagogy for the CPD of SA and debate the merits of hosting students' prosocial learning in the formal curriculum.

3.14 Creating physicians that match what societies need

Discussion in this section moves from the expressed need for a more socially accountable medical professionalism, to theorising how diverse medical students negotiate this change.

Participants in the study enter the field of medicine either as *insiders* - traditional, upper middle-class backgrounds where family are physicians or other professionals; or, *outsiders*; such as F-i-F students, women, and students from working class backgrounds. The practice requirement for social justice presents a change in medical professionalism that may favour some; but for a variety of reasons, can appear strange or 'not for the likes' of others. The medical education spotlight inevitably shifts to how *change* or *learning* happens to realise new medical practice responsibilities. The following explanation introduces some concepts and terms that may be new and unfamiliar.

For medical education, which is lacking in theory challenging embedded modes of practice (Bleakley, Bligh & Browne 2011), there is a need for theory that produces "consistent and generalizable effects on learning and performance" (:75). As Cianciolo and colleagues (2013) suggest, “a hallmark of good theory is functional relevance” (:76). Theorising the complex phenomenon of enculturation to different forms of medical professionalism may require a sophisticated account of the sociological dynamics of power in society. Studies of workplace cultures, including medical schools, reveal hierarchical power relations that can change, but tend to “remain unwelcoming to outsiders” (Sommerlad 2007:194). This indicates the suitability of critical theory approaches to studying access and exclusion to contested societal goods.

A critical theory attested to have functional relevance to formation and transformation of medical professionalism is Pierre Bourdieu’s theory of practice (Bourdieu & Passeron 1977). Luke (2003) identifies Bourdieu’s theory as

> providing greater theoretical and analytic scope for investigating the complexity of social and cultural factors in early medical student professional socialisation
>
> (:43).

McArthur (2010) proposed use of *critical theory* “places issues of power at the centre of considerations of education and social justice” (:494); and follows

> a belief in the inter-relation between education and society, and a commitment to change in education and society to ensure greater social justice
>
> (:495).

A more detailed outline of the relevance of Bourdieu's theory of practice to this study is elaborated in the Theoretical Framework [Chapter 5].

A precedent for this study was a report from medical educators in the U.K. recording how near-completion medical students perceived SA (McCrea & Eaton-Murdoch 2014). These researchers conducted focus groups with Final Year students, as they were more likely to have an overview of the whole program. The medical program they describe aimed to be socially accountable but had no deliberate SA pedagogy. Participants reported that the outcomes driven curriculum had negative consequences on their learning and "a perception of lack of support or opportunity to explore and develop their own interests" (ibid:872). Regrettably, students' learning, awareness, and attitudes to SA values were 'limited' (ibid :868).

Essentially, as Preston et al (2016) acknowledged, "the nature of development of social accountability is contextually dependent" (:8) – indicating a need for alignment of values, leadership, partnerships, workforce and funding. This suggests that reinforcement of the contextual relevance of biomedical knowledge is important to pedagogy for SA; consistent with ethical reasoning. Ethical dilemmas of SA may be better known to outsider students, and advantage their social capital.

In an American study, premedical students that self-identified as belonging to lower social status groups, faced significant obstacles to continuing in medicine compared to higher status students (Grace 2017). This was a potential problem for meeting national health objectives for culturally diverse, low SES communities. ‘Low SES’ referred to “the lowest socioeconomic quartile of the population” (Zipin et al 2012), although this grouping has a dynamic membership. The obstacles Grace (2017) identified include financial duress (low economic capital), class-based discrimination (low cultural capital), less doctors in the family that could act as role models (low identity capital), and educators that thwarted career aspirations (structural violence). While the ‘widening participation’ (WP) agenda aimed to attract students from non-traditional backgrounds to medicine, their ‘usability’ for SA practices was not well known.

By 2009, researchers inquired why so few working class students found their way into medicine (Mathers & Parry 2009). In this English study the narratives of twelve mature working-class students were examined, and revealed an insuperable conflict between class identity and medical identity. Studies in the U.S. however, reported greater success in WP admissions among high school students from disadvantaged backgrounds that attended preliminary health science studies (Fincher, Sykes-Brown & Allen-Noble 2002). Studies of aspiration for HE among school leavers from low SES backgrounds in Adelaide reinforced the idea that culture is not only located in the past but continually ‘in process’ (Zipin et al 2012). Low SES students aspired to an alternative future for themselves “at a latent and tacit level of consciousness” (ibid:239); and researchers drew attention to the ‘funds of knowledge’ that ‘outsider’ students brought to HE in habitus. ‘Senses of possibility’ latent in these students’ ideas, as features of habitus, may likewise be charged with aspirations and solutions for social health improvements.

While a reform process of *de-colonisation* of knowledge (questioning the silencing of diverse voices by gender or cultural dominance in discourses) was in process in many universities (Baron 2018), it was in early stages within Australian medical training programs. Giving voice to young peoples' 'funds of knowledge,' and building capacity to aspire to a better future, may allow *emergence* of transformative change in their aspirations (Zipin et al 2012). Aspirations are then no longer pre-set by the orthodox habitus of low SES, nor constrained by the structural limitations of prevailing economic conditions. Instead they are capacitated by education to empower future-oriented community actions (ibid). Education-empowered youth in the Zipin study (2012) revealed insider knowledge of their community and where improvements may usefully be implemented: sociological insights. In Chapter 12, I discuss education theory legitimating sociological discourses in medical curricula.

In summarising the discussion of widening participation to the professions for students from non-traditional backgrounds, I return to the study. Bourdieu's theorising may help explain differences in medical students' dispositions, perceptions, and aspirations in relation to SA. Medical traditions propagated in a hidden curriculum, where students inevitably learn of further hierarchies of privilege, can negatively impact their career aspirations. These doxic (orthodox) features of the traditional medical culture, are reinforced in popular culture from an early age, and centre on status, income, and various material and symbolic rewards.

3.15 Problematising higher education in late modernity

In late modernity, change is the new constant. With the arrival of neoliberalism, Luke (2003) enquired "are medical students ready for a new corporate age of health care?" (:50). This question has parallels to the ways that HE institutions have responded to the globalization, commodification and 'internationalization' of curriculum. Many universities have moved to the neoliberal 'market model' emphasizing competition, individualism, and standardisation rather than a 'social transformation model' that emphasises innovation, global cooperation and intercultural understanding (Hanson 2010). In medicine, and global health in particular, recognition that "globalization lead to increased marginalization of significant groups of people around the world" (ibid:73) necessitates pedagogy and institutional *modus operandi* that value and support ethical transformation of the social order. This harks back to Bloom's attention on the *social ecology* of medical schools (Bloom 1989). Responding to Luke (2003) the abstract question this study asks medical student participants is; 'Are you ready for a social accountability age of health care?'

Critical theories that scope the question of *practice change* often refer to Bourdieu's schema. Critical theory as a *problematising* practice can also be brought to bear on changing the structures of HE in ways that Gramsci indicated; through de-colonisation practices that make curriculum more inclusive (Walton 2018). In the study, I respect the reciprocity of accountability implied by these two practices. In the theoretical framework [Chapter 5], I outline how recent theoretical ideas of practice change articulate with the WP agenda in HE.

In the Australian context, the characteristics of a prosocial medical habitus may be discernible from the characteristics of the *doxa* of PHC practices in areas of social need; although to restrict it to this profile would be to stereotype. A proxy index of change in the medical doxa can be found in the growing literature on social health topics in respected peer-reviewed journals (Lancet, NEJM) and other publications. A search of the Scopus database for ‘indigenous AND health AND Australia’ for the decade 1990-99 located 141 items; 2000-09 there were 1,308 items, and from 2010 to 2017 a further 2,002 items. This pattern was also reflected in the number of publications containing the word ‘indigenous’ in the Medical Journal of Australia over the same periods. Similarly, the search terms ‘equity AND medicine’ located 238 items in the decade 1990-99, 624 items in the decade 2000-09, and between the years 2010 and 2017 there are 838 items listed.

Social justice practices, including research, can be applied in the work of medical specialties by health teams wanting to improve health equity outcomes for their patient cohort. It can also be practiced by practitioners wanting to ‘make a difference’ by regular travel in health teams to remotely located communities with high health needs. A study of dentists that serviced remote Australian communities found the majority were ‘tapped on the shoulder’ by colleagues that recognised their dispositions for the field (Gardner et al 2014). The dentists reported intrinsic rewards as “simple, unexpected, associated with relieving pain, community engagement and making a difference” (ibid 302). Anecdotally, students with prosocial dispositions were often attracted to moral exemplars in the profession, and to exemplary health service organisations such as the World Health Organization (WHO) and Médecins Sans Frontières (MSF).

An example from the current decade of an informal curriculum in medicine was the documented swing in graduate preferences from primary health practice to specialist practice in the United States. Some observers attributed the swing towards highly paid specialist practice to neoliberal HE policies that have resulted in rising university fees and student debt (Glenn 2012; Youngclaus et al 2013). Others suggested that rather than income, a manageable lifestyle to avoid emotional ‘burnout’ may be a key motivating factor for graduates’ choice of specialty (Enoch et al 2013). Yet, many specialist physicians and surgeons can earn four or more times the income of a general practitioner.

Against this background of student concern for one’s survival through the stresses imposed by a bulging curriculum and rigorous assessments to graduate in medicine; and a perceived need to compete for privileged entry to a medical or surgical specialty program; it would seem unlikely that medical students would retain any pre-selection concern for issues related to social justice and health. This set of conditions might instead predict a further regression in moral reasoning about ‘the Other’ among medical trainees and graduates, and a greater commitment to what Hafferty (1998) called “the important stuff” (:403). Reduced to essentials, this ‘stuff’ refers to the *status quo* of reductionist biomedical, demand-led health care, pharmaceutical research and its products. In this context, ‘social justice’ can be construed in economic terms as distributive justice: the fair(*er*) allocation of government funding and resources across the health sector.

The capability to be a learner, let alone *creator* of new practices like SA, against the shape shifting background of ‘liquid modernity,’ can be highly challenging (Bauman 2005). The imposts of Information technology, the constant revision of facts, and neoliberalisation of HE, now puts increasing onus or *responsibilisation* on the learner for flexibility (ibid). The result, Bauman suggests, is a *series* of life projects that serve only to keep one afloat:

> the volatility of the disjointed, poorly integrated, and multi-centred liquid-modern world makes it certain that each successive episode of a life-through-projects will call for

> another set of skills and information, invalidating the skills already acquired and the information already memorised.
>
> (Bauman 2005:314)

Bauman (2005) points to multiple changes in the education field that shifted the emphasis “from ‘teaching’ to ‘learning’” (:316) and contributed to “growing unwillingness of learners to make long-term commitments that constrain the range of future options” (ibid). This view aligns with the ‘meta-reflexive’ hypothesis of Margaret Archer (2012), that postulates students flexibly plan their futures (and education) in an uncertain world through their internal conversations.

Certainly, education for an unchanging world is no longer an option; but the search is on for pedagogies adaptive to the certainty of social uncertainty.

3.16 Critiques of medical education research

In their publication ‘Medical Education for the Future’ (2011) British medical educators David Bleakley, John Bligh and Julie Browne summarised and critiqued the ‘fault lines’ in past medical education research and offered a framework for producing greater rigor and practical application of research results. I first outline the authors’ critiques of medical education as they relate to this study before discussing their literature review and recommendations for medical education research. Their overarching criticism of medical education centres on the

> paradoxical relegation of the patient to a secondary position in curriculum design and then in the subsequent teaching and learning process
>
> (Bleakley, Bligh & Browne 2011:254).

These authors commend measures proposed by the International Federation of Medical Student Associations (IFMSA) to increase patient contact throughout the curriculum by integrating structured work-based ('situated' or 'service') learning with science learning (ibid:255). This pedagogic proposal may facilitate transfer of concepts between abstracted and practical knowledge forms in medical training; a suggestion taken seriously by Maton (2014) in Legitimation Code Theory (LCT) [Chapters 11, 12]. Among other IFMSA proposals that align with the humanist, patient centred, and social justice goals of The Charter include; *first*, that medical education policy align with changing local population health needs; and *second*, that the public be involved in policy making.

Critiques of medical education research summarized in *Medical Education for the Future* (Bleakley, Bligh & Browne 2011) include the lack of theory development that can 'challenge assumptions' of habitual, embedded modes of practice. These authors argue that research should "go beyond the idea that restrictive mindset that theory only means hypothesis testing" (:238). This quote refers to the reductive tendency in medical education research to borrow positivist methodology from the medical sciences; supporting previous commentary on obstacles to teaching students critical reflexivity (Wiles, Allen & Butler 2016). Instead, it is argued, medical education research needs to view the field systemically; as a complex set of relations or *ecosystem* (Bleakley, Bligh & Browne 2011:233). Others critiqued the issue of *quality* in medical education research, proposing evidence was needed “to guide scholarship and practice” in order to know that “the right questions are being asked” (Prideaux & Bligh 2002:1114).

Bleakley, Bligh and Browne (2011) promoted social learning theories in medical education research for their questioning potential; “to make the familiar strange” (ibid:238). Examples of social learning theories include Albert Bandura’s *Social Learning Theory*, Lev Vygotsky’s *Theory of Social Development*, and Pierre Bourdieu’s *Theory of Practice*.

The latter, I will argue [Chapter 5], offers validated conceptual tools for examining differences in students’ dispositions, which have the quality of being ‘transposable’ – they can adapt to change in the logic of a *field* or market, such as changing medical culture (Jenkins 2002).

3.17 Summary: Literature Review

The will of the profession for greater social justice in medical practice, inscribed in The Charter of Medical Professionalism, is widely supported, and related to real world problems. Restoration of trust in the profession is the contractual goal of reforms. The task of usurping false consciousness in modern medicine in relation to dynamic social inequities affecting the human condition, is an incompletely understood and complex process of transformative learning. Students’ loss of altruism or empathic concern for patients’ social disadvantages tends to increase during medical training as medical students ascend the professional hierarchy. Attributed to a ‘hidden’ curriculum, moral ambivalence may be the result of relegation of the patient and societal contexts to the margins in a largely biotechnical medical education. The hidden curriculum can capture the student imagination, and dissimulate prosocial values. Empirical research of education programs aiming to instil humanist values reported failure.

The normal age-related development of critical consciousness may be delayed or deferred in medical students, and is a gap in the literature of high importance to medical education. Diversity of students' social identities need to be taken into account when studying critical perspective transformation. The 'millennial generation' are considered more tolerant of identity differences than prior generations; and while male medical students tend to apply *justice* reasoning, females apply *care* reasoning to ethical dilemmas. The ethical *sensitivity* to recognise moral dilemmas, and ethical *reciprocity*, are considered the main preconditions for moral dialogue and ethical argumentation. Justice sensitivity can require sociological imagination of the distressing and unfair sociopolitical conditions that structure health outcomes and get 'under the skin' of socially marginalised, stigmatised and underserved populations (Hatzenbuehler et al 2013).

'Structural violence' or injustice can be perpetrated by meanings configured in unreflexive knowledge organisation for educating professionalism (Tennis 2013). Increasing patient contact throughout the curriculum was regarded promising for contextualising students' social health learning. 'Situated' service learning in contexts of social disadvantage have good evidence of efficacy when supported, yet opportunities for engagement in service learning are not equitable. The Charter may call for a dualism of biomedical and sociological science knowledges for reasoning local and global health solutions; integrated into a holistic, ethical praxis of professionalism. Prosocial change in professional culture is theorised to be a gradual, tangential process of change in discourse or *stance*; requiring leadership from the dominant group, in solidarity with less powerful others.

Problem solving of moral dilemmas of global or local health may advance students' development of critical consciousness. Epistemic reflexivity to discern how sociopolitical conditions shape medical phronesis may be a key skill for SA praxis. Medical students are considered cognitively capable of the required systematic reasoning for SA problem solving; and at undergraduate level are forming their own political identities. Social theories of learning hypothesise prosocial change in identity to be fostered in proximity to prosocial peers, and maintained in prosocial peer-led student groups external to the formal program. Which curriculum matters for learning of social justice needs in health care and health production remains unresolved. Critical reflexivity on patients' lives is regarded a key SA skill for recognising equity needs, and delivering humane medical care.

The literature review affirmed the validity of the WP agenda in medicine for introducing discourses of social health and illness into a bioscience dominated curriculum. Beneficial effects on clinical reasoning were expected from integration of SA phronesis into medical management; and to broader intersectoral population health reasoning. Prosocial students are expected to accrue reciprocal benefits from curricular support and engagement in SA practices. Benefits for the individual student may include avoidance of identity dissonance and marginalisation (or fractured habitus) by the dominant professional culture; and fulfilment of the promise of social diversity participation and usability in medical education.

The communicative, cognitive and affective tasks of SA professionalism may be elucidated by critical theories of practice and associated philosophies of justice and care applied to both students and patients. Transformative insights to SA are sought from participant cohorts differentially socially *situated* by; a. secondary /postgraduate educational status; b. insider /outsider professional status; c. high and low social equity status; and, d. pre- and post-curriculum structuring principles.

CHAPTER FOUR:
SOCIAL THEORY OF PROFESSIONAL PRACTICE

4.0 Introduction

In this chapter, I outline how Bourdieu's theory of *practice* and Sen's theory of social justice as *capability* can provide a sociological explanation of diverse medical students' perceptions and aspirations for SA practice. These critical theories form the principal lens in the theoretical framework for analysing structuration of prosocial agency among participants from diverse social positions that volunteered for the study. The resulting theoretical framework is developed in full in Chapter 5.

A number of medical education academics have implored a role for sociology research in medical professionalism and ethics education (Bleakley, Bligh & Browne 2011; Emmerich 2013). Understanding some of sociology's *fundamental premises* can make this claim more accessible.

- Humans are biological organisms, dependent on and interacting with the biophysical contexts within which they develop
- Humans are social organisms, embedded and developing within patterns of relations of interdependence
- Human brains are exceptionally dynamic… people not only can learn but must learn from others to survive and develop normally
- Human persons are dynamic. While they exhibit apparent stability at some levels, their characteristics [are] always open to change.

(Kasper 2014 np)

In the study, I reflect on these premises in relation to both the study *participants* and their *patients* that will require SA measures to meet equity targets in modern health systems. Participants from diverse social backgrounds, can find their adjustment to the culture of medicine (the 'rules of the game') relatively easy or difficult, depending on their 'fit' to prevailing characteristics of the field. For diversely positioned citizen-patients in a society, capacity for coping with social stressors in the lifeworld can affect mental state, capability to function autonomously, and illness outcomes (Marmot 2005). Intervention in socially produced illness to offset excess morbidity and mortality is the humane purpose of SA medical praxis. The inculcation of responsibilities relegated to physicians by The Charter requires thoughtful, critical pedagogy by educators of medical professionalism.

4.1 Bourdieu, reproduction and change in professional culture

Pierre Bourdieu, a prominent French sociologist of the 20th Century, developed a taxonomy of terms to map his theoretical ideas and report on empirical studies. His work, applied to HE, exposed the production and reproduction of power, and therefore societal inequalities.

Bourdieu employed the term *habitus* to refer to an individual's acquired 'set of dispositions' or 'internalized cultural schemas' derived from formative familial and social environs of childhood (Bourdieu 1993). Habitus was conceived as the individual's 'core' perception-shaping apparatus, serving to link *agency* (the individual's capability to act) meaningfully with society’s diverse *structural* surfaces. The capacity of habitus to give an individual *power* in a social field was theorised to occur by two means. Each habitus is differently endowed by financial and non-financial *capitals*; and by the confidence to negotiate fields of power or *structures.* The family, although particularly the mother if it was her time invested in the child’s best interests, was the likely source of *cultural* capital (Reay 1998): the sense of home, belonging, or ‘taste’ as Bourdieu (1984) saw it. A medical student with physician parents will be more familiar with the machinations or ‘logic’ of the medical ‘world’ than a student whose parents are say, welfare workers. The first student knows ‘the rules of the game’ (Bourdieu 1977) and can play to own advantage following the parents’ curriculum.

The concept of *habitus* was devised to explain how individuals may be ‘fit or unfit’ or have “a sense of place” (Hillier & Rooksby 2005) for practice in a particular social *field*, such as the medical profession. The habitus concept attempted to avoid the determinism implied by one’s *dispositions* in a strict ‘structures -> dispositions -> practice’ explanatory framework (Edgerton & Roberts 2014:193). Instead, habitus was intended to provide a more dynamic account of social practices*.* In Bourdieu’s lexicon, habitus structures a participant’s approach to any given context, habitat, or *field* in society while also *giving structure to the field* in which it operates. Hence, a ‘structuring structure’ is the way Bourdieu (1990) described habitus; indicating the dynamic, interactive quality of his structure-agency construct.

A key insight here, with regard to SA practices, is that non-traditional or ‘outsider’ students are hypothesised to ‘give structure to’ or change the field of medicine. A student with a parent in community welfare was likely more *socially* aware than ‘insider’ children of physicians; of conditions of inequality and injustice, the machinations of poverty, welfare dependency, violence and illness. By the same token, ‘outsider’ students may undergo habitus change *towards* the *status quo* of medical culture; potentially at some personal cost (Bourdieu 1990).

Importantly, although habitus is relatively stable over time, predicting the reproduction of the dominant culture in new fields (be it a ‘biopsychosocial model’ or ‘socially accountable model’ of medical practice), habitus is considered to be open to reflexivity (self-monitoring) and adjustment, or change (Sweetman 2003). Reflexivity therefore becomes an important focus of the theoretical framework produced in Chapter 5; reflecting the importance in the study of change in participants’ discursive engagement with The Charter’s professionalism.

To illustrate use of Bourdieu’s toolkit in the professions, I sketch a published example of social change analysis in the kindred field of law. Hilary Sommerlad (2007) employed a Bourdieusian social analysis to produce a succinct account of the professional adjustment process experienced by students from diverse social backgrounds entering law studies in the United Kingdom. As in medicine, students were entering a field “once clearly the preserve of white middle-class males” (ibid:193). Sommerlad compared three explanatory models of social relations; a. models of transformative agency that imply “a weakening of the social stratification of access to resources” (:193); b. traditional models that emphasise ideology; and, c. structural accounts like Bourdieu’s that emphasise “the ways in which existing power relations are maintained through adaptation to historical change” (Sommerlad 2007:193). In Bourdieu’s framework, a social ‘field’ such as medicine or law has historical status, a social contract granting ‘professional’ autonomy, and practices “strongly patterned by traditions” (ibid:194). These practices constitute a *doxa*; “everything that goes without saying” (Grenfell

& James 1998:126), formed by “taken-for-granted presuppositions” (Sommerlad 2007:194) of the field’s structure. As in medicine, ‘hegemonic professionalism’ persists in U.K. law despite recent losses of the profession’s autonomy, prestige and income; changes forged by a new economic order wrought by transnational trade and neoliberalism (ibid). Sommerlad (2007) cited decline in *pro bono* legal aid services a ‘social good’ lost in this crisis. Another modernising change the professions shared was the democratic opening of admissions to women and diverse, non-traditional entrants; the WP agenda.

In her study, Sommerlad (2007) researched the processes of professional identity formation of outsider students entering law at low-ranked UK universities. Her enquiry investigated whether the generative capacity of habitus could result in outsider students subverting and contesting normative legal professionalism (:195). This has relevance for the current study of medical students of diverse social identities entering medicine. Sommerlad (2007) recognised a tension between the disembodied nature of ‘professionalism’ and power relations in legal workplaces; “imbued with race, class, gender and other social categories” (ibid:194).

Bourdieu’s framework envisages the advantages that habitus brings to a *field* (such as law or medicine) as different forms of embodied *capital*. These are termed a. *cultural* e.g. dress, conduct and tastes; b. *social* e.g. class status, place of residence, networks; c. *economic* e.g. income and assets, and d. *symbolic*. *Symbolic* capital referred to one’s position of respect in hierarchies of public categories such as state, business, profession, arts or sport. ‘Capital’ commodities could be *traded* to gain greater access to valued symbolic resources such as power, titles, and social prestige (Bourdieu 1990; Murray et al 2012).

Bourdieu recognised how an individual's accumulated set of economic, social and cultural capitals, invested in education, could expand one's cultural capital and life benefits. One's capital resources then acquired a "band of more or less probable trajectories" (Bourdieu 1990:85) for social mobility that maximise future capital assets. Bourdieu's research revealed differences in habitus were class-based, underwritten by various 'amounts and types of capital,' and generated "orientations, inclinations and dispositions that organise practices and the perception of practice" (McDonald 2014:903). In this way, individuals came to 'know their place' in society, but could aspire.

Sommerlad (2007) designed her study of 'outsider' law students to

> track career developments in career aspirations, perceptions of the legal professional field, and levels of attainment during and after the vocational training stage and into qualification
>
> (:196).

Questionnaires collated socio-demographic details of law students entering legal practice; their motivations, intentions and successes in gaining training positions. Forty-five percent (45%) of participants self-identified as 'working class', and half of all students were F-i-F to attend university (Sommerlad 2007). Interviews with selected individuals were conducted at regular intervals, and focus groups were conducted with participants selected by shared social characteristics; all females, all non-white, *et cetera*.

In addition, to elicit tacit understandings of the legal profession, Sommerlad (2007) asked students to discuss, write and draw their impressions of ‘solicitors’ (:197). Despite ‘repellent’ depictions of solicitors, many students “expressed enthusiasm for becoming solicitors” (Sommerlad 2007:202); were compliant with normative professional habitus in dress, conduct and speech; enjoyed the cultural capital of legal status; and had a preference to enter highly paid corporate law. One female outsider student expressed social justice ideals but planned to go into corporate law: a transformation Sommerlad (2007) termed “the displacement of a value rationality by a calculative rationality” (:202). Other female students were wary of entering a male dominated field like corporate law, and this ‘identity dissonance’ was resolved by a preference for entering small law practices. Many outsider graduates faced obstacles in joining a law firm; based on age, class, ethnicity and gender. An older graduate with intersectional identities was struck by what Sommerlad (2007) called the “profession’s irrational devaluation of unconventional experiences and skills” (:209). This has relevance to Flinders medical students in this study, the majority having an initial degree, career and adult life experiences. Sommerlad’s study (2007) also has implications for the study of ‘outsider’ medical students; to postulate whether they would abandon social justice values to support a ‘corporate rationality’ of medical practice; and how they might reconcile the inherent philosophical differences.

Reay (2015) delves into a *psychosocial* understanding of habitus, informed by Bourdieu’s claim that human dispositions derive from (unequally) “being exposed to the world” (:12). “We are disposed because we are exposed” (Bourdieu 2000:140-141; Reay 2015:12). The insecurities and risks of “lesion, emotion, suffering, sometimes death” (Reay 2015:12) that underlie our passions and drives, mark “affective transactions between habitus and field”

(:12). This insight resonates with ‘intersectionality theory’, which valorises the perceptions of individuals having *multiple* oppressed identities or positions in social space; for example, stigmatised gender *and* race (Crenshaw 1993). An intersectional lens helps social theorists explore the lived complexities of inequalities, including structural barriers, and how they are resisted or subverted by individuals (Webb et al 2017:151). Reay (2015) addressed how different ways of ‘being exposed to the world’ may produce affects related to social injustice, in terms that may also apply to medical student participants in this study.

> [T]he impact of these affective and psychological transactions becomes sedimented in certain habitus, so, for example, the learning that comes through inhabiting pathologized spaces within the field often results in a predilection of shame, fear, anxiety, or righteous indignation, while the internalization of social inequalities in the privileged can result in dispositions of superiority, entitlement, disdain but also a predilection for guilt, ambivalence and discomfort.
>
> (Reay 2015:12)

A professional concern arising from Sommerlad’s study of the experience of U.K. students from working class backgrounds in HE, regards the struggle students can have as a result of a *divided* habitus (Bourdieu 1999:511). Students may find they perform well educationally, yet feel uncomfortable reconciling their success in HE (a field generally perceived ‘not for the likes of us’) with their natal cultural identities (Reay 2015). Enticingly, this observation suggests a *divided* habitus may become *whole* when a physician from a non-traditional background practice in contexts proximal to the cultural class of their natal background.

In distinction, Reay (2015) described how privileged middle-class students may experience *aversion* to less fortunate others (i.e. the majority of public patients);

> their relationship with their working-class other inscribed in white middle class habitus is one in which dispositions of empathy, pity, and openness are at constant risk of being overwhelmed by fear, contempt and, in some cases, repulsion.
>
> (:17)

Yet these middle-class families can also tousle with a *divided* habitus; one marked by ambivalence. On the one hand, they can prefer their child to maintain distance from working class students; on the other, they may espouse a more equitable society (ibid). The emotional costs of divided loyalty was described by Reay (2015) as “fear of getting too close to need” and “anxiety about being contaminated by poverty and lack” (:20). Compared to working-class students, white, middle-class students likely have a more flexible habitus preparing them for unfamiliar fields. Yet, they can be more vulnerable to pressures on habitus that can result in “repression, sublimation and defensive responses” (ibid:20); or what Sennett & Cobb (1972) term ‘the hidden injuries of class’ (ibid).

Reay (2015) related conflicts in the habitus to the neoliberal context of HE and considered how this may impact participants’ prosocial dispositions.

> Dealing with the tensions generated through the contradictory interplay of cooperation and competition, consumerism and welfarism (Miller 1993), leads to a white middle-class subject torn between an acquisitive self-interested self and a more altruistic public-spirited self
>
> (:16).

These tendencies can be identified from participant responses to clinical hypotheticals posed in the study. The above quote suggests the affective or psychosocial nature of habitus may be activated in students from non-traditional class (WP) backgrounds by attempts to internalise the neoliberal norms of the prevailing medical and social culture. How students resolved these conflicts may also relate to their choice of 'type of medical professionalism' (Wear & Aultman 2006); an idea I develop in the theoretical framework [Chapter 6].

Bourdieu's theory of practice is predictive rather than deterministic and can bring into focus an ecosystem view of medical education. In Bourdieu's schema, each *field* has its own rules, "governed by their own logic of practice" (Thompson 2014:90). An uneven 'playing field' is "riven with tensions, debates, oppositions and alternative doxa" (:90). Recalling the quote describing reform of medical education as "reform without change" (Swanson 1989), Bourdieu pointed to the dual processes of education as both a site of *production* of new knowledge (such as SDH) and a site of *reproduction* (of doxic positions in medicine that 'play the game' for field-specific capitals) (Thompson 2014:90). The capacity for evolving the professional contract to novel circumstances is implied here.

Reflecting Bourdieu’s optimism about the possibility of change, Thompson (2014) made the observation,

> it is possible to be positioned to carry out the prevailing logic of the field, and to do so, but at the same time take up a doxic position and adopt a partial practice which runs counter to that which prevails in the field (Thompson & Hall, 2011)
>
> (:90-91).

The idea of tangential change offers hope that medical practices can reverse contemporary health system shortfalls. But will hope depend on reaching a ‘critical mass’ of shared physician values for SA? (Ahlquist 1996). Or, will societal changes and ecological threats force change in medical culture? Bourdieu’s theory attests

> symbolic power maintains its effect through the *mis-recognition* of power relations situated in the social matrix of a given field
>
> (Online Cambridge Dictionary).

An example of critical ‘mis-recognition’ was an engineering faculty reaching its gender equality target or ‘critical mass’ of women in its courses, but with no change in the male norms of engineering culture (Stolk et al 2017). Their studies show

> gendered typing of engineering abilities causes stereotypically feminine competencies such as ethics, social consciousness, health and safety, diversity, and communication to be devalued or marginalized by men despite the centrality of these competencies to engineering practice
>
> (Stolk et al 2017 np).

A 'critical mass' effect implicitly relied on the 'minority group' to make change in powerful structures like culture (Stolk et al 2017). In distinction, a 'critical act' (Dahlrup 1988), such as positive affirmation or empowerment of minority group values, involved examining ways in which the *dominant* group can assist in "shifting culture" or "lowering resistance to change" (Stolk et al 2017 np). This suggestion may prove useful to theorising change in professional ethos through empowering the capabilities and usability of WP students.

The reproduction and accumulation of 'capitals' – in Bourdieu's social theory; the collective social, cultural, financial and symbolic resources an individual brings to the field; predicts graduates with the habitus for the traditional culture of medicine seek highly paid positions in close proximity to major cities; the centres of cultural production. This is not the usual province of PHC physicians, who in comparison earn less, and are located in socially isolated and culturally poor rural and remote areas. Many rural physicians feel the urge to return to cities to further their children's education and meet own social and career needs (Cano et al 2021). Yet, despite his depiction of the enduring nature of habitus, Bourdieu (1977) noted how it can change; practitioners and their families can find medical practice and lifestyle in rural underserved areas rewarding, and stay for the long term.

In recent times, Bourdieu’s emphasis on culture as a means of class reproduction has come under scrutiny. Bourdieu’s theory of practice suggests that aspiration and status anxiety can compel the upwardly mobile to reject the cultural identity of their class origins. Yet, in some countries, the socially mobile are more likely to be cultural omnivores, as this may confer social benefits (Friedman 2012). Furthermore, in contradistinction to the social reproduction function that Bourdieu observed, education is a SDH and can act as a vehicle of social class mobility.

Critical social theorists attest to the potential for structural changes in society, related to learning by critical reflexivity. In this study, this implies learning by moral deliberation on the values of medical education embodied in its diverse students. The importance of reflexivity and misrecognition to SA professionalism is prominent in the study design (Chapter 6].

4.2 Sen, social justice and capability

Amartya Sen, an Indian social philosopher, reviewed Rawl’s theory of justice in relation to the lower caste poor of the sub-continent. Capability, Sen suggested, refers to “the freedom to pursue ways of being and doing the individual has reason to value” (Hart 2013:49).

In theorizing how change occurs through education, Hart (2013) indicated that Bourdieu’s conceptualization of different forms of *capital* complements Amartya Sen’s ‘*capability* approach’; and applied the frame to analysis of how students’ capital assets may be *converted* into capabilities. Hart (2013) quotes Terzi (2007:37), who argued “the capability to be educated is fundamental and foundational to different capabilities to lead a good life" (:66).

Although education research employing a capability approach is still developing, it suggests a means for medical professionalism to gain from diverse student discourses of the social 'health-illness' dialectic. Capability is particularly important to social justice, as it infers the ability and willingness *to act*. Hart (2013) outlines the difficulty of measuring capabilities compared to other measures of development, but reports progress in this area that led to her research framework for education. What capability for social justice professionalism may require, in educational terms, is the *transfer* of schematic knowledge to a broad range of health contexts, to build cumulative knowledge of SA praxis. Aside from curricular knowledge, students' social justice dispositions and prosocial motivations need to be supported by curricular structures and professional(ism) pathways.

Students may be diversely drawn to the doxa of the hidden curriculum or to prosocial curricular structures; but developing students' capabilities ought to be the social justice goal of medical professionalism educators. To operationalise pedagogy, Hart (2013) proposed combining Bourdieu's critical social theory with Sen's capability doctrine promoting equity as 'capability to enact values'.

This formulation, of freedom to act in preferred ways of being, permits personal justice and aspirations to align medicine with the goals of SA. Other transformational and critical theory considerations may attach to this framework, as considered in the next chapter.

4.3 Bourdieu and Sen: capability to aspire

‘Capability to flourish’ as a synthesis of Bourdieu and Sen’s theories (Hart 2003) may relate in part to participants’ capital assets (Bourdieu 1977), equity identities (Intersectionality theory), and constructive alignment of personal and vocational *values*.

Students’ *freedom capability* (Sen 1999) describes the agency to choose with *undivided* habitus (including prosocial ethical capital) a plan of action for one’s life; more or less free of structural constraints. I intend this *wellbeing* concept to apply to medical students *and* the public they ‘treat’ - to *signify* reciprocal justice. I conjecture ‘freedom capability’ maps onto participants’ preferred ‘type of medical professionalism’ (Wear & Aultman 2006); although in reality, the student’s ultimate professionalism may be a composite of these ‘types’. In Chapter 9 [Results], I chart participants’ choice of ‘type of medical professionalism’ with their equity identities, to discern how subjective social position may link to the aspiration to work in an area of healthcare need.

Graduates with prosocial aspirations are hypothesized to seek to invest their knowledges, values, and identities into a meaningful *gestalt*. A conclusion reviewers drew from Hart’s ‘Sen-Bourdieu’ analysis suggested “that aspiration operates as a meta-capability, an important capability in its own right, and a functioning” (Unterhalter, Ladwig & Jeffrey 2014:136). Furthermore, *meta-capability* implies an ability to *transfer* knowledge forms from one situation, problem, case or context to another. Habitus is a dynamic, adaptable concept, and Bourdieu’s theory of practice (1977) informs medical educators wanting to nurture the diverse capabilities and aspirations graduates bring to medicine. Aspiration for social justice, empowered by sociological imagination and critical thinking (or CC), may be the meta-competence likely to enable SA professionalism.

Solbreke et al (2016) held that “capacity for critical thinking has been proposed as one of the most important formative outcomes of higher education” (:29); and suggested the project of developing professional responsibility required physicians and educators to deliberate on their “role as engaged citizens in current societies” (:36). Sen’s capability approach (1999) can inform the vocation of social actors aspiring to correct global and societal health inequalities. The inclusion of eclectic student and patient voices, stances and knowledges into a dynamic conception of *curriculum* (Baron 2018), is an ethical issue I take up in the Discussion [Chapter 12].

In the following Chapter, I construct a theoretical framework for analysing participant data

CHAPTER FIVE: THEORETICAL FRAMEWORK

5.0 Introduction

In this chapter, I outline a set of propositions for explaining variation in medical students' prosocial professionalism: how moral development, social position, conceptual and critical thinking, and structural constraints, may distinguish participants' responses to the study. Constructing these ideas into a theoretical framework aims to capture axiological (values), ontological (ways of being), and epistemological (knowledges, points of view) aspects of participants' perceptions of their professional responsibility for SA praxis.

Bourdieu's social theory of practice (1977) offers a suitable methodological toolbox for examining variation in agency potential *or power*; and Sen's capability approach (1999), expected variation in *empowerment* among diverse study participants in relation to the discursive structures of medical education, medical professionalism, and neoliberal society.

The contextualising of medical education to meet shifting social needs in society is essential to the framework analysis; hypothesised to require students gain a critical, sociological imagination of health inequalities and remedial actions, to supplement biomedical science imagination of the human body. Transformation to a SA paradigm of professionalism was thought to occur when students questioned their own assumptions and 'tried on' different points of view or discourses (Brown 2013). The process of transformation, shift, or *ellipsis* of habitual dispositions (Bourdieu 1977) toward particular discourses is complex but accessible through the following multi-theory framework.

In the following sections, I discuss theoretical accounts of professionalism education as a prelude to devising a suitable 'theory before' framework (Meyer & Ward 2014) for the study. Theoretical discussion anticipates the diverse conceptual frameworks participants may apply to study questions of the sociopolitical structuring of health and health care. Theory needs to scaffold both the sociology of societal health and medical inculcation of professional values between the First and Final Years of education. The resulting mixed qualitative-quantitative study draws from participants' social identities and perceptions of The Charter as a formal change in professional requirements, with implications for medical practice.

I begin by discussing fissures in the existing paradigm of medical professionalism, and theoretical approaches to understanding how diverse medical students may negotiate expectations of social justice practice. Configured as 'transformative learning', the study questions the complementarity of practices of SA and biomedicine; participants' intrinsic knowledges, capabilities and aspirations for social justice practices; the meta-competence of knowledge transfer from one clinical context to another; and potential benefits to medical students and patients of the new professionalism.

5.1 Problematising the theoretical basis of professionalism

Medical professionalism, the term describing the moral codes of conduct expected of physicians in their relations with patients and society, was founded in an historical social contract. While much professionalism education is directed to the virtues of 'the good doctor' (proscribing 'bad' doctoring), little attention has been given to the knowledges, values and aspirations students bring to their practice. The learning of professionalism, its knowledge and conduct, is thought to be role-modelled by more experienced physicians teaching in clinical contexts, guided by situational learning theory (BEME Guide #25 2013). However, a Best Evidence Medical Education Guide (BEME) literature review revealed

> no unifying theoretical or practical model to use as a format to integrate the teaching of professionalism in to the medical curriculum
>
> (ibid).

A BEME systematic review of 'teaching' of medical professionalism reached the following conclusions;

- There is still no unifying theoretical or practical model to use as a format to integrate the teaching of professionalism in to the medical curriculum.
- Professionalism is learned most effectively through the influence on students of clinicians they encounter in the course of their education
- Situated learning theory is the best theoretical basis with which to develop a teaching program for professionalism.
- While it is generally held that professionalism should be part of the whole of a medical curriculum, the specifics of sequence, depth, detail; and the nature of how to integrate professionalism with other curriculum elements remain matters of evolving theory.

(Birden et al 2013:e1252)

In relation to this study, these conclusions can be problematised on four fronts. The *first* is the emphasis on the teaching rather than the *learning* or *enculturation* of professionalism; secondly, the implied *tabula rasa* or blank mindsets of proto-professional students entering medicine; *thirdly*, the implied abundance of humanitarian physician role models; and *finally*, the unreflexive portrayal of situated learning theory as a fully realised explanation.

In regard to the latter, the original description of 'situated' learning, devised by Lave and Wenger (1991) regarded learning less a mental process and more

> a relational matter, generated in social living, historically, in social formations whose participants engage with each other as a condition and precondition of existence.

(ibid:95; Bleakley et al 2011:47)

Browne & Bligh (2011) proposed this idea of situated learning;

> Learning is then about a mutually transformative relationship between work and identity and is primarily ontological – focussed on issues of existence and relationships such as 'being' and 'becoming' (Bleakley 2010b).

(Browne & Bligh, in Bleakley et al 2011:47)

Hence, ‘being and becoming’ a medical professional occurs in a ‘community of practice’ (Lave & Wenger 1991) with other professionals; and is exemplified by small group, problem-based learning (PBL) in pre-clinical medical education. This depiction describes reproduction of a *status quo* medical professionalism, but could equally portray professional renewal in which humanism is exercised in a ‘community of practice’ – in dialogue with patients and society. The BEME review (Birden 2013) refers to the biopsychosocial paradigm of medical professionalism; the dominant form of which is centred on the individual patient, carers and family: a context of disease and recovery from illness. More contemporary professionalism locates the health subject in global ecosocial *networks* that unfairly reproduce power and inequality, morbidity (illness) and mortality (death): contexts of health production amenable to change.

Additionally, the study has implications for the “potentially dividing structural differences” (Wilson-Strydom & Walker 2015:6) of curriculum and pedagogy for particular students. I have discussed studies of the WP agenda, focussed on equity in the selection of medical students; sourcing students from diverse social backgrounds as a means of producing graduates best suited to health service in disadvantaged communities. However, little research attention has been given to the tacit, ‘embodied’ knowledges, ways of being, languages and meanings students of diverse socio-economic class, gender, sexuality and ethnicity bring to their courses (Gale 2012).

This draws attention to participants’ social identities, and how social position can make ‘outsider’ status to HE, and medicine in particular, an unfair burden for entrants. Position is based on working class (Reay 2009; Lehmann 2014), colour or race (Beagan 2001), culture (Faulkner & Crowhurst 2014), and policy exclusion (Razack et al 2013). There are reports of sexual harassment of women students in medicine effected by physician educators, patients and families (National Academies of Sciences, Engineering, and Medicine 2018). Hence, I draw on the geography of participants' diverse social positions to theorise 'situated' knowledges of the social world that contribute to understandings of SA. Conceptualised as HE curricula, critical experiences can be *internal* to the medical school; or *external*, in diverse extra-curricular experiences. However, it is the formal medical curriculum that *legitimises* particular discourses that construct the graduate professional (Maton 2003).

Situated learning theory "refers to theoretical frameworks which argue that knowledge, thinking, and learning are situated (or located) in experience" (Durning & Artino 2011:188). Sociocultural learning theories value the authenticity of the context or environment in which learning takes place; and to the mental processes of engaged students. The main features of 'environment' include 'capable others'; and, a set of conditions that derive from empirical research conducted by Lave (1991) into 'communities of practice'. 'Communities of practice' refer to workplace learning practices "with and beside others" (ibid); a concept verified empirically by Boud & Middleton (2003:194), yet being possibly one explanation among others. Much of this 'situativity' research was conducted with participants in HE (Biggs 1996), in professional courses (Boud & Walker 1998), and in workplaces (Boud 2003). Learning by reflection on experiences, in interaction with others, and in authentic workplace environments, is regarded productive *andragogy* or adult learning practice. Instead of learning 'de-contextualised' knowledge, students' pre-constructed cognitions are brought to the learning context to be challenged (Biggs 1996).

The medical education ‘context’ of learning clinical skill expertise was examined by Durning et al (2010); however, ‘context’ for medical praxis of SA was less well elaborated. The task of accommodating knowledges of the biological science of medicine and lifeworld science of sociology requires a novel conceptualisation of *context*. Boud & Walker (1998) referred to context the “total cultural, social and political environment in which reflection takes place” (:196). This is an entry point for critical social theories, to contest “the many features [of context] which are taken for granted and normally invisible on a day-to-day basis” (:197). These variables include the ‘personal foundations of our experience’ (akin to *habitus*); “assumptions we hold about ourselves and others” (:197), the language of the *lifeworld* (Von Uexküll 2001), and social distinctions that stratify people’s experience of society. These variables are attributed to ‘embodied learning’ that occurs in contexts of family, groups, and pluralistic societies during human growth and development.

Relevant to social justice learning are critical discourses that allow

> learners to develop skills to make sense of what is happening around them, recognise diverse viewpoints and know how to deal with uncertainty and complexity.
>
> (Brown 2013:2)

This is regarded an active learning *process* that occurs in discussion with others; to “enable learners to explore ideas on their own terms… and construct knowledge” (ibid:3). It may also occur when physicians from a more privileged social background than the patient (a common occurrence) attempt to understand what life is like for disadvantaged patients (Béhague et al 2020). In a secure environment, a form of *dialogic* communication can be established to develop trust and therapeutic relationship with the patient. Fundamental drivers of health in the patient's lifeworld can surface, and be dealt with. Physicians from the same social class as the patient can expect to find this 'health-illness dialectic' more legible; indicating a semiotic meta-capability (Rafieian 2010) for SA praxis.

However, the orthodox practice of interpreting a patient's *symptoms* (verbal symbols of illness) and *signs* (physical changes in the body signifying disease) tends not to take into account signifiers of the patient's experiences in society (ibid). The latter, termed *Umwelt* (Von Uexküll 2001) or *lifeworld*, can be thought of as a 'semiosphere' (Hoffmeyer 2010) – an orb of signs encompassing the individual's world, directing engagement with the changing environment. Mind makes vital and moral meanings and predictions from the semiosphere, and behavioural responses follow. Signs may include the unfair distribution of societal goods; and other structural conditions that communicate embodied meanings, affecting human health across the lifespan. *Recognition* of these adverse structures involves physicians in restoring justice (Marmot et al 2013).

A pedagogy cognisant with SA may be informed by the moral perceptions that socially diverse medical students, in their orientation to human health, may regard reasonable justice. It is this idea of the 'social' I aimed to examine in a 'theory-driven' approach to qualitative analysis (Meyer & Ward 2014). The theoretical framework for the study aims to account for the *ontology* or "nature of reality" (Muzzin & Mickleborough 2013:764), *epistemology* or “ways of knowing that reality” (ibid), and *axiology* or “contours of right and wrong or morality and values” (ibid) derived from three main contexts in the lives of medical student participants.

I deal initially with medical axiology, then the ontology and epistemology of the medical training experience in an attempt to demonstrate their inter-relatedness. Contemporary crises in global societies affecting health, contextualise the critical thinking that could inform participants’ conceptions of social injustice.

5.2 Theoretical frames for prosocial professional values

An axiology or ‘theory of value’ describes philosophy for the study of goodness or valuation (Stanford Encyclopedia of Philosophy). I propose three frames for examining development of social justice values in medical student proto-professionalism, in response to The Charter.

I first define ‘value’ in *opposition* to the ‘value-based’ care described by Gonzalo et al (2017) which refers to ‘value added’ to the U.S. health system by unpaid medical student work as *economic* accountability to the public. This practice can support an unsustainable and socially *unaccountable* health system paradigm, posing a disservice to medical students.

A. Developmental

The *first* of the axiology frames for this study is *developmental*; acknowledging medical students’ moral maturation from quasi-independent youth to independent adulthood; with the associated tasks of learning by socialization, partnering, and fashioning a career or vocation, and lifeworld as a medical professional.

B. Reflexive

The *second* frame is *reflexive*; in which students respond to the dispositions conferred by their unique natal backgrounds, to deploy (with agency and power) acquired capitals and capabilities for moral action. The 'values reflexivity' of interest are perceptions participants derive from contexts of contemporary HE, medical culture, experiences of health systems complexities, patients, and the sociology of health and illness in modern societies.

C. Prosocial

The *third* frame can be characterised as *prosocial* and relates to the contract of medical professionalism guiding graduates' relations with the public; including the service of social justice and human rights (WHO 2017). This frame includes axiology referred to as the 'social accountability' agenda of medicine (Boelen 2008; Boelen & Woollard 2011). It is based in the profession's historic contract with society to provide 'health for all'; and recognises the existential risks of contemporary, local and global ecosocial inequities.

5.3 A theoretical framework for the CHAMP study

A critical theory framework for evaluating participants' transformation to a social justice ontology of medical and health practices is proposed to involve developmental, situated, reflexive and moral processes. [See **Table 5.1**, below]

The re-purposing of medical education to meet the SA ethos of The Charter presents both generic and particular challenges to every medical school. Diversity of student voices and embodied knowledges of the social world precludes a single pedagogical ‘entry level’ to the new field. The new ‘rules of the game’ (Bourdieu 1977) may be located in the habituses, discourses and the *products of habitus* of ‘outsider’ students; those from disadvantaged class, gender, sexuality and ethnicity having *non-traditional* social backgrounds for professional practice (Bourdieu 1977).

While some liminal concepts related to a SA phronesis may be assisted by a threshold concepts framework (Meyer & Land 2005), developing CC for social inequity can entail a committed shift in student identity and life plan (Mustakova-Possardt 2004). An ethos of social justice among medical students is theorised to develop in the *primary* habitus-forming, socialising context of the family; and *secondary* habitus in social experiences, including prosocial peer groups, during the transition from childhood to adult maturation (Wacquant 2014). Personal moral dispositions often mature during early adulthood; coinciding with students’ undergraduate years (Kohlberg 1981). Religious and political beliefs reinforcing particular topics of social justice sensitivity can be internalised at this stage of development. Students’ developing autonomy, and broadening prosocial and political conversations, can be particularly powerful in structuring internal schema of perception, becoming new pre-dispositions of *secondary* habitus (Wacquant 2014). For example, voluntarism and participation in prosocial medical student groups can catalyse and reinforce social justice mindsets against a tendency by students to neutralise the value of their own and patients’ social identities in their clinical phronesis (Lave & Wenger 1998). Voluntarism can also potentiate “local autonomy and diversity” (Clarke & Butcher 2006:14) to improve organisational performance in the new professionalism. In business models, this is a reliable means for re-configuring traditional, hierarchical management. Power shift to a pluralistic model is seen as a “natural evolution of organisation form” (ibid:4).

In Bourdieu’s theory of practice, the unique set of transposable *capital* assets (and associated *capabilities*) that each student brings to medical training as *habitus* can be activated and modified by reflexivity - on self and background, the social lifeworld, course and curricula, critical experiences, future career path, and lifestyle preferences. Not all students were expected to possess ethical dispositions for social justice practices; but may endorse *collective* aspirations for societal improvement in accord with Cultural Historical Activity Theory [CHAT] (Vygotsky 1978). While prosociality can act as a human capital for SA practice, habitual practice of reflexivity (Bourdieu & Wacquant 1992) - on self, knowledge and social conditions - can assist prosocial physicians to assimilate into clinical decisions and creative praxis, societal discourses relevant to contemporary ecosocial health needs. The pedagogy informing socially accountable praxis is a secondary focus of this study.

Contemporary forms of social stratification distinguish categories of class (working, middle, upper), socioeconomic status (SES), gender, sexual identity, ethnicity, and SDH inequalities. For example, Intersectionality theory (Crenshaw 1993) can illuminate the role of (mainly) female students with equity identities in medical education. In effect, social identity situates people in unfair hierarchical positions in society; historically to distinctions of material value (McLaren 2010), or to distinctions of cultural legitimacy (Bourdieu 1984; Wacquant 2014). For example, while entry to medicine has traditionally been the cultural province of males from middle class backgrounds, high academic achievement may now furnish working class students cultural capital for entry to the profession.

Table 5.1 Features of sociological, cognitive and motivational theories for evaluating participants' critical reflexivity on social justice and health.

Ontology	Developmental	Reflexive	Moral
Practice (Bourdieu 1977)	Habitus & capitals (dispositions & distinctions)	Doxa, illusio, & field constraints. Recognition.	Alignment of habitus to practice in a new field
Capability (Sen 1999)	Capability to flourish vs. Stigma, oppression, chronic stress.	Prosocial 'capability set'	Freedom, imagination, aspiration, equality, rights, reciprocity.
Conscientization (Freire 1973)	Oppression, intersectionality, hegemony.	Critical pedagogy, critique of hierarchy & power.	Critical consciousness.
Pedagogic rights (Bernstein 1999)	Inclusion, participation, belonging, confidence.	Discourse of social order and possibility.	Learner autonomy, aspirations, actions in the world
Critical realism (Bakhtin, Archer)	Empirical, dialogical knowledge of reality.	Ecosocial mechanisms	Truth-seeking
Cultural historical activity theory (Vygotsky)	Internal conversations, activities and change.	Situational improvement, & future orientation.	Social stance & collective imaginaries of a better world.
Threshold concepts (Meyer & Land 2005)	Formative perceptual categories.	Concept analysis, liminality of socio-political processes.	Transformed worldview, empathic othering.

Table 5.1 (above) displays seven sociological theories of learning that modulate agency and structures in the (trans)formation of medical students' professional practice orientations.

Knowledge of students' ideas of social action (Weber 1947) as motivated by *desires, emotions, goals, or values*, may assist the organization of rational, professional actions on social inequities. However, motivation of students' ethical capabilities into aspirations (Hart 2003) for social justice actions may rely on legitimation of SA discourses and practices in the formal curriculum (Bernstein 1999).

Bernstein’s theory of curricular justice (Bernstein 1999) highlights structural barriers that can marginalise subordinate voices in medical education; voices and discourses that could assist the scaffolding of meaning from the social lifeworld for team-based learning of a SA phronesis of clinical medicine. Empirical learning can occur during informal experiences and voluntary service learning programs bring novice learners in relation to social disadvantage. Social justice learning is reinforced by critical refection on novel, so-called *fuzzy* experiences that expose the machinations of power in society (i.e. structure vs agency; unfair social inequalities; social, cultural and commercial health determinants); and on global forces that create inequalities impacting on human wellbeing.

However, *reflexive practice* (Bourdieu & Wacquant 1992) rather than *reflection-on-practice* (Schon 1983) is proposed to capacitate trainees’ functional abilities to ‘read and respond’ to change in the social conditions of health production. This idea extends the praxis of clinical communication in medicine to the *signs*; not only of bodily disease, but also to impacts on health of ecosocial and political factors active in the patient’s lifeworld. How these signs are interpreted and make meaning (semantics) to the patient are theorised to complexly modify the human stress response.

‘Epistemic reflexivity’ was the education term Bourdieu (1990) advocated for *problematising* information. This critical cognition skill set and its components (e.g. empathic acuity) may be necessary learning for students and health teams to discern professional actions on social inequities [see **Table 3.3**]. Examples of epistemic reflexivity on critical health experiences, and important components of this skill set are sought in participants’ interview narratives;

in response to interview questions, and discussed in more depth in the final chapters on pedagogy.

Abstracting from Margaret Archer's sociological study of millennial university entrants, the acquisition of *meta-reflexivity* may signal a departure in students' conative intentions away from familial and prescribed narratives (e.g. the *doxa* of modern medicine) related to the dominant culture. Counter to Archer's portrayal, *individualistic* concerns are theorised to respond to the dominant discourse of neoliberal capitalism; either by accommodation to neoliberalism, or conversely to an anti-hierarchical mindset among young people with pro-community sentiments (Archer 2012; Bull et al 2010; Magill & Rodriguez 2014).

Following Meyer and Land's study of liminality in learning (2005), 'equity' is a suggested threshold concept for participants' understanding of the ramifications of social injustice to medicine and health. Another (modifiable) social health fact is evidence of a *gradient* of socioeconomic inequality related to cardiovascular disease (Steptoe & Marmot 2002). Studies of unlearning and 'strategic ignorance' (McGoey 2012) also provide psychological insights to deformation of prosocial habitus to the hidden curriculum of *unreflexive* professionalism.

Triangulation of data can test the hypothesis that social justice health concepts are more salient to participants having sociological imagination rather than a biomedical imagination of health. Situated learning theory, intersectionality theory, and Bourdieu's theory of practice predict participants from backgrounds proximal to conditions of social inequality have more realistic perceptions relating social injustice to health. Personal and historical experiences (in the collective memory of family and culture) of stressful social, economic, and physical conditions of living, may enhance CC (Freire 1973) for social injustice among participants with migrant and refugee backgrounds.

Participants with greater intersectionality of stigmatised identities (Crenshaw 1993), and those with close experiences of oppression, are expected to have greater empathic acuity for sociological mechanisms generating health problems - the social *health-illness dialectic*; and be more likely to engage in SA practices. Students with ideological objections to social justice as a medical professional requirement may have fewer experiences of social oppression, and are less likely to engage in SA professional practices.

Moral development theory (Kohlberg 1981)
Intersectionality theory (Crenshaw 1993)
Capitals, habitus (Bourdieu 1977)
Capability (Sen 1999)
Critical consciousness (Freire 1973)
Justice as fairness (Rawls 1971)
Theory of practice (Bourdieu 1977)

How do diverse medical students perceive the value of social justice to medical practice; and how can students' critical capabilities be harnessed into socially accountable professional practices?

Transformative learning theory
Curricular justice (Bernstein 1996)
Situated learning theory
Becoming to know (Jakubik 2011)

Figure 5.1 **Research Statement: study question and theoretical framework.**

Figure 5.1 (above) displays the composite of theories that may inform components of the study question. Bourdieu's theory of practice and Sen's capability theory are in **bold type** to signify their *guiding role* in theorising participants' *capability to aspire* to prosocial practice

(Hart 2003). Theories expected to have a *significant but minor* role in data analysis are in plain type.

Fairness and flexibility of structural settings in HE can promote the unique moral vision of each student's career in 'health' through peer socialisation and interactions with diverse, likeminded others. These conditions are likely essential to student *wellbeing*; giving voice to otherwise silent aspirations in their habituses; perhaps silenced by the hidden curriculum. Likewise, academic restructuring for greater engagement between "university, community, and service institutions" (Rosaen, Foster-Fishman & Fear 2001:10) can align medicine with its civic responsibilities.

5.4 Implications of theory for the study

Bourdieu's theory of practice (1977) can inform the adaptation or resistance of participants from diverse social groups to traditional and novel forms of medical professionalism.

Students from high social status backgrounds, 'insiders' to medical professionalism, can be sensitive to claims they lack altruism for others. Middle social status can confer anxiety about proximity to social needs, when seeking the social mobility a profession offers. Students from 'outsider' backgrounds can be unreflexive of the personal and ideological costs of internalising the norms of traditional medical professionalism, and the tasks of reconciling change in social identity in becoming a physician. Change oriented toward the professional culture may be incomplete and result in 'fractured' habitus: discordance and ambivalence about one's new status; and marginalisation within the dominant culture (Bourdieu 1984).

Likewise, entering a dominant profession like medicine with low social status identity, such as equity intersectionality, may confer more concern with 'fitting in' and less for SA. Lacking social capital, WP students may need to work harder than peers to gain equal footing in the field. In the usual circumstances, cultural reproduction of doxic professionalism is ensured; and there is no social change. Yet among this group, insights and knowledge of deprived lifeworlds that communicate social inequity and distress (the social 'health-illness dialectic') may be strong suits. In Bourdieu's social theory, cultural consumption in each social class is wrought by 'schemas of perception' that involve "an act of deciphering, decoding, which presupposes practical or explicit mastery of a cipher or code" or "familiarity with the internal logic" (Bourdieu 1984:2) of class tastes that give the social world *meaning*. These 'schemes of perception' (including CC), may underpin a creative potential among WP students for innovative solutions to social health inequities.

Inclusion and empowerment of the embodied knowledges of participants with socially devalorised identities, and those with situated learning of the health-illness dialectic, may be productively analysed employing qualitative methods; combining Sen's capability approach and Bourdieu's theory of practice (Hart 2003).

In the final chapters, I relate SA pedagogy to advances in education theory produced by Basil Bernstein and later, Karl Maton; to clarify the semiotics coding *legitimacy* and *transferability* of knowledges in curricula. Structural changes, to decolonise the medical curriculum and accommodate students' prosocial discourses and latent potential for actions on SDH, is elaborated in Chapter 12.

CHAPTER SIX: RESEARCH DESIGN & METHODOLOGY

6.0 Introduction

The study was conceived as a mixed, mainly qualitative, interpretive inquiry of medical students' perceptions of social justice needs in medical practice and population health. Factual data of participants' social identities and career plans are quantitative features I use for analysis of primary habitus and habitus change.

The study expands considerations of 'context' to map critical perceptions and knowledges of the social lifeworld, and ethical understandings of SA professionalism of *four cohorts* of medical students; in relation to human health production ('upstream') and health care ('downstream'). Study participants were sourced from First and Final Years of Adelaide and Flinders medical education programs (in South Australia), and responded to an online recruitment notice seeking students' views of 'social justice in health care and health promotion' [Appendix 2]. Low risk ethics approval #6877 was granted by the Social and Behavioural Research Ethics Committee (SBREC) at Flinders University; and then approved by the Research Ethics Committee, Faculty of Health Sciences, The University of Adelaide [Appendix 1].

In the study, I use the term *context* to include the discourse or 'gaze' habits developed in the social lifeworld, organised in habitus (Bourdieu 1977) of participaants. In this sense, habitus is configured as a pre-constructed context that permits each individual more or less adaptability to a new field. This idea recognises intersectionality as contextual; "what may seem like oppression in one field may be privilege in another" (Marfelt 2016:35). Society, and the diverse social contexts of participants' backgrounds, are composed of multiple "relatively autonomous 'worlds'" or *fields* (Bourdieu 1994:73). Participants with an equity identity (or *more than one*, signifying 'intersectionality') were theorised to have habituses in closer deictic relationship to plural discourses of power and entropy in the social lifeworld. Context also pays regard to social change, as students with equity identities progress from First to Final Year, and graduate into the social hierarchy of the professional culture.

Habitus change in WP students can be *complete* – achieving ellipsis to the secondary habitus of status quo professionalism; or, *incomplete*, indicating a 'fractured' professional identity (Sommerlad 2007). The cost of complete habitus change for WP students however, may be the suppression of knowledge of unfair social relations of production in capitalist societies (McLaren 2010: 97). 'Fractured' habitus may be signified by ambivalence, guilt or compensatory behaviours.

An assumption in the study is that *evolution* has driven a sympathetic, humanist view of social inequity; one informing our moral judgments of fairness and its consequences for oneself and others (Pinker 2018). In effect, participants' diverse moral perceptions, knowledge sets, and interpretations of social epistemology may interact with dominant discourses in medical education to create meaningful actions of prosocial professionalism. Semiotics is the study of *messages* (of any kind) "and their relation to interpretation, meaning or reference" (Nessa 1996:364).

> The reference of the message concerns the relation between the message and the object in the world the message is referring to.

(ibid:364)

Hence, the semiotics of social injustice has indirect relation to real lifeworld contexts of disadvantage and oppression that produce health conditions. Messages encoding social justice concepts are understood to be transferrable by analogy to a range of clinical and health promotion contexts; and students' perceptions and misperceptions may usefully inform group-based learning of SA praxis.

In the following sections, I outline the rationale for the study design and the ethical considerations for ensuring validity and quality of data.

6.1 Qualitative research methodology

The questions qualitative research can elucidate extend to a broad range of 'social' or relational facts and variables. The 'social' often refers to human communications and interactions in society; while a 'social fact' such as racism, is "any way of acting… capable of exerting over an individual an external constraint" (Durkheim, in Meyer & Ward 2014:527). The way of acting exerts a constraint "over the whole of society whilst having an existence of its own, independent of its individual manifestations" (ibid). In sociology, the salient effects of social facts existing between groups in society are distinguished from a random distribution. However, debate on 'structuration' continues: to what extent are social facts outcomes of the power of human *agency* or *structural* forces?

Social theorists conceptualise this structure-agency relationship as either external to, or an intrinsic property of, the individual. Pierre Bourdieu's social theory of practice (1977) assigns potency - a potential or power to effectively function in a field, to act or practice, to *habitus*. The implied *structuration* of habitus combines structures (social facts that enable and constrain) *and* agency (the freedom to act in a social field) in a single entity, conferring individual or group capability. This duality of action and constraint, inscribed in all practices, has been applied in qualitative studies to account for social diversity, adaptability, and stability through reproduction of societal practices; including in HE (Bourdieu 1984). In medicine, Bourdieu's theory may help explain the reproduction of particular types of professionalism and resistance to change. Practices according with *actor-network theory* (Fenwick 2010) link professionals to dominant societal discourses, such as neoliberalism.

In order to measure social facts and explain social phenomena, sociologists have devised evaluation tools to make valid connections between theory and empirical data. This can be done in two ways. Qualitative research "can both test theory and allow theory to emerge from the data" (Meyer & Ward 2014:529). 'Theory before' or theory-driven research is used to *verify*, while theory after ('grounded' theory) is used to *generate* theory (ibid:526). For some questions, a dual approach may be needed "for theory verification and generation" (ibid:526). The latter, dual method was applied in this study.

Grounded theory (Corbin & Strauss 2008) refers to an innovative approach to empirical research in which theory is generated from the data rather than testing data using a pre-formed theory. A process of 'theoretical sampling' from various sites and sources tests ideas emerging from the data: "selected flexibly for their theoretical relevance in generating comparisons and extending or refining ideas” (Dey 2004:80). First, qualitative data is openly sourced from recorded observations and semi-structured interviews. Further sampling for clarification proceeds during data collection, finally narrowing to more specific data sources. In ‘grounded’ methodology data analysis begins during sampling to inform decisions on further sampling and data collection as the research proceeds (ibid).

In qualitative research, data includes the researcher’s notes and discoveries drawn from themes abstracted from the data. Notes taken during and following interviews can provide data for interpreting the study. Richards (2005:88) suggested a variety of creative steps that can be fruitful to analysis: ways of coding a passage of text to *display* (descriptive coding), *categorise* (topic coding), and permit new meanings to *emerge* (analytic coding).

In the CHAMP study, I have followed this process fully, in the following ways;

6.1.1 Descriptive coding

Descriptive coding of participants included quantitative information about age, gender, Year level, University, international or domestic origin; and equity status (based on unfair societal distinctions of class, gender, ethnicity, colour, migrant and refugee status). This data was anonymised by a unique participant subject code, and stored for convenience in an Excel spreadsheet. Disclosure of sexuality was not requested, only volunteered; so, could not be used as separate descriptive code item. When devalorised sexuality was volunteered it was added to the subject’s equity status. Descriptions of habitus were drawn from participants’ background information, and assigned either *insider status* (high cultural capital) or *outsider status* (low cultural capital) for the field of medicine.

6.1.2 Topic coding

Topic coding was applied to interview transcriptions of each participant; by observing each sentence and response for a central idea (topic); together with a portrayal of *actors*, their agency or role, and features of *structures*. A participant's sociological imagination of health, and theorising about social facts, were sketched into separate folders or 'nodes' by this process.

6.1.3 Analytic coding

Analytic coding asks what is going on in interview statements: the separate themes that represent the participant's schema of perception relating to structures represented in a question. Thorough familiarity with all data is considered a precondition for achieving successful analysis.

All study questions were conceived and written by the investigator; drawn from my clinical experiences as a physician and a patient, and as a medical educator. Interview questions were structured to sample participants' *prosociality* or altruism; their empathic and moral sensitivity to fairness or social justice of *health-related* topics; and cognitive reasoning of social justice related *clinical* concepts. Questions were structured to capture and compare variables tested in previous social justice research [See **Fig. 3.1**]. Questions were also composed to test likely threshold concepts; such as the difference between equity and equality in medical practice, and its consequences. As an example, Interview Question 7 [Appendix 5] aimed to challenge participants' understandings of the clinical importance of patients' sexual identities to providing equity-based health care. Additional, unstructured questions were asked to clarify participants' imagination e.g. *why* The Charter was issued. Participants' narratives and ethical discussion of personal, familial and clinical experiences of injustice were encouraged. Of particular interest was evidence of the 'silent ethics' of concealed injustice in medical culture.

In the initial analysis I identified three main, overarching themes and seven sub-themes in the data [see **Figure 7.1** & Appendix 9]. For each theme and subtheme, passages from the data were collated based on participants' descriptive categories (First Year/ Final Year, etc); to investigate distinctions and theoretical explanations. Following initial reflections on the collated data, applying the constant comparative method, I synthesised the 'knowledge management' [Appendix 7], and 'becoming to know' pedagogical frames [Chapter 11].

The 'constant comparative method' described by Glaser & Strauss (1967) is one of several qualitative research tools in which categories of cognitively similar data are connected to generate insights (Seale et al 2004:88). The constant comparative process aims to avoid conflating correlation with causation, by locating order and class or "regular patterns of similarity and difference" (ibid:89) within categories of interview data. Constant comparison can lead to the discovery of new categories, and is considered complete when the process is followed until no new categories are produced (ibid).

An alternative approach to the constant comparison method that Seale et al (2004) depict is "to think of causality in terms of powers rather than patterns" (:89). In qualitative research, unlike quantitative methods, multiple contingencies on the data cannot be controlled for, yet *shifts in power* can be explanatory as they relate to real world, embodied experiences (ibid). In the study, the powers (or capitals) differentiating participants included a. social class or socioeconomic status; b. First or Final Year status (only the latter had *clinical* insights); and, c. equity identities (*intersectionality* supposed the actor had societal relationships unfamiliar to those with dominant social identities). d. insider (I) or outsider (O) status (the latter including F-i-F or WP students). Domestic (Australian citizen) students were compared with International students; but International students were quizzed about the society they were most familiar with.

Iterations of this analysis were organised in numbered and dated drafts of the thesis. In one analysis, data was categorised based on participants' conceptualising either a *duality* (an integration) of biomedical and ecosocial knowledge in their reasoning; or a *dualism* (the two knowledge forms kept separate). In a second analysis, pre- and post-liminal understandings of threshold concepts were displayed; and in a third iteration, data demonstrated which participants understood *binaries* of social facts related to the study [Appendix 5].

The descriptive categories *First* and *Final* Year follow an arrow of time in which exposures to the medical culture and curricula at each school were compared. The two categories of medical school, undergraduates at Adelaide and postgraduates at Flinders, also structured categories by age, maturation, and exposure to societal discourses.

On the basis of the revised theoretical framework, I produced a diagram of the research statement [**Figure 5.1**, above].

6.2 Theoretical perspectives

The purpose of a study of medical students' perspectives of medical professionalism relates to the ways medicine ought to be practiced; and to the ways medical education policy and practices are structured. In the study, intentions for SA practice were interpreted from recorded observations of participants' personal theories, ontologies, axiologies, and epistemologies. In this sense, the discourses were formative and future oriented.

An assumption derived from Bourdieu's theory of practice regards participants' *values* or axiology, intangible assets formed in the social lifeworld of family, peers, and society; and related to social positioning. Values are inscribed as dispositions or *precepts* to perceptions, attitudes and behaviours. The uniqueness of the actor's social positioning inclined their 'sociological gaze' (Mills 2000) and was associated with diverse 'funds of knowledge' (Zipin et al 2012) of sociopolitical geography that impacts on human health. The gaze inscribed by organising curriculum also mattered (Bernstein 1999). Values are also *transacted*; derived from social relations and intended for practice relations with patients and co-workers, in a community of practice (CoP) (Lave & Wenger 1998). However, rather than a need for transactional analysis of data, the forms of relationships (transactional or transformational) could be elucidated to distinguish participants' orientations to SA health care. While a transactional doctor-patient relationship might view social conditions as fixed or just; a transformative clinical relationship would regard the patient's social conditions unfair and deserving improvement.

Bourdieu's social theory, outlined more fully in the Theoretical Framework [Chapter 5], requires information about the dispositions and aspirations of participants; linked to cultural tastes, social networks, and financial capital assets. These ‘capitals’ are viewed investments for eventual success in high stakes ‘games’ such as medicine. They allow actors to play by ‘the rules of the game’ (Bourdieu 1977) and aspire to social mobility; or to reproduce family capitals, financial and symbolic, bestowed by society. The importance of identifying the *dominant* group of prosocial participants is believed to lie in their ability to empower minority group values; assisting by “shifting culture” or “lowering resistance to change” (Stolk et al 2017 np). Bourdieusian ‘capitals’ were sought as demographic data; first, as family residential postcode and combined income bracket (socioeconomic status or social capital); second, levels of parents’ educational attainment and occupations (symbolic capital); third, family cultural tastes, humanities interests and choice of news media; and finally, memberships of medical student associations, at university and external to the university (cultural capital).

The non-dominant, ‘outsider’ group of prosocial students were distinguished as having low configurations of social, financial and cultural capitals, but sufficient academic capital to succeed the entry criteria to study medicine. Positive affirmation quotas boosted entry for rural and Indigenous students, to facilitate their participation in HE. Most International students were full fee-paying, so had financial capital.

6.3 Study Design

6.3.1 Four main cohorts

The study was configured to compare perceptions of participants from four main cohorts: First Year and Final Year, at Adelaide (undergraduate entry) and First Year and Final Year at

Flinders (graduate entry) Medical Schools. These cohorts provided evidence for the research question from four distinct contexts of the formal medical curriculum.

First Year students at Adelaide were the youngest cohort (17 to 20 years); recently graduated from secondary education, with learning capitals, but little exposure to medical school life and the prevailing 'culture of professionalism' or 'hidden curriculum' of the school.

First Year students in the Flinders program were older than those at Adelaide (up to 40 years), and reported occupational and life experiences as graduates in another disciplinary or professional field.

	Medical School	
	Adelaide (undergraduates)	Flinders (graduates)
First Year (pre-clinical)	Year 1 n = 6 Female = 5 Gender fluid =1 Age average = 18.6	Year 1 n = 13 Female = 6 Age average = 24.7
Final Year (clinical)	Year 6 n = 13 Female = 8 Age average = 26.5	Year 4 n = 8 Female = 5 Age average = 28.0

Fig 6.1 Study participant groups, numbers & genders

Figure 6.1 (above), details School, Year group, gender, tally and average age of the four participant cohorts.

Final Year students at Flinders were older than their counterparts at Adelaide, and some belonged to a different generation (X rather than Y). They had been exposed to a SA curriculum, unlike Final Years at Adelaide. At least one was a parent.

Final Year students at Adelaide were generation Y, and by choice had variable exposures to clinical settings of social disadvantage.

Both Final Year groups had experienced the professional culture and various medical curricula at their schools; had completed formal examinations; and at the time of participation in the study were gaining clinical practice experience in preparation for graduation as a physician.

6.3.2 Before and after exposure to medical curricula

Final Year students, as McCrea & Murdoch-Eaton (2014) suggest, can reflect on the whole program at their medical school. At Adelaide, Final Year students were expected to be more advanced in moral development than the First Year cohort. By Final Year, students have been observed and assessed in positions of responsibility in relation to peers, patients, educators and the public. They have also been exposed to the ‘hidden’ curriculum of their school, and various elective informal curricula, including student-led groups. Final Year students at Flinders prior HE qualifications, career and life experiences are assumed to inform their perspectives.

The decision to sample First and Final Year students at each School was to provide contexts for comparison of 'pedagogical justice' (Bernstein 1996). This term refers to formal medical school practices and pedagogies that capacitate student diversity; supporting students' moral orientations and motivations for 'othering' – sympathy, care, empathy, CC, and related equity practices against dehumanising discourses. This enabling process may counter a hidden curriculum of colonial domination which maintains deficit discourses of Aboriginals (Haynes et al 2014). Pedagogical justice also relates to a graduate 'usability' criterion proposed for accreditation of SA medical schools (Boelen & Woollard 2011). 'Usability' referred to initiatives taken by a medical school to "ensure that its trained professionals are put to the highest and best use in response to social needs" (ibid:618). First Years would likely express prosocial discourses and aspirations for medical practice that are unaffected by a hidden curriculum; whereas, unreflexive Final Years may absorb and reproduce discourses of the hidden curriculum socialising learners into "the logic of the present system" (Shaull 1996: Freire 1996). Final Year participants reflexive of hidden curriculum, or supported by a student-led prosocial curriculum, may be seen preserving prosocial discourses.

International students, most from non-English speaking backgrounds (NESB), comprise a separate cohort for comparison of pre- and post-curriculum perceptions. While School and Year level social categories were common to all participants; social capital as a member of student organisations, choice of elective experience; and intersectionality of equity identities, could meaningfully refer to positionality of social perceptions, and the potential for sociological gaze as a feature of habitus.

6.3.3 Demographic data and habitus

Demographic data of participants' backgrounds and equity identities was collected for comparison of social and cultural capitals as features of habitus. Capitals served as symbolic markers of participants' dispositions to either *reproduce* the dominant paradigm of medical practice or *change* to a SA praxis. [Appendix 3]

English immigrant James (A68) had high *social* and *cultural capitals* as a result of his parents' 'Oxbridge' academic status, occupations and cultural interests. Among the latter, James listed architecture and horse riding. Bourdieu's theory would suggest that entering medicine was a social maintenance project for James; he was also likely to maintain status keeping abreast of landmark change in the medical field. In interview, he declared his interest in changes of social and political *power*: in contemporary social commentary and global narratives of political conservatism, inequality, identity, climate change and sustainability. In doing this, he ideally positioned himself to take advantage of available opportunities in a changing world; a dialogical, *reflexive* association. Yet, as features of *habitus*, James's family strongly valued humanism and social justice; his mother applied this ethic in her medical practice with intellectually disabled children. For James, it was a matter of self-respect to acknowledge both his privilege and prosocial ethos. His regular surveillance and *reflexivity* on global socio-political systems advantaged James's cognitive acuity, empathy and critique of the professional context he was entering. These features of *habitus* provided him social advantages; insights to global sociological changes, and avoidance of the embarrassment of *misrecognition* of the shifting powerplay or *'rules of the game'* in the medical *field*.

The sample vignette (above) demonstrates the triangulation of a participant's habitus with the field (high symbolic capitals positions James an *insider* to medical professionalism). Yet, James was keen to show he was reflexive of his status, and the social structuration of health and was meta-reflexive of what The Charter meant for his professional stance. His habitus included a strong moral commitment to social justice. Despite social expectations of success in the traditional medical hierarchy, with associated financial and symbolic rewards, James is expected to maintain family capitals in a manner that reproduces respect.

6.3.4 Capability and equity identity

The above participant vignette illustrates the purpose of demographic data to theoretical reasoning, linking habitus and practice employing Bourdieu's critical theory.

Participants' *capability sets* (Hart 2013; Sen 1999) were abstracted mainly from their social equity identities; with the assumption that absence of an equity identity conferred greater capability as a member of the dominant social group; and greater capacity to aspire (Hart 2013). Bourdieu recognised highly aspirational students with 'outsider' identities can prefer to dissociate themselves from their (devalorised) backgrounds; and seek the status, income and cultural habits that signify a less precarious social position. Some seek the lost cultural capital of their parents. 'Outsiders' are expected to be more or less successful at this aspirational project. At times of crisis, Bourdieu predicted the new identity, being less durable than habitus, can fracture. Ambivalence and critique of the status quo can de-stabilise the professional façade, allowing greater clarity of the structure of the field. Although entry to medicine may be empowering for students with intersectional equity identities, the literature review pointed to hidden social hierarchies within medicine. Mismatch between habitus and field can mean that 'outsiders' struggle with professional role expectations.

In this study, “weakening of the social stratification of access to resources” (Sommerlad 2007:193) was reflected in the WP agenda; and the social turn in medical professionalism implied by The Charter. Both changes seemed to favour ‘outsiders’ to the profession. Yet, Bourdieu’s social theory of practice (1977) views adaptation (to reproduce dominance of) the new social order tasked to academic ‘insiders.’ For insiders attuned to the existing ‘colonialist’ model of health care, SA reforms may represent a crisis that puts them ‘on the back foot’; yet may impart greater clarity about the new game rules, aiding their adjustment or *ellipsis* toward the *doxa* making sense of the new field (ibid).

Each participant in the study was assigned an equity identity on the basis of having one or more of the following marginalised identities or habituses: female, black, Muslim, refugee, migrant, rural, minority ethnicity, low SES and LGBQTI sexuality. For example, an American male participant of sub-continent Indian ethnicity, reported public harassment when travelling on the basis of his American accent; yet in America following the 9/11 crisis, he was mistaken as Muslim and refused customer service.

Being female and having more than one equity identity conferred ‘intersectionality’ - whether or not the participant reported social marginalisation. The decision to follow this categorisation was the expectation it would not be feasible to expect intimate disclosure of true equity identities. However, during interviews, participants spoke of experiences of social prejudice and adversity. Without prompting, some participants disclosed their equity identities and family experiences of hardship.

6.3.5 The Medical Schools

The University of Adelaide has the older medical program, distinguished by having two Nobel laureates and being one of the first medical schools in Australia to accept women. At the time of the study, the school was centrally located in Adelaide near a major teaching hospital, libraries, art gallery and museum. From 2003, the Adelaide medical program integrated sub-disciplinary knowledge around patient case problems; with group-based student learning favoured in pre-clinical settings. Medical professionalism, communication and ethics were tutored by registered medical practitioners; and given equal assessment weight with biomedical knowledge and clinical skills.

The Flinders Medical School was located in a complex comprising public and private hospitals, university and grounds built on the foothills of the southern margins of metropolitan Adelaide. Flinders Medical School belongs to THEnet (The Health Equity network), a network of SA medical schools, continuing Flinders University's provenance of accountability to the South Australian community. The macro alignment of values between Flinders and THEnet medical schools goes some way to legitimising students' dispositions for SA. Flinders University's reputation in social health advocacy likely attracted students looking to join its 'community of practice.'

Teaching of social health concepts had begun at Flinders Medical School, but were absent at the time of the study in the Adelaide course. Opportunities for student engagement in urban and rural medical practice were available at both schools, although longitudinal rural clinical placements in regions with high health needs were only available in the Flinders course.

6.3.6 Reflexivity on the research question

The main research question sought to interpret the SA perceptions of medical students attracted to a study seeking views of practice of social justice in medical professionalism. A brief background to my motivations in formulating the research question follows.

As coordinator of personal and professional development in the Adelaide medical course, I was aware of graduates working in underserved areas of the world; in Australia's Northern Territory, Papua-New Guinea and Africa. Medical student group activities assisted women's reproductive health in Africa, Médecins Sans Frontières (MSF), and Indigenous health services in South Australia. Strong collegial bonds developed between diverse medical students as a result of cohabitation in university colleges, and during the many cooperative activities organised by medical student groups. Student-led activities organised for medical student peers can be categorised as collegiate, multicultural, sporting, social and artistic. The high level of voluntarism among students hinted at shared moral commitments to others, and the affective 'teen spirit' of collegiality. Dr Daina Rudaks, then President of the Adelaide Medical Students' Society (AMSS), provided insights to the range of prosocial activities conducted by subgroups of AMSS; engaging State, national and global health problems. Australian Medical Association (AMA) leadership courses were very popular among this generation of students. A great deal of energy or 'capital' was invested in purposeful activities; but to what end?

In business organisations, inclusion and harnessing of employees' voluntarism responds to corporate responsibility goals, and benefits productivity (Clarke & Butcher 2006). Reflecting the pluralism of human capital in society, stakeholders can hold a diversity of conceptions of organisational purpose. This sentiment is of particular interest to the SA of medical schools.

> Building responsible moral, organizational communities must therefore be concerned with reconfiguring hierarchy in a way that builds the voluntary commitment of employees to super-ordinate goals.
>
> (Clarke & Butcher 2006:527)

Perhaps medical education for SA should be interested in the potential for structural inclusion of diverse medical student voices and their super-ordinate goals.

The idea of medical students as proto-professionals and stakeholders in their education and career aspirations, is encapsulated by *stakeholder theory*. As my interest shifted from students' prosocial motivations to social justice, I began a literature search. A Scopus database search of the terms "social justice" AND "medical professionalism" yielded articles discussing 'The Charter of Medical Professionalism' and revealed potential as a platform for dialogue about humanist values, learning theories for professionalism, and SA in medical practice.

My initial reading focussed on moral development, critical pedagogy, CC and critical theory; before Bourdieu's social theory of practice was suggested by supervisors. A medical education academic advised I apply 'threshold concepts' learning theory (Kamel-ElSayed & Loftus 2018); and education academic Prof Ben Wadham helped me understand the value of critical theory and reflexivity to learning. Dr Browne-Yung, a recent doctoral graduate shared her interest in Bourdieu's ideas and helped me make sense of his social theory of practice. The question of freedom (Sen 1987; Saito 2003) for medical students to express social justice values and become involved in social justice actions led me to consider how agency (in particular, social capital) and the structuration of learning by curricular rules were conceived in HE. Papers on Bernstein's theory of curricular justice (1990) and Maton's Legitimation Code Theory (LCT) (2003) provided more detailed explanations of how power was encoded in pedagogic discourses. The latter are discussed in more depth in Chapter 12.

Gradually, I understood how my study was shaped by a. the history and sociology of medical professionalism, b. Australian HE policy, c. neoliberal discourse, d. sociology of the 'new public health', and d. the relationship of social emotions, identities and aspirations to diverse medical students' well-being. This complexity necessitated a longer literature review than was anticipated; but one I believe enriched the theoretical framework, research methodology, data analysis and discussion.

6.4 Study Methodology

6.4.0 Introduction

The theoretical framework [**Figure 6.1**] provided 'theory for' (Meyer & Ward 2014) evaluating the ecosystem of situated learning of social health discourses expressed by participants in the study. The *quantitative* component of the study involved a. the collection of participants' demographic data for evaluation of habitus and social group comparisons, and b. multiple choice (MCQ) and Likert scale questions for evaluation of social health orientation, knowledge, and threshold concepts. The *qualitative* component of the study sources participants' interview responses to questions devised from the theoretical framework. All questions were preloaded on SurveyMonkey® for the participant to access online during the study process; while the investigator operated a digital audio recorder. Quantitative and qualitative findings are triangulated with features of participant habitus (equity identities and insider/ outsider status to medicine) in vignettes, to demonstrate common themes and their theoretical associations. [Appendix 9].

6.4.1 Structuring of primary and secondary discourses in the study

Dividing participants into four groups of First and Final Year students at each medical school allowed comparison of four distinctive contexts of medical professional structuration. It suggested a reasonable, practical goal of forty participants, approximately ten from each group, could be a suitable number for achieving data saturation and study credibility.

Structured into the various curricula at each medical school is the *primary* discourse of the dominant professional status quo; to which we can assume all Final Year participants have been exposed. *Secondary* discourses are derived from sources external to the dominant discourse; from participants whose 'outsider' status derives from disempowered habituses and internalisation of social fields external to the medical profession. First and Final Year participants with equity identities and habituses of newcomers to the field of medicine, were considered 'outsiders' for the purposes of the study.

A qualitative interpretive study is structured by its theoretical framework, sampling methods, and the context in which investigator and participant interact. Each of these elements of the study are discussed in turn.

6.4.2 Theoretical framework

The theoretical framework seeks to explain, predict and understand responses of diverse medical student participants to a change in medical professionalism to include social science health concepts and practices. Does The Charter have support as a professional social contract? What gaps in understanding may require a recontextualising principle in medical pedagogy for effecting SA professionalism? The framework includes critical conceptions of participants' identities, and their agency in relation to macro structures of medical curricula, Australian HE, and contemporary social health concerns.

An assumption was that learners have sociological imagination (Mills 2000) enabling them to 'read' the power structured in these contexts; and subsequently to read the social health-illness dialectic or mechanism of health production. For International participants unfamiliar with the features of Australian social inequities, their country of origin was the default site of reference. Participants' situated learning experiences in diverse social contexts – rural, remote, Indigenous, and global disadvantaged settings, were also sought.

6.4.3 Sampling methods

The central concern of data sampling is representativeness – the variance of the phenomenon under study (Gobo 2004:453). In qualitative research, data is continually monitored by the researcher to observe the relations between *variables*; as Gobo (2004) emphasised, "not only to assess… the number of persons that feature one characteristic" (:453). Invariance or regularity of a phenomenon represents a finding or 'social fact'.

In this study, the social pervasiveness of health equity concepts among participants was sought for making claims to generalisability. Qualitative researchers need to specify that generalisability does not extend to populations outside of the study, but to the conditions under which the study was conducted, including its theoretical framework (Gobo 2004:451). The framework was designed to comprehend participants' conceptualisation and funds of knowledge of health equity; and their dispositions, aspirations, knowledges and capabilities for SA medical practice. An *aspiration* is a 'strong desire to have or do something' (OED), often held in long-term memory. Recalling studies by Zipin et al (2012), young people from low SES backgrounds in South Australia had latent aspirations for social improvements that could be capacitated by empowering their 'voices' and funds of knowledge of their social lifeworld. Knowledge of this has relevance to medical students in the study from non-traditional or outsider backgrounds; and to physicians seeking to involve patients in health advocacy projects.

For low SES, and other 'outsider' medical students, the struggle to gain symbolic capital and a valued position in the field, may raise aspirations for competitive entry to the traditional medical hierarchy. Yet social justice is not emblematic of the traditional discourse or 'rules of the game' (Bourdieu 1977) in contemporary medical practice. Volunteering for a study seeking medical students' perceptions of social justice is likely to evoke a different set of aspirations. The study provides an opportunity to voice these ideas; as do medical student groups and other fora that produce secondary prosocial discourses. Group membership lends credence to Bourdieu's conception of habitus change: actors can be engaged in the rules of the game (the primary *doxa* or dominant discourse) while simultaneously holding aspirations – embodied and latent, or explicit and enacted – for social change (derived from secondary discourses).

Generalisability in the study then refers to shared conceptualisations of social discourses that matter to health and health care, as duties of medical professionalism. Secondary sources of prosocial discourse may vary with the individual and their habitus; but should be recognisable as themes in the data.

6.4.4 Recruitment of medical students to the study

My main concern in recruiting medical students into a study of social justice related to students' well documented regard of psychosocial topics as 'soft' and less worthy in their strategizing of medical learning than the 'hard' science of biomedicine (Humphrey 2006). Controversy inherent in notions of 'social justice' related to political or religious ideologies could also skew the number or sample of volunteers. Alternatively, students with strong social justice sensitivities may be attracted to the study.

I reasoned these issues need not be a concern to the study; as those interested in social justice may be more accustomed to articulating their justice reasoning, and provide better quality data. A 'snowball' process was used, in which volunteers were asked to invite other students likely to be interested in the study. I decided against targeted recruitment of particular student groups, but was unfortunate not to recruit students self-identifying as Indigenous. Recruitment resulted in a diversity of participants; with a significant number having equity identities. An Asian International student (F19) appeared to volunteer only to obtain the $20 food voucher: responses were rushed and brief. I paid in cash and excluded his data from the study. Failure of audio recording led to exclusion of interview data from participant A62, although data from Likert scale questions were included [see Appendix 4].

The study recruitment notice and Introductory letter from my primary supervisor were submitted for ethics approval, then placed in online student noticeboards at Adelaide and Flinders Medical Schools [Appendix 1]. As students responded by email, they were allocated an appointment time and location for interview, and provided a consent form for each to complete [Appendix 2]. Interviews lasted 50 -60minutes in most cases; and were conducted in rooms within the participant's medical school, or nearby on campus. An ethics approved protocol was followed for gaining signed, informed consent for recording of interviews and follow-up. Instructions were provided for accessing and completing the online survey and interview questions in SurveyMonkey.

6.4.5 Contexts of data collection

Student volunteers were interviewed in rooms at their own medical school to align the study with the familiar, contemporary context of their medical education. The two groups of Final Year students, as near-graduates, were in the process of leaving this social context, while First Year groups were arriving.

Recruitment and data collection was continued over two years in order to reach an adequate participant quota. Hence, two cohorts each of First Year and Final Year students completed the study, receiving certificates of appreciation and $20 food vouchers.

A description follows of the process of deciding suitable written and oral questions to participants to elicit data directed at the study question.

6.4.6 Semi-structured interview questions

Questions posed to participants were structured as short answer questions (SAQ), multiple-choice questions (MCQ), and semi-structured interview questions. I encouraged discussion about these questions during the research process, to hone the depth of participants' perceptions and the validity and reliability of core questions. In semi-structured interviews, the interviewer can modify or extend a line of questioning to either expand the scope of enquiry or limit it. Important to this study was the scope and quality of critique participants were capable of producing from their social (habitus) and academic (School and Year) positions.

'Threshold' concepts can also be employed to test knowledge (Meyer & Land 2005), an idea used in the formulation of interview questions for this study. For example, differences between the homonyms equality and equity insinuate a threshold concept; what follows are the *meanings* each term implies for medical practice (Ward 2009). The stem of research questions can be composed to problematise contemporary social hierarchies, and test the valence of participant perceptions of a patient's stigmatised identity to health needs. This was the basis of interview Questions 6 & 7 [Appendix 4, Panel 3].

Reflexivity on the research process is important to understanding the possible reactions, assumptions, and shared meanings participant and researcher can reach when probing qualitative study questions. Since all narratives were perspectival, it was impossible for either participant and researcher to be objective (Bolton 2010). Yet, perspectives “can be widened and deepened” through what Bolton (2010) terms “the lens of artistic scrutiny” (:16). Reflecting with “intuitive knowledge of social and human areas” (ibid:17) allowed both participant and researcher to “imaginatively and vicariously” (ibid) critique social health contexts. This advice was consistently followed in the study during participant interviews.

> A creative leap is required to support widening and deepening of perspective, and the effective ability to mix tacit knowledge with evidence based or explicit knowledge.
>
> (Bolton 2010:16)

One creative qualitative research skill was to ‘unpack’ questions in ways that stimulate ‘widening and deepening of perspective’ in participants’ responses. Reflexivity on basic assumptions was important to this semi-structured interview process. For example, participants could be unfamiliar with the question posed by critical theory: *who benefits?* – and, by corollary - *who is harmed* by existing social arrangements? Some may wrongly believe that value neutrality is an option. Some may have never fully contemplated their own perspective of the topic, nor been exposed to others’ perspectives informed by lived, critical experiences. The ‘variation theory of learning’ (Wright &Osman 2018) can assist the researcher in these instances, by applying a *partial-whole-context* structure to interview questions; informed not only by the researcher’s but a diversity of perspectives. In HE terminology, this structuring of concepts for partial-whole learning is known as ‘scaffolding’. This technique was applied in several interview questions [Appendices 4B & 4C]; and appeared to open a space for participants to use sociological imagination and critical formulation of responses [Appendix 9].

Essential to formulating semi-structured questions and responding to answers is the interviewer's assumptions of the pedagogical structuring of field-related discourses (how theory and practice validate what is learned and when) underpinning questions. Here, I needed to be self-reflexive of paradigms that may ethically impact the research process.

6.5 Researcher reflexivity

6.5.0 Introduction

In this section, I aim to critically reflect on personal, professional and research related matters that may intersect with the ethical conduct of the study. I report on researcher and study-related considerations necessary to lend credibility to the collected data and its interpretation.

6.5.1 Self-reflexivity on habitus, identity and bias

The study enquired about social justice values, identities and sense making of the social production of health; so it was important to remain reflexive of how the researcher's own ideology and social position relative to participants may influence the process and outcomes of the study.

I self-identify as a liberal, middle class Australian, of Anglo-Saxon heritage; a heterosexual male; former medical practitioner, medical educator, and 'patient.' Being a patient with a chronic illness is my only equity identity. I have never been a member of a political party.

My background is that of a post-war, working class, South Australian family. Following Army service in WWII, my father worked full-time for a transnational chemical company; while my mother worked in the home. At high school in the 1960s, I led the student group ‘Interact,’ dedicated to publicising current international issues of social injustice; including apartheid in South Africa and the ‘Cold War’ between the Americans and Soviets.

I was first in family to attend university, with medical education in the 1970s made possible by Commonwealth Government scholarship. As a medical student I sought paid work during vacations and undertook extra-curricular electives in rural community health in Central Australia and in southern India. My first formative experience of social health inequity occurred when the first Indian child seen with the paediatric registrar was diagnosed with diphtheria. This potentially fatal bacterial infection was long ago eradicated in Australia by effective vaccination programs. Because neither the Indian health system nor the child’s father could afford the almost one dollar cost of penicillin to secure the child’s life, they were sent away without treatment.

My student elective in Central Australia coincided with the National Aboriginal Eye Health Survey, led by Prof Fred Hollows. This was a remarkable example of health activism. Despite political opposition, Hollows’ team completed a national survey of Aboriginal health under the guise of a national trachoma eye health program, that revealed alarming gaps in health and life expectancy.

In medical school, I became critical of the education we received, in which disciplinary specialists would deliver lectures with no regard for students’ cumulative knowledge or entry level to the topic. Medical evidence was being taught by physician-scholars with no training in the scholarship of teaching and learning. I resolved to correct this misrecognition in my own career.

In 1979, following graduation and internship, I left suburban Adelaide to work in coastal north Queensland. There I witnessed the poverty of social living conditions in remote Indigenous communities and townships, and gained insights to the historical, structural, social and ecological stressors impacting people's lives; a constant struggle over which Indigenous people (and 'black birded' Pacific Islanders) had little control. It was during my practice in these communities I first gained insights to the mechanisms of social health and illness. I heard peoples' personal narratives that corrected my mis-conceptions and urban schooling about the colonial history of Australia (Reynolds 2021). Mentors helped make the connections between Indigenous history and health. Practice experiences in family planning, sexual health, and community mental health were instructive to my understanding of the sources of stress for people subjected to different forms of 'violence'; the result of stigmatised gender, race, sexuality, diagnosis, disability, poverty and living conditions. Policy, education, vast rural distances, opportunities for improvement in quality of life, and intergenerational discourses continued to delimit health outcomes. Importantly, mentors were found among health practitioners working in non-Government organisations, concerned with Indigenous well-being; people possessing what I now know as 'critical consciousness'. These were peers I could actively engage in reflective discussions of social and cultural health problems. Together we became a 'community of practice' (Lave & Wenger 1998); "groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly" (ibid). The more holistic conception of health held by Indigenous people, which aligns with social and cultural determinants, was one I could transfer to other areas of medical practice.

In 2000 I began casual teaching in the Adelaide medical course while awaiting double lung transplant (2004) for cystic fibrosis. I made a strong recovery, and in my role as Coordinator of Personal and Professional Development found great scope for transferring valuable experiences as a doctor and a patient to medical student learning experiences. It seemed many undergraduates entered medicine with little personal experience of social diversity and adversity. Without exposure to diverse interactions and discourses, getting to know 'the Other', the learning of doctor-patient communication skills, and achieving equity health outcomes, were likely to remain unmet. In First Year, pairs of students were sent out to a diverse range of community settings to meet people and write about their experiences in reflective essays. The program brought students into relationship with 'Others' - physically and intellectually disabled, refugees, parents and children living with cystic fibrosis, and community health support organisations, among others.

My interest in widening participation and meeting social health needs coalesced.

6.5.2 Reflexivity on bias in the study

My prior role as Coordinator of Medical Personal and Professional Development in the Adelaide MB, BS course (2004-2015) placed me dialectically in a dominant position in relation to all study participants. To my knowledge, I had no other relationship to the participants. Universities are hierarchical institutions, and all Final Year subjects at The University of Adelaide likely recognised me as a Medical School lecturer and examiner.

While I had been a community heath physician and medical educator, I had little research experience or output that could foster status anxiety among participants.

Reflexively, my main risk as researcher was *confirmation bias*; described as “the seeking and interpreting of evidence in ways that are partial to existing beliefs, expectations or an hypothesis in hand” (Nickerson 1998:175). This meant I would hear perspectives on social health justice I strongly affirmed, and others I didn’t. Yet, as investigator I had to remain neutral; to establish participants’ meanings and evaluate the rationality of critical thinking about problems posed by the study. Vigilance was important to the validity of the results. It was during interviews I would experience pressure to avoid confirmation bias; and on reading the transcripts, would learn where I succeeded and failed. For example, I needed to respond consistently when participants intentionally exaggerated or used irony to convey their ideological positions and insights to social injustice. Yet, my insider status to teaching and learning of medical professionalism, and to medical practice in contexts of social disadvantage, conferred some validity to the study topic.

While social justice was an ethics topic in the ‘concept map’ of the Adelaide medical course, the value and actions of social justice in health care and health production were gaps in *formal* professional learning. In the peer reviewed education literature, I discovered a gap in educators’ understanding of ‘transformative learning’ of social justice concepts by students in HE [**Figure 3.1**]. While studying a Graduate Certificate in Higher Education, I learned about the transformative potential of ‘threshold concepts,’ and considered how differences in political construal of ‘social justice’ could make this concept ‘troublesome knowledge’ for some learners in medicine. The change in practice that can follow a concept transformation also depends on existing practices; an insight of Bourdieu's theory.

Yet, nearly two decades after The Charter was published, evidence of institutional uptake of SA practices in medicine was underwhelming. Ironically, the false dichotomy between individual and population health seemed to persist in the context of economic austerity following the 2007-2009 Global Financial Crisis. In the cause of restoring the Australian budget, political and public attitudes hardened *against* social issues like indigenous health, same-sex marriage, migrants and refugees. Same sex marriage was passed into Australia law ten years later. Conservative economic policies marginalised financial aid for developing countries, welfare recipients, and those pejoratively perceived to be 'leaners not lifters' (Hockey 2014). All political pretence of social, cultural, and environmental stewardship gave way to rhetoric promoting economic recovery, production and growth.

When HE of international students became a major source of financial revenue for the Australian economy, fee payment was expanded to domestic students; with increased pressure on the WP agenda of social inclusion, and on students and their families repaying loans. My attention turned to how these structural changes may alter students' motivations for prosocial 'types' of medical professionalism; and how they may affect attitudes to SA in their future practice. To understand these questions, I would need to interview medical students, and perform qualitative research.

To understand what was required of qualitative research in medical education, it was important to know what had gone before. Prominent critiques suggested qualitative methods used in education research were more useful than quantitative methods - the randomised, controlled trials that inform clinical health practices (Stacy & Spencer 2000). In qualitative education research, the researcher can take a reformist stance, but make explicit their theoretical position, and produce research assessed by “the quality of evidence and arguments *for and against* the specific reforms, debated in conjunction with the evidence” (ibid:498 Italics added). Critical stances taken by feminist researchers, for example, avoided the pretence of objective detachment: researchers reflexively declared the personal and political stances that inform their study (Fine 1994). The activist-reformist stance I have chosen to take in this study “seeks to unearth, disrupt, and transform existing ideological and/or institutional arrangements” (ibid:17), premised on a critical review of the medical professionalism literature. In doing this, I join a ‘network of concerned actors’ with hopes for a society having

> high levels of social cohesion and resilience, organised political action for social justice and… proper public investment in human and social capital
>
> (Friel 2018).

An example of assumptions in relation to participants from non-Western cultures was the global, post-colonial spread of the western medical curriculum. As Bleakley, Brice & Bligh (2008) warned, the global export of particular pedagogical and cultural assumptions in curriculum can have the negative impact of a ‘new wave’ of imperialism. As westerners, we can implicitly internalise a hegemonic history that assumes white, European dominance. We can forget how eastern cultures produced many philosophies and technologies in advance of the west; including distinct and complete systems of health care (Winchester 2008). As researcher I could not assume International students from western cultures (or western students for that matter) fully shared or supported the concepts inscribed in the medical paradigm they were studying.

Empirical studies by Nisbett (2003) distinguished philosophical differences between easterners and westerners. These were summarised by Kennedy-Reid (2012);

> Easterners are far more attentive to context and to relationships, that Easterners tend to think holistically whereas Westerners take a more reductionist, deterministic view, and that Easterners see the world in constant flux, while Westerners strive for stability.
>
> (ibid:256)

The relevance these social facts lent to the study was the suggestion that resistance to change was inherent to western thinking; but so too was solidarity with a new paradigm (theory of practice), once established. Expectation of change among easterners suggested they were more reflexive of future oriented and collective health needs.

Reflexivity needed to be extended to the shared paradigm produced between participant and researcher by the theories and socialised language of social justice and medicine. Polish philosopher, sociologist and physician, Ludwik Fleck recognised

> theories act to produce the questions we can ask, and predispose the answers we can give. In this, they act as a *gestalt*, circumscribing the possible realities we can perceive, and limiting them.
>
> (White, in Collyer 2015; 9:149)

During interviews, I became aware that rather than reformulating a difficult question, the question may require sensitive scaffolding with a tailored narrative or imagery to assist the participant's broader conceptualization of a topic. A disorienting ethical dilemma, perhaps one provided by the participant, could provide an imaginary context for verging the unknown. This was characteristic of 'threshold concepts' – discussed previously in the theoretical framework [Chapter 6]. In this context, the participant may actively make new connections and realise novel concepts in the actual space-time of the interview – an exciting, 'light switch' or 'aha' moment.

Strongly held, *ideological* conceptions of 'fairness' in societal relations however, were likely to conform to a set of moral principles and concepts; rather than a practical position that 'took account' of the social circumstances of illness. Social differences between humans can be regarded as part of the natural order; so too, their consequences. In this context, a 'threshold concepts' framework may be ineffective in urging participants' critical thinking beyond ideological loyalties to religion, state, faculty, university, or political party. The study framework may not *resonate* with the participant; or the participant may *resist* alignment with the frame of the study (Gale et al 2013). In these events, Corbin & Strauss (2008) advise researchers to force questions "that can break through conventional thinking" (:67).

In my research ethics submission, I provided the title ‘Critical Health Advocacy in Medical Professionalism’ or CHAMP study; and developed the following objectives.

6.6 Study Objectives

The following four study objectives were drawn from my understanding of the literature to have practical relevance to the research question and to guide the research design.

- **Objective One:** Critical consciousness (CC)

An initial objective for this study was to engage study subjects in a discourse of social justice as it relates to health and health care, in order to evaluate the following;

- Ability to engage in *ethical discourse*, including the affective attributes of moral sensitivity and reciprocity (Gross 2001); and ability to offer critical insights to common biases and stereotypes perpetuated in a hidden curriculum;
- Capability of forming a systemic view of health and health care;
- Critical reflexivity by subjects on their upbringing, schooling, experiences & ideology to reveal sociological awareness of ‘structure versus agency,’ oppression and freedom (Hilgers 2009); and indicate possession of ‘reflexive habitus’ (Bourdieu);
- Participants’ “possession of values and aspirations congruent with social accountability” (Preston et al 2016),

- Negotiation of 'threshold concepts' (Meyer & Land 2005); relations between threshold concepts and participants' critical experiences; and connections to "ways of thinking and practising" (Barradell & Kennedy-Jones 2016) SA medicine;
- Gendered differences in social justice awareness and reflexivity on habitus (Sweetman 2003); characteristics of *female* participants' narratives of social justice;
- Intersectional differences in social justice sensitivity; discourses of subjects with multiple marginalised identities (e.g. female, black, LGBQTI, migrant or refugee, rural or remote);
- Comparison of eastern and western participants' views of SA practice;
- Consumption of a 'hidden' curriculum of medicine relating to the anti-critical discourse of the 'neoliberal' university (Ridley 2017);
- The 'voices' of instructional and regulative pedagogic discourses (Bernstein 1990) relevant to a pedagogy of social justice in medicine;
- The scope of subjects' understandings of the 'health-illness dialectic' arising from the adversity of societal conditions. For example, the aim of Interview Question 3 (below) was to probe how participants noticed the SDH constrain patients' capabilities to *change* unhealthy behaviours. Questions probed how the health of marginalised 'equity groups' may be disadvantaged by existing social structures; what false assumptions, including Bourdieu's *misrecognition* about the role of medicine in health participants held; where participants observed 'fracture lines' in the existing (downstream) structure of medical care; and how the *social change role* of physicians perceived by participants differed from Marmot (2017): "education and training; seeing the patient in broader perspective; the health service as employer; working in partnership; advocacy" (:686).

Recognition and *misrecognition* were the terms Bourdieu (1970) used to describe his concept of 'symbolic violence'; harm done in education by power and sense-making operations that reproduced a status quo of class-based occupations and wealth to the exclusion of particular groups (Jenkins 2002).

Interview Q.3.

Many doctors experience frustration or 'learned helplessness' when treating people who continue to engage in unhealthy behaviours despite receiving good advice for keeping healthy.

What is your perspective of this problem?

What do you consider are the fundamental causes of this problem?

- **Objective Two:** Ethical capital

A second objective for this study was to examine differences in perspective between Final Year and (non-repeating) First Year participants. It can be assumed that Final Years were fully socialised into the medical culture of their Medical School and training contexts, and First Years, not. Final Year students can have experiences during training transforming their habitus and level of CC; to elucidate the mechanisms of social injustice affecting individual and population health. Such embodied learning was characterised, *pace* Bourdieu, 'ethical capital' (Bull et al 2010); a disposition enabling SA professionalism.

- **Objective Three:** Theoretical considerations

A third objective of this study was to test predictions based in Bourdieu's theory of practice (1977) to participants' discourses and projected aspirations for social justice praxis in their medical career. Bourdieu's concept of *habitus* (1984) as agency resourced by various 'capitals' suited to the medical field, coupled with Sen's 'capability approach' (1999) - the freedom to function in preferred ways of being - may be triangulated with participants' aspirations for a particular *type of medical professionalism* (Hart 2013; Wear & Bickel 2000).

This may clarify the *capitals* (financial, cultural, social, academic, ethical, etc.), and aspects of medical professionalism WP (or 'outsider') participants perceive as structural limitations on their prosocial intentions. Another task is to elucidate how the *empirical* and *theoretical* are imbricated in participants' descriptions, evocative of Bourdieu's sociological methods for education research.

The study will seek evidence of Archer's *critical realist* hypothesis regarding millennial students' practice of *meta-reflexivity* on changes in society in order to plan a future course of action. This questions whether participants have moral imagination and CC for current local, national and global 'health inequities' (Benatar 2005); and is this "what we care about" (Archer 2012)?

- Objective Four: Prosociality

A fourth and minor objective is to test hypotheses from previous research findings of the characteristics of 'prosocial' students.

These include;

- An initial idealistic, humanist perspective in First year; to a perspective devoid of concerns for equity and justice in the Final years of the course (Patenaude, Niyonsenga & Fafard 2003)
- Association of active group membership of student organisations with prosociality. A prior study found students involved in more clubs on campus had a greater sense of belonging to a community and more social justice attitudes (McAuliff, Williams & Ferrari 2013).
- Greater 'care' arguments among female students; greater 'justice' arguments among male students in bioethical reasoning (Sommers et al 2011).
- Less intention to work in low SES or medically underserviced areas among students from very low and very high SES backgrounds. Less intention for the same among males and students from non-English speaking backgrounds (Griffin, Porteli & Hu, 2017).

6.7 Limitations of the Research Design

Possible limitations of the design include participant recruitment and numbers; questions; researcher effect; and types of medical professionalism.

- Ideally, the study would recruit all subjects in a single academic year; however, there is no reason to believe there is less reliability in having a study cohort recruited over two years. To follow Year group cohorts across an entire course was not feasible in a PhD study.
- The number and lack of gender diversity of volunteers from First Year at Adelaide was disappointing, and posed limitations on generalisability of findings.
- Study questions are designed to strike the uneasy balance of being comprehendible to both First and Final Year students. However, the semi-structured interview format gives

the researcher flexibility to scaffold questions to the level of the participant's understanding. Yet, with potential 'threshold concepts' it is important the researcher not disclose post-liminal concepts before the participant has attempted to think the idea through.

- A potential 'confirmation bias' applied to study volunteers taught or examined by the investigator, or conscious of status in medical hierarchy. The risk is that responses to the study can be matched to what the subject thinks the investigator wants to hear ('Hawthorne effect'); or what a participant wants me to think of them. Such distortions may ultimately result in unreliability of data and study conclusions.
- 'Types' of medical professionalism are drawn from a survey of U.S. physicians employed in a privatised health system (Wear & Aultman 2006). The American typology was convenient in the absence of an Australian typology of medical professionalism; however, the categories of professionalism types may feasibly differ between physicians employed in different health systems.

6.8 Summary of Research Design

The design of the CHAMP study aimed to elicit, categorise and interpret demographic, biographic, and conceptual data; features of heterogeneous medical students' perceptions and reasoning in relation to restructure of the social contract of medical professionalism. The new structure is an approved, international Charter citing a professional responsibility of physicians to practice SA to the communities they serve.

Social justice is a value considered important to SA and to achieving health equity outcomes by medical teams. Learning of SA concepts relevant to health care and health production is theorised to involve a process of transformative learning encompassing threshold concepts and critical consciousness for broadened professional practice that varies with students' 'usability', predispositions, identities and aspirations. Accommodation to the new structure, integrating the historically separate sciences of biomedicine and health sociology, may also depend on structural reform of medical curricula.

A multi-theory, critical framework informed the research question: How do diverse medical students critically interpret the value of social justice to medical practice; and what are the structural enablers and constraints to prosocial medical professionalism?

In the study, my reformist stance is inscribed in the theoretical statement, which seeks to clarify heterogeneous medical students' dispositions *for and against* SA as a medical professional duty, and featured next; to learn what sociological knowledges, skills and insights participants brought to higher education.

CHAPTER SEVEN: DATA ANALYSIS

7.0 Introduction

In the CHAMP project, students at two South Australian medical schools responded to an invitation to participate in a study investigating ‘your views about social justice in medicine.’ A segment of The Charter urging greater SA in medical practice was given to participants to read, prior to an audio-recorded, semi-structured interview. Interview questions were designed as touchstones to a critical discourse of value in medical professional practices of SA. Study participants, by nature of their unique social positions, were expected to have diverse dialogical or sense-making relationships with health forming structures in the social world, and to the profession they are entering.

Quantitative and qualitative data sets were collected from study participants based on a ‘theory before’ framework [**Fig. 6.1**] according to the convention described by Meyer & Ward (2014). Analysis by triangulation of qualitative and quantitative data into vignettes followed, to appraise the theoretical framework, and reveal ‘theory after’ (ibid).

Bourdieu’s theory of practice required collection of quantitative data informing *habitus* differences between participants; as did identification of *equity* identities. Each participant’s study identity was coded into a single cipher, in accordance with research ethics approval, to protect anonymity. The cipher records 1. Medical school, 2. Year level, and 3. Order of interview for Year level. Hence, Nate (F46) referred to a Flinders Final year participant, the sixth interviewed. Qualitative data derived from each participant’s responses to interview questions, and interactions with the researcher, were audio-recorded for later transcription and thematic analysis.

7.1 Cohort comparisons and predictions

A change in moral habitus toward the hidden curriculum of medicine was expected in Final Year participants as they interacted with the Australian health system, its actors, and its limitations. A 'parallel curriculum' of prosocial student-led groups was likely protective of prosocial habitus and students' deep learning (Fullan & Scott 2014:5) of social justice needs, against the dominant or 'hidden' curriculum of medicine. As with students' situated learning in contexts of social inequity, a 'collective consciousness' for social justice can emerge from the complexity of the socio-cultural environment (Mason 2008).

In contrast, habitus in undergraduate First Year Adelaide participants (with low exposure to medical curricula and the Australian health system) likely related more to natal background and to personal and relational experiences with social disadvantage during schooling, travel, and gap year experiences (Bourdieu 1977). While political awakening may play a role in the emergence of First Year consciousness for social justice, maturity of cognitive schema and embodied ideologies in students may be limitations on processing social health concepts. Postgraduate participants in First Year Medicine at Flinders were likely to have *secondary* habituses adapted to the *field* and *doxa* of undergraduate study and prior occupations; and have longer and broader sociocultural experiences of societal structures than the First Year Adelaide cohort. Yet, both First Year cohorts may be considered on a par with regard to the doxa of medical professionalism at their school.

As participants progressed through medical school, expectations of change in personal and professional *identity* became less certain. Perspective transformation to a lens that allows students to make meaning of Indigenous health practice, for instance, can require situated engagement with the Indigenous context of health; and demands a high level of complex thinking. In Kegan's model of adult development, a 'self-authoring' or 'self-transforming mind' may develop in such challenging contexts; in which the student integrates multiple perspectives and develops new knowledge, ethical meaning and collaborative decisions (Lewin et al 2019). Yet, not all participants experienced (or submitted themselves to) such 'disorientating dilemmas' and the perspective change that each developmental lens offers. For example, participants in all cohorts can have variable curricular knowledge and situated learning knowledge of indigenous health. The latter can demand considerable emotion work to accommodate cultural difference and 'othering' discourses. Most participants likely begin with solely curricular (vertical) knowledge of the sociopolitical structuration of Indigenous health.

Personal 'equity identity', conceived objectively as one's relative social position in society, recognises stratifications based in social power differences and stereotypes, having counterparts in the social gradient of health. During interviews, equity identity was validated when a participant spontaneously spoke about personal experiences of social shaming and adjustment. Others, judged likely to have devalorised 'equity' identities as a result of common social stigmata, were asked about subjective experiences of prejudice. Reflexivity, and absence of reflexivity on social privilege in participants with no equity identities, divided this group into cohorts for comparative analysis. Equity identities and prosocial intentions, expressed as preferred type of professionalism, were compared to indicate the stratification of cohorts in their orientation to prosocial medical practice. [See Appendix 8].

7.2 Themes

The complete data set was first manually examined for major themes related to concepts of professionalism for SA. Chronologically, the first theme assembled participant perceptions of the meaning of The Charter for medical practice. The next theme collated participants' critiques of current professional practices that unfairly distributed health and healthcare. The third major theme comprised the range of concepts participant social sub-groups perceived to represent the values, knowledge and logistics for becoming a SA physician.

To begin the process of thematic analysis, all data from the four 'Year Group' classifications were systematically searched for examples of each theme and sub-theme. Then, for each participant I wrote a vignette to portray social identities, habitus, perceptions, significant experiences related to the sub-theme, social knowledge and values orientation to themes. Collated by sub-theme, the resulting collection of vignettes facilitated comparison between subjects' social identities (other than Year Group), and the observation of new categories of perception. A threshold concept that I had not observed during data collection became more visible using this aggregating approach.

For each participant vignette within a theme, I abstracted the salient theoretical concept or precept, then returned to the literature to locate theoretical resonances to illuminate an explanation. Emerging from this 'theory after' aspect of the qualitative method were new understandings of the data and ways of thinking about SA professionalism (Meyer & Ward 2014).

In the following step, I collated the main ideas abstracted from vignettes and grouped these categories in tables to draw out the propositions the categories suggested. *Sustainability* was a further category derived by this process.

7.3 Triangulation of quantitative and qualitative data

Mixed methods research (MMR) or *triangulation*, as used in this study, is a means of achieving validity of data analysis. Theoretical triangulation is a recognised research strategy in medical education for the examination of complex phenomena (Samuel et al 2010). The following definition and endorsement of MMR is provided by qualitative methods expert Denzin (2012);

> an inquiry that focusses on collecting, analysing, and mixing both quantitative and qualitative empirical materials in a single study or series of studies … best understood as a strategy that adds rigor, breadth complexity, richness, and depth to any inquiry.
>
> (:82)

While representation of data by triangulation attempts to assess “the interpretive, contextual level of experience where meaning is created” (Denzin 2012:83), it is often interpreted for political and moral ends. In this study, the *ends* are social justice actions for health improvement. A thicker, more complex description than triangulation can be achieved by ‘crystallization’ (Ellingson 2009). This describes an MMR methodology that joins multiple forms of lens for analysis; “reflexively embeds the researcher’s self in the inquiry process and eschews positivist claims to objectivity” (Denzin 2012:84).

A further paradigm refers to the researcher as a theoretical or methodological *bricoleur*; combining a range of interpretive paradigms “that can be ‘brought to any particular problem” (ibid:84). This approach recognises that participants can hold belief systems that “attach the user to a particular worldview” (ibid), acting as “overarching philosophical systems denoting particular ontologies (ways of being, becoming), epistemologies (ways of knowing, knowledges), and methodologies (interpretations”) (ibid:84). Denzin (2012) noted that *paradigms* (such as feminism, Marxism, or constructivism) may not be as easily moved between as participant *perspectives*. In the present study, reflection on the diversity of participant *identities*, *habituses* and *ideologies*, led me to adopt a *bricolage* methodology: to account for both *perspectives* (less well developed systems) and *paradigms* (well-developed systems), and move between them (ibid).

> The interpretive bricoleur understands that research is an interactive process shaped by the personal history, biography, gender, social class, race, and ethnicity of the people in the setting.
>
> (Denzin 2012:85)

My task was to conduct a critical synthesis reflexively joining each participant's perspectives and paradigms into a representative whole.

The use of participant vignettes is one method of achieving triangulation of data with researcher reflexivity; a process not unlike the interview, in which interaction between researched and researcher informs the interpretation (Langer 2016). In this study, the researcher's subjective awareness of participant Year level (and all it entails), equity identity (a potential for critical, embodied, social knowledge) and features of habitus (capitals, trajectory, durability and pliability) informed a praxis in which evaluation of bespoke narrative connections to the idea of 'SA medical professionalism' accrued. Equity identity can also be associated with participants of 'outsider' status, recognising that prior to widening participation in HE, medicine was regarded a field 'for the likes of' white, middle-class men (Becker et al 1961).

Praxis synthesis, reflecting on my first experience, occurred in the process of writing the vignettes. Synthesis was a complex act of interpretation of interrelated contributions (from social theory; and dialogical meaning-making of a question arbitrated between participant and researcher); akin to assembling an artwork by bricolage of distinct image fragments. Once begun, this textual praxis or "gradual production of interpretation" (Langer 2016:740) was cultivated, like a writing genre.

The extensive use of participant vignettes in the presentation and interpretation of results was felt necessary; first, to demonstrate validity by triangulation of demographic and interview data; and second, to theorise participant prosociality in response to The Charter.

- 1. **Critiques of contemporary medical professionalism**
- 2. **Transformation to a social justice perspective of medical practice**
  - 2.A. Informative learning
  - 2.B. Formative learning
  - 2.C. Transformative learning
- 3. **The medical practice of social accountability**
  - 3.A. Responses to The Charter
  - 3.B. Awareness
  - 3.C. Agency differences; helping patients
  - 3.D. Ways of ‘seeing’ and knowing
  - 3.E. Space-time for social accountability practices
  - 3.F. Education to overcome health inequities
  - 3.G. Sustainability
  - 3.H. Conscious boundaries of social accountability

Fig. 7.1 Themes and subthemes identified in the data

Figure 7.1 (above) lists the themes and subthemes identified in transcribed data.

To both validate and demonstrate the participant change process of developing CC of social inequity as a precept of health, I borrowed the tableau “from informative, to formative, to transformative learning” (Frenk et al 2010:1952). Vignettes served to contribute to research validity and reliability; doing justice to diverse perspectives. The investigator’s aim was to make conceptual triangulation of data more transparent (Tobin & Begley 2004). Limitations of using participant vignettes include the potential for selective presentation, and the loss of particular narratives; a “trade-off between depth and breadth” (Reay et al 2019:9).

Social justice related concepts and preferences were tested, and demographic information about each participant was collected in a pre-interview survey, to triangulate the validity of participants’ oral testimonies with individual features of habitus. The documentation of triangulated vignettes, collated into themes and subthemes, are found in the final Appendix. The collated study results offer insights to how diverse participants oriented their identities, interests, ideologies, beliefs, knowledges and appraisals to a more holistic, humane, and sustainable approach to health and health care, based on social justice values.

7.4 Key to participants

Adelaide = A, Flinders = F; First Year = 1, Final Year = 6 (Adelaide) or 4 (Flinders)

Pseudonym [School = A or F, Year, Order of interview] e.g. Julie (F45)

7.5 List of Tables

7.6 Research Question

Study results focus on the **main research question** (repeated below) and are accompanied by participant vignettes drawn from qualitative themes [Appendix 9] to add rigor and transparency to data analysis.

How do diverse medical students critically interpret the value of social justice to medical practice; and how can students' critical capabilities be harnessed to socially accountable professional practices?

7.7 Reflexivity on interpretive writing: the joint production of meaning

In the study, I used vignettes to both structure suitable interview questions and to triangulate quantitative and qualitative participant data with the research questions.

Writing interview questions as problem-posing vignettes was a creative task that needed to anticipate the level of ethical or conceptual thinking the researcher hoped to probe with participants, to achieve joint production of meaning. Törrönen (2018) referred to the discursive function of vignettes in qualitative research as evoking participants' contextual views or relatedness to the topic. I discovered the process of triangulation actually began anticipatorily with question writing; and proceeded during interviews by modifying the pre-structured question in response to a participant's level of understanding, until mutual meaning-making was assured. Interview vignettes, and question modifications during interviews, aimed to inspire participants' critical awareness - perceptions, cognitions, emotions and knowledges - problematising the fairness of the professional status quo and taken-for-granted practices in the field. This technique revealed *misrecognitions* (Bourdieu 1986) participants' held of existing professional practices.

Langer (2016) claimed the methodological foundations of the qualitative research vignette traditionally included the researcher's reflexivity on the interview, to effect "a means of methodological control on the researcher's subjectivity" (:735). He proposed an alternative method of vignette writing that produced 'thick description' and added interest for readers; written from a position that allowed the reader to participate in the analytic process. Langer (2016) also pointed to Foucault's exegesis of the function of 'confession' being reflected in contemporary 'interview society' – "in which the production of selves and lives is accorded special significance" (Atkinson & Silverman 1997:313; Langer 2012:740).

Understanding the interview in this manner, as a production, required reflexivity that

> the interview is, in the first place, an expression of the joint co-construction of meaning in *this* particular situation with *these* particular interview partners.
>
> (Langer 2012:741 Italics added)

He argued the research interview was an unnatural situation, "always charged with power relations and asymmetries" (ibid:741); in which an 'authentic' self was *collaborated* between the interviewer and interviewee. Yet, as Langer (2012) qualifies, however subjectivities are *performatively* produced,

> does not mean that they are arbitrary and detached from the lived and embodied experience of the research partners

(ibid:741).

Before the start of an interview, each participant completed a set of demographic questions about their family and themself that served as an anchor for contextualising *identity* and establishing critical features of *habitus*. Identity included *insider* (I) or *outsider* (O) status in relation to culture of medicine. Students first-in-family and from the WPA were outsiders. These features were woven into vignettes to cue the reader's expectations of participant *agency* (capability to aspire, or act in preferred ways) in relation to the structural conditions of the new professionalism. For each theme and sub-theme identified from analysis of the data set, I wrote a selection of participant vignettes that, on their own and in juxtaposition, seek to open the dialogical relation of the inquiry to interpretive and comparative scrutiny [See Appendix 9].

Writing data analysis as a vignette; such that a viewer may observe a performance; presented knowledge of the object of study to the viewer/reader to co-interpret, make meaning, and validate: a form of social constructivism (Langer 2012). While no single vignette alone can be expected to validate the research question, a "thick, complex interpretation" (Langer 2012: 742) is made possible through the collective, 'bricolage' effect of vignette arrangement of qualitative findings (Denzin 2012).

The reader is now directed to Appendix 9 to read the triangulated participant vignettes. Next, in Chapter Eight, I present study results as a bricolage of the interview vignettes, comparisons and interpretations; to signify their relevance to the study question.

CHAPTER EIGHT: RESULTS
SOCIAL JUSTICE & PROFESSIONALISM

8.0 Introduction

All medical student respondents to the study recruitment notices were made aware that the subject of the study was ‘social justice in health and health care.’ Participants became aware of the professional requirement for social justice when reading an excerpt of The Charter at the start of the interview process [Chapter One]. The following protocol was followed for classifying participants’ social identity characteristics.

Participants’ identities were represented by a pseudonym signifying medical school, Year level and order of interview. Also collected were gender, domestic or international status, equity status, and insider or outsider relation to the traditional professional habitus. *Equity status* referred to participants’ devalorised social identities; based on being female, black, minority ethnicity, migrant or refugee, Muslim, disabled, low SES, Indigenous or rural origin. *Intersectionality* referred to females of one or more de-valorised social identities presumed to pattern their embodied experiences of social injustice (Crenshaw 1993). Males with *more than one* equity identity were also classified as having intersectionality. Non-equity status referred to traditional ‘social dominance’: being male, white and possessing high socio-economic and cultural capitals. In distinction, social dominance orientation (SDO) refers to a personality variable predicting social and political attitudes (Feather & McKee 2008).

‘Insider’ status applied to participants with high cultural capital for the professions; with a parent who was a physician or academic, or had high cultural tastes and socioeconomic class credentials. ‘Outsider’ status referred to students entering medicine from low socio-economic and culturally diverse backgrounds; not traditional sources of professionals.

In evaluating the results it is helpful to recall the agency-structure predictions of Bourdieu’s theory of student habituses facing field changes to the social contract of medical professionalism; and the zeitgeist of societal complexity and future uncertainty.

8.1 Orientation to social justice praxis

How do medical student participants, of diverse social backgrounds and identities, critically interpret the value of social justice to medical practice?

8.1.1 Responses to The Charter

- The study mainly attracted students with dispositions for social justice.

The first distinction drawn from participant testimonies was orientation to ‘social justice’ as a concept. All but one participant, a white male of high social status, agreed social justice was a valid responsibility for medical professional practice. Other participants, sceptical or resistant to the practice of SA, were similarly male, white or Asian, or low equity identities. No female participant disputed The Charter’s framing of social justice praxis. However, the strongest affective support for social justice was narrated by participants with *intersectional* equity identities; while most outsiders to traditional professionalism reported embodied experiences of social injustice.

In **Table 8.1** (below), perceptions of groups facing unfair social disadvantage in Australian society are grouped by participants' Year cohort, and show remarkable agreement only on the first two nominations.

Table 8.1
Participant perceptions of disadvantaged (equity) groups in Australian society.
(n = number of participants in the Year group.)

Q. 20. Which groups of people in Australian society do you think are not dealt with fairly or not given a 'fair go'?

Study cohort	**First mention**	**Second mention**	**Other mentions**
Adelaide First Year n = 6	Indigenous x 4	Refugees x 2	Elderly War on drugs Poor Homeless Rural population
Flinders First Year n = 13	Indigenous x 9	Refugees x 3 Migrants x 3	Homeless Drug addicted Low English literacy Poverty
Adelaide Final Year n = 13	Indigenous x 7	Refugees x 4 Migrants x 3	Low English literacy Asylum seekers LGBQTI Homeless Poor Mentally ill Islamic Unborn
Flinders Final Year n = 8	Indigenous x 8	Migrants x 4 Women x 3	Refugees Elderly Rural population Working parents Eco-activists LGBQTI

Less International participants with intersectional equity identities reported membership of student associations. International participants with low equity identities joined student groups at a rate comparable to domestic students. Proximity to social need may drive WP students with intersectional identities to be more focussed on study, success, and consequent material and symbolic aspirations.

8.1.2 Reflexive concerns of intersectional participants

- A high percentage of participants had social equity identities

Intersectional participants with migrant and refugee family histories expressed reflexive concern for the health and well-being of *similar* groups in Australian society. For some this was a discourse of existential survival, indelible in collective family memory. The narrative included the gratitude of safe arrival in Australia, but also a sense of injustice and insecurity from racist threats towards Asian identities. Most had experienced social inequities, but also social attainments, and had prosocial professional values that accorded with The Charter.

Resilience in the face of hardship: one participant's mother, was the first Vietnamese refugee to graduate in medicine at The University of Adelaide.

Race-related social distress discourses were absent in white participants whose parents were European and Eurasian migrants. These included A15 (France), A68 (England), F46 (Croatia) and F48 (Romania). While the families of F46 and F48 had experienced material poverty, their migrant discourses had faded after decades of successful living in Australia: they referred to themselves as Australian. All these white European-Australians expressed prosocial discourses of *solidarity* with disadvantaged people. This generation had 'social gazes' of social inequity; theorised to be weaker than the 'born gaze' of their parents [See **Figure 8.1**, below] (Maton 2010).

Olivia (F112) with two equity identities, had experienced discrimination as an Indian Sikh migrant and a woman, when living in England. She seemed conflicted about social stigma. She reflected on her own disposition of stigmatising others, but was ambivalent about the need for GPs to identify a patient's sexuality. However, she believed all patients need to be treated 'at the same level' – referring to unconditional regard and quality of care despite social status. As an equity strategy, she proposed more interpreters be made available in hospital settings.

The main status differences between Olivia and white participants from migrant backgrounds, was skin colour; and being in a transitional state of belonging – not to India, not to the UK, not yet to Australia. A self-concept able to securely empathise with the plight of others, motivated to provide justice and care, may not yet be fully developed; or may be *fractured*, the result of immigrant status insecurity or self-stigma. In an Australian study of 'self-concept', the importance of medical students' psychosocial attributes to academic and professional development was emphasised (Yeung et al 2014).

8.1.3 Reflexive concerns of a privileged participant

In a 'cultivated gaze' insight arises from socialised dispositions and educated ways of thinking and being (Maton & Moore 2010:166). Although upper social class participant James (A68) was an English immigrant, the idea of his family being insensitive to social disadvantage was anathema and insulting. Moral humanist discourse and the state of the world were everyday concerns to his family; a trained gaze sourced to James's mother, a child psychiatrist. Having no equity identity, James may be less likely than other study participants to work as a physician in an area of social need. Yet, having high cultural capital, a physician of James's status could be a powerful ally in support of SA professional practices and policy actions. His engagement in a prosocial health team could confer symbolic capital to reproduce the family's high social standing. James had 'cultivated' knowledge of social justice; a weaker social relation to knowledge claims than participants with *born* (the strongest) or *social* (the next strongest) gazes (Maton & Moore 2010:166). With a *cultivated* gaze; and strong capitals (Bourdieu 1977) and capabilities (Sen 1999), James could become an effective actor in the new professional culture. That is, James could reproduce family capitals while simultaneously participating in professional reforms (Bourdieu & Passeron 1977). [See Gazes **Fig. 8.1**, below]

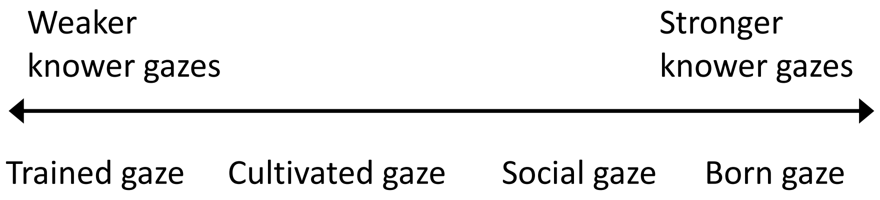

Fig 8.1 Knower grammars and gazes
(Sourced from Maton 2010, Fig. 8.2 p.166)

8.1.4 Dissent to social justice professionalism

Martin (A61) was a clear outlier in the study. He identified as a white, conservative male; an only child, raised in a well-off area of urban Adelaide. He held Protestant European cultural tastes, and free enterprise family capitals. As an 'insider' to traditional professionalism, he had no equity identities. He was the first participant interviewed, and voiced his opposition to social justice. To Martin, only legal justice mattered.

> Martin (A61):
> "A lot of people think that social justice means people can do absolutely anything they like and the community must empower everyone to do whatever they want, which is incorrect."

This discourse upheld the existing social order as just, economically fair, and protected by the institutions of western democracy. Australian Indigenous health was perceived to be generously funded; and patients not complying with doctor's instructions were lacking motivation. This discourse qualifies as neo-functionalist: the doctor's expertise was traded as a demand-led, doctor-patient transaction. No social account was given of bespoke patient needs; and no advocacy considered for disadvantaged patient groups. There was no critical reflection on one's own social position, nor was any sociological imagination of societal structuring of health evident.

However, clear alignment of habitus and conservative political ideology gave Martin's perspectives internal moral consistency. Loyalty and institutional norms had precedence over social justice; while 'affirmative action' or equity breached the inviolability of market economics. The term 'discrimination' he argued, more usefully applied in medical practice to the need "to distinguish between the sick and the well". The investigator claimed social justice discrimination was needed to discern between the medically sick and socially ill, and identify those with equity needs.

Martin (A61) opined citizens had a moral responsibility to look after themselves; and if SA was to be a category of medical professionalism, it ought be instituted as a specialty within the existing structure of the profession. Lacking contextualising experiences of poverty, Indigenous health, social stigmata, or compelling pedagogy, Martin was unlikely to develop a sociological imagination of health. He argued ‘love and charity’ were the virtues we owe the poor. Absent any social relation to disadvantage and personal intention to act for social change, Martin’s gaze for societal, humanistic health knowledges was blind.

Next, I compare Final Year Martin (A61) with First Year Melissa (A12), a Chinese-Australian woman whose father was a rural GP. While Melissa was an ‘insider’ to medical professions, she had equity intersectionality as a woman that experienced anti-Chinese prejudice in Australia. She reported a developmental shift in political consciousness, recently becoming more liberal and shedding her father’s conservative views. Her knowledge of social justice issues in society, and her CC, had expanded through volunteering experiences, and by consulting the online app Tumblir.

> Melissa (A12):
> “I think, like, social justice should be taught in medicine because it’s a really important part… ‘cause if you go through medical school without any knowledge about the social implications of things and like, knowing the different populations, what they need and what they want… then you are going to make a bit of a lousy doctor; because the social aspects of health care is [sic] so important. As I was mentioning before about emotional

> health and the social health, ‘cause they probably make up more of health outcomes than just plain medicine.”

The comparison between these discourses was stark, with some of the difference likely attributable to participants’ equity identities. Remarkable, was Melissa’s early insights and Martin’s failure to acknowledge the significance of social distinctions between patients – the ‘difference principle’ in Rawl’s theory of justice - during his six years of training. As an insider, Martin (A61) was likely to reproduce the traditional medical professionalism; yet Melissa (A12), an insider with equity identities, supported medical professionalism reform. The other important difference between the two insiders was *ideology*; one conservative, the other progressive.

8.2 Sociological imagination of health

What are the characteristics of participants having a ‘sociological imagination’ of health? ‘Theory after’ the study (Meyer & Ward 2014) needs to account for the observed variation in participants’ sociological imagination of the contexts of health production.

8.2.0 Sociological imagination: A hierarchy of knowers

Extending Bernstein’s studies of critical structuring of pedagogy, Maton (2010, 2014) noted *which* and *whose* knowledges matter (convey meaning and confer legitimacy) in building cumulative knowledge across a course. He observed the hierarchy of legitimate *knower gazes* [**Figure 8.1**, above].

This finding supports a social realist perspective of curriculum that contests the traditional order of pedagogic dominance, and valorises social epistemologies of those closest to the social conditions of health production. In the study, participants' demographics allowed approximation of relational identities to the social contexts of health (equity identity) and the profession (insider /outsider).

Maton's graphic depicting graduated strength of 'knower grammars and gazes' was supported in the study from evidence of a gradient of meaning making of social inequity and health outcomes related to participants' social identities and discourses. Having mixed insider and outsiders identities, in the case of Melissa (A12), conferred a critical gaze of medical practices and of bigotry in Australian society.

8.2.1 Sociological imagination: **Characteristics of participants**

In the theoretical framework, sociological imagination (Mills 2000) is a precept of critical consciousness; allowing the participant to evaluate the social impacts of power in society, and accordingly, the potential health impacts of social injustice in local, national and global contexts.

Safiya (A14), with four equity identities (female, ethnic minority, LGBQTI and Muslim), was the most vocal of all study cohorts. From her multiple social locations, Safiya articulated an insightful, critical sociological understanding of health and health care in Singapore society. Her strong social capital likely stemmed from lived experiences as a marginalised youth turned political activist; and from voluntary service learning experiences in a Singapore psychiatric facility and among a low SES community. Popular discourse of Singapore's remarkable economic success and wealth may help to obscure lifeworlds of poverty at the lower end of a social gradient in this conservative, capitalist society.

With her consent, Safiya's interview ran over an hour while she intently detailed her observations and ideas; venting her sense of injustice at the health inequities she had witnessed in her family and community. Safiya (A14) reflexively knew the social reality for disadvantaged youth, as a peer identifying with stigmatised Malay and LGBQTI groups in Singapore society. Such groups faced a conservative policy and policing environment. Rigid, adverse and hierarchical attitudes toward minority groups by professionals, including physicians, unfairly stereotyped their behaviours and resulted in reduced access to health resources. This misrecognition of health ontology was a further cause of distress and illness; a source of symbolic violence (Bourdieu 1970) commonly termed 'blaming the victim.' Poverty in Singapore society, Safiya observed, had compounding negative outcomes on adult health literacy, health care access, health, and survival. Safiya (A14) had a born gaze and a social gaze [**Fig. 8.1**] (Maton 2010) of contexts of social inequity in her community.

8.2.2 Sociological imagination: Equity as a conceptual lens of social accountability

A. Universal approval

Likert scale survey questions [Appendix 4, Panels 4 -7] revealed *all but one* participant 'strongly agreed' to medical education for social justice, student activism for social justice, and global actions to reduce social inequities affecting health.

B. Threshold concept

Equity in clinical health care was a threshold concept for participants in all study cohorts. Few were unaware of the term, but those who could define ‘equity’ did not necessarily comprehend its implications for practice. Participants with social equity identities were more capable, with Safiya (A14) most capable.

C. Conceptual errors

Common conceptual errors in participants’ constructions of the care owed to socially disadvantaged patients were;

a. restricted to the ‘downstream’ context of health care, and

b. equated *standard* of care with *fairness* in health care. Some stated the care owed all patients, regardless of social identity, was ‘the same’; mistaking non-judgmental care with justice.

D. Discussion

Equitable care requires physician identification of patient social identity; to evaluate social justice needs that may require *more* care or *equitable* resources. The patient’s social identity is a clue to semiotic lifeworld stressors that may require more detailed history-taking (listening) to uncover (Rafieian 2010).

Identification of patients’ social identities was considered unnecessary by some students, and discriminatory (in a negative sense) mainly by First Years. This was observed in response to general practice question (Q.7, below) on patients’ sexuality. In addition, some seemed to understand the *concept* of equity but were not familiar with the terminology; while one participant (A61) admitted to knowing equity only as a banking term. These findings are consistent with ‘knowledge blindness’ (Maton 2014); and support a call by Sharma, Pinto & Kumagai (2018) for teaching the ‘social determinants of equity’ (SDOE) rather than SDH in SA medical education.

Next, I provide an interview extract from a participant with *preliminal* understanding of health equity; then a participant with *sociological imagination* of health equity; and finally, a participant who connected equity to professional *responsibility* – the duty to act.

Kerry (F41) voiced a discourse that viewed fairness as equal *standard* of non-judgmental health care.

> “So, I think that it doesn’t matter what your background is, or why you’ve come to needing health care… you will be treated in the exact same way. So, whether that’s to do with the resources that are needed to treat you… it’s the same patient, no matter who they are, that’s what you will use for them. It doesn’t matter if you personally have a problem with someone’s race, gender, SES, ethnicity, religion, any other category, you need to put that aside and the way you act as a physician to that person is the same.”

The discourse provided by Hannah (F42), an International participant with intersectional equity identities demonstrated a sociological imagination of health. Hannah had worked in a Los Angeles (LA) youth centre and understood the health-illness dialectic resulting in drug and alcohol problems for deprived youth. She understood these behaviours as unhealthy coping strategies responding to the chronic stress of surviving living conditions in inner LA. She applied this understanding to psychiatry research into smoking behaviours of gamblers.

While unfamiliar with the term ‘equity’, she understood the concept very quickly once it was explained. This may be attributed to situated learning in a disadvantaged social context.

Nate (F46), who clearly understood equity, had gained sociological imagination of Indigenous health during a longitudinal clinical placement. He inverted the equality-equity concept to interrogate the purpose and motivation for professional responsibility.

> “You could treat everyone equally the same, better or worse wouldn’t matter, because at the end of the day, you’re getting a pay cheque.”

The level of involvement in SA actions participants perceived as professional responsibility is considered next.

Interview Q.7

An Adelaide general practitioner knows that about 10% of the population is homosexual, but she is not aware of any homosexual patients in her practice.

What could be the problem and what could she do to change the situation?

8.2.3 Sociological imagination: Patients with stigmatised sexuality

Interview vignette Q.7 (above) problematised the identification of LGBQTI patients attending a general practice setting. Sexuality may not be disclosed by patients presenting to general practice; but does it matter, and why?

This vignette aimed to provoke participants' problematising of the health-illness dialectic of social stigma and self-stigma; and how these factors affected access to quality health care. The distress of sexuality stigma can result in psychopathologies: mood disorders, drug abuse, obesity, and self-harm; illnesses a SA physician is expected to diagnose and manage. Without reflexivity, 'social distance' between heterosexual physicians and LGBQTI patients can be a barrier to effective communication, diagnosis, and access to health resources.

A. Identification of LGBQTI patients

A First Year discourse found this vignette perplexing, and suggested the GP showed negative discrimination by wanting to identify patients' sexualities.

Olivia (F112), an Indian Sikh woman, experienced racial prejudice in U.K. and migrated to Australia. She had friends who identify as LGBQTI and believed they would find it strange for a medical practice to put up a poster to welcome the community.

> "I don't know how I feel about that because that's essentially discriminating you know, people in the populations, so it's like, almost like saying… 'Only…' I don't know, I don't know how to say it… I just… I just don't think she needs to change the situation. I think it could be word of mouth and say, you know, 'It would nice to have people like that in here', but even then, I'm confused about the question. Is it even a situation…? I think they're all… we're all the same people, regardless of what your sexuality is. I don't think it matters."

The perceptual schema here was *pre-clinical*; suggesting the participant's association of a patient's identity with health risks was not yet in place. Yet we were talking about social justice. The ability to integrate horizontal and vertical discourses into professional praxis was not expected of First Year students; yet this question make sense to those with critical consciousness of social inequalities, and others socially proximal to LGBQTI sexualities.

Essentially, a lay perception of equity viewed the practice problematically;
a. identifying a patient's sexuality was unfair discrimination, and
b. 'discrimination' was a social justice problem rather than social justice solution - a practice of *problematising* the context i.e. *positive* discrimination by making the *subject-object move*. It appeared an example of a pre-liminal concept that required more critical health knowledge of the social structuring of the Other's lifeworld to fully realise the concept.

B. Stereotypes of LGBQTI patients

The reflex of many Final Year participants responding to the interview question on sexual identity was to stereotype LGBQTI patients by the demography of their sexual health risks.

A vertical, biomedical, and 'recently learned' heuristic of the sexual health risks of 'men who have sex with men' (MSM) informed one First Year participant's answer (below). She first explained her understanding of the question, and acknowledged stigma as distributing unequal access to health care.

Pandora (F111), a Chinese woman from Hong Kong, with a Bachelor of Medical Science from a Sydney university, had been four years in Australia.

> "What's the problem? Yeh, because even though there are so many homosexual people in society they are just sceptical to come into the clinic and seek help, so there is a problem. How can you encourage homosexual people to come, yeh? Unless you can… unless you can get rid of the discrimination, like sitting in peoples' minds towards homosexuality… we should expect them to come.
> Homosexual people are more susceptible uhh, in some kind of diseases. Because I just attend a lecture yesterday. Some kinds of disease like syphilis… and men having sex with men have a like, higher HIV rate in this field, so the way they have sex or the way that they interact makes them more vulnerable to some kinds of disease; and that's a fact not that we can blame, just the way that they live they are more vulnerable."

While the lecture was only yesterday, Pandora's iconic First Year perceptions will need to be refined. Her take-away message was behavioural and biomedical.

It suggests the semiotic structuring of; a. *concepts* for a 'sexuality and health' topic need to be more holistic; to include mental health related to sexuality (semantic *density* code) and b. *contextual* knowledge of LGBQTI lifeworld inequities (semantic *gravity* code).
Cumulative building of sociological knowledge of human difference, social capital, structural vulnerability and mental wellbeing need consideration in pedagogic planning. These SDH, allied to the value of social justice, underpin critical, ethical phronesis of patient problems.

C. Psychological needs of LGBQTI patients

A white Australian, gay, male, Final Year Flinders student (F46); and a female American Sub-continent Indian, Final Year Flinders student on psychiatry placement (F42) were among the few participants to acknowledge the *psychological needs* of LGBQTI patients related to social stigma and self-stigma. A lived or embodied knowledge of oppressed sexuality was provided by Safiya (A14), a young woman with intersectional equity identities.

Safiya (A14) has lived with the oppression of homosexual illegality in Singapore, and told how young gay people's attempts to promote societal integration and freedoms for the LGBQTI community were officially rejected by the Government. She gave a psychological account of the initial uncertainty that young people may have about their sexual identity; the self-stigma, and fear of disclosure to authority figures, that hinges on trust in physician professionalism. She advised physicians to read the patient's body language for cues to sexual orientation; to enquire about relationships, distress and social support; and be wary of parental and religious coercion.

D. Human rights of LGBQTI patients

Safiya (A14) spoke dialogically, as a fair-minded physician might, about others' sexuality; par excellence, a semioethic discourse, that recognises the singularity of life.

> "Just because I don't support it, I don't have to be against it. And I feel even if you are against it, you shouldn't take active steps to make a person's life *worse*. I think in most religions they do say you should treat people fairly even if they are from a different religion. Just because, they are all like your brothers and sisters… together as one… and I

> feel just because a person is gay, that's only one part of them, so even if you don't support their being gay, doesn't mean you don't support them being a human being; having human rights."

E. Sociological imagination of heterosexual dominance

Social dominance in Singapore society was portrayed by First Year participants from different social strata of Singapore society; and social dominance by China in Hong Kong was expressed by a Hong Kong resident

Kim (F19), was a Chinese, male, heterosexual, political science graduate from Singapore. He saw structural inequalities that favoured families over single parents, the national economy over welfare, and stability for the conservative, patriarchal *status quo*. Despite the illegality of homosexuality in Singapore, an informal 'don't ask, don't tell' rule softened the structural violence for LGBQTI youth. Kim believed generational change in Singapore would endorse LGBQTI rights.

For Safiya (A14) and her LGBQTI peers, the distress of oppression and stigma, and the struggle for social recognition, perpetuated harms to their emotional and physical health.

Jade (A16), born in Singapore but raised in Adelaide, self-identified as Christian and heterosexual. Her education and academic family background were relatively privileged; signifying an insider with low equity identity status. In interview, she followed a critical line of reasoning to reach a practice decision about identifying LGBQTI patients.

Jade (A16)

"I'm quite lucky in that I've not really seen a lot of discrimination but I know that in certain areas, certain people are opposed to it and, I mean, obviously that would be very difficult for people that are feeling attacked by that or who are being discriminated against in society."

Interviewer

"Could it impact on their health?"

Jade (A16)

"Yes, certainly. I mean, yes, not only mental health but you see people that are being physically attacked for these kinds of things, which is… "

Interviewer

"So, it is more important to see - *to know* than not to know?"

Jade (A16)

"Yes. I mean, I suppose so. I mean, yes. In that context I would like to know because I would want to understand what's happening or, you know, if… I mean, particularly if they're experiencing some mental, you know, unhealthy thoughts or feeling depressive thoughts…"

Jade's statement revealed that a First Year student could employ sociological imagination to critically analyse the health-illness dialectic for stigmatised sexuality. While Jade (A16) indicated that lesbians 'coming out' at her all-girl Australian school were embraced; Kelvin (F44) claimed there had been generational change in sexuality stigmatising by professionals.

F. <u>A generational change discourse</u>

In this discourse homosexuality is now more accepted in society that it was, and physicians of our generation are more accepting of diverse sexualities. Kelvin (F44), a white, Canadian male from a low income, rural background, expressed some ambivalence about SA as a physician practice.

> Interviewer:
> “And why would a patient be uncomfortable about disclosing that they are homosexual?”
> F44:
> “Well, I’m hoping that they wouldn’t, but they would have had; I mean, say they’re thirty-five years old… twenty years ago when they were fifteen and brought it up, there was a different practitioner, they might not have been treated well. So, they’re hesitant to bring it up. My being a bit younger and not having grey hair might help, hah! I mean it… socially its becoming much more acceptable in the last, … actually really rapidly in the past few years… less sorta stigma and more sorta okay with letting people know that.”

The generational claim that older physicians were less trusted by homosexual patients, does not exclude relevance to the doctor-patient encounter of *self-stigma* and *structural stigma* (Hatzenbuehler & Link 2014). As with the anxiety and uncertainty perceived by participants when approaching Indigenous patients, the inter-cultural space with LGBQTI patients warrants a critical professionalism pedagogy to do justice to a socially devalorised group.

G. Social accountability to patients of diverse sexuality

Biomedical accountability to sexual health risks rather than SA to LGBQTI patients’ stigmatised experiences of their sexual identity was a heuristic of this inquiry.

Mainly, First Year participants held false perceptions of the importance of patient identity to health; and preliminal concepts of identity discrimination as a professional good. Despite perceptions of generational change in professional attitudes to sexuality, most participants lacked sociological imagination of the invisible suffering experienced by people with LGBQTI sexualities in society. However, a guided discussion with First Year (A16), of the harms of social stigma to mental health, led to her conviction that identifying LGBQTI patients was important to good medical practice.

Whether *mental health related to sexual identity* was a threshold concept (Meyer & Land 2005) for participants was contestable. The cognitive work of reflexivity on stigmatised sexuality, and growth in CC, may be more important to understanding this societal health-illness dialectic. This was most conscious to those participants with lived experiences of devalorised sexuality and its effects on mental health. A ‘recently learned’ heuristic matched patients’ homosexuality with its biomedical (disease) relevance, attesting to dominance of biomedical imagination of the formal curriculum. A generational change discourse, however true, does not exclude patient *self-stigma* and *structural* stigmata as causes of lower access to quality health care. Ethnographic studies demonstrated how normative understandings of sexuality are produced in a medical school hidden curriculum (Murphy 2016).

In discussion, a pedagogy for critical medical professionalism should outline the importance of *identification* of patients’ gender, sexuality, indigeneity and intersectional equity status: for accurate empathy and holistic management of ‘the Other’. Pedagogy should aim for student reflexivity on heterosexual privilege (Pease 2010); making visible the emotion work, distress, and risks of LGBQTI persons suffering *illness* in addition to disease.

H. Reflection on the sexuality interview question

Interview question seven (Q.7) worked well to discriminate medical stereotypes from more holistic insights to the psychological vulnerability people with stigmatised sexual identities can face. Psychological vulnerability from public and self-stigma of LGBQTI social identities can produce patient anxiety and reduced trust when attending health services. Poor identification of LGBQTI patients in medical practice can lead to mis-diagnosis and non-treatment of modifiable adjustment, mood and substance use disorders; and partner relationship problems. Chronic illness, disabling mental illness, and suicide can result. Global instances of political oppression of diverse sexualities, and reports of hate crimes, add layers of symbolic violence to the lives of young people with LGBQTI identities. Sexuality-related physical health problems are also important to identify, treat and prevent. Social justice to the health of this community requires that physicians and practice staff have contextual knowledge and skills, including the practice of relational justice for those with oppressed identities; to maximise access to appropriate, holistic health care.

8.2.4 Sociological imagination: Aboriginals & Torres Strait Islanders

A. A majority of participants agreed that Aboriginal & Torres Strait Islander (or Indigenous) peoples are the most disadvantaged groups in Australian society; a perception that accords with health statistics (See **Table 8.1**).

B. Participants also nominated the Aboriginal and Torres Strait Islander community as the most disadvantaged group in the Australian *health care system*.

C. Linguistic disadvantage experienced by NES migrants and refugees was a clinical problem for health services students when learning to take a patient's history. This concern was expressed by a majority of participants from NES backgrounds.

D. No specific questions on Indigenous health were structured into interviews, but arose spontaneously in the context of discussion of inequity and participants' clinical and service learning experiences in Australia.

E. Perceptions of Indigenous disadvantage

Just one Final Year participant, Martin (A61) was ambivalent of the claim that Indigenous people are discriminated against in health care. Instead, he perceived equity in health care *resourcing*. His discourse problematised Indigenous health *behaviours* rather than inequity of health determinants. Martin self-identified as a white, conservative, Australian-born male, who received no training in an Indigenous community.

> Martin (A61):
>
> "Well I know Indigenous Australians have much poorer health outcomes. I'm not sure if… my impression is they are not discriminated against in health care. They receive a whole lot of extra support, in fact. So, I wouldn't say they are discriminated against in health care, personally. I may be wrong but that's just…"
>
> Interviewer:
>
> "What about in distribution of health care, because they often live in more remote areas, and often traditional Aboriginal people can move around quite a bit. And they also have language… you mentioned language problems before; some of them are English speakers as a second, third or fourth language. Hm."

> Martin (A61):
>
> “Well, a lot of things increase the difficulty of providing services to these people. I would like to think that there’s no discrimination involved, but that’s not necessarily true. And I think among some but not all practitioners there is… there probably is stigma attached to um, to a lot of Aboriginal people but especially if they also have mental health issues and substance issues.”

Despite contingencies in the phrasing of his response, Martin (A61) alluded to a deficit discourse that stigmatised Indigenous people by visible, behavioural discriminators. This stigma was understood to be unjust to the contexts of the stressful realities of diverse Indigenous lifeworlds, and historical harms of colonisation. Martin instead referred to the impact of difficult patient behaviours on health service perceptions; yet, difficult patient behaviours are not confined to the Indigenous population. The ‘extra support’ received by Indigenous groups accords with a PHC or equity approach, which has yet to deliver equality of health outcomes.

Despite additional funding, Indigenous health improvements have been slow, and Martin’s comments suggested other (agentic or motivational factors other than structural) may be responsible. Left unsaid: Australian conservative politicians regard maintenance of remote Indigenous communities economically untenable. This political pragmatism is at odds with Indigenous spiritual concepts of health related to the land, the want of a legal treaty, and United Nations sanctioned human rights (Reynolds 2021).

F. ‘Becoming to know’ Indigenous health

Several Flinders and Adelaide Final Year participants were critical of both pre-clinical training and the variability of professional role-modelling of respectful, transcultural communication. They shared experiences and insights to the necessary adjustment of habitus (Bourdieu 1986) to the contexts of Indigenous health care.

Nate (F46) reported a strange practise in a Northern Territory Indigenous community where he trained. Poor living conditions put Indigenous diabetics at high risk of limb gangrene and amputation. Amputated limbs were stored in a cool room – to be buried later as a whole body, in accord with cultural custom. Nate recognised the spiritual importance of this health system practice; but seemed unsure of the value of this justice practice (new knowledge) to diabetes care. Culturally appropriate health care that respected custom and reduced fear of amputation could improve clinic attendance and subsequently reduce Indigenous diabetes severity, need for amputations, and premature death.

In discussion, I consider how critical reflexivity on cultural practises may produce clarity of meaning for Indigenous diabetics, and improve health outcomes.

G. <u>Strategic ignorance and Indigenous health care</u>

Critical and constructive attitudes were recorded to compulsory learning of Indigenous cultural competence.

Ingrid (A63), an outsider with prosocial with intentions to work in an underserved area, talked about her peers' pre-clinical attitudes to compulsory learning of Indigenous cultural competence in an overloaded curriculum.

> Interviewer:
>
> “So, how do you think a lot of your peers treated Indigenous health when it came up in the course?”
>
> Ingrid (A63):
>
> “To be perfectly honest, they treated it with quite a bit of contempt, because it was just another lecture we had to go to, and it wasn’t even going to be in the exams!”

Hannah (F42), an International (SE Asia/ USA) participant with intersectional equity identities, was reflexive but sceptical about the cultural sensitivity training she received.

> Hannah (F42)
>
> “I really appreciate that Flinders has done so much to give us all this information about it. It’s still just the tip of the iceberg because all these features are deeply embedded in our culture and our country; so, although Flinders has done a great job to fight that, it’s kind of deep seated within who we are, so it… it’s so difficult to change that… perception, I think.”

The strategic attitude to learning described by Ingrid (A63) was common in pre-clinical medical students (Becker et al 1961). However, ‘strategic ignorance’ is the opposite of knowledge when that knowledge sits uncomfortably with the learner.

McGoey (2012) referred to strategic ignorance as,

> obfuscation and deliberate insulation from unsettling information, the mobilisation of unknowns in a situation in order to command resources, deny liability in the aftermath of a disaster, and to exert expert control in the face of both foreseeable and unpredictable outcomes
>
> (:555).

Not yet reflective of the capabilities they will need as competent graduates, students can focus on immediate, academic goals. Yet strategic ignorance can account for a further, critical reason why learners relegated the uncomfortable truths of Indigenous health: it may exist covertly among students resisting cultural sensitivity training.

Resistance to others' cultural norms may also be accounted for by *ethnocentrism* – in which

> individuals hold rigid attitudes and behaviours toward ingroups that are different to attitudes and behaviours with outgroups
>
> (Neuliep 2012:5).

Increasingly, *mindfulness* is proposed as a means to "negotiate meaning with strangers" (Haynes 2014:4), and improve communication. The actionable social determinants of Indigenous health need to be structured into an integrative pedagogy; as produced in the semantic design of LCT (Maton 2010).

To avoid the perception that medicine is solely devoted to disease management in individuals, medical educators may need to clarify to students before entry to medicine, that learning about social, cultural and global environmental impacts on the public's health is essential to contemporary practice.

H. Social justice role modelling

Final Year participants at Adelaide and Flinders received compulsory Indigenous 'cultural humility' training. A 'cultural safety' approach was now considered more appropriate and effective (Dwyer et al 2016).

No structured study questions were asked about this training, but participants spontaneously voiced

a. admiration for their Indigenous trainers,
b. dissatisfaction with the expected gain in capacity for Indigenous cultural competence,
c. dissatisfaction that advocacy skills for improving Indigenous health were not taught.

Nate (F46) witnessed role-modelling of racial intolerance when a hospital-based physician directed a student, saying; '*Smell that Aboriginal over there? Go and take his history.*' This incident recalls the physician pitfall of moral aversion to 'the sights and smells' of pathology or mistaking the patient for their condition; a discourse regarding the doctor rather than the patient a victim of injustice (Skarlicki et al 2013). Yet, Matt observed other physician role models communicating with Aboriginal patients in their own language.

Alison (F11) a white, Australian woman, Arts /Science graduate, and outsider to the profession, spoke about the problem of trust in medical professionalism that she felt The Charter responded to.

> Alison (F11):
> "I think in some areas, for example in Indigenous communities, there wasn't that trust there to begin with, particularly because Western medicine is very white dominated and that can… it has a lot of cultural baggage attached to it. So, I think that… it's something we need to think about because of problems that are occurring, because of problems we've never resolved previously anyway."

Oblique reference to a professional culture of white dominance places an historical 'colonising' discourse central to the failure of the social contract for Indigenous health. Perceptions of Indigenous mistrust in medical professionals, communicated through the hidden curriculum, may also produce 'approach anxiety' and uncertainty in students when treating Indigenous patients.

The idea of *mutual recognition* (Honneth 1992) of 'the cultural Other' or 'stranger' in pedagogy for SA professionalism, may prove useful to reducing the anxiety and uncertainty that can accompany health worker interactions in the intercultural space (Neuliep 2012). This integrative idea is also encompassed in semioethics, the joining of signs and values (Petrilli 2014), to recognise the global interdependence of lifeforms.

8.2.5 Sociological imagination: Equity as a conceptual lens of health production

The final interview question invited participants to imagine they were doctoring in an isolated Australian community with the usual ecosocial concerns of modern living. The question was intentionally placed last; to cue participants' imagination for SA actions from critical theory concepts scaffolded during the study. What community-based actions could they suggest to *improve the community's social health*?

A. <u>Perceptions of socially accountable *health production*</u>

The idea of health production as a socially accountable practice was posed.

> Interview Q.6
>
> Since social inequalities can be improved, should doctors also learn to how to advocate for improvements in health for socially disadvantaged people in society?

Few participants (most notably, Flinders Final Year) could propose appropriate SA actions they would implement as a community resident physician.

Matt (F47) recalled how his family began a number of 'club' activities in the remote farming community where he was raised; and understood the value of these activities to communal mental health. The concept of a men's shed (F47) denoted a social meeting space for men with depression; common in farming communities experiencing social and financial distress due to climate change and drought. He was also conscious of how masculinized structuring of the rural lifeworld likely harmed LGBQTI residents.

Age-group related activities suggested for improving social health included diet and exercise; reflecting common physical health preoccupations of young, middle-class female participants, related to global social media and popular culture.

Middle class cultural health solutions were prioritised over SDH or SDOE solutions for Indigenous patients. Interestingly, only non-Australian Asian participants had a perspective of health system mismatch to ATSI health needs.

However, student leader and law graduate Julie (F45), advocated community consultation; and suggested categories of *local*, *national* and *global* SA actions physicians could engage in: a political model of health equity. Julie was building considerable cultural capital (as lawyer becoming physician), and applied a *cultivated gaze* (Maton 2014) to the organisation of action for social change, aimed at effective resourcing of social health justice.

B. Perceptions of socially accountable activism

Support for activism by the medical professional association. In interviews, participants discussing the Australian medical profession's health activism, approved of the AMA President's support for evacuation of sick children in refugee detention on Manus Island. Student leader Julie (F45) believed the professional body could be *more active* on national social justice issues affecting health.

Few participants displayed sociological imagination of the *systemic* structuring of SA discourses in Australian health. Julie (F45) problematised the limitations imposed on physicians by economic distribution of health goods and services, as guided by their duties to the funder, the Commonwealth of Australia. In essence, this discourse highlighted frustration at the absence of an effective feedback mechanism to policy makers, to signal need of policy reform to fund systemic social drivers of health outcomes (SDH).

No participant showed critical awareness of wasteful funding on expensive new pharmaceuticals; nor fraudulent research claims for drug efficacy and safety (Jureidini & McHenry 2020). Yet, speculating on the provenance of The Charter, Matt (F47) voiced a philosophical question about the purpose and moral compass of the medical endeavour.

> "I guess there was a situation that meant 'let's try and think about what it is that doctors are doing'; are they just restoring health and promoting longevity or are they perhaps doing something else?"

Reflexivity on the neoliberal structuring of health determinants was voiced;

> Kerry (F41);
> "we've got the economy being portrayed as being... you know… the world's going to fall apart if the economy is not strong… I just think, um, I just think the idea that we base how well we are doing… how well our society's running based on our money, our wealth, in terms of… money… then that's, that whole idea is flawed."

First Year participants' ideas of SA actions were mostly centred on the doctor-patient relationship; inter-personal communication skills, empathy and humanism, and linkage to support services. This view reflected the moral concerns of their Year level of medical education, a view that regarded SA, at least in part, the responsibility of the doctor. Some discussed referring patients to welfare agencies or allied health professionals.

The voice of a hidden curriculum was heard from Final Year participants frustrated by patients' lack of science knowledge (F44) and knowledge of statistics (F46); unfairly responsibilizing the patient.

8.2.6 Sociological imagination: Social accountability to low capability patients

A. The interview question

In the study, Interview Question Three (Q.3) inquired how participants perceived the failure of some patients to adhere to the physician's medical advice.

Interview Q.3

Many doctors experience 'learned helplessness' when treating people who continue to engage in unhealthy behaviours despite receiving good advice for keeping healthy.

What is your perspective of this problem?
What are the fundamental causes of this problem?

Participant discourses variously referred to,

1. Humanitarian sympathies, often related to the participant's family background
2. Practical concerns of advocacy for disadvantaged patients,

3. Emancipatory justice for patients or groups that ‘fall through the gaps’ or have unmet needs in existing (downstream) contexts of the health system.
4. Distributive justice to rural and Indigenous communities.
5. Education as SA.
6. A counter discourse to SA that responsiblizes all patients as equals.
7. Dominant and critical economic discourses.

B. Discourses of humanitarian care

A discourse of humanitarian care, involving reflexivity on habitus, can underlie prosocial motivations.

Violet (A13), the daughter of a Vietnamese refugee that settled in Australia, talked about the unfairness of Australia’s detention policy to the health of refugees and asylum seekers. She had travelled to Vietnam and was shocked by the poverty she witnessed there.

> Interviewer:
> “The way that migrants and refugees are treated – is that a social, a political issue, a legal issue…?”
> A13:
> It’s actually ended up a political issue. It’s…I feel that its less of an economic issue. Perhaps it’s a social issue as well. Um, I think mainly political… because policies allow for detention centres, and their time in detention centres is indefinite as well.
> Interviewer:
> “So, you feel it’s unfair?”

> A13:
>
> “Yeah… but I’m not sure what’s caused health care to be completely denied them. I’m not sure if that’s because of the guards or policy that’s absent, or…”
>
> Interviewer:
>
> “So, they’re not treated the same as Australian citizens. Why should they be treated the same as Australian citizens?”
>
> A13:
>
> “Because everyone should have the same access to healthcare, so they have equal opportunities to improve their lives and live their life to a natural humane standard.”

Beata (F43) and her family migrated to Australia from communist eastern Europe. She advocated for improved health justice for patients with mental illness, for migrants, and rural populations. Here, she expresses reflexivity on her own journey, and what motivated her social justice interests.

> “I think its valuing other people, um, not just yourself and your aims in life; and realising that all individuals are important, and contribute to society in some way or another. I think a lot of the time, personal circumstances can provide a lot of motivation as well, so if someone’s been brought up in a situation of social inequality, that could make them want to provide change. Or if they experienced somewhere, like being on placement somewhere where they’ve experienced it.”

Beata’s discourse depicts a humanist philosophy informed by critical reflection on social purpose in people’s lives, and reflexivity on her own career path. She intuited how people, patients, or students situated closest to social inequality gained greater contextual knowledge of social needs. This observation of the educational field aligns with Bernstein's delineation of horizontal discourses (knowers) and vertical discourses (knowledge); and to Maton & Moore (2010) as 'knower structures' and 'knowledge structures' (:162). These are two 'analytically distinct' structures that shape intellectual fields (ibid).

Recontextualising the education field then needs to account for 'whose social is speaking' (knower code) (ibid:161). The critical questions this code poses for curricula and pedagogy include; Whose perspective is it? How is it generated and legitimated? (Maton & Moore 2010:161).

C. A discourse of practical concern

A discourse of practical concern for patients disadvantaged by lack of SDH sought to clarify the physician's role in meeting expectations of SA.

Beata (F43), a white European woman, previously a pharmacist, undertook a medical elective in the Solomon Islands. She observed parents arrive late to health services with dehydrated children, rousing critical reflection on diverse patient needs.

> "It really made you want to, you know, start up a whole education campaign all over the place, but… so having experiences like that make you more aware of the situations people may be in, like they might not have the education to realise that they need help at certain points. So that certainly changed the way I see things when I communicate with patients."

Social advocacy arose from the participant's situated learning, in a post-colonial society, of the real world consequences of a physician's actions (or inaction) for child health. There was first, surprise - at the unexpected reality and unfairness of inequality - then transformation of consciousness with powerful motivation, and transfer of learning to other contexts of health care.

Alison (F11), a white Australian woman with strong justice emotions, demonstrated sociological imagination of the difficulties disadvantaged people face attempting to change health behaviours against *macro* and *micro* structural obstacles in their social environment. The difficulty she saw patients face was a cognitive limitation in dealing with these distinct *paradigms* and deciding *which* of these they can control.

> "I think that's the entire reason that a lot of people go into medicine, because we want to help people, and I think that it is our responsibility to try to do that even when someone doesn't want to change."

Alison saw the physician's role as confirmation, clarification, motivation, and activation of human supports. 'Help' was configured in her discourse as emancipation of low capability patients from structural oppression, or empowerment. However, the element of coercion needs to be tempered by respect for autonomy and advocacy of structural change, to avoid *responsibilizing* the patient.

D. A discourse of emancipatory justice

A discourse of emancipatory justice for patients that ‘fall through the gaps’ of health systems sought social justice to improve health outcomes.

Safiya (A14) visited a crowded, poor area of Singapore, and talked about her perceptions of low access to health care among residents.

> Interviewer:
> “So, you think the health system can make false assumptions about people’s capacity to deal with information?”
> Safiya (A14):
> “Yeah, and I think there is also…, another layer of it would be the *fear*. They know they’re not feeling well and you know they’re not great, but some of them I guess, are thinking if I do actually go to a doctor, I will be diagnosed with all these problems. Most people have heard of diabetes, high blood pressure, high cholesterol, but they don’t exactly know what it means and how it affects them; and I think in some ways it scares them… because of some things people say: ‘Oh, if you don’t take care of your diabetes you could get your leg cut off.’ ‘Or your arm cut off.’ That’s the fear and the stigma that sticks to them.”

This was not a discourse of mistrust in the medical profession, but one of symbolic violence among a socially disadvantaged population. Fear and stigma of disease is related to needs; driven by poverty, poor education and health literacy that impaired capability to mobilise resources and seek timely access to life-saving screening and health care. Adults in this Singapore community avoided seeking the health care they needed if they perceived the outcome may adversely affect the family income and survival. Similarly, low health literacy affected prevention strategies.

> Safiya (A14):
>
> “You have breast cancer awareness, where they have free mammogram scans and things like that, but I think just having these campaigns, its… it’s not really enough, I feel. Though they have it, and people do attend um, some people may not be aware of what it is about. I can hear, ‘Oh, they’re having free breast cancer scans for women above a certain age’ and I’m just ‘Oh, okay’ but to me, I’m like… ‘I don’t have breast cancer’.”

This dialogical insight portrayed poorly educated, low socioeconomic status women thinking breast cancer screening was only for women with established breast cancer; not for them.

When visiting Kenya, African-Australian Hope (A611) observed a society in which corruption flourished in the hospital, and patriarchy meant a sick woman could be represented at the clinic by her husband. Hope expressed the takeaway message in both personal and dialogical grammar.

> Hope (A611):
>
> “Medicine in Kenya is very paternalistic. You know whatever doctor says, you do. The doctor is virtually god. You in engage in a discussion with the patient about ‘What would you like to do?’ but they almost tell you you’re not doing your job, ‘cause… ‘Why are you asking me?’”

Hope learned about disempowerment of women by patriarchy, and was incredulous at the unequal social position of women in Kenyan society compared to Australian society. Their lack of consciousness, autonomy and control was clearly portrayed in Hope's perceptions. However, the challenge for Hope may be to critically observe how more subtle forms of patriarchy in multicultural societies impact on women's health outcomes; and decide what forms of emancipatory advocacy she could support as a physician.

E. A discourse of distributive justice

A discourse of distributive justice sought SA for populations with high, unmet downstream health needs, located in remote or disadvantaged social contexts.

Violet (A13) became interested in social justice during high school, and joined the Rural Health Alliance – a health professions group convened external to the formal curriculum. She discussed her impressions of the purpose of The Charter.

> Violet (A13)
>
> "It's basically a set of guidelines, just stating that they need to address this issue of better equality in the distribution of healthcare. So, um, its goal is to achieve equality so I suppose, avoiding discrimination based on gender or obesity or social status. I think specifically in relation to Indigenous Australians; their health is about like developing country standards. There's a lot of issues with that especially because, I guess it's hard to get doctors to move to rural areas, to rural Australia as well, and getting doctors to stay

> there, so sustainable health care and resources needed to treat, and like monitor the health of these people.“

In this discourse, distributive justice was conceived in terms of both horizontal and vertical economies. Upstream actions on SDH other than stigma were not considered. While SA was viewed as promoting systemic sustainability to rural and Indigenous *healthcare* needs, it was framed in the doctor-patient relationship rather than broader, professional advocacy of social equity measures.

The incident Nate (F46) reported, was of a Northern Territory community hospital making provision for amputated diabetic limbs to be stored until patients died. The deceased can then be buried in the customary manner, as a whole body. The policy aimed to reduce the stigma of diabetes and improve Indigenous access to ongoing diabetes health care. To Nate, this practice was new and strange; and he did not seem to recognise it as a *de-colonising* or reflexive practice.

Recognising the *strangeness* of new knowledge during inter-cultural relations is examined as a “critical pedagogical decolonising process” (Haynes et al 2014:6). To make sense of this cultural safety approach to diabetes care requires ‘epistemic reflexivity’ (Maton 2006); the subject-object move takes social account of Indigenous ways of being. Referring to Maton’s triangle of epistemic reflexivity [**Figure 11.1**], the storage of amputated limbs for later burial was new *knowledge* related to the *known* medical requirement for close monitoring of diabetes to reduce disease progression: a socially accountable, local solution to a global problem. In this manner, epistemic reflexivity allowed creative solutions to be found to critical social health problems.

Nate (F46) was also startled by confronting bioethical dilemmas requiring justification of the economic distribution of health care. He found these dilemmas confronting because of both ethical (moral argument) and emotional (human) realities.

> Nate (F46):
> “At Grand Round…there was an economist who said, ‘How do you tell a parent we’re not going to provide lifesaving treatment for your premature baby?’ But, ten thousand dollars could go to something else; it could help or save a whole group of people.”

Here, SA professionalism runs up against hard structural constraints in which multiple imperatives need to be ‘taken into account’ - political, economic, democratic, and just.
In a multi-cultural society such as Australia, the *inter-cultural space* (Bhabha 1994) needs to be taken into account in order to maintain professional trust. Haynes et al (2014) regard racial and colonising discourses maintaining racially constructed boundaries and unequal power, ethical constituents of SA decision making.

F. Education as social accountability

‘Education’ as a SA solution for health equity, was a common thematic finding of interview data in this study.

Participants variously referred to a need for;

a. Early childhood education (a social determinant of adult health)

b. Parent-child education of nutrition, hydration and basic self-care (didactic education)

c. Education of disadvantaged women for improving socioeconomic status and health (empowerment, or emancipatory justice to improve women's and children's health)

d. *Conscientization* or raising critical consciousness to overcome oppression and ignorance.

Proponents of the latter, conscientization as emancipatory justice, included two Final Year female participants that returned to their parents' countries of origin on medical electives. Nipuni (A69) went to Sri Lanka and Hope (A611) went to Kenya.

> Nipuni (A69):
>
> "… in Asia a lot of women don't continue education because they're either married off or put to work um, and I suppose the same for a lot of males in developing countries. They're put straight to work for peanuts just so that they can sort of… they don't understand this idea of… not *they* don't… they… the *concept* of not having to earn money for a little while longer to get them an education is quite foreign."

> Hope (A611):
>
> "Sometimes I think people lack the knowledge to know that their situation isn't right… that it is not a coward to demand that things are done differently or demand change in a sense… then they're just happy… well not happy, but they just sit there and think: 'Well that's just how it is.' But no-one has told them that 'This isn't how it has to be'."

In both examples, oppressed citizens remained unconscious of the ways political and economic disadvantages affected their own social position and prospects for a better life.

Freire (1973) advocated ‘education for critical consciousness’ for Brazilian peasants lacking agency against the structural oppressions of colonial and patriarchal powers in their society; essentially to promote political awareness and self-empowerment. This too, requires critical and cultural insights and creativity.

G. A responsibilizing discourse

A responsibilizing discourse countered social justice and professional accountability actions. Neoliberal theory holds the individual responsible for risks to their wellbeing, regardless of context; absolving government and official structures (Liebenberg, Unbar & Ikeda 2013).

Martin (A61) reported only urban experiences of medical practice training, and held conservative and local perspectives of the profession’s social contract. Responding to the interview question asking why patients may not comply with medical advice, Martin advised he would continue ‘nagging’ his patients to change unhealthy behaviours, regardless of their equity identities and social circumstances. The grammar of ‘nagging’ conveys non-reciprocal *power over* relationships; and anti-critical actions that may present a structural barrier to patient enablement (Paradis et al 2019). If nagging is the normative practice, no enquiry or listening to patient concerns can take place. Martin qualified his argument;

> Martin (A61):
>
> “There are lots of important social justice movements that are really, really good, but I think um, there also… I, … I really don’t believe in affirmative action, I think that’s a really silly idea, and um…”
>
> Interviewer:

> “Hmm. Okay. Can you say why?”
>
> Martin (A61):
>
> “Well, I think if you want to remove discrimination… if there’s a level playing field there should be no need for it. If… if I was trying to solve all these problems I would be focussing on education in the younger years and making sure everyone has a good education. If people choose not to take advantage of that… then affirmative action would be… unhelpful. I… I really do think that a free market approach does solve… does bring back equilibrium. So, I really don’t like the idea of disturbing, ha ha, by putting into place any rules regarding affirmative action; other ideas that just seem to be reverse discrimination, which… doesn’t improve the net benefit, just leads to a mixed benefit.”

This discourse idealises fairness in societal structure, to envisage an economic starting point of equal opportunity, available to all. This perspective represents a ‘view from nowhere’ (Nagel 1986), as the social locations of diverse actors are never equal. The social structuring of power redistributes opportunities for reasons other than merit (Marmot et al 1978). A reflexive physician, using a super-subjective mindset, may observe the unequal societal distribution of human capitals, capabilities, choices, and economic opportunities; based on social identity and position in the social hierarchy.

H. Dominant and critical economic discourses

Perceptions of economy for SA health were restricted to normative financial notions in the testimony given by Martin (A61), rather than economic sustainability inclusive of social or political goods (James & Magee 2017:2).

The affordability of Universal Health Care (UHC) insurance was questioned in the 'financial' accountability perceptions of George (A66). By comparison, fair distribution of 'health resources' referred to by Violet (A13), advocated sustainable health care as longitudinal commitment to underserviced, remote regions of Australia: the spiritual home of many Indigenous people. Kerry (F41) too, was critical of Australian political discourses prioritising 'money' ahead of environmental, cultural and historical goods such as Indigenous sacred sites.

I. Summary: Social accountability to low capability patients

Few participant discourses reached *critical* sociological understanding of the interplay of forces affecting the lifeworlds of the people whose health problems they witnessed.

Participants' discourses of SA are summarised here.

1. Outsider participants of migrant and refugee family backgrounds were more reflexive of their social distance from disadvantaged 'Others' than long term Australian residents.
2. No participant in the migrant or refugee 'outsider' group opposed The Charter's socially accountable professionalism.
3. The forms of social disadvantage perceived informed the solutions that were proposed.
4. SA actions mainly focussed on patient education or building patient awareness; rarely on group empowerment through development of CC. Reflexivity on how these practices perpetuated normative ideas (doxa) of social order, and reinforced dominance and hierarchy, was not observed. Early childhood education of self-care, not affirmative action or empowerment, was proposed by low equity participant and insider, Martin (A61). Other participants responsibilized culture, tradition, patriarchy, government

policy and funding, professional hierarchy and inertia, rurality, identity discrimination, poverty, and English literacy for disparities in access to health services.

5. Critical perceptions of *economy* for SA health were depicted as *holistic*, sustainable accounts of fair distribution of societal goods – political, environmental and financial. Two insider Final Year participants voiced a predominant *neoliberalised* account.
6. Participants with low equity identities that denied the benefits of SA for patients with equity needs may require a 'deliberate pedagogy' in a culturally safe community of practice to develop an equity phronesis of medical practice.

8.3 Aspiration for prosocial practice

How do participants' equity identities relate to aspiration for prosocial practice?

8.3.1 Aspiration: Equity identities and practice intentions

Problem solving creative solutions for provision of SA health care is theorised to engage physicians in *epistemic reflexivity* on the social context of health production. Participants' equity identities, insider or outsider status, choice of preferred medical professionalism, and social justice concerns were evaluated to discern contextual differences in sociological imagination and meaning-making of critical health production.

Most participants indicated a single preferred 'type of medical professionalism' (rarely a combination), based on the typography provided by Wear & Aultman (2006).

Number of equity identities	**Participant codes**	**Preferred type of professionalism**
0	A61, F13, A62, F18, A66, A68, F19, F110, F113. [n=9]	D, C, D, F, C, C, G, F. One decline. **Subtotal** C x3, D x2, F x2, Gx1.
1	F11, F12, F14, F15, F45, F16, F17, F41, A63, A64, A67, F43, F111, F44, F45, A16, A610, A612, A613, F47, F48, A15. [n=23]	G, F, A, D, D, F, D, D, G, A, G, A, C, D, F, D, D, C, D, G, F, A, G. **Subtotal** A x4, C x2, D x8, F x4, G x5.
2 or more	A11, A12, A65, F42, A13, A14, F112, A69, A611. [n=9]	D, C, D, G, D, F, C, C, C. **Subtotal** C x4, D x3, F x1, G x1.

Types of medical professionalism
(Wear & Aultman 2006)

A. Traditional doctor, working long hours, dedicated to patients

B. Medical practice as a means to business ventures

C. Combine medical practice with teaching and research

D. Part-time doctor, part-time other interests e.g. family, lifestyle

E. Technical mastery, specialist, financial success

F. Follow your own personal morality, what works for you

G. Practice in an area of need, concern for disadvantaged groups

Fig. 8.2
Participant equity identities and preferred type of professionalism

Types were correlated with participants' equity identities into groupings of; *zero* (males with no equity identity), *one* (females with no other equity identity, or males with one equity identity); and *intersectional* (two or more equity identities). These results are displayed in **Fig. 8.2** (above) and **Chart 8.1** (below).

Findings correlate with an Australian study by Griffin, Porteli & Hu (2017) that examined medical student SES and intention to work in underserved areas. In their longitudinal study of 351 undergraduate medical students, those from very low (and very high) SES backgrounds indicated lower practice intentions for low SES or medical underserviced areas than those from mid-range SES backgrounds.

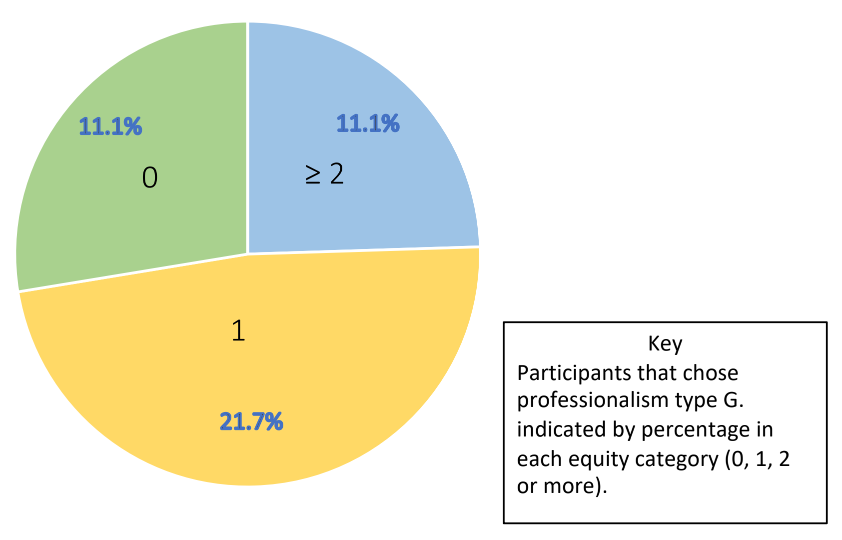
Chart 8.1 Type G professionalism and equity identities

Furthermore, participants’ career intentions were sorted by their equity identities.

> Males and students from non-English speaking backgrounds indicated less desire to work in low SES areas, perhaps explained by high aspirational motivation.
>
> (Griffin, Porteli & Hu 2017:491).

High aspirational motivation refers to the ambition to climb the professional hierarchy of specialist medical or surgical positions, with associated symbolic and material benefits.

In the CHAMP study, only one male, Nate (F46) with two equity identities, from a non-English speaking and middle SES background, indicated a preference to practice in an area of disadvantage (professionalism type G). He made a late career change to medicine from engineering, had two brothers in physician practice, and expressed credible sociological insights to social inequity from his training experiences in rural, Indigenous Australian settings. In Maton's classification of *knower gazes*, Nate (F46) had both a *born* gaze and a *trained* gaze of social structures (Maton 2014).

8.4 Transformation to a social justice perspective of praxis

How does transformation to a social justice perspective of professional responsibilities take place?

8.4.1 Transformation: Critical reflexivity on one's own culture

Clinical experiences reported by many Final Year participants, during pre-arranged electives in foreign countries (Kenya, UK, Sri Lanka, Solomon Islands, Vietnam), or during clinical training in rural and remote areas, effected transformative understanding of systemic gaps in social health accountability to citizens marginalised by ethnicity, poverty, education, transport, and colonisation. Such experiences made real the SDH, and resulted in critical reflection by participants of the need for structural advocacy to improve health outcomes.

Nipuni (A69), a Sri Lankan-Australian woman from Newcastle NSW, sought clinical experiences in rural Australia, London and Sri Lanka. Nipuni had intersectional equity identities and was an outsider to medical culture. She showed understanding of which knowledge practices met the requirements of The Charter;

Nipuni (A69):

> "…not just consider their health problems but other things such as their socioeconomic status, their gender, their race and what you can do to sort of help eliminate any discrimination in those areas… so, thinking about things that might not be obvious on presentation and sort of spending a bit more time; because these things would obviously be really important to the health care of the person, as opposed to things like, you know, 'Have you had your blood pressure measured?' or 'Have you had your cholesterol levels checked?'… like figuring out their socioeconomic status and how it might drive their health…"

Nipuni (A69) demonstrated 'sociological imagination' of health; critical of physicians who treated socially diverse people *the same*; and who discriminated against those socially disadvantaged hospital patients who were "coming in again and again." 'Awareness' was portrayed as critical inquiry into structural vulnerabilities active in the patient's lifeworld; not as a reason for physician despair or under-treatment, but for arranging equitable care.

8.4.2 Transformation: Uncertainty and anxiety in intercultural communication

A. First Year participants at Adelaide medical school, the first cohort learning how to relate effectively with Indigenous visitors to the school, expressed confidence in improving health care access for Indigenous patients. Prosocial First Year female participants (A13) and (A16), of Asian background, arranged their own visit to a remote South Australian Indigenous community. They both expressed shock at the low standard of living conditions generally, and the delayed level of educational achievement among Indigenous youth.

B. Final Year participants reported persisting difficulties in approaching Indigenous patients in Adelaide hospital settings, despite completing 'cultural safety' training. Those Final Years reflexive of their learning experiences in Indigenous community contexts, reported learning new knowledge and gaining greater practice confidence in rural Australian health settings; despite geographical remoteness and 'social distance' factors.

> Matt (F47):
> "I went to a school that did have an Indigenous program, so there were a few guys from the *APY lands and a couple of Ngarrindjeri guys from down south; but by and large I don't have any exposure to the Indigenous population. So, when I went up there, I realised how uncomfortable I was even talking and asking a standard history I would ask a patient on the ward here every single day. What is your name, where are you from, that sort of thing? I didn't like how uncomfortable it made me, but had to deal with it, and it made me reflect on why that was…"
>
> *APY - Anangu Pitjantjatjara-Yankunytjatjara are the people and language groups that live in the northeast of South Australia, and are the largest Indigenous community in the State. The Ngarrindjeri are traditional owners of the Fleurieu peninsula and offshore islands in South Australia.

Anxiety and uncertainty management (AUM) theory (Gudykunst 1993) deals with this common intercultural experience, and is discussed in a proposal for SA health professions pedagogy.

8.4.3 Transformation: Getting to know 'the Other'

This discourse aimed to know how to relate to 'the Other' – essentially to adapt medical practice communication to cultural needs.

A. Human intersubjectivity

'Talking with people' was valued by participants wanting to learn how to connect across cultural boundaries. Attempting to perceive *analogies* to personal knowledges could make the Indigenous context of health more meaningful (Harries-Jones 2016).

Georgia (A613) believed physicians dealt with ATSI people as one group as a heuristic – to reduce the complexity of differences.

> "Aboriginal and Torres Strait islanders, … the cultural differences, the language differences, are not properly taught in Medicine, at Medical School; how to interact with that population. Hmm, I don't think as medical students we get enough exposure to that. Are they real cases they target? I think there's one in CBL [Case Based Learning]. It should be referenced more when talking about patients and a certain disease. They should also be talking about the differences. Because there's going to be cultural differences, especially Torres Strait Islanders… quite a different community or nationality. I think it would also be good if we had a placement; not in a remote community, but just involved in some sort of Indigenous health care."

Beata (F43), a white European woman, immigrant and pharmacist, understood the need for indigenous health equity, but felt she lacked confidence in *cultural* knowledge to deliver the required care.

> “I feel like there’s still a lot that I don’t personally understand and that makes me a little bit hesitant to dive into helping in that particular area, so… for example, we weren’t really … if you have an Indigenous patient on the ward, you don’t necessarily really know how to connect with them …So, I think a lot of the education needs to have a component where you learn about their culture or you get a bit more understanding about who they are, as a culture, and then that makes it easier to understand the individual. Um, the same goes with a lot of other social groups, I think. Like, things we don’t understand. They might have practices that are very different to our own personal practices, so I think a lack of knowledge is one of the things that needs to be addressed.”

B. Understanding the *individual* and the *culture*

Understanding the *individual* and the *culture* was a perceived knowledge need for SA praxis. In this discourse, knowing anthropological differences about ‘the Other’ was considered important to knowing how to relate clinically, in a bespoke manner. Beata gave suggestions for increasing the Indigenous relevance of the pre-clinical medical course; ‘patients’, even on paper, need to be ‘real’ – not artificial vignettes – and more opportunities provided for direct interaction with Indigenous people. This narrative vindicates the Indigenous ‘quiet advocacy‘ approach taken by medical educators at the Adelaide Medical School.

I follow-up these suggestions in Discussion [Chapter 12], and argue for a critical pedagogy that elucidates the Indigenous health-illness dialectic, but avoids the *symbolic* violence (Bourdieu & Wacquant 2002) of omitting or committing particular knowledges in the syllabus.

8.4.4 Transformation: Indigenous health training

I now compare the ‘uncertainty’ narrative expressed (above) by Beata (F43), with the ‘becoming to know’ narratives of her peers Nate (F46) and Matt (F47), who completed a longitudinal integrated clinical placement in a remote Indigenous community.

A. Longitudinal integrated rural placement

Nate (F46), a white, gay male from a rural region of Australia, had European immigrant parents who were market gardeners, and therefore intersectionality of social identities. He claimed outsider status to medicine, with a previous career in engineering. As a youth he played competitive football with Indigenous boys. Recent clinical training experiences in an Indigenous community raised questions about ontological justice to diverse Indigenous people throughout Australia.

> Nate (F46)
>
> “… that idea that I was saying, about the way that we think… we *don’t* think. No-one encounters the Indigenous population as they are – they’re referred to as this catch-all term but as soon as you start talking to anyone that works in the field or anyone that works in and around most of… that will be in the Territory or in northern Australia, umm,

> they'll be like, what do you mean they're Indigenous? Are they Pitjanjatjara, or are they like, Larrakia? Or …? You can't just paint them with one stroke."

Matt (F47) demonstrated reflexivity on his discovery of different language groups and identities of Indigenous Australians, decolonising the disempowering collective terms 'natives' or aboriginals. Getting to know 'the Other' had revealed the diverse ontologies of Indigenous people - in their dynamic, evolving, and transcultural contexts. 'You can't just paint them all with one stroke' expressed his critical recognition of difference; social knowledge that positioned Matt closer to 'becoming to know' (Jakubik 2011), and to evolving a bespoke phronesis of Indigenous health care. Further learning about each group's colonisation stories, kept alive in the oral tradition, may reveal how colonial subjugation of Indigenous status has harmed health. Such stories can subtend the sociological imagination to the hegemony of successive government policies and laws; and what Indigenous people may fear as minority traditional owners of the land, lacking a treaty.

Although a metacognitive gaze, Matt's revelation fell short of *critical* recognition of Indigenous status loss related to colonisation that can result in internalised ontological distress, poor health, lateral violence and inter-generational harms.

This *structural* violence (Bourdieu & Passeron 1997) can be felt as real physical pain that negatively impacts the morbidity and mortality of Indigenous families; and resonates through the generations. Matt (F47) has more to learn, yet his reflexivity is clearly an asset for building capability as a knower and actor.

B. Indigenous cultural competence training

Some study participants gave feedback about their expectations of Indigenous cultural training.

Ingrid (A63) was raised in the Barossa region of South Australia, home to early German immigrants, where she knew no Indigenous people and only one Asian person. She nominated her father as a role model of social justice. Ingrid reflected on her expectations of culturally inclusive medical education; supposing everyone is susceptible to intrinsic, ethnocentric biases; and, reflexive of limitations on her own and her peers' worldviews.

> Interviewer:
>
> "So, hmm, what would be a better or a deeper learning approach to Indigenous health?"
>
> Ingrid (A63):
>
> "I think almost, to some extent um, not using the words 'Indigenous health'…and sort of saying 'Well, let's talk about culture and how culture influences the way we approach health'. And, maybe your own culture has influenced the way you see health; so… you're, you know, young, white, female, western, grown up in a health literate household; and how that differs from someone who's a new migrant, doesn't speak English, and having that basic… even that very basic level and I know that sounds very straightforward but um, when you have a bunch of 18, 19 year-olds, fresh out of school who often come from very homogenous home environments, often quite privileged backgrounds. I mean, I… in some ways I was very lucky growing up rurally, because my world experience was quite

> different coming into medical school. I didn't have a lot of peers that I had gone to school with, so I had to make an effort to see outside of that."

This reflexive discourse problematises the gap in CC that could make Indigenous culture and health problems meaningful; at the entry level of 'a bunch of young medical students from homogenous class backgrounds'. The taken-for-granted, ethnocentric lifeworld of privileged middle class medical students can normatively problematise the Other's, but not one's own culture. Reflexivity may be needed 'to make the familiar strange'; to challenge students 'to see outside' of the doxic norms of their own lifeworlds, and refresh the professional gaze. As an extended concept of symptoms, semiosis refers to a plethora of signs linking the patients' lifeworld to health; the social health-illness dialectic. Seeing, reading or hearing the signals of this dialogue becomes important to phronesis for SA.

In discussion, I contemplate how medical professionalism under The Charter would prioritise Indigenous health for equity measures; and underwrite professional solidarity by coding into curricula positive, de-colonising constructs of empowerment, inclusion, and respect.

8.4.4 Transformation: Getting to know ourselves

A. Physician – know thyself

This reflexive discourse speaks of 'becoming to know' ourselves in relation to 'others'.

Alison (F11) was identified as a white, female, Arts-Science graduate from rural Australia.

> "…we're not going to be able to change anything unless we know what is… what the problem with ourselves is, um and so, I think reflection's really important. Talking about things with other people is also a good way to do that, so tutorials or discussions over lunch, um and also listening to other people's stories and once you listen to someone who might be very different to you, you can start to understand… what? I don't know, just a lot of different things, I guess."

An insight of this self-reflexivity – *knowing what the problem with ourselves is* – a feature of Bourdieu's theory of practice (1977), corroborates the slow process of *ellipsis of habitus to a new field*. The 'becoming to know' framework (Jakubik 2011), too, conceives self-change and 'othering' experiences as central to transformative learning about what it means to be a SA physician. Self-reflection is the first step in the process of reflexivity (Haynes et al 2014). 'Reflexivity on habitus' problematises the taken-for-granted ideas and narratives we tell ourselves: ethnocentric memes unconsciously internalised from everyday sociopolitical narratives. These memes continue to position 'ourselves' and 'the Other' in a hierarchical schema of relations (Haynes et al 2014). However, recognising oneself and power as part of the broader problem affecting Indigenous health is not a reason to withdraw, but reason for cultural sensitivity, and solidarity with health equity projects.

> Matt (F47):
>
> "So, if we can realign how we think of ourselves and how we think of people um, we'll probably stop a lot of our problems. If we go back to the asylum seeker, if we saw them as 'desperate' people, not 'stealing our jobs' – an economic rationale, ah, I don't know, being dangerous to us; we're not thinking of them as people, we're thinking of them as…

> either leeches on our funds, or dangerous people that are going to kill us and there's nothing to say that's true."

Here, *how we think of ourselves and how we think of others* is a reflexive concern for justice and clarity of consciousness directed at a popular societal discourses that unfairly demonise the disadvantaged 'Other'. Neoliberal discourse rationalises priorities from economic, not human benefits. It was recognised as a source of failures of the social contract by the U.S. medical profession, and related to poor U.S. public health care outcomes.

8.4.5 Transformation: Colonised structuring of Indigenous mental health

A. A trauma discourse helped a participant read the lifeworld of 'the Other' and come to know the social structuring of Indigenous mental health.

B. In contrast, a biomedical discourse of mental health disorders located affective and cognitive problems in the brain and its biochemistry.

Flinders students learned from Aboriginal people the negative health impacts of European colonisation; practices that excluded democratic participation in their own affairs and nation building. Colonial 'othering' unfairly imposed categories of Indigenous belonging based on racial purity; unfairly stigmatising mixed Indigenous identities (miscegenation) in Australian society. This colonial mindset was most evident to 'outsider' participants in the study; less so to long term Australian residents.

Nate (F46) told how his parents migrated to Australia from the former Yugoslavia. In the course he recalled being deeply moved by the personal account of an Indigenous woman, describing her life after being forcibly removed from her family as a mixed-race child. This Australian Government policy was enforced as late as the 1970s.

> Nate (F46):
>
> "She was part of 'the stolen generation'. So, she had a talk which was actually a video we watched… and I just cried through it. How can people do that to other people? I just don't understand. And she got through it. Just awful, awful, awful… So, that in a way, that stuff needs to be taught in Australia from a young age."

In contrast to participants seeking cultural knowledge of Indigenous people (a vertical discourse), Nate (F46) valued knowledge of the SDH in the woman's narrative (horizontal discourse); in which colonial dominance exerted symbolic violence on Indigenous freedoms, ontologies, and health. He observed how some peers and physician role-models rejected the idea of Indigenous 'cultural safety'.

> Nate (F46):
>
> "If it hasn't got an evidence base, some doctors don't want to touch it, sort of thing."

This observation refers to the hegemony of *scientism* in an informal curriculum, in which social science (humanities) evidence is marginalised. Some students don't attend lectures unless a physician is presenting. (One study participant needed to know if the investigator was a medical graduate). For these students, ellipsis to the dominant biomedical gaze, and the habitus of the professional status quo was expected. This strategizing, also described in

‘Boys in White’ (Becker et al 1961), the first sociological study of medical students, interests educators seeking to integrate horizontal and vertical discourses into medical practice.

Adaptation of medical evidence to indigenous contexts is instructive; for the need of accountability to multiple health determinants.

8.4.6 Transformation: Decolonising discourses of indigenous health

Decolonising discourses aim to restore justice; materially (in law) and dialogically (semantic messaging in language). ‘Decolonising’, in this context, refers to restorative justice and accountability actions for colonised people (such as Australian Aboriginals); negatively and multifariously impacted by historical injustices; including ongoing minority status in ideology, culture, economy and land rights; and everyday racism.

a. A de-colonising discourse of Indigenous health was barely present in participants’ narratives of SA.
b. Participants reflexive of colonising narratives that impact on Indigenous health referred to problematic western paradigms of political cognition.
c. However, Final Year participants with first-hand experiences in Northern Territory Aboriginal communities returned with (‘becoming to know’) transformed perspectives; more granular contextual understanding of Indigenous ontologies.

Nate (F46) came close to recognising bespoke Indigenous needs when he recalled;

> “As you start talking to anyone that works in the field or anyone that works in and around most of… that will be in ‘the Territory’ or in northern Australia, umm, they’ll be

> like… *What do you mean they're Indigenous? Are they Pitjanjatjara, or are they like, Larrakia? Or …?* You can't just paint them with one stroke."

Nate (F46) perceived cultural mis-match between western health systems and Indigenous health; the cost-accountable neoliberal approach at odds with the spiritual lifeworld and ideals of Indigenous populations.

> Nate (F46):
>
> "One of the elders, she had a um, she had a talk at Grand Rounds, and she says that one thing that white medicine doesn't do well, is in Indigenous culture, one place is for… um… births, one place is for deaths, and one place is for sickness. You put them all together, you shove them in a big high-rise… lots of air-conditioning, white starkness, there's nothing… there's not very much at all we do for Indigenous people like that."

Kerry (F41) conveyed sociological insight to how dominant neoliberal values marginalised what is valued in Indigenous culture, resulting in harms to psychosocial and physical health.

> Kerry (F41):
>
> "Money is put before what might be the best for their culture, whether it is mining their land or... I guess the big thing is the land, you know; so, if there is a sacred site that means something really important to the indigenous people of that place, I think, you know, we should give them the right to say what is done with that land. Um, yeah!"
>
> Interviewer:
>
> "Okay. So, do you get a sense of how that connects to their health?"

> Kerry (F41):
>
> “I think very much in a mental health... to a mental health perspective… yeah and um, having a sense of powerlessness and feeling that they don’t… you know… if you’re in that situation, not having control of your life and how you can live it... a lot of that plays on mental health, which of course I think feeds into physical aspects of health.”

Here, Kerry articulated the ‘health-illness dialectic’ of Indigenous disempowerment, rather than a biomedical mechanism of the stress response in Indigenous bodies. It was a humanist discourse that did not impose a colonial (in this case biomedical) mindset on a colonial (land, capital, control) problem. Sen’s capability theory is a lens to the loss of control and freedom Kerry perceived.

8.4.7 Transformation: ‘becoming to know’ Indigenous and migrant health

Prioritising improvements in Indigenous and migrant social status and health outcomes was uniform across cohorts in the study [**Table 8.1**]. However, many participants declared low interaction *confidence* related to ‘othering’ discourses with Indigenous peoples, non-English speaking migrants and refugees. Those in close proximity to Indigenous health contexts revealed growing confidence in inter-personal interactions, and greater awareness of Indigenous ontologies.

A. Cultural anxiety and avoidance

Cultural anxiety and avoidance reactions to Indigenous patients was a prominent finding among Final Year participants at both schools.

Participant uncertainty and anxiety in approaching Indigenous patients was common; but improved in those experiencing prolonged engagement in training contexts; in keeping with Bourdieu's theory of practice. Testimony accords with Bourdieu's (1977) description of 'ellipsis of habitus to a new field'; a gradual learning process in which professional identity transforms. The diversity of Indigenous lifeworlds was a surprise to visitors. A reflexive understanding of the professional phronesis for meaningful engagement in Indigenous health problematised self, 'Othering' and paradigms of health service delivery. Likewise, a culturally safe pedagogy of engagement with Indigenous people, trialled with First Years in the Adelaide course, received favourable reports from these participants.

B. Solidarity with Indigenous people

There was general agreement among participants of need for equity in distribution of funding for Indigenous SDH; as well as 'sustainable' (ongoing) health care workforce servicing rural communities.

C. Colonised attitudes to Indigenous people

Colonised attitudes to Indigenous people such as white privilege and racism were observed by participants in health care settings; however, the provenance of this mindset was not recognised as colonialist; likely the result of unconscious dispositions in habitus. Few participants perceived the *continuing* impacts of colonisation on Indigenous lifeworlds, and resulting impacts on mental health. A sociological gaze of Indigenous health would brighten the lifeworld signals that dominant policies and structures impose on indigenous lives.

D. Health system incompatibility

Western health system compatibility with Indigenous ideas of health; and Indigenous autonomy in choice of health system; were problematised by several Asian participants in the Flinders course. Their outsider status likely enabled a problematising, systemic gaze of Australian health.

E. Distinguishing health and treatment needs

The need for both abstract *justice* actions and clinical *care* for Indigenous people were poorly differentiated in participants' discourses.

A *de-colonising* pedagogy for Indigenous health may benefit from Honneth's theory of recognition (1992); in which mutual *recognition* is regarded a SA action (Worsdale 2017). Habermas' theory of communicative action (1981) recognises the validity of 'the Other's' discursive claims to autonomous achievement of social order. Both theories may inform pedagogy for interpersonal, social and cultural accountability practices.

In educational sociology, a *re-contextualising principle* (Bernstein 2000) can encode a social justice ethos into medical practices; and integrate dual knowledge sets.

8.5 Integration of social and biological perspectives

What characteristics of study participants enabled integration of social and biological knowledges into a holistic phronesis?

Hannah (F42), from a similar ethnic background and migrant status to Olivia (F112), ceded the profession's *societal error* when reflecting on the failure to prevent deaths from alcohol induced liver failure;

> "I think the mistake is that as a profession, we're very focussed on the end of the disease, our whole thinking, our intervention is that end stage."

Hannah pointed to the traditional 'focus' of critical thinking (logic) on biomedical science and management of disease, as separate to the critical thinking (critique) of social science and illness prevention. She regarded the public's perception of the doctor's role as false: doctors deal with disease, not health. This view linked the public's respect for medical professionals to the problematic downstream health economic paradigm; a powerful structuring force acting on the medical habitus at a subconscious level.

I performed an analysis of interview transcripts to identify participants capable of sociological cognition of health problems. Analysis was based on a cognitive framework for sociological analysis of health problems, with four interrelated factors,

> 1. *historical factors*: how the past influences the present;
> 2. *cultural factors*: how culture impacts on our lives;
> 3. *structural factors*: how particular forms of social organisation affect our lives;
> 4. *critical factors*: how we can improve our social environment
>
> (Germov 2018:7).

Sociological Imagination of health inequity	Historical	Cultural	Structural	Critical
Adelaide Year 1		A11, A12, A13, A14, A16	A11, A12, A13, A14, A16	A11, A12, A13, A14, A16
	0%	83%	83%	83%
Flinders Year 1 **(2/13 recordings incomplete)**		F11, F12, F13, F14, F15, F19, F110, F111, F112, F113	F11, F12, F13, F14, F15, F16, F19, F110	F11, F12, F13, F16, F19,
	0%	90.9%	72.7%	54.5%
Adelaide Year 6	A68	A61, A62, A63, A64, A65, A66 A67, A68, A69, A610, A611, A612, A613	A62, A63, A65, A66, A67, A68, A69, A610, A611, A612, A613	A62, A63, A65, A67, A611
	8%	100%	77%	38%
Flinders Year 4	F47	F42, F43, F45, F46, F47, F48	F41, F42, F44, F45, F46, F47, F48	F41, F42, F45, F46, F47
Totals	12.5%	75%	87.5%	62.5%

Fig. 8.3 Sociological analysis of health problems among Year groups
('Insider' codes underlined) Analysis based on taxonomy by Willis (Germov 2018)

In **Figure 8.3** (above), participants considered 'insiders' to medical professionalism have underlined identity codes. Percentages in each category reflect the finding that participants expressed discourses across multiple categories of health inequity. Note the low percentage of *historical* discourses, excepting two Final Year participants.

Two interpretations of these findings are based in the theoretical framework of 'capability to aspire'.

A. Generational or sociological change?

The high proportion of insider participants in each sociological category may reflect a shift in professional discourse and habitus toward the social production of health. This result may reflect the high level of *engagement* of insider participants in prosocial medical student groups, and other situated learning experiences in which *reflexivity* on non-biological determinants of health is facilitated. The shift may also reflect the voluntariness of those students interested in a study of social justice; that is, not representative of the whole Year group. This shift was stronger in the Flinders cohort than the Adelaide cohort; perhaps reflecting the SA orientation of the Flinders curriculum, and self-selection of medical school. Compared with Adelaide Final Years, more Final Year *insiders* in the Flinders program held critical social advocacy important to professionalism. This may signal generational ethos aligned with the SA provenance of the Flinders course; or greater *illusio* and *ellipsis* of professional habitus to curriculum structures in the Adelaide course, observed in previous research of traditional medical courses (Hafferty 2006).

B. A role for Insiders?

Insiders are theorised to have higher capitals and capabilities that facilitate adaptation to the new doxa of medical professionalism and maintain dominance in the field. They know to play the new game rules to advantage; and will likely support low equity identity graduates with ‘professionalism type G’ aspirations, not in competition for highly valued specialist positions. Insiders voiced the ‘know-do’ gap in SA actions, and those with leadership aspirations (e.g. F45) would likely participate at the organisational or management level. Participants demonstrating least insight to the social production of health (A15, A61 and F44) were males with low equity identities. Insider participants with low equity identities (e.g. F45, A68) that demonstrated capability for sociological thinking are more likely to maintain dominant positions in the professional hierarchy.

C. Presentism and the lessons of history

The paucity of *historical* perspectives (how the past affects the present) in professional accountability is quite marked. Only two participants, both insiders, drew on historical events when discussing professional accountability to society. Medical educators can introduce missing historical narratives, such as Virchow's 'medicine is politics' narrative, unethical research practices, and the chronicle of the societal error; to bolster the professional imperative for confronting the politics of injustice. Reflexivity on 'scientific' medicine and marginalisation of social science may help counter the hidden curriculum.

A creative praxis of SA needs to apply reflexive critical thinking to urgent local, national and global health related problems. The ingenuity of storing amputated limbs as a cultural solution to improve Indigenous diabetes outcomes, was a successful communicative action between a community and health system. However, many other unmet and emerging SA needs arising from the global, societal lifeworld demand multidisciplinary solutions.

8.6 Structural obstacles to prosocial professionalism

What fault lines do participants perceive in current medical professional practices and how do these inform medical education of SA?

A general finding was that existing professional arrangements were perceived by participants to be unfair to both public patients and to medical students.

8.6.1 Obstacles to prosocial professionalism: **unfairness to *patients***

A. Participants critiqued seven forms of injustice to patients;

- preferential quality of health care for *private* patients, related to physician income;
- scarce time for patient-centred care concerns;
- stigmatisation of devalorised patient identities;
- lack of SA to patients with diverse capabilities and needs;
- avoidable hospitalisations;
- distributive healthcare injustices; and,
- disrespect for patients with functional, psychological, or degenerative brain conditions.

B. Participants problematised 'the rules of the game'

The rules of the game in medicine (Bourdieu 1977) that unfairly marginalise devalorised patient identities were identified as; a. those with chronic multi-system disease (A68); b. Indigenous patients (F46); c. 'acopics' (F45); d. the elderly (F46); e. postcode shaming of the poor e.g. (A68); f. substance misuse, obesity, low health literacy, and immigrant communication limitations (e.g. Safiya A14).

Figure 8.3, below, displays Year cohorts perceptions of social disadvantage.

However, as portrayed next, not all participants with strong critical awareness of gaps in the professional ethos were Final Year students or postgraduates.

Reflexivity on health context:	**Local**	**National**	**Global**
First Year Adelaide	Poverty (A13, A15) Education (A13) Sexuality stigma (A16) Screening (A14)	Poverty (A13) Sexuality stigma (A14) Addiction (A14) Indigenous health (A16)	Poverty (A15) Human worth (A111) Enablement (A14) Prevention (A14)
First Year Flinders	Racism (F14) Addiction (F12) SDH (F11) Bounds of consent (F13) Education level (F13) Bounds of responsibility (F12)	Structural racism (F14) Health system flexibility (F11, F13, F16) Health access (F14) Domestic violence (F11) Racism (F111, F14) Policy structures (F19) Language, communication (F112)	Racism (F14, F112) Refugees (F16) Health access (F112) Sexuality stigma (F19)
Final Year Adelaide	Rights of children (A63, A610) Patient capacity (A63) Health access (A68) Poverty / class (A67)	Indigenous, rural health, distance (A63, A612) Domestic violence (A63) Poverty (A68) Aged, neuro impaired (A68)	Neoliberalism (A62) Cultural (A63) Prevention (A68) Paternalism (A611) Poverty (A69)
Final Year Flinders	SDH (F44) Acopia (F44, F45) Health access (F44) Elderly (F46)	Indigenous (F46) Aged care (F41) Medicine (F46, F47) Funding distribution (F46) Medical hierarchy (F45)	Climate (F41, F45) Human rights (F45) Capitalism (F42) Education (F43) Health access (F48)

Figure 8.3 Scope of sociological imagination in participant discourses

C. Critical consciousness in an intersectional participant

First Year Safiya (A14), a young woman from Singapore, had the highest intersectionality of equity identities of all cohorts. She sought service learning opportunities in a poor area of Singapore, and a psychiatric hospital, to build her portfolio for entry to medicine. Safiya's deficit perspectives of medical professionalism were informed as an 'outsider' medical student. Her experiences in Singapore had fuelled a critical, sociological narrative of the gap between health needs and professional services for marginalised groups.

Safiya (A14):

“I’ve heard of cases where doctors are more inclined to accept patients from a certain socio-economic status ‘cause, you know, they don’t have to worry if their bills are paid on time. I think its people that come from the poorer rural part of any country or from the lower socioeconomic status or especially when there is cultural stigma. It comes along with it. Often there is a high rate of teenage pregnancy, there is a lot of alcohol, smoking, drugs involved. I think that there is also some sense of discrimination because there’s always that association in it; ‘You’re uneducated, your poor, you’re from a lower socioeconomic background which generally means you have bad health and it means that you’re not taking care of yourself, and a lot of things are preventable’. And usually when these people reach out to the healthcare system, it’s not in the beginning stages it’s the later stages, when their starting to have a lot of complications with the rest of their body. And to hear things like, ‘I’m sorry, this is the best we can do’, ‘Oh, and that’s all that we can do…’; that’s… that’s disappointing on both ends. “

Interviewer:

“Hm, mm. Okay. What do you think are the fundamental causes of this problem?”

Safiya (A14):

“I really feel that the fundamental problem, the causes of this problem is really due to lack of awareness, um, and lack of support. More towards these people, the lower socioeconomic status, because obviously many of them are, you know, unaware, uneducated and if nothing is done to educate them, this will go on to the next generation.”

Only two months in Adelaide, Safiya (A14) articulated a rare level of CC for multiple SDH present in her society. They included poverty and racial inequality in access to housing, jobs and income, post-colonial structural violence, and low educational attainment. Safiya had observed stigmatising social stress behaviours; poor self-care and access to health care and screening, maladaptive coping behaviours, avoidable chronic illnesses and premature death. ‘Upstream’ health services were poorly distributed where most needed. Safiya was also highly critical of Singapore policies that disenfranchised and marginalised LGBQTI and low SES citizens. This lack of awareness, or dependence, attributed by Safiya to people living in poor socioeconomic conditions, was related by Lupton (2003) to people’s reduced ability for reflexivity on feelings of trust and risk in health systems available to them (Ward 2006 :130).

8.6.2 Perceptions of medical professional culture: unfairness to *students*

This section documents participants’ perceptions of an unreflexive professional culture; while others reflexively perceived the impacts of this culture.

A. A hidden curriculum of social stigmatisation

Final Year participants reported injustices experienced in clinical training settings. These included stigmatisation, unreflexive hierarchical mind-sets, and variable role modelling of prosocial professionalism.

B. A hidden curriculum of social blindness

A ‘social blindness’ discourse, exemplified by Martin (A61) from Adelaide and Kelvin (F44) from Canada, appeared relatively unreflexive about the need for SA professionalism.

Despite their privileged positions in the social hierarchy as white male student physicians, they saw less inequality or a more level ‘playing field’ for disadvantaged groups than other participants. This ‘poverty blindness’ is a feature of dominant class perspectives: a lens that validates the success of those who work hard and capitalise on opportunities they presume available to all. Lewin et al (2019) suggested that little change in perspective or personal growth would result.

Unlike Martin (A61), Kelvin (F44) experienced relative economic poverty in his rural Canadian upbringing, and later when itinerant in South-East Asia. A preference for living in a lower middle class area of Adelaide aligned with his primary habitus. Yet, his secondary, professional habitus was strongly oriented to achieving an income that ensured a high quality of life; representing a *fracture* with his primary class habitus (Bourdieu 1984). As an example of this, he believed social workers or nurses should enact SA, not physicians. Yet, in the interview he admired a community based solution to prolonged hospital management of patients with chronic conditions, instigated by a physician registrar. Ambivalence about social justice may persist throughout his career. During interview Kelvin checked whether the interviewer was a doctor; a hidden curriculum tendency to devalorise non-medical personnel; and, possibly indication of Kelvin’s ellipsis of habitus to the status quo.

C. Perceptions of *hierarchy* in medical professionalism

Postgraduate Flinders Final Year participants were more critical of medical hierarchy than undergraduate Adelaide Final Year participants that entered medicine from secondary schooling. An exception was Safiya (A14) who problematised the effects of hierarchy on patients; and whom I compare with Julie (F45), who problematised its effects on students.

Julie (F45) was a white, female, legal practitioner with strong leadership credentials in human rights advocacy, student organisations and activism. She received a privileged education on merit of a scholarship, but drew social justice values from her family, law training, and a role model of human rights in the Australian legal profession. With high capitals (Bourdieu 1986) and capabilities (Sen 2009), Julie was an insider to traditional medical professionalism. Yet, transfer of her 'funds of knowledge' (Zipin 2019) and skills to the contexts of her professional development had been stymied by senior physicians that related to adult 'students' as subordinates. Julie believed that marginalisation in medicine reflects marginalisation in society; perpetuating unfair relegation of women to inferior positions in organisations. Other female participants referred to experiences of workplace sexism, assumed dominance by males, and profiling of patients by gender and race. The nature of these gender 'microaggressions' in medicine is reported in a study by Periyakoil et al (2020).

Julie (F45) reflected on her suggestions for organisational change in a national environmental advocacy organisation with physician and student members. In this extract, she referred to her role in Amnesty International, an organisation defending human rights (Amnesty International 2020).

> Julie (F45):
>
> "It's one of my frustrations with medicine, although I don't have any illusions that I'll have any impact on it, is 'the hierarchy'. And so, you know, I have a bit of a different background to all these senior consultants and so on because of my experience in, with

> Amnesty International … and all these things; but trying to get small changes made that I feel would make the organization more effective, I really failed. Like, I'm the national student representative at the moment, which makes me the most senior student in the organization, but I find myself constantly thinking – you know, what's the point?"

This disquieting comment, from a trainee with high leadership capabilities for prosocial practice, was an indictment of a medical professional culture with declared SA aspirations.

Safiya (A14) related her perspective of medical hierarchy from personal experiences in contexts of social disadvantage in Singapore. It was 'very prestigious' to be a physician in Singapore, but Safiya observed how status wrought negative effects on both physicians and patients. Physicians treated patients with less respect, yet patients shunned paramedical 'therapists' with lower status in the field in favour of 'a Doctor'. Deceptive practices began before medical school, when prospective students feigned interest in 'community health' to improve their chances of medical selection. Safiya (A14) regarded the macro project of SA the 're-integration' of marginalised people into society; an emancipatory perspective.

In summary, two participants, one with low (F45), the other high equity identities (A14), agreed about the harmful nature of a social gradient in medical professionalism. While Julie (F45) presented a mostly subjective analysis of unequal relations within the patriarchal professional culture, Safiya (A14) made the 'subject-object move' to problematise the sociological relations of the professional culture to socially disadvantaged patients.

In discussion, I propose first, that hierarchy the result of biomedical dominance in health, is an aspect of the hidden curriculum that commits symbolic violence (Bourdieu 1977) to the wellbeing of prosocial medical students and patients.

Second, the WPA that broadens access to medical education for students of diverse social identities could recognise the value of diverse *epistemologies* to contextual understanding, that students and patients bring to health systems; stances that enhance equity actions, and organisation for SA outcomes.

D. Perceptions of values in professionalism training

James (A68) and Matt (F47), white males from privileged family backgrounds with high social and cultural capitals, were firm advocates of social health justice for women, the socioeconomically disadvantaged, and Indigenous people. However, while Matt found these values in the context of a longitudinal integrated clinical (LIC) placement in the Northern Territory, James did not find his values mirrored in his professional training.

This perception reflected participant comments about *the sameness* of social marginalisation attitudes observed among health practitioners and society.

Ingrid (A63), a white female undergraduate from an all-white rural Australian town, had travelled widely to make the transformative journey to a critical perspective of health systems; and pursued *self-learning* of a ‘well-being’ approach to SA in preparation for rural practice.

Alison (F11), a white Australian rural woman and Peace Studies graduate, intended to practice in an area of need. She was reflexive of mis-match of the Australian health system to the Indigenous lifeworld; and was critical of her medical education - teaching students about the SDH but not how to effectively act on them; a ‘know-do’ gap.

E. All low equity identity students expressed critical social discourses

Yet *ontological justice* to their personhood and prosocial *being*; their CC, and ‘usability’ (Boelen & Woollard 2011), were left unacknowledged and unsupported in their professional community of practice (CoP) (Lave & Wenger 1998). Affirmation of students’ positive human values by professional peers may develop their *becoming to know* (Jakubik 2011) ontologies and *motivation* to create SA practices. Baron (2018) warned that “hierarchical organizations impede open conversations and their resultant creative processes (Richards 2014:1396)” (:19).

In discussion, I propose a need for change in professional consciousness through attention to communications rather than professional attitudes; to foster a *heterarchical* change in medical culture.

8.7 Macro critiques of the health system

Another general finding was the *relative lack of critique* by participants of the existing doxa of medical professionalism that maintains the status quo of the health system.

8.7.1 Health system critiques: The western model of health care

A. Participants' responses to The Charter of Medical Professionalism generally agreed that The Charter referred to contexts of *health care* rather than health production.

   In **Fig. 8.4** (above), few participants voiced concerns of everyday social inequities. Among First Years - strong concerns were for contemporary local and global discourses of racism and gender violence (reflecting social movements 'Black lives matter' and 'Me too'); and, among Final Years - strong concerns regarding more abstract, contemporary global injustices.

B. An additional question posed by the interviewer after participants had read an excerpt of The Charter asked:
   'Why do you think the profession found it necessary to issue The Charter?'

First Year participants found this question difficult to answer. Possibly as a gauge of their *illusio* (Bourdieu 1986) to the course they had competed to enter, or lack of exposure to the professional culture they were entering, most seemed unaware of controversies related to western medical professionalism.

South-East Asian participants F13, F14, F16 and F111 expressed more critical perceptions of western health system structures; as did Australian participants F41 and F45, who entered the Flinders medicine course from other professional pathways.

First Year Flinders participant from Hong Kong, Pandora (F111), expressed a culture of *mistrust* of the Chinese medical system following hospital work experience in Hong Kong.

A First Year participant from South-East Asia, Simon (F13) suggested the western medical model lacks adaptability to Indigenous health needs; and endorsed Chinese medicine as an alternative. He believed Indigenous people should be able to choose between traditional medicine and western medicine for different health conditions; and suggested western medicine added complexity, risk, and extra disadvantage to Indigenous lives. However, he was unaware that Indigenous healers often worked alongside western physicians in community-controlled health services.

Just three Final Year Adelaide participants (James A68, Carmen A610 & Georgia A613) expressed significant concerns with Australian medical professionalism and health system structures. James (A68) critiqued a hidden curriculum that unfairly labelled (re-prioritised) patients by their social identities; Carmen (A610) challenged the profession’s uncritical support of pregnancy termination; and Georgia (A613) lamented the lack of opportunities to explore social concerns with patients in the busy hospital context of health care.

Final Year Flinders participants Julie (F45), Nate (F46), and Matt (F47) exhibited reflexivity on the existing doxa of medical professionalism. Each queried how professionalism should be embodied and enacted; as a physician and a professional group. Julie (F45) critiqued harms of professional hierarchy, and urged the profession to speak out in solidarity with groups suffering macro social injustices affecting health. Nate (F46) critiqued unprofessional role models, and the distributive priorities of public health spending. Matt (F47) critically reflected on the physicians’ role as ‘moral compass’ for their community; and the gate-keeper role that entrusted physicians with the tasks of distributing health care equitably.

The compatibility of the professional social contract of western medicine to contemporary health needs of Indigenous and multi-cultural Australians is explored in the Discussion [Chapter 12].

8.7.2 Health system critiques: Overloaded downstream context of medical care

Prosocial participants interpreted The Charter as promoting ‘awareness’ to keep social justice values and actions ‘in mind’. This realisation acknowledged a need for humanism to be more central in health care; and the need for CC informing equity actions to improve downstream health outcomes. These comments related to the overloaded ‘downstream’ context of biomedical practice, a feature of the hidden curriculum related to ‘the societal error’ (Stone 2010). This injustice in health economy was perpetrated by the dominance of individualist medicine, which draws funds and human capital away from initiatives to improve fundamental, upstream determinants of health. ‘Awareness’ as a theme in the grounded analysis of the study [Appendix 9] portrays The Charter as a reminder to be ‘socially conscious’ of patient-specific care needs. A *reminder* was needed because of ‘forgetting’ – perhaps related to dominance of the biomedical mindset, and to perceptions of high demand arising from busy public healthcare settings; or physician distancing from social suffering (Boltanski 1999).

Georgia (A613), an Adelaide woman whose father was a surgeon, was an insider to medical professionalism with prosocial concerns for Indigenous Australians. She travelled to the

Americas and Asia doing medical service learning, and attended a medical elective in a remote Australian town.

> Interviewer:
>
> “There’s a perception in medicine that you can’t change the social circumstances of people’s lives. In fact, a number of the social determinants of health are reversible. There’s not a consciousness for it…?”
>
> (A613):
>
> “No… but also, I just think there’s so little time for people to even reflect about… for doctors and medical students to reflect on these things… there’s so many other pressures… um, you know… at Lyell McEwen [public hospital in a low SES area] and the amount of patients you have to get in, get out, you know. No beds, no time for anything, um, some of us ask where does it come from?”

Here, the overloaded downstream context of hospital health care in a disadvantaged area consumed the energies of the health workforce; to the extent that upstream solutions (to multiple SDH) were excluded from consideration. Students learned the hospital physician’s task was ‘getting rid of patients’ (Mizrahi 1986); a feature of the ‘hidden curriculum’ (Hafferty 1998).

8.7.3 Health system critiques: Self-serving professionalism vs trustworthiness

A. The most disparaging critiques of modern medicine referred to a professional culture of self-serving greed; lack of SA related to the societal error; and physicians voicing common prejudices, unreflexive of ‘Othering’ as a fundamental upstream cause of

> illness. These critiques were voiced by participants in First and Final Year at both medical schools.

Safiya (A14) became an activist for the freedoms of the LGBQTI and mental illness groups in Singapore; which likely increased her *capability* for medicine, despite being an outsider with low social and cultural *capitals*. She bitterly critiqued the conduct of Singaporean physicians she observed stigmatising an ethnic minority by their social health behaviours. Discourse was centred on professional trust and justice.

> Safiya (A14)
> “It doesn’t matter who the patient is; what kind of race, what kind of background; but first and foremost, it’s the *health* - they’re here because they need help; and they have trust in you and you should um, we should not take advantage of this trust. People are coming in because of drug addiction or overdose and things like that… but regardless of your own personal opinion of these people, they are still your patients… and you shouldn’t be like ‘Oh, I’m not going to prioritise this patient because she brought this on herself’, whereas, this patient, she’s actually sick!”

This critical discourse takes aim at physician racism and poverty shaming; social judgments being made the basis of deciding *who* is deserving, and what *quality* of care is given. In socially accountable practice, race and background stressors are considered to evaluate each patient’s equity needs.

Both the United States and Australia were implicated by participants in forms of medical professionalism that reflected the neoliberal economic order and opposed the profession's 'collective public trust' to serve society. Julie (F45) commended Cuban medical education for producing a model of socially responsive, global health care to underserved societies. The perception of two standards of health care in Australia; one private, one public; and the systemic failure to improve Indigenous health, were regarded social injustices by two Final Year South-East Asian participants.

B. A 'professional hegemony' narrative was strongly voiced by student leader and lawyer Julie (F45), referring to opposition to UHC policy by the U.S. medical profession.

> "…[That] the rich doctors who have the keys to the system don't allow change… I suspect is one of the most egregious examples of injustice and inequality in healthcare, in such a wealthy country."

Yet, Julie (F45) made exceptions to the Australian profession;

> "I mean there is a perception in the community that doctors are interested in money and that's why they go into it, and I think that may be true for some, but most of my fellow students are not like that. But… there are many high profile doctors who are very wealthy and flaunt their wealth and don't really seem to look at these social issues. Again, I don't think it's so much of an issue in Australia."

Again, this was a critical discourse of professional trust, asking 'who benefits?' Julie (F45) may trust her peers, but had yet to experience the deforming systemic power of the professional culture.

8.7.4 Health system critiques: **Presentism and past professional injustices**

A. *Presentism* in participants' discourses of medical professionalism, defined by Rimke (2018:19) as "the analytic neglect of historical forces shaping" the discourse, can contribute to 'forgetting' about the lessons of historical atrocities.

B. Few participants recalled historic failures of medical professionalism such as incidents during the Holocaust, unethical research, and inhumane experiments. Just one participant, Matt (F47), referred to the harms of 'historical abuses' of medical professionalism, such as the Tuskegee experiment; and the expectation of physicians to be a 'moral compass' for their community.

> Matt (F47):
> "… in order to be truly moral, to treat someone fairly, you have to take those into account: that people might be in situations where they don't have fair distribution of health care resources because they are disadvantaged."

Here, 'taking into account' is an equity cognition that transacts fairness. In the Discussion [Chapter 12], I deliberate on the consequences of *presentism* in relation to evolving dilemmas in medical professionalism, and the potential benefits of a future-facing praxis. I discuss a social contract that responds to the pluralism of human societies; and preserves medical students' prosocial intentions for medical practice, their developing capabilities for socially responsive medicine, and well-being.

The topic of ‘equity’ rightly belongs here, as the term for correcting past unfairness in social relations and health disadvantages. The presence of a threshold concept between equality and equity was confirmed; although once terminology was explained, some participants knew immediately what the terms related to. Others needed time to cogitate their post-threshold understandings. An example was Viola (A11), an intersectional First Year student who was also unclear about the meaning of the term ‘determinant’. However, she had revealed a sociological imagination for health inequity before we discussed the terminology. Viola had learned about international inequalities and the Gini coefficient in geography classes during secondary schooling. Once the term equity was explained Viola (A11) correctly deduced; “Aboriginals have a drastically lower life expectancy than we do. That has to do with social inequity.”

Kerry (F41), a white Australian parent and Health Sciences graduate, reported little experience of Indigenous lifeworlds. When talking about The Charter, Kerry voiced a *pre-liminal* conceptual understanding of equity (unaware of its ramifications compared to *equality*) in health care, for both distributive and emancipatory health justice.

> Kerry (F41):
> “So, I think that it doesn’t matter what your background is or why you’ve come to needing health care, so whatever reason you come to need health care, whatever the background you’re from you will be treated in the exact same way, so whether that’s to do with the resources that are needed to treat you…

> It’s the same for the patient, no matter who they are… so um, it doesn’t matter if you personally have a problem with someone’s race, gender, SES, ethnicity, religion, any other category, you need to put that aside and the way that you then act as a physician to that person is the same. So, you’re seeing a patient… that needs help and the way that you address that is uniform throughout…”

At this stage of the interview, I constructed a clinical vignette to help Kerry follow her own reasoning to a logical conclusion. Her response typified the task of negotiating a new ‘threshold concept’ (Meyer & Land 2005). There was equivocation before irreversible understanding was reached. In this interaction, her conceptual clarity progressed *from pre-liminal* (“no matter who they are… the way you then act as a physician to that person is the same”) *to liminal* (“if you want the same outcome, you have to take into account their social situation”), *and back to pre-liminal* (“if you’re spending this extra time to get the same outcome for one person, are you then taking away time from someone else?”) in her understanding of health equity needs. Her reasoning comes up against systemic limitations on physician praxis by the societal error.

> Kerry (F41):
> “Yeah, so I suppose if you want the same outcome, you have to *take into account* their social situation to work out how you can get that same outcome for the both of them and it might mean that you have to do something slightly different.
> Yeah, then I suppose, you have to *take into account* your own resources and time…
> and if you’re spending this extra time to get the same outcome for one person, are you then taking away time from someone else that needs just as much care?”

C. ‘Taking into account’ is the transaction that helped Kerry across the threshold of this concept, and also to equivocate.

Ironically, as a physician, she will give her time again and again to patients with equity needs: to the ‘heartsink’ patients that keep returning to health services for management of chronic illnesses.

8.7.5 Health system critiques: A western, economic accountability discourse

A. An economic discourse in participants’ narratives referred to the ‘societal error’. Inequity of health care expenditure favoured expensive biotechnical interventions at the expense of primary health interventions that could reduce the burden of illness for disadvantaged populations. This discourse also directly affected the significant Indigenous spiritual health resource of land. Land rights, employment, and royalties from mining or agriculture present divisive dilemmas for Indigenous communities.

Julie (F45) talked about social justice responsibilities The Charter assigned to physicians that link to national democratic rather than economic goals.

> Julie (F45):
> “So, I think it’s about um, using whatever resources or opportunities doctors have to um, make sure their service is accessible, and to fairly distributing the resources that are given. But I think part of that is advocacy to the Commonwealth um, which is the major funder of health, to say that we need more money for primary health care, we need

> more money for Aboriginal and Torres Strait Islander health care, and for mental health, all these areas of underservice that if we could fund them properly, we could actually positively affect people’s lives.”

Mark (A612), a white male and rural South Australian participant, gave an economic and political perspective of distributive justice. He claimed disproportionate funding of public services favoured more populous urban areas, despite greater health equity needs in rural areas. He recounted the tragic story of a farmhand dying from acute asthma, too far from the nearest health service for timely intervention. This tragic event likely underpinned his advocacy of distributive social justice for regional health care.

> Mark (A612):
> “There’s been numerous studies that show, for example in my own interest area, show worse indicators of health outcomes of populations from rural and remote areas.
> So, I think it’s important in terms of um, providing more funding and resources to rural and remote populations so that that sort of gap can reduce… and then even to a further extent, primarily in the Indigenous population, there’s a health gap between the Indigenous and non-Indigenous population of Australia… and obviously that needs some form of um, resource or action to try and reduce that gap. It’s a huge question and I’m not sure I know the answer.”

Both Julie and Mark voiced distributive justice discourses that aim at economic equity for Indigenous and rural health needs; but do not reference the primary health care needs that result from colonisation.

8.7.6 Health system critiques: A social realist perspective of Indigenous health

A. A social realist discourse paid respect to Indigenous ways of being and becoming, and the need for longitudinal engagement by health services that develops mutual trust.

Violet (A13), a Vietnamese-Australian woman, perceived Indigenous health equity as a social justice priority of the Australian health system. Although not bonded to work as a rural health physician, Violet attended a rural health student group, and expressed a passion for social justice.

> Interviewer:
> "And health equity… what would that be for Indigenous people? What would we need to do to achieve health equity for Indigenous people?"
>
> Violet (A13):
> "Um, we would have to provide more doctors and I guess, people who are going to stay there, so a constant presence of medical professionals, not like rotations.
> Um, we would also need to educate the doctors that are going there about the cultural… like taking into account cultural considerations of indigenous people, how they like to be; like, because they like to have a centre for men and a centre for women. Take all that into consideration so that people are happy to access that health centre, and feel invited. It's also education of health, like there's a negative view of going to see the doctor… in one of the cases we studied this year, an Indigenous study um, so I guess, like building that trust and building that education that, 'If you're sick, go see a doctor'."

This discourse acknowledged traditional Indigenous cultural health needs, and suggested a sustainable approach to health care that addressed peoples' autonomy and trust. Communicative and relational justice were implied.

Yet health education was portrayed as individualist, and conformed to the imposed western system of health, leaving fundamental causes of population illness unchanged. Greater reflexivity on Indigenous health needs will likely emanate from work experiences in this field.

8.7.7 Health system critiques: **Becoming an advocate of Indigenous health**

A. Greater public advocacy by the profession in support of Indigenous inequities affecting health was strongly supported by just one participant; student leader Julie (F45).

Resentment at not being capacitated as a SA physician, when there was collective will to improve Indigenous health, was the main emotion that attended prosocial participants' complaints about compulsory cultural training.

> Julie (F45):
> "In our course we've got quite a lot of information about Indigenous cultural safety which for various reasons we really don't need to go into, hasn't been presented that well, um, and it doesn't lead to students becoming more empowered, to becoming more active on the issue; which is probably one of the most important social justice issues in Australia."

This discourse expected of medical education the knowledge and skills for becoming an effective physician advocate of Indigenous health issues. Pragmatically, this discourse related less to culture than to improving the Indigenous SDH. While individual learning was invoked, inter-professional advocacy of social health was implied.

B. Narratives that problematise Indigenous *culture* can shift the focus of primary health care initiatives *away from* powerful non-Indigenous structures generating social inequity, symbolic violence, and illness.

8.7.8 Health system critiques: **A health system incompatibility discourse**

A. This narrative was reflexive of a fundamental mismatch between the Australian health system and Indigenous conceptions of health.

Two Flinders participants from South-East Asian backgrounds considered the western health system unsuitable to Indigenous health problems and a communal wellness paradigm.

Simon (F13), a Chinese male psychologist from Singapore, correlated a systemic perspective of distributive justice with Indigenous health.

> "… what I do think is they [Indigenous people] may not be able to access health care, at the same time, because they have a different idea of health, because it's supposed to be more holistic, more community… so, instead of saying that they do not demand health

care, they need in my view, um…, occidental medicine as second tier to their traditional medical, um… beliefs, ideas and systems. *So, it's not a case of unable to, but they don't want to.* That's one… that's one way I think of it."

B. This discourse advocated traditional Chinese medicine to complement allopathic western medicine for meeting Indigenous expectations of a holistic health system.

It argued that SA to Indigenous groups required Indigenous people with the capabilities (Sen 2009) to autonomously choose a health system attuned to community-determined goals. SA professionalism is portrayed as a health system that permits social choice and respects autonomy for Indigenous ways of being and becoming. This accords with Sen's capability theory of social justice; an eastern rejoinder to Rawl's western theory of social justice.

In discussion, I explore the semiotic entanglement of western hegemonies in medical professionalism; and the value of an eastern perspective of the social contract to contemporary (Charter-led) medical professionalism.

8.8 Threshold concepts, ideologies and beliefs

A. The difference between equality and equity as a threshold concept (Meyer & Land 2005) of distributive social justice was confirmed; and was not confined to a particular study cohort.

In deciding 'threshold concept status' I needed to distinguish between participants that were unfamiliar with the *terms* 'equity' and 'equality' from those who did not understand the *concepts*. A diagram depicting dark-skinned people of differing heights attempting to watch a ball game over a perimeter fence was an *aide-mémoire* for some participants, distinguishing *equality* (all get a box to stand on) from *equity* (boxes are re-distributed to allow all to see over the fence). The semiotics of this visual image may have suitably low *density* of meaning and low *gravity* of context to initiate students' understanding of SA. However, applying this metaphor to complex contexts of health can require participatory action research to find solutions – the configuration of 'boxes' that works best for all. The diabetes limb strategy at Nhulunbuy was an example.

B. Participants in the Adelaide course exposed to rural and global health training had better understanding than Flinders peers of the value of health equity and SDH to health outcomes. Viola (A11) and Ingrid (A63) were examples. However, Flinders participants aware of the SDH, wanted to learn how to act on them (a *know-do* gap). *Actions in the world* were more evident in Flinders participant accounts.

C. Political ideologies that value *economic* justice above social justice were confined to two male Final Year participants, (A61) and (F44). Demonstration of economic sustainability of equity projects in health may re-balance the ledger of moral concerns these students have.

D. Religious ideology did not seem to play a significant role, except for one participant, (A610) strongly opposed to medical abortions.

E. Justice concerns for children were expressed less compared to concerns for aged adults; although several female participants cited evidence that equity actions for poor women improved child health.

8.9 Widening participation and professional aspirations

Results of participants' Insider (I) and Outsider (O) status and choice of type of medical professionalism (See Wear & Aultman chart, above) were tabled in Year group cohorts (See **Table 8.2,** below). Outsiders are linked with the widening participation agenda.

In the study survey, participants were invited to choose ONE preferred 'Type of medical professionalism' (A to G) from the following chart by Wear & Aultman (2006).

Types of medical professionalism
(Wear & Aultman 2006)

A. Traditional doctor, working long hours, dedicated to patients
B. Medical practice as a means to business ventures
C. Combine medical practice with teaching and research
D. Part-time doctor, part-time other interests e.g. family, lifestyle
E. Technical mastery, specialist, financial success
F. Follow your own personal morality, what works for you
G. Practice in an area of need, concern for disadvantaged groups

8.9.1 Widening participation: Combined school cohorts

- A higher proportion of outsiders at Flinders reflects the school's SA provenance.
- No Adelaide participant selected type F. professionalism (*Follow your own morality*).

  This result may reflect the formational stage of development of undergraduate students, and socialisation to a traditional program of medical education. Those choosing type F. professionalism at Flinders are discussed below (8.9.2).
- No insiders selected type G. professionalism (*Practice in an area of need*).

  The ambition for traditional pathways of medical practice reflects Bourdieu's theory of practice in which the dominant structure of society is reproduced through HE.
- A choice of type G. (*Practice in an area of need*) by both Adelaide and Flinders outsiders suggests vocation for public health practice was present early among Adelaide students and retained by those entering Flinders medicine from other careers.
- Outsider participants in the combined Adelaide and Flinders cohorts were more likely than Insiders to choose type F. and type G. professionalism (**Table 8.2**, below).

8.9.2 Widening participation: Adelaide outsiders

Adelaide Final Year outsiders were more likely to choose type G. professionalism than Flinders outsiders; and type D. (*Part-time doctor, part-time other interests*). The pattern of type G and type D. professionalism was in common with Flinders outsiders.

This finding indicates a strong declared vocation for social justice among school leavers entering a traditional medical program; and accords with Archer's social realist thesis of meta-reflexivity on the social order of society in times of humanitarian crisis.

Adelaide student code	*Habitus* Outsider/ Insider	*Type of medical professionalism chosen*		*Flinders student code*	*Habitus* Outsider/ Insider	*Type of medical professionalism chosen*
♀ A11 ♂	O	D		F11 ♀	O	C
A12 ♀	O	C		F12 ♂	O	F
A13 ♀	O	G		F13 ♂	I	C
A14 ♀	O	D		F14 ♂	O	A
A15 ♀	I	A		F15 ♀	I	D
A16 ♀	O	G		F16 ♂	O	D
A61 ♂	I	D		F17 ♀	O	F
A62 ♂	I	C		F18 ♂	I	F
A63 ♀	O	G		F19 ♂	O	G
A64 ♂	I	A		F110 ♂	I	F
A65 ♀	O	D		F111 ♀	O	A
A66 ♂	I	C		F112 ♀	O	C
A67 ♀	O	G		F113 ♂	O	-
A68 ♂	I	C		F41 ♀	O	D
A69 ♀	O	C		F42 ♀	O	D
A610 ♀	O	D		F43 ♀	O	C
A611 ♀	I	C		F44 ♂	O	D
A612 ♂	I	D		F45 ♀	I	F
A613 ♀	I	C		F46 ♂	O	D
12 Female 1 Fluid 6 Male	**Higher status**: types B, C, E **Lower status**: types A, D, F, G			F47 ♂	O	G
				F48 ♀	I	F
	O/I =10/9 =1.1	A=2, C=7, D=6, G=3		12 Female 9 Male	**O/I = 15/6 =2.5**	A=2, C=4, D=6, F=6, G=2 One omission

Table 8.2 Comparison of study participants *habitus* (Insider or Outsider) and career aspirations (See 'Types of medical professionalism') at two medical schools. Flinders is a graduate entry course and social accountability medical school. Adelaide has a traditional, secondary-entry course.
Female ♀ Male ♂ Gender Fluid ♀ ♂

Findings:
Higher ratio of female to male study participants = 3 : 2
Higher ratio of Outsider to Insider participants at Flinders = 2.5 : 1.1
No 'Insiders' selected Type G. professionalism (*Practice in an area of need*)
'Outsiders' at Flinders were more likely to choose Type F. professionalism (*Follow your own morality. What works for you*) and Type G. (*Practice in an area of need*).

8.9.3 Widening participation: **Flinders outsiders**

Choice of type F. professionalism (*Follow your own morality*) by Flinders outsiders suggests they were *meta-reflexive* of traditional career pathways, as proposed by Archer (2012). They planned to flexibly practice medicine (in ways that matter to me); within the constraints of a personal life plan and projects, but ‘outside the tent’ of conventional professionalism types.

Choice of type D. professionalism (*Part time doctor, part-time other interests*) by Flinders Final Year outsiders may reflect the same meta-reflexive concerns as type F.; or, all being women, feminist reflexivity on domestic and broader societal roles complementary to medicine. Leadership, social and political advocacy were strong interests among this group.

8.10 Reflections on the results

A. Support for social accountability learning

The collated data gives a sense of participants’ general willingness to broaden their consciousness to include the social structuration of illness in medical practices. Very few could imagine what a physician’s SA practices would involve. Some found just ‘talking with patients’ difficult to find time for.

B. Distribution of critical capability among cohorts

While positive social justice orientation was common to the majority of participants, the cognitive skills of CC were unevenly distributed according to differences in ontology (intersectional identities) and pedagogy (situated learning), rather than epistemology (knowledges) or correlates of formal curriculum (School, Year level).

Disadvantaged adults lacking agency for improving the conditions of health in which they live, work, and raise families were perceived to require social support in downstream and upstream contexts, from a broadened, more *holistic* consciousness of health accountability.

C. Downstream focus of social accountability

‘Outsider’ participants with refugee and migrant backgrounds had embodied prosocial concerns for disadvantaged others of the same background, and sociological insights to health disadvantage. Yet, proposed actions on these concerns were more often directed to the *individual* patient, than to the *social group*; and to the patient’s ‘*midstream’* knowledge, health beliefs and behaviours, more than to fundamental social forces acting ‘*upstream’*.

Given the clinical skills training at both schools, motivational interviewing and direct patient education to reduce harmful behaviours was expected in Final Year participants’ narratives. The approach was found to be inconsistent between Final Year participants; with confusion about the philosophy of social and behavioural change. When taught as a midstream approach, motivational interviewing focusses on the clinical encounter. Study transcripts show methods unaccompanied by advocacy actions to correct upstream, communal health problems; and in a few Final Years, alarmingly didactic or paternalistic approaches.

D. Education of consciousness

Participant perceptions of the type of ‘education’ or ‘awareness’ required by disadvantaged patients resembles a Bourdieusian form of critical *mis-recognition*.

It was not rote learning, but life changing *capabilities* that Sen (1999) observed resulted from emancipation from major social stressors that empowered people to act in their families' and own best interests. This was the distinction in pedagogy Freire (1973) made: critical education as consciousness-raising (capability) interrogates the symbolic violence of dominant cultural ideas (such as colonialism and neoliberalism); to reject the resulting distortions in social relations of self and others to society (Ray 2015). Capability for CC begets forms of capital, capability or empowerment to gain greater freedom, access to social goods, and control of one's living conditions.

Critical pedagogy can signal to physician consciousness the current and local structural constraints generating distress and illness, to inform ethical responsibility.

E. The upstream health production mindset

For the majority of participants, the idea of 'health improvement' or 'health production' (*not* preventative health) was an unfamiliar concept.

Essentially, health production refers to chronic disease prevention (Harris, Kidd & Snowdon 2008). Repeatedly during interviews, participants hesitated when reading this phrase; and gave the bemused response: 'Hopefully this is what we're already doing!' (when treating a patient's medical condition). Yet, sociological understanding of the 'health-illness dialectic' implied by the SDH may be necessary *before* this concept and its consequences for practice are fully grasped. Hence, this may be a threshold concept (Meyer & Land 2005) for students accustomed to the biotechnical, downstream, disease model of medical education.

Health production mindsets among First Years referred to mindfulness (A16), positive thinking (A15), and relaxation (F111); whereas, Final Years advocated didactic health education (A65, F43) such as dietary advice (F42, F44); parent education for early detection of children's sickness (F43); and early adult presentation of symptoms (A14, A69, A64).

In biosemiotics, to evaluate capabilities / freedom, the physician enquires about the sign system (semiosphere) structuring the patient's lifeworld; and the meanings the patient draws from reading their sign world that complexly determine thoughts, feelings and (health related) behaviours. This gives *mindfulness* a reflexive dimension; but capability for reflexivity may need to be prioritised.

Proposed upstream interventions included individual capacity building (A63); early childhood education (A61, A68); wellbeing approaches (A63, F42); inter-generational community programs (A68, F47); and, personalised adolescent interviews to assess adjustment to sexuality. East Asian Final Year participants promoted choice of health system, and advocated Chinese medicine as an alternative for Indigenous health.

Hope (A611) passionately voiced the need for raising CC among oppressed rural people she saw in Kenya: disempowered citizens who passively accepted a dysfunctional, unjust and patriarchal health system. She observed health workers performing street theatre as a method of HIV-AIDS education appropriate to rural people with poor literacy and education. This was an example of 'epistemic reflexivity' (Bourdieu & Wacquant 1992; Maton 2003) contributing to creative design of an effective SA health intervention.

F. Critical misrecognition

In this mindset, students can perceive disease (or pathology) but not illness (or suffering); for want of mutual recognition (Honneth 2009) of our common humanity (Worsdale 2017). This false consciousness echoes the sentiments of medical educators commenting on the purpose of The Charter as promoting *humanism* in medical professionalism (Hafferty 2006; Coulehan 2005).

Misrecognition was observed in participants (e.g. A61) with *preliminal* (pre-threshold) concepts (Meyer & Land 2005) of the difference between equality and equity in health care.

A conservative ideological viewpoint elided structural differences, such as the significance of a patient's social position, determined by socioeconomic gradient and SDH; and supposed fairness was met by people *choosing* to take advantage of equally available opportunities in society. This viewpoint accords with neoliberalised ideals.

The sociological system that Bourdieu devised from empirical observations, can account for this outcome. The mix of various capitals (material, cultural, social or symbolic); social distinctions that empower habitus (Bourdieu 1986) in a field, reproduce the societal hierarchy (Bourdieu (1984). *Misrecognition* of the machinations of power in society, an artefact of unreflexive cultural advantage, is reproduced through the education system (Bourdieu & Passeron 1977; Navarro 2006). Hence, reflexivity on habitus (on the social power bestowed by habitus) appears essential to transformative empathic understanding ('awareness') of how 'the Other' is unfairly socially disadvantaged.

Similarly, positivist science, as a dominant power in the HE field, was *contextualised* by Bourdieu (1984) as a vehicle of the unequal societal status quo. Hence, a *re-contextualising* principle (Bernstein 1999) becomes necessary for instilling critical pedagogy in medical education.

G. Community engaged learning

Evidence from this study supports the value of voluntary 'service learning' experiences or electives in contexts of social disadvantage, and membership of prosocial student-led groups external to the formal curriculum; to inform students of the plural ontologies and epistemologies of social disadvantage and illness.

H. Widening participation

The widening participation agenda, bringing 'outsider' students into medicine, is supported by evidence of their dialogical understanding of the social 'health-illness' dialectic, despite divergent intentions to practice in underserved areas of health need.

While critical observations on social health concepts were made by both insider and outsider participants, fewer 'insider' participants could suggest broad SA actions for health improvement.

I. Boundary objects shed light on dual health needs

- A critical, sociological imagination for health improvement was restricted to participants that experienced health settings where a critical approach to health was most needed.

This was the case for Nate (F46) during his training in a Northern Territory Aboriginal community, making sense of the *strangeness* (Haynes et al 2014) of storing amputated diabetic limbs; Ingrid (A63) in London, learning about *capacity building* measures for empowering homeless women dependent on sex work for income (ibid); and Safiya (A14), learning about the practice of *self-denial of health needs* among socially disadvantaged women in Singapore. Julie (F45) experienced learned helplessness about medical hierarchy; and resignation about negative 'boundary objects' (Star 2010) shared between medicine and social welfare (e.g. 'acopic' patients with needs recognised by both biomedical and social health knowledge communities yet *belonging* to neither disciplinary category). These crises are 'cracks where the light gets in' - clarifying a new account and ethical purpose for medical practice in which community goals are prioritised. A shared positive boundary object between these communities of practice is likely CC; a common language linking upstream and downstream contexts of health practices (Fox 2011). Furthermore, the diverse ontologies and 'funds of knowledge' (Zipin et al 2015) of health practitioners and patients, could inform participatory action research leading to evidence based solutions, and a new epistemology for medical practice.

- Participants' lack of 'situated' and engaged learning experiences in diverse human social *fields* was partly responsible for limitations in sociological health perspectives, narratives and bioethical reasoning.

Abdolmeleki et al (2017) claimed that visionary health professions leadership, giving emphasis to community engagement, is linked to better uptake of SA practices.

J. Fractured habitus

Of concern were 'outsider' participants (e.g. F44), with community-based experiences of social disadvantage, that remained *unreflexive* of their habitus and the field of health production when expressing social beliefs.

As concluded for participant F44, this may result from *fractured* habitus. Graduates with *fractured* habitus, unless more reflexive of patients' equity needs, may feel ambivalent about SA health approaches. Validation by pedagogy of the language of SA, and physician roles and relationships, can affirmation prosocial dispositions. Those 'insider' participants objecting to social justice and affirmative action principles (e.g. A61), cannot be expected to contribute to professional SA actions; but may instead prefer charitable work.

K. Reflexivity on global inequities

The post-modern era has exposed a diversity of structural inequities affecting human wellbeing. Many were under-reported in this study. Participants' perceptions of social health inequities rarely reached a state of critical consciousness that could anticipate emergence of new categories of health disadvantage. Arguably, SA requires the profession to adopt a critical stance to social change and disruption: to be agile and anticipate future health system needs.

L. Sustainability and future health needs

A responsive, sustainable health system needs to be future-facing and ready to prioritise and coordinate actions equitably. An ecosystem of knowledges will likely be invaluable to this objective.

Study results revealed a strong collective disposition among participants for social justice as a component of medical professionalism; the need for a phronesis, and a desire to learn SA skills.

The topic of social justice brought to the study a female majority of participants, many with intersectional equity identities; and a male with no equity identity opposed to social justice ideology. Consistent with previous research, those with low equity identities preferred to practice in areas of health need; more than participants with high equity intersectionality or no equity identity.

Outsiders, more than insiders, expect to acquire competencies in cultural literacy and social accountability. In the current academic structure, they plan to practice flexibly, and follow their own professional paths. They have social justice habituses and a wealth of critical humanist social knowledges: prepared to convert *capabilities* into SA practice *competences*.

Medical education reform to validate SA practices is needed to formalise prosocial career pathways. Outsiders' social justice capitals need *authentication* in professional discourse to prevent 'identity fracture' and mental health problems. The reform role of the 'pedagogic device' as a lever of educational stance is introduced in Chapter 11.

Participants’ creative capitals for SA practice (in the study setting) were poor; yet, the following praxis, collectively formulated from interview transcript data, has merit.

8.10.1 Acknowledging inequity

In recognition of the social contract, physicians need to acknowledge that these problems (inequities in health outcomes) exist.

8.10.2 Being mindful of purpose

To respond, and avoid becoming part of the problem, physicians need to understand themselves as communicative agents; and understand the paradigm of the health system they are working in; to question its *purpose*. Bringing ethical *purpose* to the patient means timely accountability to existential needs.

8.10.3 Adapting to diversity

No health system is ‘one size fits all’; physicians need to adapt health practices to diverse needs and human contexts.

8.10.4 Collective actions

Physicians need not work alone to develop SA actions, but not all will wish to be involved. In the U.S. and U.K. new health worker positions have been created to deliver social interventions in the community, prescribed by physicians, with evaluation of effectiveness (Roland, Everington & Marshall M 2020). ‘Social prescribing’ as it is known, may be cost saving, and could usefully be introduced by medical and health professions educators in Australia.

8.10.5 Social justice as a guiding mindset

Social health justice is owed to all patients *and* students in health professions. “We can all provide justice where we are” (A16) captures this sentiment. Some medical students have a vocation for social justice; in which their medical ccareer is a means ‘to make a difference’. Participation in SA activities is an aspiration in pursuit of competencies. Curricular validation of SA practices may provide bridging capital for WP students with dispositions for primary care. Outsider students with prosocial habitus and funds of social knowledge may productively engage in group-based SA problem-solving and actions, despite aspirations for social mobility. Critical insights to complex societal problems can lead to novel research approaches and new knowledge.

8.10.6 Reflexivity on outmoded modernisms

Medical associations representing the professional collective need to become reflexive of the community impacts of social and professional hierarchies, and neoliberal discourses; and speak out for social and political justice and human rights, in solidarity with oppressed groups and health professions colleagues. Racism, sexism and sexuality stigmatising are unacceptable in public and professional spheres. Truth-telling serves human rights.

8.10.7 Prosocial academic leadership

Change in professional discourse toward greater social justice is underway in academia; as evidenced by the flourish of articles advocating social accountability in The Lancet and NEJM.

The agency for SA is present in participants' discourses, but structural validation of the human contexts of social inequity in medical education appears weak. I address this problem in Chapter 12.

CHAPTER NINE: RESULTS PART 2.
CONCEPTIONS OF SYSTEMIC HEALTH INEQUITIES

In what ways do participants problematise the health system for social inequities?

9.0 Macro/ micro structuration of health inequities

Social injustice was perceived by many participants to be effected by health system frameworks that permit micro and macro *maldistribution* of health care resources, reflecting common social prejudices, constant social change, and political pressures in society. These conditions present a challenge for health professions educators attempting to integrate into a single praxis graduates' responsiveness to immediate (micro) health care demands and long term (macro) social health accountability needs (Legge et al 1996). This study examined medical students participants' generic and situated capabilities for critical interpretation of social health production that could inform graduate SA praxis.

In this chapter, I outline participant perceptions of the macro-to-micro structuration of health inequities related to the societal error. Participants' critical reflexivity on health service disparities, as both *recognition* and *misrecognition* (Bourdieu 1970), may inform a critical pedagogic theory in HE (Maton 2003) for organising effective micro-macro medical practices

Examples of participants' meaning-making of medical professional *learning* and perceived dissonance with clinical medical *practices* are analysed in the section following.

9.1 Fragmented and fractured macro health systems

Medical education, while acknowledging to students shortfalls of 5 minute consultations and the often imperfect follow-up of patients, is bound by local funding models of health care. Time limitations may permit only the essence of the patient's history to be sought, resulting in neglect of patient wellbeing. The 'societal error' is repeated when fundamental drivers of health in the social lifeworld remain unacknowledged, overlooked, or reinforced by the nature of the health system framework. Chronic health problems can be missed, and misdiagnosis or medicalisation may ensue. Mismatch between health needs and health demands can derive from empathic failure to read the 'social health-illness dialectic' disadvantaging particular groups.

In the following edited excerpt of an interview transcription, Mark (A612) was asked about his experience of the societal error. I have underlined the key elements of Bourdieu's critical concepts of *recognition* and *misrecognition* in this narrative, and provided comment in square brackets.

> Interviewer:
> "So why do you think the profession is so focussed on treating people once they become sick instead of working to make people healthier, so that they are less likely to become sick?" [Statement of the societal error]
>
> A612:
> "Um, there's not very much money in it, and that can be a huge thing, um, not necessarily as a doctor but so many drug companies want you to prescribe their drugs,

they want to get your wage, you're taught that medication is going to help, and then um, yeah… earning money is a huge thing, but I think… also it's the way it's taught in medical school."

[*Recognition*: Money is the power that dominates the field, inscribed in pharmaceutical products, backed by a wealthy multinational medical industrial complex; and legitimated by pedagogic devices in medical education empowering the profession's gatekeeper role, monopoly on drug prescription, and continuing dominance of the field. The societal error in Australia may also be partly related to major population centres being located on the island continent's coastal fringe.

A612:

"It's very much taught, this is how you treat, and it's a medication. It's also easier to give someone a drug or… just kind of, let people be the way they are, because it's hard to change it. If that makes sense…?"

[Drug prescription is a convenient, professionally sanctioned form of physician power, derived from biotechnical science, therefore credible and powerful; while social change demands exchange of power without gain in capital. Drug prescribing is also a boundary object: increasingly undertaken by nursing and paramedical practitioners, and a perceived threat to the medical profession's autonomy (Cooper, Bissell. Ward et al 2011).]

Interviewer:

> “Yeah, there’s a perception in medicine that you can’t change the social circumstances of people’s lives. In fact, a number of the social determinants of health are reversible. There’s not a consciousness for it…?”

> A612:
>
> “No… but also, I just think there’s so little time for people to even reflect about, for doctors and medical students to reflect on these things, there’s so many other pressures …um, you know, do they [sic] work at Lyell McEwen [hospital] and the amount of patients you have to get in, get out, you know. No beds, no time for anything, um,… Some of us ask where does it come from? You’ve got people who are trying to [indistinct] ...I don’t know whether you can work fully as a doctor and then… huh, I don’t know if you can do both, as well, if that makes sense?

[Time is a scarce commodity for patient care and people keep getting sick, so professional capital is consumed by disease demands and we cannot envisage meeting both treatment and social health needs. Time demands maintain misrecognition through lack of reflection. ‘Where it comes from’ answers the societal error; Lyell McEwen hospital is situated in Playford, the lowest SES region of South Australia.]

Mark (A612) exhibited critical reflexivity on the *macro*, neoliberalised order structuring the overloaded downstream context of health care, but did not quite make the connection to the societal error. He recognised that need for efficiency and cost-cutting of health services came at the expense of human care, but misrecognised how his knowledge paradigm was subject to the neoliberalised structuring of professionalism. *Epistemic reflexivity* (Maton

2003) [See **Figure 11.1**] on knowledge of social health needs in the Playford population, and health demands on the local hospital, could get him across the line to understanding the societal error in regional South Australia. As a professional act of SA, he may then question the State government's decision to close community health centres.

Other participants reflexive of *macro* structuration of health inequities in society referred to political and legal injustice. Safiya (A14) saw how wealthy conservatives held power in Singapore, cynically exploiting 'the pink dollar' (spending power of single LGBQTI people) while simultaneously refusing their civil and human rights. She saw physicians in Singapore uncritically mirror these unjust societal norms in medical practice. Other Asian participants saw how private health systems monetised quality of health care that, as a human right, should be available to all.

Inflexibility of health systems to Indigenous health needs was another criticism of the macro Australian context. Alison (F11) saw Indigenous health as 'white dominated' and attributed the failure to 'close the gap' in health outcomes, not to deliberate injustices, but to "subtle injustices like systemic issues." She saw "regimes and programs" *imposed* on Indigenous communities with "best intentions" but with no mutual trust for meeting communities' autonomously perceived health needs. Subsequent failure of programs can add to the deficit discourse of Indigenous health.

9.2 Micro structuration of health inequities

A number of themes in the results impart insights to how inequities are structured by the instrumental mode of professional practices. In this section, I collate qualitative findings of critical perceptions of health care justice and professional hierarchy on patient and student health; and speculate on sites of social justice learning.

9.2.1 Making time for patient needs

The time-space theme in participants' narratives of health inequity [Appendix 9, Theme F] points to deficit of social action on the patient's predicament; variously referred to as *forgetting, neglect, or regret* for the lack of time for equitable health care. The groups nominated were people with chronic degenerative neurological conditions, functional neurological conditions, the elderly, 'time-wasting' non-compliant patients, and 'acopics' – often elderly and socially marginalised patients internally displaced within a health system. Final Years observed a hidden curriculum that anticipated, adversely discriminated, and labelled patients according to their marginal status in the health system. They included socially disadvantaged, Indigenous people; poor or troubled communities; and, patients with drug and alcohol disorders: the same groups marginalised in society. In PHC, more holistic relations between physicians and patients were witnessed; each was well recognised by the other, with greater care, communication, and anticipation tailored to patients and their families.

The space-time problem was related to busy downstream health care settings, in which the 'busi-ness' of treatment demands reframes patients as ciphers; a biomedical, dehumanising gaze. Boltanski (1999) begins a chapter on 'distant suffering' in sociology in a manner that could be a metaphor for the 'forgetting, neglect or regret' that participants perceived of the physician role in relation to patients with chronic illness and social disadvantage. The *acopia* phenomenon comes to mind. Boltanski describes the relationship as a dilemma…

> …on the one hand there is an unfortunate that suffers and on the other a spectator who views suffering without undergoing the same fate and without being directly exposed to the same misfortune. To adopt an acceptable attitude, the spectator cannot remain indifferent nor draw a solitary enjoyment from the spectacle. However, he [sic] cannot always intervene directly; he cannot always go into action, that is to say, unify the framework within which he acts and the framework within which the unfortunate struggles in such a way as to bring together in a single situation the two originally different situations.
>
> (Boltanski 1999:114)

Wasserman (2014) described this conundrum of the "art-science disconnect" (:285). In clinical medicine, patients that don't fit the 'presuppositions' of physicians are deemed failures; marginalised within the health system. Instead, the social agenda instrumentally serves the bioscientific agenda; not the art of medicine that would "see patients as legitimate, autonomous selves" (ibid).

9.2.2 Connecting macro and micro structuration of inequity

Participants of Asian nationalities or backgrounds brought an oriental cultural lens to the study. They were aware how more liberal social policy and democracy differences between Australia and their natal society affected health outcomes. Insights often followed elective medical training experiences in their parents' homeland. Safiya (A14), observed prejudicial treatment of young LGBQTI, Malaysian and drug addicted people in Singapore healthcare, and reflected on the macro structuration of policy on these events. An oriental reading of sociopolitical change to empower stigmatised groups (e.g. LGBQTI) towards greater freedom, provided by Simon (F13), regards *community* akin to family, and *change* as cautious, harmonious, cyclical, and eventual.

Service learning experiences in developing nations afforded both Asian and non-Asian participants comparative perspectives of system frameworks; simultaneously revealing neglect of health *needs* while, often tragically, geared to late-stage health *demands*. In this way, service learning experiences opened a comparative lens on systemic health equity for participants visiting less developed nations, or rural health training in underserved towns in Australian. Yet, when asked to synthesise a strategy for health *production*, most struggled to unify the knowledge sets. Lacking a framework for enacting SA, participants used what they knew or imagined to devise an intervention; 'a way to bring together in a single situation' (Boltanski 1999) this universal framework dilemma.

9.2.3 Structuration by medical hierarchy

Flinders participants made conscious of their subordinate position in the medical hierarchy problematised hierarchy as a structural obstacle to ideological reform of professionalism.

This view accords with transformative change theories that propose change results from changed discourses in a field (Foucault 1969). Participants referred to the double bind of having unethical supervisors as assessors of student performance (F46); concern for the possible impacts of hierarchy on *patients* (A613); impacts of hierarchy on value aspirations and wellbeing of medical *students* (particularly women); and, effects of hierarchy on the professional *culture* (F45). Forgetting, neglecting, and finding no space-time to investigate subtleties of the patients' social health may also be impacted by hierarchy and hegemony of the professional status quo.

Few participants, mostly women, problematised the effects of social hierarchy on their own health, despite many reports in the public sphere of bullying, neglect and overwork of junior doctors in training programs (e.g. Kadota 2020). There was a sense of resignation in the face of institutionalised power; likely steering some highly talented women away from hospital practice.

A re-framed professionalism would recognise a *heterarchy* of knowledges that apply to health problems. Information theory has evolved quickly in the era of the 'knowledge economy' and computing; with the semiotics of communication informing learning and teaching (Semetsky et al 2010; Maton 2010). A semiotic approach to medical education is hypothesised to organise a frame accommodating heterarchical knowledges, ways of being and ways of practicing in the new professionalism.

9.2.3 History as a guide to professional ethics

Just two Flinders participants (F110 and F47), reflected on *historical* features of medical professionalism that could inform a renewed 'moral compass' for the profession. F110 reflected on the difficulty of shifting historically entrenched practices defended by the hierarchy, and reforming health care systems to meet Indigenous population needs. (F47) was the only participant to cite historical atrocities of medical professionalism that may be salutary to current professional praxis. In contrast, participant A61 opposed any critique of the propriety of existing professional arrangements on conservative ideological grounds.

In summary, ahistorical perspectives may be ascribed to the dominance of neo-colonial, neo-liberal and biotechnical discourses on student cognition. Historical essentialism, like military history written by the victor, can comprehend the professional contract as a fixed entity that outsiders need to conform with. Yet, under the present conditions of system maladaptation to societal needs, change to incorporate equity into medical professionalism is rightly sourced from outside the medical culture.

9.3 Sites of social health learning

Prosocial medical student-led groups may be micro sites for peer-to-peer learning of the grammar of social inequality; contexts that scaffold participants' situated learning of the health-illness dialectic from experiences with disadvantaged communities. In effect, they may be incubators and knowledge hubs for socialising medical professionalism discourses.

Intersectional equity identities	**Nil or one equity identity**	**Totals**
International 1.8	International 2.66	**International** 2.27
Domestic 2.27	Domestic 2.67	**Domestic** 2.52

Fig. 9.1 Average number of medical student group memberships.
Comparison of Australian (domestic) and International participants.

In **Figure 9.1** (above), the cohort with the lowest membership in medical student groups was International participants with intersectional equity identities. Perhaps having more to lose from exam failure, and fear of getting too close to needs, they invested more energy in academic progress and social mobility; a practice in which extra-curricular activities could be seen as distracting. For others, I hypothesise, these groups provide social and cultural capitals not available in other settings, and satisfy vocational dispositions for social justice.

However, this may be a form of misrecognition. Bourdieu's social theory (1977) refers to reflexivity on *first order* or material objectivity of 'socially scarce goods and values', and *second order* or symbolic objectivity as the 'system of classification of social agents'. Medical student groups may be contexts where 'systems of classification' of professional hierarchy are rehearsed and contested before peers. One Asian participant (A66) reported non-Asian 'cliques' in medical student groups that appeared unwelcoming to him. Further research may be helpful to clarifying the socialisation of capitals in student-led groups.

Although prosocial groups face outward to global community concerns, It was not possible to know from study data whether participant reflexivity on the social order of society was role-modelled in these groups; or whether critical reflexivity matured in relationship to disadvantaged others during clinical and service learning encounters. There was evidence from interview data that transfer of this competency was difficult via Indigenous cultural safety training; yet was evident in the testimonies of First Years (A16 and A613) and Final Years (F46, F47, A63 and A613) returning from Indigenous service learning experiences.

These findings accord with Maton's classification of a hierarchy of knower gazes according to social proximity [See **Fig. 8.1**]; and to the idea of cultural *literacy*, mooted earlier. Initial impressions, and guesses (or reflexive abstractions) of how culture matters to the health encounter, are refined with experience. *Literacy* is hypothesised as ability to read lifeworld and contextualise the health-illness dialectic; information needed to strategise SA actions.

Final year participants were reflexive of negative stereotypes communicated by physicians involving race, sexuality, poverty and Indigeneity, although some dismissed these discourses as *generational*; their peers were not like that. First Years were yet to test their intrinsic biases in health care settings that Final Year students found to unfairly mirror societal norms. The perceived need for social identification of patients was obscure, or was felt to be discriminatory, by the majority of First Years; while the problem was pigeon-holed to physical (sexual health) concerns by most Final Year participants. Critical pedagogy informed by biosemiotic methodology may assist students with this learning fallacy.

Those students with high justice sensitivity and strong symbolic competence for social action seemed to scaffold near-peer learning of critical sociological concepts in zones of proximal development (Vygotsky 1978) to social disadvantage; that is student-led groups. Yet, in Bourdieu's theoretical framework, medical students are in competition with each other, and other health professionals, for available cultural and symbolic field capitals. Traditionally, highly rewarded positions in the professional order were modelled on outdated, hierarchical, gendered and colonial systems of governance. Prosocial service has not traditionally been highly rewarded in medical professionalism. Yet, *meta-reflexivity* on the reward structure; to instead consider what matters to *my medical professionalism*, may be reflected in the number of Flinders Final Years choosing professionalism type F. (Follow your own morality).

In the new social order, socioeconomic inequalities are often pre-problematised and globalised by social media; and arise more directly from sites of disadvantage and human turmoil than earlier media sources. Pro-feminist, pro-black, pro-diversity and pro-ecology discourses – in news items, anthems and cultural symbols - are freely accessible to young people through ubiquitous communication technologies. Arguably, values identification with global human injustices has never been easier than in the current era; highlighted in 2020 by social inequalities in morbidity and mortality during a global virus pandemic. Social injustices were previously highlighted by a background of steady socioeconomic growth and increasing longevity among the world's populations (Pinker 2018).

9.4 Summary: Critical perceptions of micro health system inequities

Perceived concerns for systemic structuring of health inequities engaged participants in discursive discussions of macro and micro contexts of social health production.

Critical reflexivity on upstream sociopolitical linkages to downstream health inequities during interview problem solving was rare in the study, despite participants observations of inequities. Participants lamented that they *forget*, *neglect* and *regret* the lack of time to check the patient's social wellbeing in busy 'downstream' health service contexts. They were not conscious of the multiple ways in which what was taught, and what was excluded by what was taught, contributed to this doxic dilemma (Savransky & Rosengarten 2014).

This ‘forgetting’ can happen in the ‘null spaces’ (Eisner 1994) or “what happens between what is planned and what is experienced that can affect the people students will become” (Magill & Rodriguez 2014:210). It can particularly happen in anti-critical curriculum and in western knowledge practices (Santos 2007); yet, it was in these same spaces in a critical curriculum that CC could develop. Knowledge forms are given status in the hierarchies of curriculum and pedagogy. How recontextualising symbols are coded in curriculum, assigned valence, and signal expectations in adult learning (introduced in Chapter 10), is explored further in the final two chapters.

Low equity identity Australian participants expressed concerns for negative effects of professional hierarchy on students’ prosocial aspirations; perceiving impacts on patients, students and the medical professional culture. Macro social and policy changes that would produce greater SA were seen as important but distant from the micro settings of health service demands; and difficult to reconcile with the system framework physicians work in. Negative system comparisons were made between the United States and health systems in undeveloped nations, while positive comparisons were made with Cuba and Scandinavia.

High equity and Asian-identity participants expressed critical concerns for western health system impacts on Indigenous groups, and quality of care in public versus private systems. In eastern thinking, voiced by F13, sociopolitical change to correct social injustices was traditionally cautious and harmonious, but eventual. Health system changes matching political norms were expected to follow. Both macro and micro contexts of health were problematised by an Asian participant with high intersectionality (A14) whose critical, discursive, social realist narrative was drawn from close proximity to disadvantaged patients in Singapore. Some participants challenged the suitability of ‘one-size-fits-all‘ health frameworks to diverse health needs; but innovative solutions that involved physician actions were not voiced. This may reflect the communal rather than individual cultural relations common to Asian groups.

Empirical studies by Nisbett (2003) distinguished philosophical differences between easterners and westerners. These were summarised by Kennedy-Reid (2012);

> Easterners are far more attentive to context and to relationships, that Easterners tend to think holistically whereas Westerners take a more reductionist, deterministic view, and that Easterners see the world in constant flux, while Westerners strive for stability.
>
> (ibid:256)

The relevance these social comparisons lend to the study is the suggestion that resistance to change is inherent to western thinking; but so too is solidarity with a new paradigm, once established. Expectation of change among easterners suggested they were more reflexive of future oriented and collective health needs.

Of ethical concern is engagement of medical students in practices that constitute ‘symbolic violence’ for patients; whether students are conscious or not of this outcome. This dilemma drives a moral duty by educators to develop a pedagogy for inculcating students' critical reflexivity; one that motivates SA practices and greater consciousness among graduates of critical dilemmas in their medical praxis.

How the findings of the study may inform suitable pedagogy for SA praxis is the main topic of discussion in the following, final chapters.

CHAPTER TEN: DISCUSSION PART 1.
CRITICAL REFLEXIVITY IN PROFESSIONAL PRAXIS

10.0 Introduction

The Charter levies additional responsibilities to physicians; to do justice to the social circumstances affecting the health of patients and populations. In effect, SA actions reset the social contract of medical professionalism, and sets medical education on an *outcomes* track. Sensing extra work, one participant resisted, querying whether it was feasible ‘to do both’ (health *and* social care). This view misrecognises the expected ameliorating effect of SA on downstream health demands: similar to those regretting lack of time or space to help problem-solve patients’ social circumstances.

Yet, all participants found curricular planning of social justice learning diffuse and mostly informal. Learning was drawn from medical student-led groups, global health topics, and elective service learning or rural program experiences. Overall, no ‘constructive alignment for learning’ (Biggs 1996) was apparent. A suitable pedagogy for enculturating SA professionalism remains aspirational.

A logical pedagogy of universal appeal is needed; one that regards all health professions students potential agents of SA, despite their diverse practice intentions. In addition to a revised funding model for practising SA health, the issue of organisation of pedagogy for SA praxis becomes central to medical education of the new professionalism. Here, I outline ‘theory after’ (Meyer & Ward 2017) data analysis, as stimulus for an integrative socioscience pedagogy, legitimated by progress in critical education studies.

This chapter reviews the results of the study, interweaved with theoretical discussion related to the study question;

How do diverse medical students perceive the value of social justice to medical practice; and how can their critical capabilities be harnessed into socially accountable practices?

10.1 Social signals and health reasoning

10.1.0 Introduction

An objective for this study was to engage participants in a discourse of social justice as it relates to health and health care. While mindful that First Year cohorts had little experience of health care or the formal curriculum of their school, I held realistic expectations they had reflected on the ontologies of health and illness, "in the nature of the worlds where health and disease emerge" (Savransky & Rosengarten 2016:1). Capability for 'epistemic reflexivity' (Bourdieu 2003) is theorised to exercise students' critical evaluations; and become habitual with socialisation. Reflexivity on human meaning derived from information of multi-layered contexts of reality is required to explain social health epistemology. Yet, at the biological level of communication, linear 'cause and effect' energy exchanges explain mechanisms of illness (Harries-Jones 2016). Medical pedagogy needs to recognise these differences, and at the same time, show how the epistemologies connect.

10.1.1 Perceptions and critical concepts

Adelaide First Year participants' perceptions of health and illness 'mechanisms' (e.g. biochemical, homeostatic) were often weak first impressions; and their *perceptions* of external, human realities (society, politics, health) largely 'gestalts', patterns or outlines. They were the youngest cohort, and reported recent developmental changes in cognition. I briefly regress to elaborate a recent semiotic understanding of sociological imagination.

Perceptions can be regarded as actions (Harries-Jones 2016); so if we refuse to look, we cannot 'see' (perceive or learn) about poverty or injustice. More fine-grained *conceptions*, schema refined in the hierarchical cortex of the brain that intersectional students employed to think critically, may still be developing *categories*. The patterns of external homeostasis that inform the organism of variation in *environmental* conditions, can have equal value to survival as fine-grained distinctions of internal homeostasis to human health. Responses to stress are characterised as binary: fight (adjust?) or flight (avoid?). Yet, unavoidable adverse conditions of everyday life become a stressful norm in the lifeworlds of the disadvantaged, and can become internalised biochemically.

In the study, social *learning* was evident in those closest to the social contexts of inequity, with intersectional perceptions indicating sympathetic and empathic understandings of 'the Other's' predicament. A hierarchy of 'knower gazes' from increasing social distances was seen in those with one equity identity, to two, and finally; an instrumental (rule-based) gaze in those with a dominant social identity. The emotion work (capital) of perceiving social injustice was barely observable in participants with dominant social identities (A61 and F44). However, for intersectional participants, little emotion work of CC was needed, as their conceptual schema of injustice were likely more developed. Their observations of injustice were no surprise. In some cases, schema were quite granular; needing greater refinement. Abstractive thinking was most developed in A14; who felt compelled to voice her CC in a soliloquy lasting over an hour. Social justice had assumed the quality of habitus.

10.1.2 Reflections on 'theory before' and study design

The Charter of Medical Professionalism was positioned in the study as an official document from which participants could anchor perceptions of how a 'good doctor' should respond to the practice requirement of SA: essentially to ameliorate social ontologies of illness.

The results suggest this strategy worked well; drawing from participants ethical discourses related to medical praxis; and sociological, philosophical, theological and political ideas. Debate about the principle of social justice in health production *and* health care added rigor to this post-positivist study (Young & Ryan 2020), and introduced critical concepts of social health equity into the professionalism paradigm.

The critical theory framework allowed a contextual analysis of participants' sociological insights related to their social identities; the latter conferring situated perspectives of the social structuring of health. Social identities, designated as insider or outsider to medical professionalism, drawn from Bourdieu's structuration concept *habitus*, assisted analysis of Final Year participants' shifts or *ellipsis* of professional identities relative to the status quo. In this study, single equity identity participants were more empowered than those with intersectional equity identities to follow their own morality, and pursue aspirations to enact health equity (see **Fig. 8.2**).

Yet, Decoteau (2016) argues from Bourdieu's notions of primary and secondary habitus, that all identity is layered socialisation; "a personal emergent property is unique to an individual because of her unique field position and trajectory" (:318). This suggests that prosocial dispositions as features of habitus are emergent *precepts* of CC – levels of developmental, diversely distributed, affective-cognitive *capabilities* that differentially empower discourses for SA practice (Kumagai & Lypson 2009).

Participants with intersectional equity identities had greater funds of *realist* knowledge of the socio-political structuration of health, but less intention to work in disadvantaged communities. Considering these results, having a single equity identity and a vocational trajectory was empowering; but empowerment in those with intersectional equity identities was imagined to accrue from learning the 'rules of the game' that ensured social security. Empowering pedagogy, or positive signalling to social justice habituses, may be the capital that empowers social change.

The study found that the majority of participants were able to engage in ethical discourse, with the affective attributes of moral sensitivity and reciprocity (Gross 2001); justice (Rawls 1971), and care (Gilligan 1982) for disadvantaged and discriminated patient groups. All cohorts correctly identified the main vulnerable groups in Australian society (**Table 8.1**). Many Final Year and some First Year participants revealed critical insights to biases and stereotypes perpetuated in a hidden curriculum of medicine. All but two participants had "possession of values and aspirations congruent with social accountability" (Preston et al 2016). Objectors resisted notions of the critical structuration of health that conflicted with their worldviews. However, results also show *contextual* knowledge to make meaning of patient health equity needs was mal-distributed according to participants' social distance from disadvantaged 'patients'. Lacking imagination for the systemic structuring of patients' lifeworlds, only the somatic, biochemical level of health analysis remains meaningful.

However, the physician process of integrating the social and the biomedical in clinical reasoning, is the target of epistemic reflexivity on social health inequities.

10.1.3 A congruent frame for achieving critical metacognition

Discussion turns to human contexts from which health emerges, and how conceptualisation of two distinct knowledge forms, biological and sociological, is organised, communicated, and linguistically represented. The legitimation of critical human contexts in the medical praxis *lexicon* is theorised as necessary to critical perception. I continue the semiotic elaboration of the health-illness dialectic; the dialogue between organism and ecosystem communicating *meaning* to human health.

How news from the social world informs our actions and survival is quickly perceived in categories, then more slowly contextualised in detail (Harries-Jones 2016: 102). According with Peirce's sign theory, we do not respond to the *signal* (visual nerve impulse) but the *sign* (the object, interaction, or social event) of perception (ibid). As humanities knowledge, these 'percepts' pattern interpersonal communication, from which *meaning* can emerge. However, congruence of contextual *frame* is a pre-condition for meaning to be shared (Harries-Jones 2016: 111). Meeting a patient for the first time, a flood of multi-level signals need cognitive sorting before effective patient-physician interaction and equitable care can begin. This is an anxious moment, that participants reported feeling when approaching

Indigenous patients. Looking for commonalities, they can miss the most obvious; shared humanity.

Frame dissonance between Indigenous and physician cultures can be strong; and not surprisingly, Indigenous patients also feel anxious. Among the signal exchange in this interaction can be perceptions of stigma; cultural memories of colonisation; dominance discourses of white Australia; the network of relations that constitute institutionalised racism; and internalised self-stigma. Feedback loops and affective states add complexity to the way these events contextualise the interaction (Harries-Jones 2016: 108). The helping relationship is in search of a communicative frame for the transaction that cuts through human differences, but takes account of the part-whole relationship of multilevel contexts to holistic health (see Rafieian 2010). Familiarity with analogous contexts (for example, the migrant experience of displacement cf. Indigenous displacement from land or family) may give physicians with social equity identities the advantage in critical literacy.

10.1.4 Relating threshold concepts to critical consciousness

Negotiation of the 'threshold concept' (Meyer & Land 2005) of *equity* was made in relation to participants' critical experiences; but was imperfectly connected to "ways of thinking and practising" (Barradell & Kennedy-Jones 2016) SA medicine. *Education* of individual patients was the most common perception of a SA practice need. Communal methods for increasing access to health care (e.g. Indigenous diabetics in Northern Territory) or communication of HIV health risks (to villagers in rural Kenya using pantomime) were observed by participants in rural elective experiences, but few novel solutions to observed need were proposed. Expecting patients to understand statistics in order to better communicate health risks was one example of a code violation. Getting patients to an ‘a-ha!’ moment of transformative learning is a meta-communicative task that is both socially accountable and critical – equity is served.

The above example of *equity practice* as a threshold concept is, I suggest, an act of CC at a higher education level of praxis. This advances the idea that habitual practice of reflexivity and equity actions may become CC; a feature of habitus. In a critical realist examination of Bourdieu’s construction of *habitus*, Decoteau (2016) writes about the possibility of habitus undergoing reflexivity and social change. The capability to synthesise humanities and bioscience knowledges into ethical medical practice may itself be powerful reinforcement of reflexive habitus, and the desired social change in professionalism.

While SA was legitimated in the Flinders formal curriculum, participants stated they were not empowered by their training to develop SA practices. Development of reflexive habitus in those with social justice aspirations, would likely benefit from critical pedagogy incorporating student engagement in the tasks of SA projects; including peer-to-peer teaching.

There was evidence of critical reflexivity by both high and low equity status participants; on their upbringing, schooling, experiences & ideologies; that revealed sociological insight to ‘structure versus agency,’ oppression and freedom (Hilgers 2009); indicating possession of ‘reflexive habitus’ (Bourdieu & Wacquant 1992). Individual participants admitted to intrinsic and ideological biases, indicating a general tendency to narrative honesty. While female participants expressed more feminist narratives of social inequity than males, both genders in Final Year cohorts equally *misrecognised* (Bourdieu 1977) the sexuality dilemma faced by the GP in Interview Question 7, testing post-liminal concepts of equity.

The observed lack of reflexivity in the study, on embodied and lived social inequities as factors in clinical reasoning, may relate to the relative social and material advantages enjoyed by participants; perhaps structured by political, religious, cultural, and economic ideologies such as neoliberalism. Strong socialisation to *science* thinking and its modes of perception, observed even in First Year participants, is another possibility (Brosnan 2011). As previously stated, biochemical science thinking is at odds with the logic of social science, but not incompatible with biosemiotics: a third paradigm. The paradigm of social science, and reflexivity on the social health-illness dialectic, may simply be what is prevented by habitual bioscience thinking and anticipation of the pyramid of science learning ahead.

10.1.5 Critical consciousness in transcultural settings

Flinders Final Year students returning from Indigenous training settings, expressed critical discourses that questioned prior assumptions of the very purpose of the medical enterprise.

For some, this surprised reaction was related to expectations of medical practice in settings where health needs outnumbered demands. The students' raw skill set was perceived as impotent in the face of multiple, intersecting SDH. While several participant discourses signalled a 'becoming to know' (Jakubik 2011) of Indigenous health, narratives often did not extend to the geography of power and human vulnerability distributed locally by macro structures of national and global policy settings. For example, Flinders participant Nate (F46) described as 'strange' the cold storage of amputated diabetic limbs in Nhulunbuy; but did not recognise this as a local, socially accountable, de-colonising equity action; designed with the Indigenous community to improve clinic attendance and health outcomes.

The sociological idea of a ‘boundary object’, shared across disciplinary boundaries, may be useful for connecting different communities of critical knowledge and practice. An example is team approaches to diabetes management that engage physicians, diabetes educators, social workers and patients. A boundary object (theory, concept, practice) acts to enhance *sense-making* by all health professionals across boundaries, and develop practice *innovation* (Fox 2011:75). The Indigenous diabetes innovation described by Nate likely resulted from participatory action research in which the shared objective, aided by community members’ knowledges, allowed transfer of meaning across ontological and axiological boundaries.

Here, critical thinking of *two kinds* is engaged:
a. logical reasoning i.e. how does expert medical knowledge apply to this problem?
b. equity reasoning i.e. what arrangements constrain equal quality health outcomes?

To further illustrate participants’ CC for the social health-illness dialectic, I compare four study participants, as a prelude to discussion of a draft pedagogic method that aims to inculcate critical phronesis for the new medical professionalism.

10.1.6 Critical consciousness in discourses of social inequity

A. Political structuration of inequity

Final Year student Mark (A612) clearly articulated justice empathy for Indigenous and rural populations; and provided situated perspectives of social inequity consistent with his South

Australian rural upbringing. His private schooling and male gender positioned him an insider to traditional professionalism, and he had no equity identities other than rurality.

Reflecting on the lack of SA in medical practice, Mark made astute observations of the way that capitalism structured medical practice. He saw links between medical education and the pharmaceutical industry; “It’s very much taught, this is how you treat, and it’s a medication.” In this statement, professional agency is viewed as strongly structured by an industry that profits from the inequity of overloaded, demand-led, commodified, and outcome-inefficient system that is modern health care. His remark was ironic in tone; ‘it’s a medication’ portrayed a simple solution to a complex problem; a cliché of the macro health care enterprise. The origin of this critical insight could have been the ‘null’ or the ‘hidden’ curriculum. The excessive patient load in a low SES hospital setting had Mark wondering ‘where they came from’; a misrecognition of the societal error. While Mark demonstrated incomplete CC, he clearly had not assimilated the *anti-critical* discourse of the neoliberal university (Ridley 2017).

B. Systems thinking

Flinders participant, Julie (F45) showed awareness of ‘acopic’ patients as ‘boundary objects’ that signified health system *misrecognition* of societal inequities. The emotion work of ‘getting rid of patients’, and the wounding of students’ professional aspirations that may accompany demoralising work conditions are well documented (Kadota 2020). Holloway (2015) observed how industry embeddedness in medicine distorted physicians’ internal ‘moral compass’; unfairly assigning professional responsibility to the individual physician. Prosocial medical students may discover that the professional habitus they graduate with does not align with prior values and self-concept as a future physician; but instead engages them in practices that represent conflicts of interest (Mayes et al 2016). In this sense, The Charter may mistake the locus for structural reforms. Students need to be made conscious of the ‘individuating effect’ of neoliberalism on their career aspirations, away from “the perceived possibility of collective action and response to structural influences” (:256).

C. The societal error

Georgia (A613) observed but did not make the critical sociological connection between the overloaded downstream hospital setting in Playford, and illness production in the region’s low SES, high migrant and underemployed population. With global sociological imagination, students may observe how ‘neoliberalised’ markets unfairly structured control of sovereign states: exerting a powerful ‘superstructure’ affecting local population health via industry relocation and job losses (Browne-Yung et al 2020).

An aspect of this *misrecognition* (Bourdieu 1977) may be that near-graduates (as insiders) found it difficult to hold perspectives of both ‘sociology *in* medicine’ and ‘sociology *of* medicine’. As a result, Georgia’s identity could shift toward a professional view of public health as problematic, rather than important situations to problematise.

D. Misrecognition

Misrecognition was not evident in Adelaide First Year Safiya’s narrative. She provided a dialogical perspective of the code mismatch between medical praxis and the sociology of illness production in Singapore. Having devalorised equity identities, including unlawful sexuality, endorsed her share in the ‘game’ of democratic citizenship in Singapore. Safiya

(A14) actively sought other situations of social health injustice, and generalised her concerns for justice and care to locally disadvantaged groups both at the macro (social policy) level and micro (health needs) levels. In doing this, I believe she developed a strong CC for social health inequities, unmatched by other participants. Her gaze was transformed by the knowledge she gained. Safiya narrated critical insights to tokenism, and common biases and stereotypes perpetuated by physicians in a hidden curriculum; in order to condemn them.

If Mark (A612) observed these he didn't comment on them; perhaps because such discourses were doxic (like a 'fish in water' in Bourdieu's analogy) to male physicians in medicine. Asian International participants expressed critical perspectives of Indigenous health inequities, making links to system inflexibility of the western model. In Confucian philosophy, justice hinges on naming injustices (Horowitz 2004:1188).

10.1.7 Emergent critical consciousness

A. CC may be a self-constructing (or *autopoietic*) mindset that develops from precepts including prosocial dispositions, strong sociological imagination, and critical reflexivity.

A First Year participant (A14) exhibiting a high level of CC (Mustakova-Possardt 2003) had experienced personal social injustices and was actively engaged in community social justice, political activism, and health care justice for stigmatised groups. She had witnessed the violence of legal justice wielded by authorities (including medical professionals) against marginalised youth, that in other contemporary jurisdictions was deemed social injustice.

Final Year participants presented critical insights to pharmaceutical commodification of health care, reproduction of social stigma, and systemic marginalisation of those with chronic illnesses and NESB cultural identities. Yet, most *misrecognised* macro structuration of health by societal inequities that produced disproportionate health service demands, income disparities, ambulance ramping, 'acopia', 'too late' patient presentations, the irony of 'getting rid of patients', and medical student distress.

10.1.8 Synthesis in pedagogy

Bourdieu stressed the "synthesizing nature of habitus, referring to it as a 'synthetic unity'" Decoteau (2016: 306). In the temporal artifice of a research interview, the study attempted to capture medical students' moments of ellipsis of habitus to a new professional order. The findings of diverse intentions and capabilities for critical thinking of social inequity yielded differences as *recognitions* and *misrecognitions* of the fields of health care and production. While students' *recognitions* can be viewed as capabilities of CC, I propose that common *misrecognitions* can equally inform a pedagogy guiding SA praxis [See **Fig.12.2**].

I draw attention to these elements of study findings to focus on *pedagogy* for SA medical practice, elaborated in the next section. Ahlquist (1992) refers to pedagogy as

> the contextualised interrelationship between teacher, students and the specific conditions which contribute to the *production* of knowledge
>
> (Grant 1992:87).

The social stratification of complexity reasoning was studied by Commons & Ross (2008). How pedagogic power is coded in curricular discourses was theorised successively by Pierre Bourdieu, Basil Bernstein; and more recently Karl Maton, in LCT.

Elaboration of these ideas may form two arms of a rational pedagogy for socialising health professionals' CC for SA.

10.2 Critical pedagogy for the new professional contract

10.2.0 Discourse and contest of powerful ideas

Reflecting on the initial analysis, I followed protocol advice from qualitative researchers in identifying potentially fruitful qualitative themes (Richards 2005). Throughout the data, I observed that participants used different 'discourses' to convey their perceptions of the social justice problems that questions aimed to elicit. This prompted understanding of how discourses were defined and differentiated; not to conduct 'discourse analysis', but to understand how categories of discourse; in particular the 'language of power' encoded in discourses can help make sense of the study data set (Paradis et al 2019).

Participant discourses were primarily oriented to the status quo of biomedical dominance *or* to forms of biopsychosocial practice that accommodated SA in health care. Participants with strong personal experiences or proximity to social disadvantages appeared to use *dialogical* (structure-agency) discourses to convey critical understanding of the social health-illness mechanism. Final Year participants reflected on experiences of paradox and irony in the medical management of disadvantaged patients – a clinical dialogic discourse. These findings imply *dualities* of knowledge silos in the medical professionalism mindset; two sets of practices for the same cohort of patients, that required separate epistemic cognition and ethical justification.

Participants also shared moments of paradigm change or 'transformative' learning following new experiences of social disadvantage. Interview transcripts gave the reader a sense of how participants' expectations (products of habitus) were surprised, then linguistically reconfigured, as an *ellipsis* or shift in habitus (Bourdieu 1977) was observed in their narratives. Such changes in habitus and discourses have ontological implications in medical education; as the student *becomes* a physician. In the absence of a 'teachable moment' or zone of proximal development, the next steps in the transformation (meaning making and habitus change) may be left to the learner to complete alone, with risk of disengagement.

In a critical theory study, the researcher is less interested in testing hypotheses; but instead attempts to critique ontological, epistemological and axiological claims to dominance in the dataset (Paradis et al 2019). Bourdieu was a critical social theorist of HE: his social theory of practice indicated how an actor's engagement in a new field distorts the habitus until it is like a 'fish in water' (Bourdieu & Passeron 1977); at one with the new field. Distortion was observed as *hysteresis*: tangential shift of primary dispositions to new structural conditions.

Vygotsky's cultural historical activity theory (1978) viewed education as a social process directed to collective societal improvement, following the progressive arc of human history. This discursive direction was observed in prosocial participants' concerns; possibly socialised in the ‘zone of proximal development’ of medical student organizations and other prosocial group activities.

Yet, the study could not demonstrate the bearing prosocial student groups had in forming participants’ knowledge and discourses of social health justice (McAuliff, Williams & Ferrari 2013); nor how membership motivated capability or voluntariness for participation in the study. Adelaide First Year participants had only minor exposure to the formal medical curriculum and informal student groups, and were not expected to have more than ‘lay’ understandings of health and illness. Their knowledges tended to be partial and horizontal – more subjective than objective, and lacking critique of the ‘known.’ In contrast, First Year Flinders participants had former careers, and as an older cohort had more *horizontal* life experiences (exposure to critical lifeworld discourses) from which to draw social observations.

Wasserman (2014) critiqued the sameness of ‘scientism’ in sociological and bioscience research methods and their application to clinical practice; and concluded that medical pedagogy could better integrate sociology by teaching its way of thinking and observing ‘social facts’. However social facts, as distinctions in sociological research, are discrete and static entities that do not reflect the dynamic information *processes* that cybernetics can make meaningful in communication of wellbeing (Harries-Jones 2016).

This foundational understanding of the communication of meaning; how power is encoded recursively in communication; has relevance to pedagogy and transmission of ethical values in health. The legitimation of particular discourses in pedagogy (via the pedagogic device) directs students' gazes between content and contexts that matter to health.

10.2.1 Integration of social and biological discourses

While several groups of educators have published details of 'integration' of social justice into their medical courses (Hatchett et al 2015; Kumagai & Lipson 2009; Coria et al 2013; Schiff 2012), little attention is given to how rational integration of knowledges and diverse voices into holistic medical *phronesis* basically works. Most educators of social justice rely on *reflection* models of learning; despite a lack of consensus among practitioners for the meaning of social justice, from which to contextualise practice (Hatchett et al 2015). Rather than reflection, the pedagogical practice endorsed for justice phronesis is *reflexivity*: change in the physician's *relation* to knowledge. Reflexivity is a praxis or habit in which practical knowledge is brought into relation to what is generic or known, to create new knowledge or solutions (Kumagai & Lipson 2009). Previously, I referred to the 'subject-object move' of super-subjectivity as the *abstraction* step of gaze transformation in the logical act of 'critical reflexivity'. Epistemic reflexivity – critique of knowledge claims in light of the structuration of education, is another. What is thought to happen here, is an aesthetic appreciation of part-whole relationships; in which the pattern of the unknown is analogically matched with known, realist knowledge of the human world (Bateson; Harries-Jones 2016).

Previous studies indicated a tendency by medical students to strategise *what* they learn quite early in the course through peer socialisation (Becker et al 1961). Peer socialisation takes place in compulsory course-related peer learning groups, and in voluntary extra-mural, student-led social programs and prosocial student-led humanity interest groups.

These medical student groups can comprise students from all Year groups; adding vertical layers of socialisation. Observing that participants' knowledge (and perception) acquisition occurred across multiple curricular pathways, I decided to investigate the educational literature of 'knowledge acquisition' and 'knowledge management'.

10.2.2 Epistemic reflexivity – critical knowledge practice

Bourdieu's educational theory advocates 'epistemic reflexivity' for validating the truth claims of science. This critical action effects sociological imagination of the *production* of knowledge, which (even in biomedicine) is always social (Maton 2003). However, Maton (ibid) held that 'epistemic' reflexivity applied to the relation between 'knowledge and the known' [B-C in **Fig. 10.1**], in distinction to Bourdieu's claim for the relation between 'knowledge and knower' [A-C in **Fig. 10.1**, below].

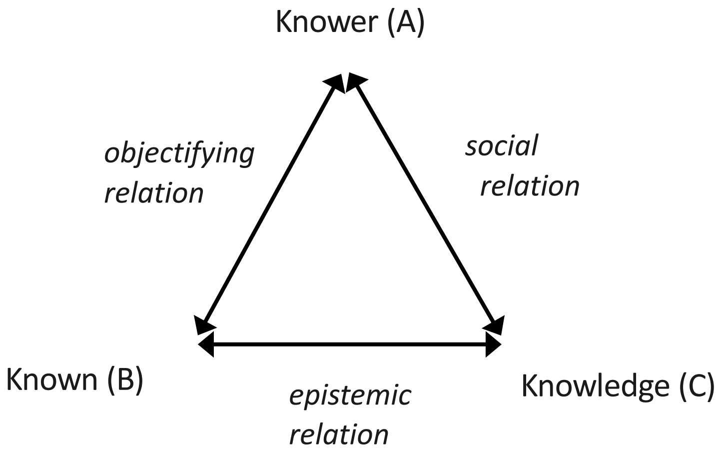

Fig. 10.1. Three relations of knowledge claims
(from Maton 2003:57, Fig.1)

The clarification by Maton (2003) of three relations of knowledge claims that inform epistemic thinking in HE, positions the knower (student/ participant) in relation to both types of knowledge. The relations between knower, known and knowledge can be viewed as an interactive triangle.

In medicine, the first is the knower's objective relation to the *known* (A-B in **Fig. 10.1**) or generic knowledge of medical sciences. The second, is subjective *knowledge* or social relation to the lifeworld context of health production (A-C). Maton's revision of epistemic reflexivity shows how pedagogy can validate a *socioscience* praxis that relates human illness to an ecosystem of knowledges (Maton 2003). This holistic approach excludes subjectivity and theorises a bi-directional, interpretive praxis (the subject-object move) that integrates theoretical (biomedical sciences) and empirical or practical (sociopolitical) knowledges to produce a reasoned praxis for managing patient problems.

A patient related example follows. The 'known' may be evidence-based guidelines for managing a patient with diabetic eye disease drawn from large studies with *European* subjects; while practice meta-knowledge may include the *Indigenous* patient's equity status. Equity status can be calculated from current (and anticipatory) social stress load; which includes cultural and family obligations, remedial SDH, and eustress or resilience factors. Together, these *conceptual* and *contextual* data inform the physician of possible physical and psychological health risks, to produce a bespoke management plan. Physician reflexivity on the relationship between knowledge sets; as applied to *this* patient, in *these* conditions, produces new knowledge – formulated as a phronesis for patient-centred care.

At the communal level of health production, inter-disciplinary team-based approaches to SA can take cues from organisational studies that refer to *arbitrage* as a dialectic, knowledge broking process.

> By leveraging their distinct competencies, groups composed of researchers and practitioners have the potential to ground and understand complex problems in ways that are more penetrating and insightful than they would be were either scholars or practitioners to study them alone.
>
> (Van de Ven & Roberts 2006:803)

Referring to knowledge as 'the capacity to exercise judgment' Greenhalgh (2010) argued, "knowledge emerges dialectically when academics and practitioners or policy-makers converge to address a problem" (:497). Greenhalgh (ibid) referred to workers in the same Bourdieusian field, but with different value dispositions, achieving 'collective sense-making' of a problem. The clinical problem of *acopia,* on the boundary between health demands and needs, is a suitable target.

Greenhalgh (2010) captured the essence of expert medical phronesis in this statement.

> Knowledgeable individuals exercise judgment within their domain of action because (and to the extent that) they have successfully completed a period of socialization (socio-cultural, professional, organisational, and usually a combination of all of these) that has

> enabled them to appreciate and take account of subtle aspects of context when making distinctions.
>
> (:496)

In summary, the ‘period of socialisation’ to professionalism can be viewed as a semiotic process, in which diverse discourses gradually make sense; synthesising what ‘the good doctor’ ought to do (praxis) in diverse contexts. The distinctions of taste informing ‘judgment’ that Bourdieu (1984) ascribed to habitus, include social justice and democracy. Habitus is regarded as embodied in humans by a dynamic, organic process of structuration: to produce ‘collective sense-making’, a ‘community of practice’ or ‘mindline’ for clinical practice (ibid).

In summary, pedagogy for SA can be structured by epistemic reflexivity (Maton, 2014) on both contextual and empirical discourses, to produce powerful knowledge and to foster students’ critical reflexivity on emerging health contexts.

The foundations of this novel pedagogy is revealed in the following sections and final chapters.

10.2.3 Knowledge regulation in pedagogy

The study was primarily concerned with grounded evidence of a mode of medical professionalism that could respond to existing and emerging health problems arising from social contexts.

The question of how medical students develop a phronesis of ecosocial accountability, in a health system dominated by biomedical axiology, can be directed toward how different *values* organise knowledge in health care decision making. A literature search led me to considering the usefulness of 'knowledge management theory' - often employed in business organisational management, but recently applied to medical sciences and clinical knowledge management (Sveiby 2009). This idea references an 'ecosystem view' (Bloom 1989) of medical professionalism: one that organises knowledge around value.

The imperative for a knowledge management system (KMS) arose from study data when considering how participants linked the biological to the structural causes of poor health. Medical education knowledge management is a growing concern of cognitive limitations on physician capacity; continually required to learn the new, unlearn the old, and apply diverse sources of knowledge to practice. In the literature, cognitive load theory (Sweller, Ayers & Kalyuga 2011) explains limitation of mental capability. Interprofessional education (IPE) and shared, team-based, clinical decision-making has developed in response. The reform of Australian general practice toward primary health care roles (Harris, Kidd & Snowden 2008) may also benefit from the KMS model of organisation, and form a virtuous coalition with medical education.

Several concerns about doxic knowledge practices in clinical medicine have emerged.

A. Evidence based medicine (EBM) and clinical management guidelines were critiqued for inspiring 'cookbook' decisions that ignore practitioners' tacit knowledge (Gabbay & Le May 2004); being derived from research performed in resource-rich settings poorly suited to health problems in developing nations (Chowdhury et al 2019); or, has been falsified for commercial gain (Jureidini & McHenry 2020).

B. ‘Midstream’ psychological and behavioural perspectives can “play down the social and organisational context” (ibid:1) of clinical decision making;

C. Too much or too little knowledge can be applied to a medical problem. The latter may come at the cost of silencing of diverse perspectives (Schultze & Stabell 2004).

The emerging trend toward equal quality, patient-centred or ‘personalised’, evidence-based health care, has focussed on the patient experience. This approach, resembling ‘horizontal’ justice, purports to be more *holistic* and accountable of social diversity in communities (Hennessy 2018). Similarly, public health research involving interdisciplinary partnerships of expertise involves community members in identifying remediable causes of health problems (ibid). In Australian Indigenous health planning, for example, community members reliably articulate their own health needs (Canuto et al 2019).

Compounding the knowledge landscape, transfer of research findings into clinical practice decisions are not straightforward between physicians (Gabbay & Le May 2004). A suitable ‘knowledge management system’ (KMS) for SA professionalism can organise horizontal and vertical discourses into a matrix or algorithm; with an encompassing *value* guiding ethical phronesis. The organising value that may best serve accountability to society, environment, and economy is *sustainability* (Giddings, Hopwood & O’Brien 2002); a value supported by an integrative SA approach to human health.

In his theory of pedagogic discourse, to answer what is transmitted in education and how change happens, Basil Bernstein (1999) referred to two contrasting discourses of knowledge acquisition as ‘vertical’ (specialised) and ‘horizontal’ (common sense). In education, the first form of knowledge was referred to as ‘schooled’ (or official) and the second as ‘everyday’ (empirical or local) knowledge. For the same distinction, Bourdieu (1977) used the terms ‘symbolic’ and ‘practical’; while sociologist Anthony Giddens referred to knowledge of ‘expert systems’ and knowledge related to the ‘everyday lifeworld’ (:158). While some commentators contrast these two knowledge discourses, Bernstein’s model incorporates the ideological, social context; and identity-forming aspects of pedagogic discourses.

> The contrasts are often ideologically positioned and receive different evaluations. One form becomes the means by which a dominant group is said to impose itself upon a dominated group and functions to silence and exclude the voice of this group. The excluded voice is then transformed into a latent pedagogic voice of unrecognised potential.
>
> (Bernstein 1999:158)

In the vertical discourse of biomedicine, knowledge is “*hierarchical* organised, as in the sciences” (ibid:159), and has a “systematically principled structure” (ibid:159). Vertical discourse holds dominance from its official and institutional context; which appeals more to one social group or class than another. Horizontal discourse, Bernstein explained, was often *segmentally* organised, lacked hierarchy or internal order, and was “usually carried out face-to-face with strong affective loading as in the family, peer group or local community” (:161).

Included, may be the habitus-shaping life experiences and learning activities participants voluntarily sought in prosocial, peer-led medical student groups. The pursuit of self-initiated learning; from interest to knowledge-sharing to building knowledge networks, is theorised to catalyse youth development (Barron 2006).

Translating Bernstein’s model to the study, First Year students have relatively minor *vertical* knowledge of medicine but could report segmented, *horizontal* knowledge of the everyday world through a variety of experiences related to social identity. These funds of knowledge contextualise biomedical learning; and may include a. *symbolic* experiences (e.g. attending prosocial student groups) or, b. *practical* experiences (e.g. talking with refugees; personal or family history of migration as refugees). Yet, a student’s knowledge of refugees can remain partial and context dependent until integrated into medical problem solving in a teaching case involving a refugee. Educators attempt knowledge *integration* into problem-based case learning in medical curricula; although framing of psychosocial aspects of the case and clarification of ethical concerns can be weakened by an emphasis on biomedical pathology. Giddens (1991) related this emphasis to the contemporary demand for ‘expert systems’; an anchor against uncertainty when there was a crisis (Jenks 1998:337).

^	**Formal - non-clinical**	**Formal - clinical**	**Informal - student-led**
Vertical discourses	Final Year curriculum & assessment	General practice – medical & community	International elective – 'global citizenship'
	Patient cases – integrated medical science disciplines	Health agency visit - paramedical roles	Refugee & Aboriginal interactions – health & human rights
	Clinical ethics learning	Rural practice placement	Medical student peer & prosocial groups
	Case based learning – integrated biomedical sciences	Indigenous cultural safety training Standardised patients	Health service learning interactions
	First Year curriculum & assessment	Travel, social, online & inter-personal experiences	Community volunteering. Student-led groups

Horizontal discourses >

Figure 10.2 Horizontal and vertical health discourses in three medical curricula

Figure 10.2 (above) presents a schema depicting two formal and one informal learning contexts from my understanding of Adelaide and Flinders medical school curricula.

10.2.4 Transformative pedagogy

Responding to a gap in the social justice literature, I was mostly interested in the transformative process by which medical students achieved 'critical' awareness; reflexivity on the potency of sociopolitical inequities to impact human health, and avoidance of medicalisation of social pathology. This became the primary frame that bound the study; excluding a solely biomedical framing of medical professionalism. The Charter served to anchor the study in an official mandate or duty statement signifying what it now meant to be a 'good doctor'. In the study, I deliberately framed The Charter's mandate as promoting 'social justice in *health* and health care', rather than downstream *health care* alone. This framing was for participants to dispute or to affirm; and assert their own perceptions of the boundaries of medical professionalism expected by The Charter.

An assumption in the study was that health improvement and health production through physician actions were legitimated by The Charter; expanding the physician’s role from solely ‘downstream’, individual and family medical care to ‘upstream’ actions on structural health determinants of populations. The latter includes local, national and global obstacles to health encompassed by ‘the new public health’ (Baum 2016). The study demonstrated obstacles to participants’ dispositions, aspirations and intentions to practice the ‘new public health’. Low social equity identity, engagement in service learning activities (including voluntarism in prosocial student groups), and choice of ‘type G’ medical professionalism (Wear & Aultman 2006) (prefer practice in an underserved area), were probably most indicative of this career path.

Aside from formal and informal curricula in medicine, are students’ personal curricula; lifelong projects of habitus “developed by family, society and other worldly interactions” (Magill & Rodriguez 2014:211). Curriculum of itself may not be transformative; as stated before, constructive alignment is needed between actors and structures (Biggs 1996). Magill & Rodriguez (2014) argue that curriculum must “act as an epistemological bridge” (:211) for students to generate a transformative ontology with teachers. The first requirement then, to forming critical social agents, is having critically conscious teachers.

Structured interview questions engaged participants in various hypothetical biosocial health contexts in which their *learning-knowing* sets could be observed. When formulating study questions, I realised that knowledge of both medical science *and* social science are assumed to be important to a social inequity epistemology. A literature review led me to Jakubik's (2011) 'becoming to know' framework, which suggested *both* epistemologies needed to be available in the 'knowledge ecosystem' in order to effectively practice SA health care. The capability to form these links, in a *socioscience* pedagogy, could be transformative to the social ecology and ontology of the new professionalism.

Theories of practice (e.g. Bourdieu 1977) and structuration theories can account for this *duality*. They apply pragmatic *both/and* thinking (Schultze & Stabell 2004) "which implies a dialectic or integrative strategy" (ibid:553). The concept of a knowledge ecosystem in which multiple health determinants are integrated to practice contexts for both health care *and* health production, could provide medical education with the paradigm shift it needs for SA. The opposing epistemology to duality (*both*/*and*) is dualism; signifying the *either/or* thinking practiced in contingency models such as disciplinary silos. Examples include hypothesising diagnostic categories of illness causation or designing management algorithms (Schultze & Stabell 2004). However, the latter, biomedical framework, with its incessantly sub-divided categories of diagnosis and work, besets health systems with organisational and financial crises (Armstrong 2019).

In this study, reflexivity on the *health-illness dialectic* related to (individual and collective) social lifeworlds was a key cognitive mindset. The skill is theorised to permit physicians to integrate into clinical actions contextual patient-related knowledge (such as equity needs related to SDH) that inform the SA component of health care decision making.

In their knowledge management paper, Schultze & Stabell (2004) urged researchers to declare assumptions about the social order as either in *consensus* (order) or *dissensus* (conflict) with the status quo. This binary distinction begins a semiotic process for re-contextualising physician gaze. The CHAMP study refers to *change* or dissensus in the medical professional doxa, as the social order is assumed to be hierarchical, change resistant, and unjust. This dissensus contends, contra neoliberalism, that social and medical sciences are not neutral, they are inherently political (Paradis et al 2019). Practical synthesis of the biological and social in clinical decisions suggests the need for a professional praxis of *dissensus* to the status quo.

The *dissensus* discourses, Schultze & Stabell (2004) labelled ‘critical’ and ‘dialogical’; while the *consensus* discourses were ‘constructivist’ and ‘neofunctionalist’ (:555). All four discourses were tabled by Schultze & Stabell (2004:556 Fig.1) to identify the attributes of each. The two dissensus discourses represented a change orientation. Only *dialogical* discourses valued the de-construction of dominant knowledge and validated multiple knowledge sources e.g. post-colonial feminist theory and intersectionality theory. The relevance of these discourses to the production of a SA phronesis of medical practice is summarised next.

The *first*, *constructionist* discourse, while in consensus with the status quo, values ‘sense making’: coordinating and integrating knowledge; and is supported by theories of practice (e.g. Bourdieu 1977) and structuration theories (Schultze & Stabell 2004). This discourse, a mainstay of medical education, values the integration of social knowledge with scientific, creating a virtuous duality. A concern is sustainability: the dominant structure remains unscathed and can re-emerge. The ideal mix of social and medical integration to health practices may always be contentious and insecure; with policy and praxis beset by the consumerist power of the dominant techno-science model of medicine. Consistent with a social ecology, this discourse may continue to govern one domain of a spectrum of medical education reforms for social accountable practice.

The *second* discourse, *neofunctionalism* regards knowledge as a *product* (Schultz & Stabell 2014). This discourse could apply to intellectual property rights in research, and to a kind of medical professionalism where practitioners felt justified in charging the ‘client’ on the basis of the value of their medical knowledge assets. It applied to non-transferable assets such as tacit knowledge that comes with experience. The ‘medical industrial complex’ continues to be highly invested in this kind of insider knowledge (ibid). In functionalist discourses, the role of knowledge was directed at improving the social order to an ideal (secure) position of competitive advantage; yet the resultant inequity may not be a concern. This discourse aligns with conservative political ideology, the neoliberal global economic order, and the students who considered themselves *consumers* of HE.

A *third*, *critical* discourse, is a dissensus of the social order that recognises knowledge as power, and a product of labour. It views *change* in the social order as the ideal reform (Schultz & Stabell 2014). Critical discourse regards knowledge a *dualism* in which some voices and (mainly) tacit knowledges are unfairly silenced and undervalued. It valorises equity actions that disempower the powerful in favour of the weak. More revolution than reform, it was nevertheless aimed at sustainability. For example, whole-of-school reform was the basis of curricula in Social Equity network (SEnet) medical schools; and critical social health their foundational educational ethos (THEnet framework 2010). To become agents of change in the communities where graduates work, a values commitment to equity was considered essential.

> Values underpinning this work include equity, quality, relevance, efficiency and partnerships, with graduates not only providing quality health care in areas of high health need but also becoming advocates for change within the health system to achieve greater equity of access to healthcare (THEnet, 2011).
>
> (Prideaux, Lindeman & Cottrell 2013:73)

Fourth is medical discourse. Sociologically constructed from the dominant paradigm of science, it is touted a form of social control that mobilises linguistic (e.g. the doctor-patient interview, the case presentation) and textual (e.g. medical research articles) dominance to its practices (MacDonald 2002). Neither duality nor integration is apparent in this depiction; rather, a dualism of power and subjugation is portrayed. Structural studies of pedagogy by Bernstein (1999) revealed pedagogic practices in which *transformation* of contextualised or primary medical knowledge to decontextualized or secondary knowledge in medical texts, was then recontextualised in tertiary (practice) settings (ibid). The choice of meanings encoded in such texts was regulated by the ideology of the dominant social order; or "symbolic orders of meaning generated by the social system" (ibid:452). These hegemonic *codes* included the ordering of *time* and *space*.

For example, MacDonald (2002) noticed that depictions of research knowledge in medical texts were dominated by the past tense, recontextualised to the present tense, and became projected to the future tense in the doctor-patient consultation. In the CHAMP study, a time-related category in participants' discourses signified *illusio* of habitus (Bourdieu 1986) serving the dominant paradigms of medical science and economy rather than patients' needs. Yet, as I elaborate in the final chapter, this discourse may inform the re-structuring or re-contextualisation of medical education; by employing semantic codes that legitimise demands for greater humanism in medical practice.

Finally, sociological discourse is regarded as having a 'weak' grammar compared with 'strong' hierarchical or vertical knowledge structures like biomedicine. Considered a 'horizontal' discourse, it is contextually segmented in Bernstein's pedagogic framing (Bernstein 1999), depending on the habituses and gazes of knowers. Yet, Maton (2010) shows how a hierarchy of *knowers* also gives humanities knowledge vertical strength. This acknowledges the diversity of contexts in which learners acquire sociological knowledge: "tacit acquisition of a particular view of cultural realities, or rather a way of realising those realities" (Bernstein 1999:165). In the study, data informing participants' habituses, social equity identities, and experiences external to the formal curriculum provided the contexts 'in which sociological knowledge differed'.

> A gaze has to be acquired i.e. a particular mode of recognising and realising what counts as an 'authentic' sociological reality.
>
> (Bernstein 1999:165)

In this sense, “to know is to gaze” (ibid:165); and by corollary, without the particular gaze the particular field and it’s ‘game’ are unknowable. Furthermore, dominant and dominated discourses in a field are in competition; in a “fight for linguistic hegemony and acquired ‘gaze’” (ibid:165).

Next, I expand on this introduction to semantic frameworks for knowledge building and discourse change before discussing the implications of the study for medical pedagogy.

10.2.5 Social semiotics of knowledge integration

Education theorists focussed on knowledge acquisition (including Bourdieu), tended to distinguish ‘tacit knowledge’ as *knowing* from practical experiences of doing or being, and ‘explicit knowledge’ acquired by *learning* of the intellectual kind. Both knowledge forms provide ‘competing maxims’ (Greenhalgh 2010) that inform physicians’ judgment of practice action (phronesis). Students from disadvantaged backgrounds can bring ‘embodied’ or tacit knowledges of unfairness in the social world; cultural capital that may advantage the ability to integrate the social with the medical.

In formulating and enabling SA problem solving in health care, I theorise that student *capability* (Sen 1999), *enabling* curriculum (framed by prosocial values), and university structures (Bernstein 1999) collectively promote (provide ‘bridging capital’) to embodied knowledges (primary habitus) of ‘outsider’ students. Otherwise, horizontal knowledge forms can be unreflexively lost in *ellipsis* of habitus (Bourdieu 1977) – the deformation of students’ prosocial habituses – to the dominant, neoliberalised medical discourse, at odds with the SA consciousness of the new professionalism.

In the interview data, participants recounted formative experiences in which the physician's moral role and 'professional' relationship to 'the Other' became evident; when they became aware of how heterogenous knowledges impacted on medical practices.

10.3 A 'becoming to know' framework

Maria Jakubik (2011) explored education theory to develop a 'becoming to know' frame that views knowledge as an ecosystem; and knowledge creation as dynamic, interactive, human, dialogical and emergent process in a community of practice. Her hypothesis claims;

> interactions between learning and knowing within a person happen in a specific time and in a specific context (i.e. social, material, virtual, mental space and place) in the knowledge ecosystem.
>
> (Jakubik 2011:21)

This contextual, 'everyday' knowledge aligns with Bernstein's depiction of *horizontal* discourse, which he compared with specialised *vertical* discourse such as medical science (Bernstein 1999).

The main elements of Jakubik's 'becoming to know' framework include "engaging, exploring, experiencing, emerging, enabling, and evolving" (ibid:374); actions reported by study participants in the interview data. Participants gave reflexive accounts of their own, critical or transformative, ‘becoming to know’ journey.

10.3.1 Pedagogy and the recontextualising principle

Aside from content and skills, tacitly transmitted in new learning experiences was a ‘recontextualising principle’; a novel mode or context that shifted ‘gaze’ (Bernstein 1999). Recontextualising ‘health’ from the physical body to the everyday lifeworld of patients and populations is theorised to shift the professional gaze. This vertical-to-horizontal shift is exemplified by the ‘super-subjective gaze’. Bernstein (ibid) argued that *power* was involved, making this a *critical* principle; a specialised language accompanied the discourse (ibid). The ethical stakes are high, as symbolic violence can be the result of omission (or commission) of particular knowledges (Tennis 2013); the problem of the societal error.

Bourdieu’s theory attributes shifts in gaze and language to new class habituses entering the field of HE; importing new ‘social class’ perspectives, knowledges, and ways of ‘reading the world’. Yet, Greenhalgh (2010) pointed to the existence of ‘knowledge brokers’ in the medical galaxy, with “particular purposes” (:493): political or commercial agendas; in networks of association with researchers and practitioners that teach medical students.

Another risk to social health equity was pedagogy supported by the ‘re-contextualising device’ (Bernstein 2000) of neoliberalism. In its place, curricular justice requires a *pedagogic device* (Bernstein 1990) - a lever for legitimating a diversity of discourses that impact on health.

> The pedagogic device refers to the ways in which social discourses (such as those relating to equity) are appropriated, regulated, contested and controlled in order for them to become 'pedagogised' or made part of legitimate educational knowledge.
>
> (Loughland & Sriprakash 2016:233)

A pedagogic device for social accountability is hypothesised from a synthesis of the discourses in this study; from students becoming the next generation of physicians.

10.3.2 Role models of social justice

Although no medical educators at the two schools were interviewed for this study, participants nominated several medical professionals as their role models of social justice, among others (see **Fig. 10.3** below).

International celebrities dominated one category of nominees: film stars, and a TV wrestler (John Cena) who raises funds and publicity for charitable causes. National figures include prominent lawyers (Kirby – international human rights, and Burnside – social and climate justice); and domestic violence campaigner Rosie Batty. Western suburbs Sydney surgeon Prof O'Brien was nominated by a student from that region. Academic role models included SA medical program architect (Prof Paul Worley) and Indigenous lecturer Hayden Bromley (Flinders University). Personal role models included a family GP (Dr Sparrow); and African, Malay and Singapore doctors, reflecting participants' backgrounds. Choices suggest that aspiration for social justice arises from imagination of making an *impact* for a better world (agency); and respond to *community* concerns of fairness versus individual success (ethos).

International

Angelina Jolie, Desmond Tutu, Nelson Mandela, Jamie Oliver, Barack Obama, Mother Theresa, Malala Yousafzai, Bill Gates, Emma Watson, John Cena.

Australian

Michael Kirby, Rosie Batty, Julian Burnside, Prof Chris O'Brien, Akram Azimi

Academic

Prof Paul Worley, Dr Jill Benson, Hayden Bromley

Personal

Parents; Peer medical students & groups; Jesus Christ; Dr Manoharan; Wangari Mathaai; Greg Mortenson; Halimah Yacob; Catherine Scerri; Dr James Lawler; Dr Koo Wen Hsin; Suzanne Crowe, Dr Annie Sparrow.

Figure 10.3 Participant role models of social justice

10.4 Summary of ‘theory after’ proposals for pedagogy

Three components of ‘theory after’ data analysis of the study provide a blueprint for pedagogy.

A. Bernstein’s critical theory of curriculum provides a frame for the diverse knowledges of the social world that, in addition to values socialisation (moral development), likely informs participants’ choices of ‘type of medical professionalism.’ A knowledge management system (KMS) for an integrative socioscience pedagogy may do justice to population health needs derived from sociopolitical inequities; and to the prosocial aspirations of medical students.

B. ‘Gazes’ and discourses that apply SA to medical practice need a KMS to link *vertical* (biomedical and social science) and *horizontal* (varied lifeworld) discourses into bespoke contexts of medical education, health care, and health improvements (Bernstein 1999). LCT extends the pedagogical frame introduced by Bourdieu and developed by Bernstein; offering a KMS that can organise and integrate SA discourses (epistemological, ontological, and axiological) in medical education.

C. Jakubik’s ‘becoming to know’ frame for the new professionalism links Bourdieu’s concepts of habitus change in relation to new fields, with reflexivity on novel clinical and public health contexts (endorsed by situated learning and complexity theories). Jakubik’s (2011) framework presents a *dissensus* to the status quo: critical and dialogical discourses convey a pedagogy of “engaging, exploring, experiencing, emerging, enabling, and evolving” (:374). Change in professionalism corresponds to changes in the social order. Jakubik’s ‘becoming to know’ framework has ontological relevance in the study, as participants’ learning is directed toward *becoming* a ‘good doctor’. The good doctor is receptive to new medical knowledge *and* dynamic social change; has humanist knowledge, values, and the creative competencies to deliver novel, targeted solutions. A pedagogic *recontextualising device* for SA professionalism, in pedagogic discourse, should reflect that change.

10.5 Discussion of curricula and SA professionalism

While assessment has a strong motivating effect on non-critical learning, both informal and formal curricula may be important to the physician requirement for social justice praxis; for the following reasons.

First, development of medical students' concerns for social health justice in the near-peer contexts of student-groups has strong support from 'community of practice' pedagogy (Lave & Wenger 1998).

Second, student-led groups may maximise the value of embodied discourses of 'outsider' and 'intersectional' students; and contextualise learning of social health knowledge in service learning experiences. Bonds formed in service learning and prosocial student groups may provide WP students the social capital (reproduction of community) necessary for ellipsis of habitus to the professional doxa, and successful medical careers. WP students with *fractured* identities may attend these groups to strengthen professional self-concept against the alienating effects of the hidden curriculum. The 'becoming' frame may overlap with Bourdieu's notion of habitus change. While 'becoming' may be equated with *illusio* (Bourdieu 1986) in the sense of coming to join in the 'rules of the game,' it may also (contra Bourdieu) mean 'becoming' critically conscious; gaining reflexive awareness that allows critical 'recognition' (Bourdieu 1990) of the 'rules of the game' that structure *power* in the field. Knowing what one is 'up against' may permit agency to strategise a career pathway that befits the student's life projects. This activity may also protect the hidden curriculum, when students play by the rules of the game to strategise competitive goals.

Critical *re-contextualisation* of the CPD pathway (curriculum) can be signalled in pedagogy by attention to the semiotics of curricular discourses. In the next chapter, I introduce teaching practices informed by the edusemiotic framework of LCT (Maton 2000), that responds to 'theory-after' insights from the study.

CHAPTER ELEVEN: DISCUSSION PART 2.
SOCIOSCIENCE PEDAGOGY FOR MEDICAL PROFESSIONALISM

11.0 Introduction

The ‘theory after’ framework (Meyer & Ward 2016) derived from the study data uncovers three constraints on participants’ prosocial perceptions.

These include;

a. macro- and micro-structuring of health inequity;

b. critical reflexivity on patients’ social identities, structure of the devalorised lifeworld, and health-related behaviours; and,

c. integration of professional ontology (moral responsibility) for demand-led medical care *and* needs-led social health justice.

Participants’ ‘subject-object moves’ described problematising shifts in gaze, or critical reflexivity, reflecting post-modern concerns of fairness related to social identity, hierarchy, and distribution of institutional power in medical organisation. Pedagogy to signify SA needs to respond to the malaise that patients experience in relation to health systems and adverse global impacts on health. This may be achieved by an evidence-based pedagogy that gains legitimacy from social semantics – the study of meaning-making of social practices.

This chapter outlines how semiotic pedagogy, or *edusemiotics*, may provide a means for educators to legitimate dynamic *external* ‘social facts’ that structure health with *internal* bioscience facts; and instil an integrated knowledge management system for a socio-science praxis in medicine. The goal of praxis is transformational higher education that is both instrumental *and* intrinsic; developing students' knowledge and skills for employment and aspirations for societal purpose (Kromydas 2017). The learning of medical *professionalism* ethical duties or responsibilities can be signalled in pedagogy by *semioethics* (Petrilli 2014).

Validation of social science concepts in medicine is conjectured to provide 'bridging capital' (Putnam 2000) to empower diverse students' capabilities for creative solutions to societal inequity.

11.1 Background

The ensuing rationale follows historical developments in structural analysis of pedagogy, and applies semiotic concepts to change in medical education. The pedagogic principles are linked to *achievement* in education.

Education studies by Pierre Bourdieu, Basil Bernstein and Karl Maton on the semiotic structuration of learning informed a critical, discursive approach to education that could be applied to SA medical professionalism. The conceptual frame for pedagogy would seek to assist students' capabilities to see 'the patient in broader perspective' (Marmot 2017), draw from a broader 'ecosystem of knowledges', read the social 'health-illness dialectic' of illness, and modify SDH. It undertakes the development of students' CC and motivation for SA practices. Professionalism learning, in which ethical praxis derives from knowledge of how the real world (the human condition) is structured in relation to pre-existing or 'known' (abstracted bioscience) knowledge, can be coded into the semantic structure of pedagogic discourses.

‘Reflexivity’ is a candidate for the practice of forming a new professional gaze: one that allows the physician to read the ‘patient’ (medical gaze) and the ‘person’ (sociological gaze). Reflexivity enables physicians to critically examine disparate discourses or knowledge sets, and avoid misrecognition of the structuration of practices by powerful vested interests. While ‘subjectivity’ is defined as “the quality of being based on, or influenced by personal feelings, tastes or opinions” (OED), ‘supersubjectivity’ refers to a ‘broader mindset’ that takes into account a range of discourses that may have relevance to a problem or topic. Applied to characters represented in a story or narrative, Macken-Horarik (2003) describes super-subjectivity as “a capacity to ‘stand over’ a character and evaluate her or his actions ethically” (:287). In the study, Hope (A611) gives expression to this idea as ‘taking a couple of steps back’; essentially to consider the precepts of a patient’s habitus; to comprehend formative crises that unfairly affected the patients’ later health development; and to frame an ethical response.

In medical care, supersubjectivity positions the physician in critical relation to individuals and populations, to avoid *misrecognition* (Bourdieu 1977) of the Other’s social power. The capacity to identify the needs of ‘the Other’ is clearly a strong suit in providing equitable health care to the pluralist populations of modern societies. The inclusion of the need to problematise ‘ourselves’ in supersubjective reflection acknowledges the relational aspects of health encounters, the duty to avoid a mis-reading of context; and the structuration of societal inequalities inherent to physicians’ social status. These elements seem essential to cultural sensitivity in health care; to avoid value judgements, and to assist collaborative efforts to improve a community’s SDH.

Consequently, ‘supersubjectivity’ can be considered another constructionist candidate in medical education for creating “a synergy between the medical student as an applied scientist and a medical humanist” (Tredinnick-Rowe 2018:492). Rather than learning as mimicry, of clinical skills for instance, supersubjectivity allows students to form semiotic meta-concepts that shift their thinking to a new paradigm: to grasp what is required of them amongst the uncertainty of diverse clinical encounters. As reflexivity, supersubjectivity may act as a cognitive component of social empathy; or sociopolitical literacy for ‘reading’ the human lifeworld. I hypothesise that empathy and super-subjectivity can be considered forms of humanist epistemology.

11.1.1 Regulation of pedagogic discourses

Semiotic supersubjectivity may permit a gaze organising what Sveiby & Skuthorpe (2006) defined a ‘knowledge management system’ (KMS): a philosophical schema for ethical interpretation of human dilemmas. These authors reported a mode of traditional learning in an Australian Indigenous society that involved stories and designs encoding moral schemas that were applied to diverse community concerns. A unifying KMS for medical practice would integrate medical science and humanist knowledges into SA praxis, guided by the *aesthetic* of an equitable society (Collingwood 1979).

Education researcher Basil Bernstein (1990) recognised how curricula were structured by the ‘voices’ of *instructional* and *regulative* pedagogic discourses. These signify to students both value and priority of different knowledge sets to the tasks of interpreting and acting on diverse health problems. For example, social stigma related to poverty is not health neutral knowledge; a *regulative* discourse is needed to signify its value to medical phronesis; and to avoid poverty blindness among physicians. Evidence of the social stratification of health places low SES patients in a higher priority status for equity actions; hence risks of chronic physical and psychological illness need to be *signalled* in pedagogy.

Bernstein’s theory recognises ideologies are “structured into the selection, organisation, transmission and acquisition of curricula” (Singh 1996:7), and that the

> regulative discourse constitutes the social division of labour for knowledge production, transmission and acquisition
>
> (ibid:6).

In LCT (Maton 2000), an ‘instructional discourse’ related to skills and ‘regulative discourse’ or “discourse of social order” (Singh 1996:6) taught in tandem, build knowledge and ‘unpack’ concepts. In medical pedagogy, LCT practices would direct students’ gazes “between knowledges that are abstract… and concrete” (Rollett 2020); that is, between *vertical* (medical knowledges) and *horizontal* (lifeworld, social knowledges).

The critical re-contextualising principle of ‘SA through social justice values’ would be signalled in the regulative discourse. Regulative discourse directs student gazes to *conceptual* meanings; relating biomedical science *concepts* to realist social *contexts* in which people become ill.

11.2 Legitimation Code Theory & pedagogy

Change in professional praxis was theorised by Maton (2003) to be effected through reflexivity on *knowledges* rather than the knower. This evidence-based process may transform medical culture to a Charter-inspired professional praxis.

Maton's revision of Bourdieu's formulation of 'epistemic reflexivity' [**Fig. 10.1**] more usefully describes the subject-object move that reconciles the two knowledge sets for SA praxis; vertical and horizontal. This informs the learner of the knowledges that ethically apply to each context. This is powerful intelligence for medical educators of SA professionalism; providing a knowledge management (KM) methodology for professionalism praxis.

LCT (Maton 2014) extended Bernstein's paradigm of vertical and horizontal discourses, to enable "knowledge practices to be seen, their organising principles to be conceptualized, and their effects explored" (:3). LCT takes a social realist position that rejects knowledge subjectivism, which argues knowledge is a *property* of differently situated knowers. Social realism instead views knowledge as social and real "in the sense of having properties, powers and tendencies that have effects" (Maton 2014:9). This shift allows 'realist' understanding of the power of knowledge *in and of* the social world; a position that educators of a SA praxis in health care might consider practical.

> LCT asserts that all knowledge practices, of which curriculum design is one, are inherently concerned with the legitimization of knowledge. This is achieved through two means:
>
> - How knowledge related to knowledge (epistemic means). What matters is what you know.

- How knowledge relates to people (social relations). What matters is who you are.

(Rollett 2020)

Social realism advances an 'independently existing' reality, beyond discourse, that helps to shape our knowledge of the world. Maton (2014) argues that in social realism, knowledge "is about something other than itself, draws on existing knowledge, and *is produced and judged by socially situated actors*" (:10-11 Italics added).

Maton (2011) borrowed the conceptual idea of 'capitals' (Bourdieu 1977) as units of social power that individuals convey in habitus to a new field, to the idea of *codes* in pedagogy. However, Maton's initial focus was on the relations between knowledge sets, instead of the knower. He showed that vertical discourses consisted of hierarchically arranged, abstract knowledges conveying *semantic density of meaning* (SD), and horizontal discourses that conveyed the knowledge *relation to context* or semantic gravity (SG). Binary sorting enabled semantic codes to be distinguished as either weak (SD-, SG-) or strong (SD+, SG+) (Maton 2009). In Maton's LCT concepts, and typical of critical thinking, super-subjectivity signals a semantic shift in *contextual* perspective; from high gravity (SG+) to a lower gravity (SG-); "rising above the specific context to describe more generalised issues" (Szenes, Tilakaratna, & Maton 2015:580).

During study interviews, participants discussed their difficulties *imagining* the Indigenous context of health care. Effective teaching employing LCT involves guiding students between SD and SG codes, to build *relational* knowledge of both theory and practice concepts. For

SA, this process would begin with relatively simple semantic constructs of equity, using everyday examples that are relatively context-free (SG-); then referring to more complex contexts (SG+) and making *semantic waves* [**Fig. 12.1**] between them, to develop students' critical thinking. This LCT practice (Maton 2011) proposes educators shift discourse between low and high SG codes (so too with SD codes). The following critique of Indigenous health *knowledge building* by Adelaide Final Year participant, Georgia, demonstrates *semantic wave* action.

Georgia (A613) reflected on her dissatisfaction with the way Indigenous health was taught. She recalled an Aboriginal 'case' during Case Based Learning (CBL) tutorials (Years 1 to 3), and suggested how deeper learning could be capitalised. In brackets, below, I attempt a dialogical translation of her pedagogic critique; then note in *Italics* each comment's semiotic significance to pedagogy using Maton's terminology.

Georgia (A613):

- Are they real cases they target? [**authentic learning?**]. *SG+ code.*
- I think there's one (Indigenous case) in CBL [**not enough**]. *SD- code.*
- It should be referenced more when talking about patients and a certain disease [**contextualise medical learning to at-risk Australian cultural groups**]. *Semantic waves between SG and SD, demonstrating critical thinking.*
- They should also be talking about the differences [**relevant historical, social, environmental, political, cultural and medical determinants of health in Indigenous and non-Indigenous Australians**]. *Semantic waves between a range of SG and SD knowledge sets* to comprehend the extent of inequity.

Maton's concept of 'semantic waves' emphasizes that 'power' is not intrinsic to biomedical knowledge but rather resides in the *agent's* semantic range and capacity to *wave between* and *weave together* different forms of legitimate knowledge (Maton 2014) e.g. medical, ecosocial, and ethical; into a meaningful praxis [**Fig. 11.1**, below]. Doing so 'speaks truth to justice' in the absence of the 'voice' of disadvantaged patients and community groups in the learning setting.

	Course topic	Semantic coding of pedagogy	
	Patient sexuality ***LGBQTI groups***	Gravity (SG)	Density (SD)
Contexts - practice	Micro	Mental health	Sexual health
	Macro	Stigma advocacy	HIV-AIDS services

Fig. 11.1 Regulative framework for SA pedagogy of sexuality & health

A knowledge management (KM) approach can place social justice values central in pedagogy for organisation of equitable, patient-centred care. In **Figure 11.1** (above) I conceptualise a KM framework of a medical curriculum topic (sexuality and health) that employs Bernstein's regulative discourse to display the knowledge sets applicable to individual (micro) and population level (macro) praxis. This SA pedagogic framework uses participant data from Interview Question 7 [Appendix 4B], including participants' critical *misrecognitions* of the GP's dilemma, to inform a pedagogic framework for developing students' clinical reasoning.

In this sense, LCT models the critical thinking practices that it analyses.

> By making explicit the nature of knowledge practices that constitute a demonstration of critical thinking, such as waves of semantic gravity, LCT enables the possibility of designing pedagogic interventions for teaching the skills that achieve those practices
>
> (Szenes, Tilakaratna & Maton 2015:589)

Communication of knowledge and meaning across human differences is a complex learning task the study addressed in interview Question Three [Appendix 4B], which enquired about difficulties in motivating behaviour change. Semioticians claim "the whole of human experience, without exception, is an interpretive structure mediated and sustained by signs" (Deely & Semetsky 2017:208). The semiotics of The Charter of Medical Professionalism, a supersubjective decree, informs intersubjective practices of SA patient care. (For example, written here in capitals, I valorise the importance of The Charter to professionalism; written in lower case lettering, I devalorise 'western' and 'eastern' as colonialist terms). The praxis first involves reflection and allows physicians and students to "draw on both objective and subjective contextual knowledge" (ibid:507); that is, both bioscience and humanist praxis: to "orient themselves to clinical environments that are profligate with new uncertainties and challenges" (:508).

Appeals to a more inclusive ‘knowledge ecosystem’ (Santos 2007) responded critically to a false consciousness in the western knowledge paradigm. This refers to a denial of

> the plurality of heterogenous knowledges… and on the sustained and dynamic interactions between them”
>
> (ibid:66).

Similarly, Savransky & Rosengarten (2016) highlighted a conundrum in the *ontology* of biomedical practices;

> to explore the kind of realities of health that these practices *enable* to come into existence, as well as those that they *prevent* from coming into existence
>
> (:1 Italics added).

The idea of ‘cognitive justice’ proposes that “positivist and functionalist mechanisms” (Santos 2007:76) of modern science tend to hold a monopoly in western epistemology that exclude a diversifying knowledge ecology (ibid). Santos (ibid) argues, the pragmatics of an ‘ecology of knowledges’ is the “interventions they enable and impede in the world” (:72). That is, complementary knowledges can improve health, but contradictory knowledges can have adverse consequences (including harmful hierarchies) for the lifeworld of those unfairly exposed to them.

An ‘ecology of knowledges’ brings into play different *levels* of abstraction; from the patient’s knowledge of their body and their embodied knowledge of their lifeworld; the diversity of biomedical and technical knowledges held by the health professions team; and medical students’ diverse and discursive lifeworld knowledges. The social health-illness dialectic, as emergent knowledge of health and illness production, develops from epistemic reflexivity on the broader *geography* of patients’ problems. Practising communicative and cognitive justice by inclusion of diverse knowledges and knower voices may expand benefits not only to the public’s health but to the health of physicians; as reciprocal, ontological justice. Importantly, it can also reduce the misdiagnosis of social problems as medical; and the harms of unnecessary prescriptions and referrals (Roland, Everington & Marshall 2020).

The majority of participants recognising the need to identify patients’ sexuality, applied a *biomedical* gaze to the homosexual *social* identity. This *misrecognition* (Bourdieu 1977) stereotyped LGBQTI patients by their sexual health risks; effecting ‘symbolic violence’. Those with a critical *sociological* gaze of the LGBQTI lifeworld, and a participant identifying as LGBQTI, regarded psychological distress as clinically more common and important; in *recognition* of LGBQTI patients’ equity statuses.

An example was Nate (F46), whose only social equity identity was his homosexuality. For Nate, the sexuality question in the interview was common sense, as he was embedded in the social semantics of the LGBQTI experience. Yet, Nate’s strange experience with diabetics in a remote Indigenous hospital produced *cognitive disequilibrium*, in which meaning was sought. In the western biomedical model (*known* to Nate), amputated diabetic limbs were incinerated to avoid bacterial contagion. Clinical management to avoid diabetic problems is *high density* biomedical knowledge in the vertical form. Yet, in the local Indigenous context, reflexivity on cultural practices modified the need to dispose of amputated limbs (epistemic relation to the known, B-C). The new knowledge functions to benefit both cultural customs *and* medical hopes of diabetic follow up for monitoring patient progress and prevention of disease progression. As a result, less amputations may be necessary; cultural accountability actions can increase Indigenous diabetics' attendance at health services and confidence in health management. Diabetics then have reduced allostatic stress load, promoting mental and physical wellness. There is restoration of both cultural and physiological *homeostasis*; although additional SDH actions may be required to improve social homeostasis.

Understanding Indigenous health knowledge practices, through epistemic reflexivity, make Nate a knower; with tacit knowledge and capability shared in a community of practice with other rural physicians. Furthermore, communicating this knowledge practice in the global academic literature can spawn new ideas, theories, and practices in other locations and disciplines; giving the new knowledge a life of its own (Maton 2014).

Maton summarises the central error in conceptions of 'subjective knowledge';

> though knowledge is a product of our minds, it has relative autonomy from knowing – knowledge has emergent properties and powers of its own. This can be seen in the way that knowledge mediates: creativity; learning; and relations among knowers.
>
> (Maton 2014:12)

Likewise, the reflexive subject-object move was theorised by Kegan (2000) to shift the actor's consciousness and capability for complex thinking to a higher level. This adaptive skill set allows physicians to get 'above the fray' of pluralist modern societies; and improvise health practices to match shifting sociopolitical circumstances.

In LCT, the coding categories combined into a SA phronesis can reflect
a. the domain knowledge of professional expertise, and
b. the humanist art of 'reading the world': critical reflexivity (interpretation, judgement, creativity) on the lifeworld context of *this* patient's or *this* community's health-illness dialectic.

Maton (2003) theorised a dialogical change of *gaze* that persuaded learners to practice 'epistemic reflexivity' on new knowledge in relation to what was known. A transformative shift in the learner's identity was touted a reciprocal effect of this 'learning-knowing' praxis. Educators too, can critically examine 'known' knowledge to identify its precepts; and map existing *contextualising principles* that unfairly organised what is learned in favour of dominant interests.

Next, I discuss continuing professional development (CPD) as a product of fairness to diverse students' axiologies, ontologies and epistemologies. Demographic, survey, and interview data from the study was utilised to characterise participants' equity identities, aspirations for particular *types* of medical professionalism, and fulfilment of holistic aspirations. This data theorises *reciprocity* in structure and agency for activating WP students' usability.

11.3 Fairness to *becoming* physicians

Fairness and flexibility of structural settings in HE may promote the unique moral vision of each student's career path in the health sector through peer socialisation and interactions with diverse but likeminded others.

Brosnan (2009) reminds medical educators of the neglected importance of *structuration* in medical education research. Here, I am interested in how medical education at two schools contextualise SA in medical professionalism, and develop the embodied values and situated knowledges of diverse student identities. Although encouraged to critique existing practices, the capability of clinical students (many with equity identities) to exercise their values and voice their concerns of health care contexts, can be sabotaged by organisational priorities and lack of professional support (Greenway et al 2019). The need for bridging capital to enhance WP students' capabilities was stressed in the literature review [Chapter 3]. Moreover, students can experience a disconcerting lack of biographical and program coherence during the transition from university to workplace (Smeby & Heggen 2012).

In the final chapter, I outline a socioscience pedagogy attuned to students' diverse equity identities, situated cognitions, and knowledges; informed by critical *recognitions* and *misrecognitions* of the social construction of illness common in clinical practice problems.

Curricular justice in the form of 'inclusive curriculum' Singh (1996) is conceptualised as "changes to the form and content of curricula so that it [sic] serves the interests of all students" (:3). In a sense, curricular justice performs a similar educative role to student reflexivity: both foster students’ democratic agency, ‘ethical capital’ (Bull et al 2010), and CC of the structural vulnerabilities that produce human suffering and illness. This pedagogic position is reflected in the following claim drawn from the literature review.

> Educators should enlist medical students and residents in developing a theory of professionalism through reflection on the activities these groups see as important to fostering their professionalism.
>
> (Wear & Kuczewski 2004:3)

In this light, framing of a political discourse such as ‘social justice in healthcare’ in The Charter may be viewed as recourse necessary to disrupt reform inertia and transform the dominant values discourse of the prevailing professional order. Medical graduates acting rationally on sociopolitical and economic injustices distressing the human condition are likely to produce a professional culture of ‘better doctors’, healthier doctors, functional inter-professional teamwork, and more responsive health systems. Public trust in the new professionalism will be the ultimate measure of its success.

11.4 Outcomes-based professionalism: bringing it together

In summarising this chapter and introducing the final chapter, I reflect on the initial motive for initiating this study. My curiosity was directed to the fate of social justice concerns and aspirations that students cultivated in medical student associations, while learning the knowledges and skills of modern medicine. How might these dispositions mesh with the wording of The Charter into imagined future practice? How could the powerful juggernaut of medical professionalism change to accommodate SA?

The evolving science of educational sociology offers theoretical means for incorporating the logistics of the social lifeworld or ‘open’ system of human society into medical reasoning. In a review of adult learning theories for medical education (Taylor & Hamdy 2013), little space was given to learning for social responsibility, and The Charter was not mentioned. The authors reported that student *attitude* constituted ‘more than half of outcome domains’ in medical education. However, a crucial comment is made about *knowledge* in outcome-based education;

> both learners and educators need to remember that learning is a process in which they weigh their knowledge against a critical examination of alternative possibilities (Ahlquist 1992)
>
> (Taylor & Hamdy 2013:e1570).

The current, post-modern era of social complexity and uncertainty, creates shifting realities of human existence and health, and adds urgency to the task of developing a critical pedagogy of medical professionalism.

How the ‘rules of the game’ or doxa can change in favour of prosocial professionalism, can now be elaborated.

Overview of the chapter to follow

In the final chapter, I identify gaps in theorising of prosocial medical professionalism, further proposals arising from the study, and synthesize a model for deliberate SA pedagogy in medical professions education that draws on critical theories of pedagogic practice. I discuss how pedagogic power is conceived in the literature of educational sociology, and draw on study results to suggest how curricular justice may be leveraged employing health semiotics to modify *knowledge* integration and include student *knowers* in professional praxis

CHAPTER TWELVE:
CONCLUSIONS & PROPOSALS.
KNOWLEDGES & KNOWERS IN CRITICAL PHRONESIS

12.0 Introduction

In this final chapter, I outline study conclusions that bear on pedagogic praxis for SA medical professionalism; one that ethically validates *knowers and knowledge*. I report knowledge gaps revealed by the study requiring further research, suggestions for pedagogy to progress the project of social justice in medical praxis, and relevant ethical concerns.

12.1 Study Conclusions

The study disclosed injustices of commission and omission in existing medical practices and the medical education discourses structuring medical professionalism. A mediating, ethical praxis, for cultivating a professional axiology of care and justice is required.

12.1.1 Axiology: social justice values

- Support for social justice learning in medical education

Study findings with the strongest evidence indicate universal support for social justice learning in medical education.

Participants with CC identified flaws in existing professional values, knowledges, and conduct that effected psychosocial and moral harms to patients and students. Lack of critical reflexivity by the profession on distributive health needs ,in the context of a neoliberalised economic order, was a target of criticism. Students perceived SA knowledges and practices, and health system reforms, important to contemporising medical practice and closing of unfair gaps in health outcomes in pluralist societies, and particularly for Indigenous Australians. They reported a 'know-do gap' in SA *practices* that medical educators were expected to close.

- Critical consciousness for structural inequities

Participants' critical dispositions, and capabilities for meaning-making of the social structuration of health were generally deficient. The most penetrating reading of the social health-illness dialectic was demonstrated by an Adelaide First Year female (A14), a social activist with high intersectionality; and Flinders Final Year participant (F46). Both had first-hand knowledge of living conditions in socially disadvantaged communities and strong dispositions for critical reflexivity.

- Intention to practice medicine in areas of health need

Strongly felt, humane discourses of justice and care were mainly voiced by female participants with no other equity identities; the same group intending to practice medicine in underserved populations.

- Obstacles to social justice mindsets

A hidden curriculum was reported, in which unreflexive and harmful 'othering' discourses voiced in public were regurgitated in clinical settings. Effects on prosocial professionalism of student-led groups remains under-theorised in medical education research.

- Global moral vision

Presentism in moral vision of the profession’s social contract left the lessons of past ethical failures unheeded. Participants’ reasoning of the social health-illness dialectic often failed to include contemporary, emerging societal and global health changes. Presentism may be related to medical student gazes naturalised to immediate health demands in the overloaded downstream contexts of health care, the pressing demands of study, and the hegemony of the biomedical gaze.

12.1.2 Epistemological justice

o Knowledge of societal structuring of health

The social health-illness dialectic was best understood by study participants with intersectional equity identities from the WP agenda. However, their SA concerns can be limited to family experiences of injustice (e.g. migration or refugee experience) unless there is further situated learning of social disadvantage (as with A14).

o Knowledge blindness

There was a range of ‘knower structures’ among cohorts. Two Final Year, low equity identity males were unaware that knowledge has properties of its own, and rejected the significance of social structuration to health. One demonstrated fractured habitus (F44); the other demonstrated a social dominance (A61). Such ‘learning fallacies’ can theoretically be corrected by making knowledge practices of SA explicit employing LCT (Maton 2010).

o Social health learning

There was unanimous participant support for learning social health justice in medical education. However, all cohorts experienced difficulties problematising the situations of social inequity presented in the study framework. This failure of sociological imagination and accurate empathy for social inequities may benefit from pedagogy employing LCT and the biosemiotic concept of *lifeworld*. Additionally, most participants experienced difficulty imagining or synthesizing creative solutions for SA. Percepts drawn from her intersectional stance in Singapore society, and strong social justice sensitivity, showed Safiya (A14) to be the exception.

- Sociological knowledge

Participants with the highest levels of CC for the contemporary health-illness dialectic; *knowers* best able to 'read the world' sociologically, were females with intersectional equity identities (*outsiders*). This finding accords with 'standpoint theory' (Lukács 1971) that regards students' knowledge construction or interpretation "influenced by their culture or standpoint" (Edwards 2014:168). While standpoint theory does not reduce agency and perspective to subjectivity, it attests to the structuration of perspectives by an actor's social position in society. Political stances such as feminism that describe what one cares about, and what changes one wants to make in the world (e.g. social justice), are described in critical standpoint theory (ibid). Edwards (2014) defends critical realist theories against claims of knowledge relativism;

> [Students'] everyday knowledge is a necessary starting point for enquiry that should lead to a higher reflexive consciousness of their standpoint in the wider world – that is to strong objectivity. Standpoint theory therefore does not reduce knowledge to the knower. On the contrary, it acknowledges the *dialectical transaction* between subjectivity and objective reality.

(:182 *Italics added*).

This statement reinforces the need for reflexivity on knowledges, in the manner of Maton's triangle [**Fig. 10.1**]. Hence, in light of standpoint theory, the *transformation* of consciousness required for SA to health equity needs, needs to start from students' partial knowledges and gradually build their relations of knowledge to the prevailing ecosocial contexts of health production (ibid:180).

As Maton (2014) attests about 'knowledge';

> once formulated as knowledge, 'objectified', our ideas can shape our knowing. We can both *improve and be improved* by what we create.

(:14 Italics added).

12.1.3 Ontological justice: becoming agents of social justice

Though the medical teacher's focus is on student learning, the educator's pedagogical focus is to structure *knowledge practices* to build and track students' *autopoietic* 'becoming to know' ontologies. Formative assessments reward observed growth in critical thinking. Knowledge practices are what LCT makes explicit, as the following illustrations from the study aim to demonstrate.

- Coming to know about sexuality and stigma

There was marked difference between two Flinders participants in how they experienced knowledge of 'health risks of gay men' (Interview Question 7). Following a course lecture on sexual health, Pandora (F111) understood stigma as related to medical risk of sexually transmitted disease; an epidemiological (quantitative) perspective. Nate (F46), a gay male, understood social anxiety related to *self-stigma* to be the greater problem. The organising principles of pedagogy informing learners' knowledge of *stigma*; how stigma manifests in diverse human contexts, failed to achieve a 'coalition of the mind' (Maton 2014) with sexual health physicians.

Pandora's fragmented, positivist knowledge of LGBQTI health risks was an example of how

> forms of knowledge enacted in pedagogic practices differentially affect the educational achievement of social groups of knowers
>
> (Maton 2014:13).

This resonates with Freire's distinction between *banking* education and *critical* education. Transformation to a SA perspective of LGBQTI patients has, for now, evaded Pandora; and social inequality for learners (and LGBQTI patients) is perpetuated. Pandora had *technical* knowledge but not the critical knowledge that acknowledges the personhood of the patient; the difference of the societal error. Teaching about sexually transmitted disease (STD) risks of homosexual men without addressing stigma as having knowledge properties of its own, commits 'the learning fallacy' (ibid:12). When conditions change - an emerging epidemic of HIV, or same sex marriage bill - how social stigma may 'play out' in the new context is essential to the management of LGBQTI patients and advocating the health needs of LGBQTI communities.

- Coming to know how healthy change happens

Motivational interviewing, that aims to help patients change unhealthy behaviours [Interview Question 3], is not ‘one size fits all’ – the whole patient and their current social conditions of living need to be taken into account. Therapeutic relationship and empathic communication are essential human qualities owed by SA. Martin (A61) absorbed a learning fallacy, thinking persistent ‘nagging’ the only effective modus operandi. Yet, Safiya (A14) knew this as fallacy *before* she commenced formal medical training. Learning experiences in contexts of social disadvantage enabled a critical comparison of patterns of meaning-making between her own and others’ lifeworlds.

- Becoming critically conscious

Safiya (A14) had the strongest social justice gaze among intersectional participants, belonging to an oppressed community and having faced Singapore police and other state officials in her activism for social change. Safiya’s discourse was the only one that could be called *parrhesia* – speaking truth to justice. She actively sought and found ‘horizontal’ sociological knowledge of social injustices in other areas of her city.

- Becoming more available

The space-time dilemma in participants’ critiques of downstream medical care; where only private patients have the luxury of the physician’s time and close care, limits the ‘goodness’ of doctor a student can become. Physician time for a patient’s needs may be structured by capitalism as a commodity; monetised, and validating the use of time-saving products. In Bourdieu’s theory, these practices then become sedimented in physician habitus. Time is money, and ideals of economic growth demand more efficient activity. Time in a colonial model of medicine was allocated to the sickest. However, time spent in upstream health spaces to reduce downstream health demands attracts less payment from ‘health’ funders and is therefore relegated from professional practice. Lack of reflexivity on this omission means that *professional stance* excludes this level of health sustainability; but is employed in gross humanitarian crises by the professional collective. Lack of reflexivity on historical injustices adds weight to an argument of insularity in the medical gaze.

○ Pedagogy for ontological justice

Among potential benefits of a deliberate, critical pedagogy is reciprocal and epistemic justice to patients and students; and greater ‘usability’ of a diversity of habituses. This is a rapidly developing area of health professions research.

Empowerment strategies may enhance students’ competencies to
a. form positive community relationships to overcome cultural anxiety and uncertainty;
b. de-colonise the clinical encounter, utilising space-time more equitably by doing justice to the context of each human dilemma of sickness and disability;
c. apply broader knowledge sets in medical phronesis; and
d. adapt health practices to changing needs.

○ Decolonising health care

SA may validate inclusion of stakeholder voices in collective solutions to those remediable health problems not cursorily fixed by pharmaceutical interventions. To achieve distributive justice, rational reform requires time, space, and funding allocated to *upstream* contexts of health production. To end symbolic violence to patients and students, non-democratic metaphors organising health care and the lexicon of modern medicine, would be removed from the medical education codes legitimating *stance*. In line with advances in philosophy of science, outdated modern and simplistic ‘cause and effect’ metaphors ought give way to non-linear, ‘process-informing’, complex adaptive systems thinking. This is elaborated in semiotic biology or biosemiotics. The emergent properties of humanist contexts of health are perceived as *part-whole* (not discrete) entities like biomedical facts. They are dynamic and interesting human realities that *qualify* the medical management approach. The mode of investigation and evaluation requires linguistic skill and judgment; and is an interactive, perceptual exercise that makes medicine aesthetic – an art. Imagination is involved and necessary (Collingwood 1979).

o Lifeworld literacy

Horizontal knowledge corresponds with human *lifeworld* (von Uexküll 2001) in biosemiotics. First Year participant, Safiya discovered several ways that lifeworld stigma (and self-stigma) can alter the behaviour of patients and physicians. Her testimonial justice served individuals and families marginalised in society and lacking *voice*. Her power as a proto-professional health advocate has risen from exercising capitals (Bourdieu) and capabilities (Sen) to effect political and structural changes in her society. The grammar of her discourse was dialogical; signalling *proximity* to the authentic realities of the family lifeworlds she encountered. In

LCT terms, Safiya had a strong 'knower structure' of the field of social health production, although as a First Year, she had weak 'knowledge structure' of medicine (Maton 2010). Safiya had not yet met Indigenous Australians, but had a reflexive habitus and schema of social inequity that could be applied to this context.

o Aspirations for socially accountable practice

Not all intersectional participants voiced critical awareness of contemporary social realities, nor a burning desire to change unfair disadvantages. Disadvantaged but successful students (e.g. socially mobile outsiders in medicine), unreflexive of the structuration of their own social mobility, can voice a narrative of *meritocracy* (Luyckx & Heyman 2013). Successful migration and education had raised these participants' capitals and capabilities for *social mobility*. These participants held sympathetic perspectives of social justice for people of similar background (e.g. for migrants, ineligible for health care insurance for the first 12 months); but showed no CC for *practicing* SA They had less intention to practice in an area of health need than single equity participants; and through medical practice aspired to further their own personal and family security.

An example from the study was intersectional participant Amrita (A65), who planned to specialise, and (like Martin A61) held strongly to a praxis of didactic patient education to improve health outcomes. She planned to travel to her parental homeland, Sri Lanka, for work experience; an opportunity for critical reflexion on structural limitations on patient education in a society with a steep gradient of socioeconomic inequality. As her colleague Nipuni (A69) attested of poor Sri Lankan women, they had weak CC or change capability.

12.2 Theoretical discussion

12.2.0 Introduction

Maton (2011) extended Bernstein's groundwork in educational sociology to acknowledge *knowers*. Hence 'knower codes' signal proximity to the contexts and conditions from which social facts emerge (Maton & Moore 2010). This suggests both knowers (ontologies) and knowledges (epistemologies) confer legitimacy to the field of medicine (ibid). The powerful canon of empirical medicine remains, but critical reflexivity on the changing contexts of health practice is required to modify this 'objective' knowledge with 'everyday' knowledge of health structuration.

In Maton's classification of *knowers*, intersectional participants had 'born gazes' of social realities; the strongest category (Maton 2014) [**Fig. 9.2**]. Socially privileged participants (insiders) supporting SA medical education had dispositions for social justice derived from family values, reflexively responding to status anxiety (e.g. James A68). However the difference in discourses between these two groups (outsiders and insiders) were separated by their proximity to emergent social realities producing human distress.

a. Insiders (I) had more *abstract* understandings of social injustice (from reading, school, discussions, habitual expectations) and reported activism as supporting petitions on social media platforms, or donating time to raise funds for charities.

b. Outsider (O) participants had more context-related discourses derived from internalised experiences of contemporary social realities - racism, poverty, the Global Financial Crisis, the migrant or refugee experience - “the historical situatedness of knowledge” (Edwards 2014:180).

c. Participants’ personal curricula were diverse; there appeared to be no single *entry level* to pedagogy. No generalisation about SA could be made from study data based on Year level or School cohort.

d. Social justice and care were ethical commonalities among prosocial participants. The most effective ‘readers’ or ‘interpreters’ of the patient’s needs were themselves immersed in social inequities and had critical consciousness of social health structuration.

Translating epistemic findings to pedagogy sets a challenge to incorporate critical discourses into medical education by means that give them power *proportional* to their value to health outcomes. The study revealed that *semantic discourses* related to social injustice held powerful meanings for diverse students that may be useful to growing SA curriculum and ethical pedagogy. I now elaborate two levels of synthesis in which *semioethics* (Petrilli 2014) may be the basis for professional education reforms. The first centres on communication in the doctor-patient relationship; the second on the ‘stance’ in pedagogy that communicates ethical discourses.

12.2.1 Semioethics in the doctor-patient encounter

Responsibility to patients’ bespoke health needs is an understanding that SA represents. The ‘rules of the game’ in medical education denote the professional duties required of physicians. Ethical messages are present in the communication exchange of the health encounter as *ideas,* couched in meta-communicative language. To interpret the idea of need, a physician must critically perceive and reflexively interpret meta-communication of the Other's lifeworld. Within the physician lifeworld, once an *iconic* sign of 'need' or 'equity' is perceived and compared with pre-existing percepts of justice and care, meaningful cognition and response (responsibility) is reflexive. The icon need only be *similar* to signs of a value-laden concept to begin learning and development of reasoned *argument* (Olteneau 2014).

Semioethics applies in the health encounter when *listening* to the patient; in the sense of symptoms of "worldwide social *malaise* – generated by the current communication order" (Petrilli 2014:v). This semiotic view regards global communications reproducing dominant social (dis)order unfair; and encompasses a medical understanding of SA as linked to embodied semiosis of *malaise* in patients' symptomatology.

In the study, participants' reflexivity on the social order contextualising a patient's 'health' was characterised as *super-subjectivity*; an abstraction in logical argument. Abstraction can allow a felt or sensed analogy to the perception; a guess or *conjecture* that prompts the argument toward the truth (learning); that, when linked to survival, becomes *habitual* (Harries-Jones 2016:210). The semio-ethical conjecture of unfairness, with its felt emotions, builds critical argument or reasoning, and the habit of critical consciousness.

Petrilli (2014) notes how the first order reasoning of *abstraction* differs from later orders of science reasoning (*induction* and *deduction*). The latter begin from known (past) not conjectural (happening) events. Open-ended, conjectural perception is akin to pattern recognition (like bird *flocking* or murmuration, described earlier by Wheeler), or complex adaptive systems science.

In relating semioethic theorising to the study, I note how participants with social equity identities were familiar with, and could more effectively *recognise*, inequities in others' situation than those lacking prior *iconic* experiences. For some, reflexivity (abstraction, 'subject-object' move) on the social order had become habitual, based on need to 'read' situational uncertainty. They look for 'difference that makes a difference' (Bateson 1979); information that conveys meaning and directs action. Participants that travelled to other societies, were reflexive of the 'strangeness' of social arrangements; likely searching for a familiar pattern to arrangements. When challenged, their taken-for-granted norms raised justice emotions; initiating comparisons and analogies to make sense of new knowledge. In semioethics, this argumentation – based on signs communicated from the external setting, can be built upon to reach logical premisses and actions.

When participants with intersectional equity identities returned to Australia from family homelands (Hope A611– Africa; Nipuni A69 – Sri Lanka; Violet A13 – Vietnam); and low equity identity participants reflected on longitudinal clinical placements (Ingrid A63, Nate F46, and Matt F47); they developed stronger *social* gazes of social disadvantage; the second strongest gaze (Maton 2014) [**Figure 8.1**].

Nipuni (A69) reflected on her transformed gaze following service learning in Sri Lanka. She conceptualised social health accountability as;

> “not just consider their health problems but other things such as their socioeconomic status, their gender, their race and what you can do to sort of help eliminate any discrimination in those areas… so, thinking about things that might not be obvious on presentation and sort of spending a bit more time, because these things would obviously be really important to the health care of the person, as opposed to things like, you know, ‘Have you had your blood pressure measured?’ or ‘Have you had your cholesterol levels checked?’… like figuring out their socioeconomic status and how it might drive their health…”

I note how the semantics of Nipuni’s gaze shifted between horizontal (or contextual) knowledge of the patient lifeworld (semantic *gravity* code) and vertical or theoretical knowledge of medical guidelines (semantic *density* code); as she constructed and de-constructed her reasoning of ‘what would be important’ to the patient’s health care. She demonstrated a phronesis of critical reflexivity on health *needs* in relation to social and medical determinants of health.

Getting the balance right in medical pedagogy, between the logics of internal and external *malaises*, is the other setting where a critical ‘stance’ can be enculturated.

12.2.2 Semioethics coding in medical pedagogy

Western curricula are held to “discriminate against the knowledge of some groups thus reproducing patterns of social disadvantage” (Edwards 2014:168). The dilemma for educational sociology, in theorising health structuration (and endorsing equity) in pedagogy, is *whose* knowledge has validity in pedagogy? This poses a critical question: is knowledge “value-free, decontextualized and ‘out there’” (Edwards 2014:170)? Or, as Virchow found, *political* and pre-structured to benefit those in power? Standpoint theory places students in epistemic relation to the traditional canon of medicine but challenges the ‘reification’ of knowledge; instead situating knowledge between the extremes of relativism and empiricism (ibid). The *pedagogic device* (Bernstein 1990) and the symbolic control of knowledges and meanings generated, is the structuration principle in education tasked with shifting power, standpoint or professional stance.

LCT provides a toolkit for educators to construct a rational approach to curriculum control. The integration of *knower* structures and *knowledge* structures in pedagogy employing ‘semantic waves’ (Maton 2013) [**Figure 12.1**] aims to validate SA (or critical reflexivity on the social order) in students’ phronesis. Essentially, LCT makes critical thinking more accessible by making knowledge practices more explicit. It recognises the legitimacy of knowers’ proximity (semantic gravity code, or SG) to social realities and the SDH. Consistent *waving* between horizontal and vertical discourses in pedagogy is theorised to develop students’ habit of, and habitus for, *ethical* practices of SA. Strengthening knower gazes, irrespective of a student’s entry level to social medicine, is a defining task of SA pedagogy.

This conclusion diverts the study’s analytic focus on transformation of perspectives to ‘knowledge structures’ in medicine; the contexts of the formal, hidden and student-led curricula. The formal and hidden curricula are presumed to be interlinked, and reproduce social privilege in the manner described by Bourdieu & Passeron (1977). The student-led curricula of prosocial groups are sites where social justice gazes are likely *cultivated*, and service-learning experiences where *social* gazes are conceived. This suggests that prosocial students seek stronger knower gazes, including *trained gaze*; to close a know-do gap, and satisfy the gestalt of their interests in medicine.

The following semantic wave diagram [**Figure 12.1**] tracks the semantic gravity and density codes used in a biology class on ciliary action (Maton 2013:15).

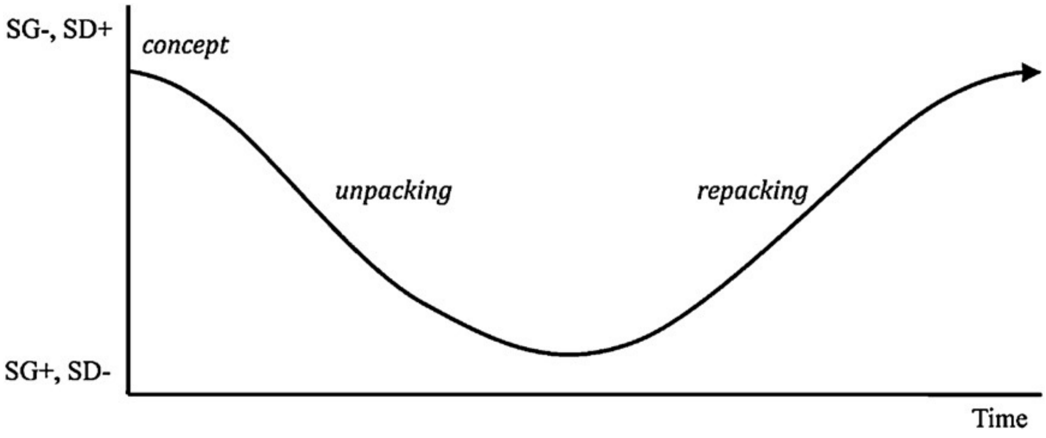

Figure 12.1 Semantic wave diagram (from Maton 2013:15 Fig. 4.)

12.2.3 Responsibility: making standpoint matter

Standpoint knowledge of a lifeworld evokes the idea of *embodied* cognition, which "involves a deep connection between perception and action" (Stolz 2014:476). Embodied cognition derives from "how we perceive ourselves, other persons and other things in the world" (ibid:477); compared to the dis-embodied and dis-integrated nature of scientific knowledge. Maton (2010) pointed to *both* knowledge and knower structures “that together shape intellectual and educational fields” (:161). In medical education, LCT validates an ecosystem of knowledges that includes biomedical science *and* the humanities; in place of a hierarchy of knowledge or knowers. In LCT, a diversity of knowledges and knowers are endorsed, with knowers providing the contextual, human discourses.

> Knower structures can thus be distinguished by the degree by which they integrate and subsume new knowers, their *sociality*.
>
> (Maton 2010:164)

This implies that growth in a field, and change, depends on educators *validating knower* structures and the contextual knowledge that knowers validate. Which knower structures matter can be determined by the strength of the *knower grammar*; “whose ‘social’ is speaking” (Bernstein 1999; Maton 2010:161); and the degree to which a ‘gaze’ is related to its source. Hence, ‘to know is to gaze’ (Maton 2010; Bernstein 1999).

In educational sociology, ‘knowledge blindness’ (Maton 2014) describes the way that a gaze for observing particular knowledges can remain opaque to knowers. LCT makes apparent to educators the range of relevant *relations of knowledge* in pedagogic structure, coded by semiotics. Mapping ensures that both *high* (SG+) *and low* (SG-) contextual knowledges are included (not just high density, privileged knowledges). In medical education, the latter is reductionist knowledge of the biosciences (SD+); while contextual knowledge of patients, communities, societal and global events (SG+) can be under-theorised and under-represented. Systematic structuring of discourses by LCT concepts can also be used to program *knowledge building* in curriculum across the course (Maton & Moore 2010).

Social justice as a re-contextualising principle of professional pedagogy, enabled by LCT, is projected to assign greater symbolic control to powerful social health knowledges, in curricula heavily weighted by biotechnical medicine. Transfer of social justice thinking to dynamic and diverse health problems is theorised to entrain students' dispositions for critical thinking and sociological imagination; draw on an ecosystem of relevant medical, social, cultural, political and global knowledges; and effect ellipsis of professional habitus to SA and CC. The semiotic pattern associated with critical thinking is the 'semantic wave' (Maton 2013) that weaves back and forth between contexts and abstract health facts.

This quote from Sharma, Pinto & Kumagai (2018) about the social determinants of equity (SDOE) reflects the same process of thinking about semantic gravity codes (Maton 2009) that validate the *contexts* of health production.

> The SDOE are the factors that determine the range of contexts observed in a given place and time, and the distribution of different populations into those different contexts.
>
> (:26-27)

Likewise, *misrecognition* (Bourdieu 1977) of the ethical value of knowledge salient to the social structuring of health, can impede students' abilities to *take account of*, interpret, and integrate dynamic lifeworld factors into medical problem-solving. This was observed in the study when participants failed to problematise the low capability [Interview Question 3] and LGBQTI [Interview Question 7] patients' lifeworlds in their reasoning.

Obstacles to social justice learning were voiced by Final Year women F45 and A63. They expressed frustration and resignation regarding patriarchal status roles performed by senior male physicians, in assuming hierarchic authority in service organisations. Both participants were potential future leaders, strongly engaged in prosocial medical student associations; yet, felt their ideas ignored or discredited. False consciousness of the ontological superiority of *specialist* knowers may underpin this aspect of hidden curriculum. LCT however, may provide a long-term structural corrective to this fallacy; by doing justice to knowledge practices, knower diversity, and the practice of knowledge humility (Maton 2014).

Sanctioned by The Charter, modifiable social inequities underlying health and health care have moral claims to inclusion in medical pedagogy. The doxa of medical practice is changed by The Charter, and the semiotic *legitimation codes* that signal this responsibility, described in LCT, provide a means to make apparent a potential 'code clash' (Howard & Maton 2011), with implications for medical ethics pedagogy.

12.2.4 The costs of code clash in medical education

Study participants recognised ontological, epistemological and axiological consequences of the code clash in medical education affecting students, patients, and health systems.

Vignette data [Appendix 9] records Final Year participants' concerns about dysfunctions in biomedicine in terms of;

a. hegemony of pharmaceutical treatments as the ultimate 'answer' to clinical care
b. a silent curriculum that labels patients with disputed hospital status, 'acopics'
c. the irony of 'getting rid of patients' - with no solution for preventing the recycling or prevention of chronic illnesses
d. political scepticism about distribution of health system funding
e. anguish from lack of physician agency and time for patient-centred care
f. dismay for harmful expressions of outmoded colonial attitudes (hierarchy, sexism, racism, ageism, poverty shaming)
g. deception about the true nature of health production by poverty and social tensions.

The resulting professional consciousness reflects what Savransky & Rosengarten (2014) referred to as 'what was excluded by what was taught'.

12.3 Study implications of critical standpoint theory

'Know-do' gaps identified in the study require further concept analysis, explaining how theory links to practice. For achieving transfer of these capabilities in health professional education, Greenway et al (2019) advises of the "need to prioritise applying theory in context specific and workable ways" (:4). Greenway et al (ibid) strongly validate the role of skilled mentors for effective socialisation and motivation of students to reduce the theory-practice gap.

This task can be informed by LCT, by developing an ‘external language’ (Maton & Chen 2015) from the study data to advance understanding the role of *critical standpoint theory* to developing a ‘pedagogic device’ for SA. The task involves determining how data from diverse discourses contribute to the construction of semantic gravity (SG) discourses or contextual knowledge of SA, across the medical curriculum (Maton & Chen 2015). A basic model of this proposal is sketched next.

12.4 Study implications for pedagogy

12.4.0 Innovation in medical pedagogy

The study revealed the prospect of outcomes-focused medical professional development guided by evidence derived from two modern and one post-modern science; biomedicine, health sociology and semioethics. Biosemiotics is a post-modern alternative to biomedicine that may assist critical analysis of modern practices, and pedagogy for ethical health practices in complex societies.

Innovative curricula are now being developed for medical students, residents and inter-professional teams to learn ‘structural competency’ (Neff et al 2020). Evaluation has revealed participants’ appreciation of this instruction and its usefulness to ”help them reframe how they think about patients” (ibid:10888), and recall their motivations for entering medicine.

However, the genesis of pedagogy for SA praxis, to programmatically attain professional responsibilities, could go further. It can aim to integrate previously segmented knowledge forms that have resulted in an unreflexive, inflexible, and de-humanising form of medical professionalism.

12.4.1 Resolving the code clash in medical pedagogy

The new professionalism legitimates social justice values, critical realist epistemologies (the multi-level structuring of health); and validates diverse physician ontologies. Curriculum theory to integrate biomedical and sociological sciences into a pedagogy valuing SA professionalism; is sketched in the following example employing LCT. **Figure 12.2** (below) outlines where LCT may usefully be applied; to legitimate diverse knowers and knowledge forms.

A diversity of discourses from the field (local, national and global), produce critical *recognitions* and *misrecognitions* – sets of knowledges that give validity to the pedagogic device. Bernstein regarded the ‘pedagogic device’ the sum of an *instructional discourse* (content and skills) and a *regulative discourse* (of moral and social order) (Louw 2018). The device “is a carrier, a relay for ideological messages, and for external power relations” (:30); so not politically neutral. The distributive rules allocate power to three educational fields that determine whose knowledge is transmitted, by whom, and to whom – the fields of knowledge *production*, *recontextualization* and *reproduction* (ibid).

A key difference of this proposal [**Figure 12.2**, below] to the SA pedagogy informed by intersectionality theory *alone* (Muntinga et al 2016), is that both critical recognition *and* misrecognition of the dynamic, real world health dilemmas inform the gravity and density codes that give medical pedagogy its legitimacy. Recognitions and misrecognitions (with their critical distinctions) may better indicate how different knowledge sets (readings and solutions) relevant to a clinical problem can be woven by educators into patient-centred praxis; and why single interpretations (e.g. biomedical) may be insufficient to achieve equitable health outcomes. Both knowers and knowledge are important to effective learning of health care equity, and LCT provides a frame guiding inclusive pedagogy.

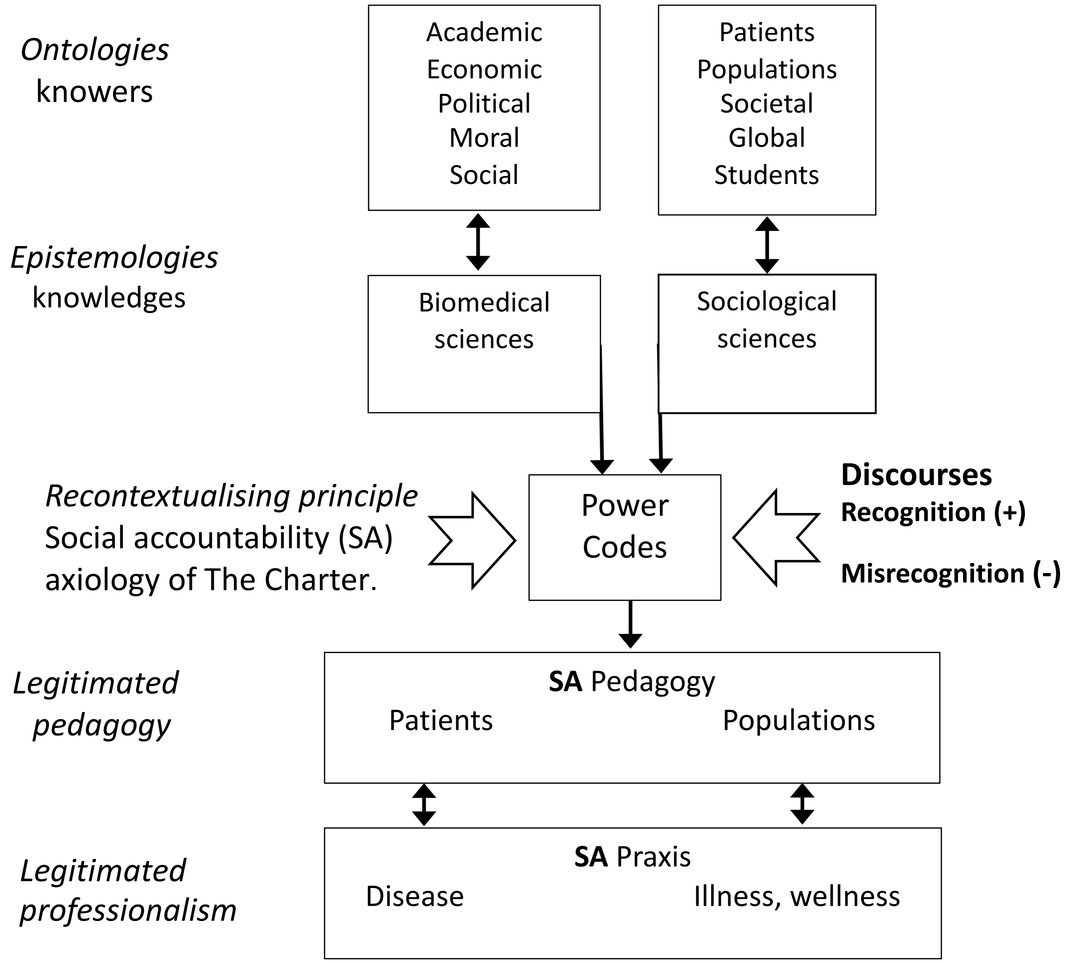

Fig. 12.2 Legitimation code methodology for socially accountable praxis

In the new professionalism, critical recognitions and misrecognitions of health structuration by diverse ontologies (medical students in this study) inform codes for medical pedagogy.

Applying this frame to the health needs of LGBQTI patients; vulnerable to structural factors in the lifeworld, psychological health may be overlooked if only physical disease is expected. In LCT, ‘what to anticipate or take account of’ is coded in the semiotics of teaching practises to direct or regulate the professional gaze. The LCT pedagogy proposal uses a sophisticated discursive methodology that aims to inculcate students’ critical reflexivity on an *ecosystem* of valid knowers and knowledges relevant to professional learning. The proposed pedagogy directs students’ gazes between horizontal and vertical discourses in ‘semantic waves’ (Maton 2013); to mutually reinforce complementary knowledge sets, and instil the habit of critical reflexivity.

12.4.2 Ethical considerations in pedagogy

An ethical concern for the development of a social justice curriculum, is the empowerment of already privileged students by expecting less privileged actors (disadvantaged students, patients, and groups) to correct their misrecognitions. The onus of contribution unfairly falls to the already disadvantaged to improve the epistemological funds of the privileged. To respond ethically to this criticism, community members and students’ voluntarism to contribute embodied knowledge to pedagogy must be uncoerced; respect given to the autonomy for consent or refusal; and if unpaid, equitable compensation offered. Further discussion of this objection may be needed to learn how it may be resolved satisfactorily.

For students and patients, the dialogic of the ‘doctor-patient’ encounter may reveal the social structuration of the patient’s lifeworld, and cue opportunities to explore this further. The ends of this process ensure that health needs are better met, effecting beneficence.

12.3.2 A pedagogic paradigm for developing sociological imagination

I propose the application of LCT (Maton 2014), with codes informed by the semiotics of common recognitions and mis-recognitions of SA professional praxis; together with the 'scaling up education change' process proposed by Thompson (2014).

'Scaling-up education change' refers to the identification of best practices and adopting them more broadly; in which misrecognition plays a pivotal role (Thompson 2014). There can be misrecognition of the unlevel playing field in HE that privileges some students over others; and in *medical education and practice*, misrecognition of the systemic injustices that impact patients' health needs. In the study, acknowledgements of *misrecognition* were observed in the 'space-time' sub-theme; when participants reported 'forgetting', regretting, or 'finding no time' to address patients' psychosocial concerns; only their symptoms.

> Misrecognition simultaneously allocates blame and disfavour, perpetuates its doxic basis, and legitimates practices which continue to differentially distribute capitals to those who are already advantaged in the field.
>
> (Thompson 2014:92)

The doxa of medical professionalism signals its authority, but misrecognitions (specific to each field according to Bourdieu), partly obscure the ways our practices serve the unequal status quo, and reproduce them. That is, until problematising actions of reflexivity and super-subjectivity allow critical *recognition* of the societal error, among other shortfalls.

Inscribing *reflexivity* into pedagogy, is the difficult reform task made possible by coding. Close analysis of mis-recognitions is made transparent by LCT.

12.3.3 Communicative action in clinical practice

Results of the study suggest that clinical education ought go beyond bodily *symptoms* - to the external sign-world that human biology interprets to attempt ecosocial adaptation.

- A biosemiotic or cybersemiotic approach to pedagogy may assist physicians *recognise* how humans *perceive* structural limitations on their capabilities, *interpret* signs in their ecosocial *lifeworlds*, and actively *adapt* habitus to changing circumstances (external homeostasis).

- Existing notions of *non-verbal* communication are re-configured in biosemiotic pedagogy to include dialogical meanings (semantics) communicated from signs in the lifeworld. These become cybernetically interpreted by a holistic ‘bodymind’, that *self-organises* well-being or illness (Rafieian 2010).

- Linguistic, spoken or symbolic communication (i.e. *symptoms*); and dialogical, semiotic or tacit communication (*signs* of the lifeworld), may unify in Habermas’ philosophy (1987) of rational *communicative action* for SA praxis. Bohman & Regh (2017) describe Habermas’ philosophy as critical of the ideological dominance of scientists and technocrats in the public sphere; and upholding the importance of *democratic* values communicated within society to ensure fairness, social cohesion, and solidarity.

- A re-contextualised professionalism can transform the reward structure of medical education; becoming a symbolic good and changing the field’s doxa.

- Creative systems thinking by graduate teams can benefit the health sector by;
    a. Improved, equity-based health outcomes and health system sustainability;
    b. Integrated policy and practice actions for population health directed at changing structural conditions in the public sphere (to overcome the ‘societal error’);
    c. Closing of gaps in community health of marginalised and special needs groups;
    d. Co-management of disease and illness, effecting holistic health outcomes;
    e. Flexible responses and inter-professional cooperation in evolving global and social health crises;
    f. Empowered graduates as advocates of environmental stewardship;
    g. Improved graduate well-being. Students can expect closer alignment between prosocial values, capabilities, and career aspirations.

- Reforms would validate diverse students’ values, funds of knowledge, and preferred ‘type’ of medical professionalism; to fulfil the promise of the ‘widening participation’ agenda.

- A biosemiotic proposal for socially accountable pedagogy could be tested against existing pedagogies, such as pedagogy inculcating an ‘intersectionality lens’ (Muntinga et al 2016).

- Biosemiotic theory may also provide a useful methodology for qualitative analysis of complex health problems.

12.4 Proposals arising from the study

12.4.0 Introduction

Socially accountable medical pedagogy and innovative practices are now being developed and published, with strong editorial leadership in the UK (The Lancet, BMJ) and US (NEJM). Among innovations is a clinical tool to incorporate data on neighbourhood disadvantage into research, policy and health interventions (Kind & Buckingham 2018). The tool fulfils a long-standing need for real-time feedback from the clinical context (downstream) to inform actions in social (upstream) contexts to correct the societal error. A suitable pedagogy for entraining a critical, sociological gaze and introducing practical social interventions to medical praxis is proposed here.

I hypothesise that a 'socioscience' pedagogy – one that validates both social and biological sciences - could promote the development of sociological imagination and CC in medical graduates, and attract more prosocial applicants to a transformed field. New knowledges ensuing from change of praxis and axiology may inform broader, interdisciplinary research agendas (such as 'Health in all Policies'), creative systemic contributions to sustainable health care, and collaborative responses to global health.

12.4.1 Fixing the professional map and territory

The formation and transformation of social justice mindsets during medical education, as revealed in the study, is but one aspect of the problem of professional reform for outcomes-based medical education.

Recent reports of Australian medical student practice preferences have revealed an alarming swing *away from* general practice towards specialist careers (Playford & May 2020). Analysts attribute the generalist-specialist status inequality, in part, to the reward structure of fee-for-service. A consultation with a GP attracts a fee *one third* of that claimed by a specialist. Clearly, in addition to student selection and professional education for SA, a more equitable financial reward structure is essential; such that *generalism* is more fairly compensated, and valued by graduates as a specialty. It is anticipated that a restorative approach to pedagogy can reinvigorate primary health care careers and progress the evolution of medical professionalism.

12.4.2 Introducing LCT to medical pedagogy

All study participants agreed to the inclusion of social justice principles in medical education and praxis. An empirical study of professional reform using LCT to integrate social justice concepts into medical pedagogy is suggested; to evaluate and learn from this theoretical approach. To date, the utility of LCT is under-reported in the medical education literature.

12.4.3 Curricular justice

Solidarity between prosocial students, fostered in medical student associations, could be supported in the *formal* curriculum to develop a culture of social justice among all students. Inter-professional service learning exercises in diverse societal contexts may magnify the symbolic value of SA professionalism in medicine. Symbolic support for social justice practices by privileged students (insiders, with no equity identities), may be crucial to curriculum reforms. However, educators need to be cautious about tasking students with equity identities with roles that expose them to further stigma; but instead make reflexivity on patients' structural vulnerabilities, and empathy, the focus of student inquiry. One proposal is to utilise LCT to analyse students' critical thinking and learning in critical incident essays (Szenes, Tilakaratna, & Maton 2015).

12.4.4 Fixing the knowledges

The reform of medical education to achieve a more 'diversity-responsive' professionalism was claimed to require three mutually reinforcing processes (Muntinga et al 2014). These included *fixing the numbers* ("equal representation of minority groups and individuals of diverse backgrounds"), *fixing the institutions* (an "inclusive organizational and educational climate") and, *fixing the knowledge* ("embedding teaching content related to socio-cultural and biomedical aspects of diversity into preclinical and clinical programs") (ibid:542).

This study suggested the WP agenda in medicine has had limited success in 'fixing the numbers'; but there has been misrecognition of the 'usability' of outsiders in medical education. All students enter medicine from unique social positions, as unique and partial knowers of people, society and world. Tacit health-related knowledge of the social lifeworld among diverse participants can remain undervalued in formal curricula and institutions of medicine unless there are deliberate inclusion policies (Fyfe et al 2020). Medical pedagogy needs to work with students' diverse discourses and expose them to epistemic fallacies that maldistribute health care and health, in a semantically structured manner. In this way, the voices of the underserved get heard.

The capital potential implied by ‘usability’ of diverse students’ dispositions appears debilitated by an outmoded, inflexible and unjust model of health care, bound to neoliberal organising values. A deliberate, social reality-informed pedagogy [**Fig 12.2**] may restore epistemic symmetry to medical education; enjoining the scientific and hermeneutic to validate curricular inclusion of SA. *Fixing the knowledge* and acknowledging the *knowers* may be how *fixing the numbers* bears fruit.

A radical reform proposal to ‘fix the knowledges’ is to flip the knowledge acquisition paradigm in medical professionalism such that meta-competence in the structuration of *illness* is learned before competence in *disease*. This strategy may mitigate the theory-practice gap reported by graduates moving into the workplace (Nilsson 2010). Structuration of knowledge practices by LCT, involves *instruction* planning that delineates how context (SG) modifies concepts (SD), together with *regulation* of knowledge building across the curriculum. These practices may help shift the ‘learning fallacy’, paraphrased here by Nilsson (2010).

> It is not an uncommon understanding among physicians that the focus on certain knowledge during the educational programme is disproportionate to the actual importance in the world of work.
>
> (ibid:268)

Among proposed generalist competences for medical practice is “development of a reflexive stance to constantly renew, re-try and reflect on knowledge that is not constant” (ibid:266). This requires graduates to learn to think for themselves; critically, abstractly, imaginatively, and creatively. Consequently, the skill set observed among intersectional participants of, *first*, ‘recognition’ of inequity (tacit knowledge); *second*, effective ‘reading’ (critical cognition or interpretation of signs communicating the social ‘health-illness’ dialectic’ (abstract new knowledge); and *third*, meaning making and intention to take action (conation).

Understanding the mechanisms mediating *illness*, from the socio-political structuration of the lifeworld through to the chronic stress response, should be core knowledge for socially accountable praxis. ‘Fixing the knowledge’ might also apply to the need for investment in KM systems supporting socially accountable practices. The largely unexploited exchange of knowledge between downstream point of care settings and upstream contexts of health production has great potential for progressing social health outcomes, “turning healthcare into a learning system“ (Braithwaite 2018).

12.4.5 Fixing the institutions

Institutional theory describing organisational change processes is a central research interest of business, management, psychology and anthropology (Dacin, Goodstein & Scott 2002). There is growing recognition that organisations are social entities, in which a culture of resilience is primarily affected by the work environment (Scott 2008). Social order within organisations aims to provide stability and meaning to social life, and depends on symbolic representations (or ideas) and cognitive frameworks (Scott 2010). Research of the impact of social movements on change in organisational culture (Clemens 2005) may usefully inform health systems reform. Culture change and optimisation of business and institutions is now itself big business; and best evidence for health care institutions suggests a need for cultural 'diagnosis'; close attention to context, leadership support, and strategy to embed culture change (Johnson et al 2016).

The impetus for health institutional change to embrace SA reforms may be more challenging in a conservative political and university regulative environment, yet may be supported by economic and electorate sense-making in the manner of universal health care insurance (in Australia, *Medicare*). Health and social assistance agencies are major employers, projected by the National Skills Commission to grow faster than education in the five years from 2020 (Hayward 2021). Planning major institutional reform may be preferable to reactive change forced by major health crises (e.g. homelessness, aged care, pandemics, climate change). Physicians and physician groups can contribute expertise and advocacy to inter-professional agencies targeting equity gaps in community health needs, and mentor medical students in these roles.

12.4.6 Development of social justice professionalism

How medical students develop social justice awareness in HE can now be enounced.

A. Diversely socialised students bring to medical school dispositions for social justice in 'habitus' that make sense of critical concepts such as equity and equality; social and material inequality; SDH; maldistribution of social goods and services; the societal error; health system economics; and, the commodification and neoliberalisation of medical endeavours. Those best situated to read the societal health-illness dialectic included students with intersectional equity identities (knowers), and those reflexive of the structuration of health following novel experiences in socially disadvantaged contexts (knower structures).

These findings foreground the importance of inter-personal communication with contextual ‘knowers’ (not only students) able to recognise inequity; in either well-constructed service learning experiences or longitudinal integrated curricula. Maturation of moral perceptions of fairness can be expected among undergraduates as they individuate from the family doxa and form their own political views of the ‘good society’.

B. Critical reflexivity on the structuration of health for disadvantaged individuals and groups, applying a critical sociological gaze to ‘read’ the societal health-illness dialectic, can avoid mis-recognition and enable socially accountable aspirations. To transform gaze, medical education needs to support students to problematise taken for granted societal norms that marginalise and stigmatise social groups and effect poor health and premature mortality. LCT offers an evidence-based means for teaching ethical concepts. Equity learning can form a strand of SA that spirals through an integrated medical course. Students’ knowledge and practice of SA actions, including advocacy and enabling education, capacity building and leadership skills, require further pedagogic elaboration. Emerging research of successful community empowerment strategies show what can be achieved. The Family Wellbeing Program, reported by Whiteside et al (2017), showcases a project revealing the latent potential of effective Indigenous empowerment.

Developing students' epistemic reflexivity on the hierarchy of health determinants may enable physicians and health teams to recognise and prioritise health needs; and to collaboratively frame innovative, holistic responses to complex health care problems. Sharma, Pinto & Kumagai (2018) emphasise the need for medical educators to be reflexive of how their own social position affects the social structuring of health for others, to enable them to model this praxis for students. They warn against teaching the SDH as a 'laundry list' of additional *abstract knowledge* to learn and instead advocate teaching the SDOE; to engage students in *actions* to modify fundamental structures, in solidarity with patients. The SDH can be wrongly normalised as 'natural' by some students; and, as found in this study, behavioural solutions given precedence over change in fundamental organisational causes (Sharma, Pinto & Kumagai 2018). The goal of having students achieve CC through communal engagement in social justice practices, is to transform *iconic* conceptions (logical premises) into more accurate interpretations of the sociological nature of 'health' and the meanings of social inequity and accountability (De Tiene 2003).

Critical consciousness can be viewed as a 'leading principle' and habit of thought driving 'growing semiocity' (learning and becoming); characterised by

> an increasing openness to all types of signs, not only from the standpoint of their recognition and interpretation, but also from the position of their creation and refinement.
>
> (De Tiene 2003:50)

C. Prosocial health teams can form ‘communities of practice’ that draw perspectives from diverse positions in a field, and promote solidarity with patient groups for advancing equity in human health and development.

D. Mentored engagement in service learning experiences in disadvantaged, underserved, and stigmatised communities can develop students’ skills in sociological imagination, communication, and interpersonal trust, in the intercultural space with ‘the Other’; and CC for social inequities. As Sharma, Pinto & Kumagai (2018) contend; to avoid tokenism and reversion to the status quo, medical education must go further:

> a transformational reorientation of medical education, with critical reflection on its overall purpose and ethos
>
> (ibid:27).

Several participants joined this argument in deep reflections on the cognitive dissonance they felt in relation to systemic health inequities. Mismatch between ‘map and territory’ may prompt reforms to produce a more ‘geographic’ medical education; one in which, medical knowledges are contextualised to match the spectrum of social diversity in the community the school serves.

E. Student discomfort about cultural competence in medical education may benefit from a ‘reflexive turn’ (Bourdieu 1977), informed more broadly by societal power and hierarchy.

- Reflexivity should aim to emancipate the *student* from dominant western culture beliefs, myths, deficit discourses, pre-judgments and mis-recognitions that maintain the unfair status quo.
- Social justice, as re-contextualising principle would steer pedagogic transformation.
- Meeting ‘the Other’ as equally human and deserving, and learning cultural similarities and differences can forge lasting bonds, and accurate empathy.
- Learning *dialogical communication* - the Other’s grammar, derived from their cultural *semiosphere* (system of symbols) - can enhance empathy accuracy, the ability to read the social *health-illness dialectic*, and guide creative and collaborative social health improvements. Cybersemiotic theory, outlined by Rafieian (2010), provides another frame for educators to scaffold learning of the sociological *communication* of mental and physical illness.
- Competencies in *participatory action research* target equity actions to identify and adapt services that account for cultural practices impacting on modifiable SDE. The diabetes strategy at Nhulunbuy is an example. Other SA models are serialised in the New England Journal of Medicine (NEJM) as ‘Case Studies in Social Medicine’. Analogies can be drawn from these cases in teaching social health, to respond to a spectrum of ethical dilemmas in public health.

F. Meta-reflexivity on global and national structuration forces, and on western thinking in the study, included the problematising of hegemonic

a. capitalism, b. consumerism, c. imperialism, and d. globalisation.

Participants pointed to how these (largely unconscious) western cultural discourses and systems of classification - features of habitus - can interfere with a humanising gaze; a veil through which social realities for marginalised groups were unfairly perceived. Medical professionalism bestows privileged perspectives of the inner workings of the human body and psyche, and the body politic. Students can learn to 'know themselves' in this critical way: as powerful knowledge holders with the potential to become creative problem solvers, advocates, healers and leaders.

G. Constructive alignment between university, medical and health professional schools, curricula, and diverse students, can bring into being professional reforms. An uncritical stance to health professions reform stands in the way of healthier societies.

BIBLIOGRAPHY

Aarseth H, Layton L & Nielsen HB. (2016). Conflicts in the habitus: the emotional work of becoming modern. *The Sociological Review* 64:148–165 DOI: 10.1111/1467-954X.12347

Abdolmaleki M, Yazdani S, Momeni S, Momtazmanesh NJ. (2017). Social Accountable Medical Education: A concept analysis. *Adv Med Educ Prof* 5; 3:108-115
Retrieved from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5522902/

Abel T, Frohlich KL. (2012). Capitals and capabilities: linking structure and agency to reduce health inequalities. *Social Science & Medicine* 74:236-244
Retrieved from: https://doi.org/10.1016/j.socscimed.2011.10.028

Adam B, Groves C. (2011). Futures tended: care and future-oriented responsibility. *Bulletin of Science Technology & Society* 31; 1:17-27
Retrieved from: https://doi.org/10.1177/0270467610391237

Agnew CR, South SC. (Eds). *Interpersonal relationships and health: Social and clinical psychological mechanisms*. 2014, Oxford University Press.

Ahlquist R. (1992). Manifestations of inequality: overcoming resistance in a multicultural foundations course. Chapter 7 in Grant C, Ed. *Research and multicultural education*. London, Falmer Press.

Akram S, Hogan A. (2015). On reflexivity and the conduct of self in everyday life: reflections on Bourdieu and Archer. *British J Sociology* 66; 4:605-625
Retrieved from: https://doi.org/10.1111/1468-4446.12150

Albanese M. (2000). The decline and fall of humanism in medical education. *Medical Education* 34:596-597 Retrieved from: https://onlinelibrary.wiley.com/doi/abs/10.1046/j.1365-2923.2000.00745.x

Allen M, Allen J, Hogarth S & Marmot M. *Working for health equity: the role of health professionals. Executive Summary*. 2013, UCL Institute of Health Equity, London.

Allsop J. (2006). Medical dominance in a changing world: the UK case. *Health Sociology Review* 15;5:444-457

Alvarez AR. (2008). Enhancing praxis through PRACSIS. *J of Teaching in Social Work* 21; 1-2:195-220 Retrieved from: http://dx.doi.org/10.1300/J067v21n01_12

Ambrose AJH, Andaya MS, Yamada S & Maskarinec GG. (2014). Social justice in medical education: strengths and challenges of a student-driven curriculum. *Hawaii J Medicine & Public Health* 73; 8:244-250 Retrieved from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4142578/

AMEE. *Recognition of excellence in social accountability of medical, dental and veterinary school.* 2015. Aspire: International recognition of excellence in medical education.

American Board of Internal Medicine. (1995). *Project professionalism.* Retrieved from: http://www.abim.org/pubs/profess.pdf Accessed 20/11/2012

Amnesty International, Australia. 2020. Retrieved from: https://www.amnesty.org.au/what-we-do/our-vision/ Accessed 28/03/2020

Anand S. (2002). The concern for equity in health. *J Epidemiol Community Health* 56:485-487 DOI: 10.1136/jech.56.7.485

Andre J. (1992). Learning to see: moral growth during medical training. *J Medical Ethics* 18: 148-152 Retrieved from: http://dx.doi.org/10.1136/jme.18.3.148

Archer M. *The reflexive imperative in late modernity.* 2012, Cambridge UK.

Arendt H. *The origins of totalitarianism.* 1951, Berlin. Schocken Books.

Aretz HT. (2011). Some thoughts about creating health professionals that match what societies need. *Med Teach* 33; 8:608-613
Retrieved from http://dx.doi.org/10.1136/jme.18.3.148

Armaline WT. Building democracy through education: human rights and civic engagement. Chapter 9. In DeLeon AP, Ross EW. (Eds). *Critical theories, radical pedagogies, and social education.* 2010, Sense Publishers.

Armstrong D. (1987). Theoretical tensions in biopsychosocial medicine. *Soc Sci Med* 25; 11:1213-1218 Retrieved from: https://doi.org/10.1016/0277-9536(87)90368-6

Armstrong D. (1995). The rise of surveillance medicine. *Sociology of Health & Illness* 17; 3:393-404 Retrieved from: https://doi.org/10.1111/1467-9566.ep10933329

Armstrong D. (2002). Clinical autonomy, individual and collective: the problem of changing doctors' behaviour. *Social Science & Medicine* 55:1771-1777

Available at: https://doi.org/10.1016/S0277-9536(01)00309-4

Armstrong D. (2003). 1.2 Social theorising about health and illness. In Albrecht GL, Fitzpatrick R & Scrimshaw SC. *The Handbook of Social Studies in Health and Medicine,* SAGE.

Arreman IE, Dovemark M. (2017). Social justice in Swedish post 16 education? New preparatory programmes. *Scandinavian J of Educational Research*
Retrieved from: http://dx.doi.org/10.1080/00313831.2016.1258672

Artino AR, Holmboe ES, Durning SJ. (2012). Control-value theory: Using achievement emotions to improve understanding of motivation, learning, and performance in medical education: AMEE Guide No. 64. *Medical Teacher* 34; 3:e148-e160
Retrieved from: https://doi.org/10.3109/0142159X.2012.651515

Asadi-Lari M, Packham C & Gray D. (2003). Need for redefining needs. *Health and Quality of Life Outcomes* 1:34
Retrieved from: https://hqlo.biomedcentral.com/articles/10.1186/1477-7525-1-34

Atkinson S, Cottam B. (2011). How doctors can close the gap: tackling the social determinants of health. *Clinical Medicine* 11; 1:57-60
Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5873805/

Atkinson P, Pugsley L. (2005). Making sense of ethnography and medical education. *Medical Education* 39:228-234 Retrieved from: https://doi.org/10.1111/j.1365-2929.2004.02070.x

Attride-Stirling J. (2001). Thematic networks: an analytic tool for qualitative research. *Qualitative Research* 1; 3:385-405
Retrieved from: https://doi.org/10.1177/146879410100100307

Australian Human Rights Commission. (2011). *Social Justice Report.* The Aboriginal and Torres Strait Islander Commissioner. Available at: https://www.humanrights.gov.au/our-work/aboriginal-and-torres-strait-islander-social-justice/publications/social-justice-report

Australian Institute of Health & Welfare. *Australia's Health 2018.* 3.3 Chronic conditions. Australia's health series no. 16. AUS 221. Canberra: AIHW. Retrieved from: https://www.aihw.gov.au/getmedia/6bc8a4f7-c251-4ac4-9c05-140a473efd7b/aihw-aus-221-chapter-3-3.pdf.aspx

Australian Institute of Health & Welfare, 2020. Indigenous health and well-being. Canberra: AIHW. Viewed 22 March 2021.
https://www.aihw.gov.au/reports/australias-health/indigenous-health- and-wellbeing

Awosogba T, Betancourt JR, Garrett Conyers F, et al. (2013). Prioritizing health disparities in medical education to improve care. *Annals Of The New York Academy of Sciences*
DOI: 10.1111/nyas.12117

Balmer DF, Devlin MJ & Richards BF. (2017). Understanding the relation between medical students' collective and individual trajectories: an application of habitus. *Perspect Med Educ* 6:36-43 DOI 10.1007/s40037-016-0321-1

Bandura A. (1971). *Social learning theory*. General Learning Corporation, USA.

Barbieri M. (Ed.) *Introduction to biosemiotics: the new biological synthesis.* 2008, The Netherlands. Springer Science + Business Media B.V.

Barilan YM, Brusa M. (2013). Deliberation at the hub of medical education: beyond virtue ethics and codes of practice. *Med Health Care & Philos* 16:3-12
Retrieved from: https://pubmed.ncbi.nlm.nih.gov/22740074/

Barnett SM, Ceci SJ. (2002). When and where do we apply what we learn? A taxonomy for far transfer. *Psychological Bulletin* 128; 4:612-637 DOI: 10.1037//0033-2909.128.4.612

Barnett R. (2012). Learning for an unknown future. *Higher Education Research & Development* 31; 1:65-77 Available at: http://dx.doi.org/10.1080/07294360.2012.642841
Accessed: 06/08/2019

Baron P. (2018). Hierarchical reflexive conversational teaching and learning as a vehicle for ethical engineering curriculum design. *Academia.edu*
Retrieved from: http://constructivist.info/13/3/309

Barron B. (2006). Interest and self-sustained learning as catalysts of development: a learning ecology perspective. *Human Development* 49:193-224 DOI: 10.1159/000094368

Barradell S, Kennedy-Jones M. (2015). Threshold concepts, student learning and curriculum: making connections between theory and practice. *Innovations in Education and Teaching International* 52; 5:536-545 DOI: 10.1080/14703297.2013.866592

Barry B. *Why social justice matters*. 2005, Oxford. Polity Press.

Barry CA, Stevenson FA, Britten N, Barber N & Bradley CP. (2001). Giving voice to the lifeworld. More humane, more effective healthcare? A qualitative study of doctor-patient communication in general practice. *Social Science & Medicine* 53:487–505

DOI: 10.1016/s0277-9536(00)00351-8.

Bateman C, Baker T, Hoornenborg E & Ericsson U. (2001). Bringing global issues to medical teaching. *The Lancet* 358:1539-42
Retrieved from: https://doi.org/10.1016/50140-6736(01)06586-2

Bateson G. *Mind and nature: a necessary unity.* 1979, New York. E.P. Dutton.

Bathmaker A-M, Ingram N & Waller R. (2013). Higher education, social class and the mobilisation of capitals: recognising and playing the game. *British J of Sociology of Education* 34; 5-6:723-743 Retrieved from: https://doi.org/10.1080/01425692.2013.816041

Battalova A, Bulk L, Nimmon L, et al. (2020). “I can understand where they’re coming from”: How clinicians’ disability experiences shape their interaction with clients. *Qualitative Health Research* 30;13:2064-2075 DOI: 10.1177/1049732320972193

Baum FE, Begin M, Houweling TAJ & Taylor S. (2009). Changes not for the faint-hearted: reorienting health systems toward health equity through action on the social determinants of health. *Am J Public Health* 99; 11:1967-1974 DOI: 10.2105/AJPH.2008.154856

Baum FE, Fisher M. (2010). The social determinants of mental health: implications for research and health promotion. *Aust N Z J Psychiatry* 44:1057-1063
DOI: 10.3109/00048674.2010.509311

Baum FE. *The new public health*. Fourth Ed. 2016, OUP.

Baum FE. *Governing for health: advancing health and equity through policy and advocacy.* 2019, United States; OUP.

Baumert A, Schmitt M. Justice sensitivity. In Sabbagh C, Schmitt M. (Eds). *Handbook of Social Justice Theory and Research.* 2016. Springer.

Bauman Z. (2005). Education in liquid modernity. *The Review of Education, Pedagogy and Cultural Studies* 27:303-317 Retrieved from: https://doi.org/10.1080/10714410500338873

Bauman Z, Donskis L. *Moral blindness*. *The loss of sensitivity in liquid modernity.* 2013, Great Britain. Polity.

Beagan BL. (2000). Neutralizing differences: producing neutral doctors for (almost) neutral patients. *Social Science & Medicine* 51:1253-1265

Beagan BL. (2001). Micro inequities and everyday inequalities: “race,” gender, sexuality and class in medical school. *Canadian J Sociology* 26; 5:583-610 DOI: 10.2307/3341493

Beagan BL. (2005). Everyday classism in medical school: experiencing marginality and resistance. *Med Educ* 39; 8:777-84 DOI: 10.1111/j.1365-2929.2005.02225.x

Becker HS, Geer B, Hughes EC & Strauss A. *Boys in white: Student culture in medical school.* 1961, University of Chicago Press.

Becker HS, Geer B. (1958). The fate of idealism in medical school. *Harvard Educational Review* 28:70-80 DOI: 10.2307/2088623

Béhague DP, Frankfurter RG, Hansen H & Victora CG. (2020). Dialogical praxis – a 16 year old boy with anxiety in Southern Brazil. *N Engl J Med* 382; 3:201-204
DOI: 10.1056/NEJMp1909864

Bell LA. (1997). Theoretical foundations for social justice education. In Adams M, Bell LA & Griffin P. (Eds). *Teaching for diversity and social justice: a sourcebook.* New York, Routledge.

Benatar SR, Daar AS & Singer PA. (2003). Global health ethics: the rationale for mutual caring. *International Affairs* 79; 1:107-138
Retrieved from: https://doi.org/10.1111/1468-2346.00298

Benatar SR. (2005). Moral imagination: the missing component in global health. *PLoS Medicine* 2;12:e400 Retrieved from: https://doi.org/10.1371/journal.pmed.0020400

Benner P. (2011). Formation in professional education: an examination of the relationship between theories of meaning and theories of the self. *J of Medicine and Philosophy* 36:342-353 DOI:10.1093/jmp/jhr030

Bennett H, Macmillan A, Jones R, Blaiklock A & McMillan J. (2019). Should health professionals participate in civil disobedience in response to the climate change health emergency? *The Lancet* Retrieved from: https://doi.org/10.1016/S0140-6736(19)32985-X

Bensimon CM, Benatar SR. (2006). Developing sustainability: a new metaphor for progress. *Theoretical Medicine & Bioethics* 27:59-79 DOI: 10.1007/s11017-005-5754-1.

Benson J, Ryder C, Gill M & Balabanski A. (2015). A brief experience for medical students in a remote Aboriginal community. *Australian Family Physician* 44; 10:752-758
Retrieved from: https://pubmed.ncbi.nlm.nih.gov/26484493/

Berger JT. (2013). Moral distress in medical students. *J Gen Int Med* 29; 2:395-397
DOI: 10.1007/s11606-013-2665-0

Bernstein B. *Class, codes and control.* 1977, London. Routledge and Kegan Paul.

Bernstein B. *The Structuring of Pedagogic Discourse*. 1990, London. Routledge.

Bernstein B. (1999). Vertical and horizontal discourse: an essay. *British J Soc Ed* 20; 2:157-173 Retrieved from: https://doi.org/10.1080/01425699995380

Bernstein B. *Pedagogy, symbolic control and identity: theory, research, critique.* 2000, London. Rowman & Littlefield.

Berwick DB, Finkelstein JA. (2010). Preparing medical students for the continual improvement of health and health care: Abraham Flexner and the new "public interest". *Academic Medicine* 85; 9:S56-S65 DOI: 10.1097/ACM.0b013e3181ead779

Bhugra D. (2013). Book review: GR Lueddeke (Ed.) *Transforming medical education for the 21st century: Megatrends, priorities and change.* Radcliffe Publishing, London, 2012. *International J Social Psychiatry* 59; 5:517-518

Biesta G. (2010). 'This is my truth, tell me yours.' Deconstructive pragmatism as a philosophy for education. *Educational Philosophy and Theory* 42; 7:710-727
Retrieved from: https://doi.org/10.1111/j.1469-5812.2008.00422.x

Biggs J. (1996). Enhancing teaching through constructive alignment. *Higher Education* 32:347-36 Retrieved from: https://doi.org/10.1007/BF00138871

Billett S, Choy S. Integrating Professional Learning Experiences across University and Practice Settings. In: Billett S, Harteis C, Gruber H. (Eds). *International Handbook of Research in Professional and Practice-based Learning.* 2014, Dordrecht: Springer: 485–512

Birden HH, Wilson I. (2012). Rural placements are effective for teaching medicine in Australia: evaluation of a cohort of students studying in rural placements. *Rural Remote Health* 12:2167 DOI: 10.22605/RRH2167

Birden H, Glass N, Wilson I, Harrison H, Usherwood T & Nass D. (2013). Teaching professionalism in medical education: A Best Evidence Medical Education (BEME) systematic review. BEME Guide No. 25. *Medical Teacher* 35:e1252-1266
DOI: 10.3109/0142159X.2013.789132

Bishop JP, Rees CE. (2007). Hero or has-been: Is there a future for altruism in medical education? *Adv Health Sci Educ Theory Pract* 12:391-399 DOI: 10.1007/s10459-007-9064-4

Bisset S, Tremblay MC, Wright MT, Poland B & Frohlich KL. (2017). Can reflexivity be learned? An experience with tobacco control practitioners in Canada. *Health Promotion International* 32:167-176 DOI: 10.1093/heapro/dav080

Blainey G. *The tyranny of distance: how distance shaped Australia's history.* 1986, Macmillan.

Bleakley A, Brice J, Bligh J. (2008). Thinking the post-colonial in medical education. *Medical Education* 42; 3:266-270 DOI: 10.1111/j.1365-2923.2007.02991.x

Bleakley A, Bligh J & Browne J. Medical education for the future. Identity, power and location. In Hamstra SJ. (Ed.). *Advances in Medical Education, Volume 1.* Springer, 2011.

Bleakley et al. Chapter 4. Socio-cultural learning theories. Medical education for the future. *Advances in Medical Education 1.* 2011, Springer. DOI: 10.1007/978-90-481-9692-0_4

Bloom SW. (1989). The medical school as a social organization: the sources of resistance to change. *Medical Education* 23:228-241

Bloom SW. (1998). Structure and ideology in medical education: analysis of resistance to change. *Journal of Health and Social Behaviour* 29; 4:294-306

Boelen C, Heck JE. (1995). Defining and measuring the social accountability of medical schools. Geneva: World Health Organization; 1995. WHO document WHO/ HRH/95.7
Retrieved from: https://apps.who.int/iris/handle/10665/59441

Boelen C. (2008). Viewpoint. Social accountability: medicine's boldest challenge. *MEDICC Review* 10; 4:52
Retrieved from: https://www.medigraphic.com/pdfs/medicreview/mrw-2008/mrw084i.pdf

Boelen C, Woollard R. (2009). Social accountability and accreditation: a new frontier for educational institutions. *Medical Education* 43; 9:887-894
Retrieved from: https://doi.org/10.1111/j.1365-2923.2009.03413.x

Boelen C & Woollard R. (2011). Social accountability: the extra leap to excellence for educational institutions. *Medical Teacher* 33:614-619
DOI: 10.3109/0142159X.2011.590248

Boelen C. (2011). Global consensus on social accountability for medical schools. *Santé Publique* 23; 3:247-250 Retrieved from: https://pubmed.ncbi.nlm.nih.gov/21896218/

Boelen C. (2018). Coordinating medical and health care systems: the power of the social accountability approach. *Medical Education* 52:96-102 DOI: 10.1111/medu.13394

Bohman J & Regh W. (2017). *Jurgen Habermas.* The Stanford Encyclopedia of Philosophy. (Zalta EN, Ed.) URL: https://plato.stanford.edu/archives/fall2017/entries/habermas/

Bolton G. *Reflective practice: writing and professional development.* 3rd Ed. 2010, Sage.

Bombeke K, De Winter B & Van Royen P. (2014). Attitude erosion in medical students: dwarf or devil, fact or fable? *Medical Education* 48:552-560 DOI: 10.1111/medu.12489

Boud D, Walker D. (1998). Promoting reflection in professional courses: the challenge of context. *Studies in Higher Education* 23; 2:191-206 DOI: 10.1080/03075079812331380384

Bourdieu P & Passeron J-C. *Reproduction in education, society and culture.* 1977, London; Sage.

Bourdieu P. *Outline of a theory of practice.* 1977, Cambridge Studies in Social Anthropology.

Bourdieu P. *Distinction: a social critique of the judgment of taste*. 1984, London: Routledge.

Bourdieu P. *Homo Academicus.* 1984, Oxford. Polity Press.

Bourdieu P. The forms of capital. In J Richardson (Ed.) *Handbook of theory and research for the sociology of education* (pp241–258). 1986, New York: Greenwood.

Bourdieu P. *The field of cultural production: essays on art and literature*. Edited and introduced by Randal Johnson. 1993, New York, Columbia.

Bourdieu P. *In other words.* 1994, Cambridge, UK. Polity Press.

Bourdieu P. *Pascalian meditations*. 2000, Cambridge. Polity Press.

Bourdieu P. Habitus. In, Hillier J, Rooksby E. *Habitus: A Sense of Place.* 2005, Ashgate: Aldershot.

Bourdieu P & Wacquant LJD. *An invitation to reflexive sociology*. 1992, Chicago. Polity Press.

Bourassa GN. (2011). Rethinking the curricular imagination: curriculum and biopolitics in the age of neoliberalism. *Curriculum Inquiry* 41; 1:5-16 DOI: 10.1111/j.1467-873X.2010.00528.x

Brabazon T. *The University of Google: Education in the (post) information age.* 2007, Ashgate, UK.

Bradley D, Noonan P, Nugent H & Scales B. (2008). *Review of Australian higher education. Final report.* Canberra, Australia. Department of Education, Employment and Workplace Relations.

Bradshaw D. A taxonomy of social need. In Mclachlan G. (Ed.) *Problems and progress in medical care: essays on current research.* 7th series*.* 1972, Oxford University Press.

Braithwaite G. (2016, Dec 9). Opinion. Healthcare time bomb is going to need more than just cost-cutting. *The Australian*.

Braithwaite G. (2018). Changing how we think about healthcare improvement. *BMJ* 361:k2014 DOI: 10.1136/bmj.k2014

Braveman P & Gruskin S. (2003). Defining equity in health. *J Epidemiol Community Health* 57:254-258 Retrieved from: http://dx.doi.org/10.1136/jech.57.4.254

Braveman P. (2006). Health disparities and health equity: concepts and measurement. *Annu Rev Public Health* 27:167-194 DOI: 10.1146/annurev.publhealth.27.021405.102103.

Brennan J & Naidoo R. (2008). Higher education and the achievement (and/or prevention) of equity and social justice. *High Educ* 56:287-302
Retrieved from: https://doi.org/10.1007/s10734-008-9127-3

Bridges DR, Davidson RA, Odegard PS, Maki IV & Tomkowiak J. (2011). Interprofessional collaboration: three best practice models of Interprofessional education. *Medical Education Online* 16: 6035 DOI: 10.3402/meo.v16i0.6035

Boltanski L. *Distant suffering: morality, media and politics.* 1999, Cambridge University Press.

Broe GA & Radford K. (2018). Multimorbidity in Aboriginal and non-Aboriginal people. Editorial. *MJA* 209; 1:16-17 DOI: 10.5694/mja18.00348

Brooks KC. (2015). A piece of my mind. A silent curriculum. *JAMA* 313:1909-1910
DOI: 10.1001/jama.2015.1676

Brosnan C. 2007. Thesis. *The sociology of medical education: the struggle for legitimate knowledge in two English medical schools.* Cambridge University.

Brosnan C. (2009). Pierre Bourdieu and the theory of medical education. Thinking 'relationally' about medical students and medical curricula. In C Brosnan & BS Turner (Eds.) *Handbook of the sociology of medical education*. Taylor & Francis eBook.

Brosnan C. (2010). Making sense of differences between medical schools through Bourdieu's concept of field. *Medical Education* 44:645-652
DOI: 10/1111/j.1365-2923.2010.03680.x

Brosnan C. (2011). The significance of scientific capital in UK medical education. *Minerva* 49; 3:317-332 DOI: 10.1007/s11024-011-9177-z

Brosnan C. (2013). How and why social science theory can contribute to medical education research. *Medical Education* 47:3-12 DOI: 10.1111/medu.12093

Brosnan C et al. (2016). Experiences of medical students who are first in family to attend university. *Medical Education* 50:842-851 DOI: 10.1111/medu.12995

Bostrum N. (2005). Transhumanist values. *Ethical issues for the twenty-first century.* Philosophy Documentation Centre. Retrieved from: https://www.nickbostrom.com/ethics/values.html

Brown P. *Alfred Schutz: The co-construction of meaning within professional-patient interaction*. Chapter 11, in *Handbook of social theory in health, illness and medicine.* Fran Collyer (Ed.) 2015, Palgrave Handbooks.

Browne-Yung K, Ziersch A, Baum F, Friel S & Spoehr J. (2020). General Motor Holden's Closure in Playford, South Australia: analysis of the policy response and its implications for health. *Australian J Publ Admin* 79:76-92
Retrieved from: https://doi.org/10.1111/1467-8500.12390

Brush DR, Markert RJ & Lazarus CJ. (2006). The relationship between service learning and medical student academic and professional outcomes. *Teaching and Learning in Medicine* 18; 1:9-13 Retrieved from: https://doi.org/10.1080/15228950903199271

Buchanan I. *A dictionary of critical theory.* 2010, OUP.

Bull M, Foster D, Ridley-Duff R & Seanor P. (2010). Conceptualising ethical capital in social enterprise. *Social Enterprise Journal* DOI: 10.1108/17508611011088832

Burack JH. (1997). Response to "Further exploration of the relationship between medical education and moral development" by Donnie J. Self, DeWitt C Baldwin, Jr., and Frederic D. Wolinsky (CQ Vol 5, No 3). *Cambridge Quarterly of Healthcare Ethics* 6:226-232
Retrieved from: https://doi.org/10.1017/S0963180100007271

Burawoy M. (2015). Facing an unequal world. *Current Sociology* 63; 1:5-34
Retrieved from: https://doi.org/10.1177/0011392114564091

Burbules NC & Berk B. (1999). Critical thinking and critical pedagogy: relations, differences, and limits. In, Popkewitz TS, Fendler L. (Eds.) *Critical Theories in Education*. NY, Routledge.

Burks DJ, Kobus AM. (2012). The legacy of altruism in medicine: the promotion of empathy, prosociality and humanism. *Medical Education* 46:317-325
DOI: 10.1111/j.1365-2923.2011.04159.x

Burnett R. (2000). University knowledge in an age of supercomplexity. *Higher Education* 40:409-422 Retrieved from https://doi.org/10.1023/A:1004159513741

Burnett R & Bengtsen S. (2017). Universities and epistemology: from a dissolution of knowledge to the emergence of a new thinking. *Educ Sci* 7;38 DOI: 10.3390/educsci7010038

Bussey M, Inayatullah S & Milojevic I. *Alternative educational futures. Pedagogies for emergent worlds.* 2008, Rotterdam/ Taipei; Sense Publishers.

Butin DW. (2007). Justice-learning: service learning as justice-oriented education. *Equity and Excellence in Education* 40; 2:177-183 DOI: 10.1080/10665680701246492

Cano G, Bain-Donohue S, Moore M. (2021). Why do some medical graduates lose their intention to practice rurally? *Rural and Remote Health* 21:5754
https://doi.org/10.22605/RRH5754

Canuto K, Harfield S, Wittert G & Brown A. (2019). Listen, understand, collaborate: developing innovative strategies to improve health service utilisation by Aboriginal and Torres Strait Islander Men. *Australian and New Zealand Journal of Public Health 43; 4:307-309* DOI: 10.1111/1753-6405.12922

Carrigan M. (2013). The reflexive imperative and meta-reflexivity. Blog. Available at; https://markcarrigan.net/2013/07/29/the-reflexive-imperative-and-meta-reflexivity/

Cartabuke MS. (2015). Empathy as an antecedent of social justice behavior. PhD Thesis, Appalachian University.

Carufel-Wert DA, Younkin S, Foertsch J, Eisenberg T, et al. (2007). LOCUS: Immunizing medical students against the loss of professional values. *Family Med* 39; 5:320-325 Retrieved from: https://pubmed.ncbi.nlm.nih.gov/17476604/

Celletti F, Reynolds TA, Wright A, Stoertz A & Dayrit M. (2011). Educating a new generation of doctors to improve the health of populations in low- and middle-income countries. *PLoS Med* 8; 10:e1001108 DOI: 10.1371/journal.pmed.1001108

Charmaz K. (2019). Experiencing stigma and exclusion: the influence of neoliberal perspectives, practices and policies on living with chronic illness and disability. *Symbolic Interaction* 43; 1:21-45 DOI: 1002/STMB.432

Commons ML & Ross SN. (2008). What postformal thought is, and why it matters. *World Futures* 64:321-329 Retrieved from: https://doi.org/10.1080/02604020802301139

Chowdhury S, Laux T, Morse M, Jenks A, Stonnington S & Jain Y. (2019). Democratising evidence production – a 51-year-old man with sudden onset dense hemiparesis. *NEJM* 381:16;1501-1505 DOI: 10.1056/NEJMp1907988.

Christopher DH, Taylor MJ. (2011). Social justice and critical peace education: common ideals guiding student-teacher transformation. *J of Peace Education* 8; 3:295-313 Retrieved from: https://doi.org/10.1080/17400201.2011.621358

Cianciolo AT, Eva KW & Colliver JA. (2013). Theory development and application in medical education. *Teaching and Learning in Medicine* 25; S1:75-80 DOI: 10.1080/10401334.2013.842907

Cipolle SB. *Service-learning and social justice: engaging students in social change.* 2010, UK. Rowman & Littlefield.

Clark S, Weale A. (2012). Social values in health priority setting: a conceptual framework. *J Health Organisation & Management* 26; 3:293-316 DOI: 10.1108/14777261211238954

Clarke M, Butcher D. (2006). Voluntarism as an organizing principle for ‘responsible organizations’. *Corporate Governance* 6; 4:527-544 DOI:10.1108/14720700610689621

Clemens ES. (2005). Two kinds of stuff: the current encounter of social movements and organizations. In David GF, McAdam D, Scott WR, Zaid MN (Eds.) *Social movements and organization theory.* (351-365). UK; Cambridge UP.

Coeckelbergh M. *Imagination and principles. An essay on the role of imagination in moral reasoning.* 2007, Palgrave Macmillan.

Cohen MJM, Kay A, Youakim JA & Balacius JM. (2009). Identity transformation in medical students. *The American J Psychoanalysis* 69:43-52 DOI: 10.1057/ajp.2008.38

Collingwood RG. *The principles of art.* 1979, London; OUP.

Collyer F. (Ed). *The Palgrave Handbook of Social Theory in Health, Illness and Medicine*. 2015, UK. Palgrave Macmillan.

Commonwealth of Australia. Australian Medical Education Study. *What makes for success in medical education?* Synthesis report. URBIS, 2008. ISBN: 978-0-642-77857-4
Available at: http://hdl.voced.edu.au/10707/213994

Cooper RJ, Bissell P, Ward P et al. (2011). Further challenges to physician dominance? The case of nurse and pharmacist supplementary prescribing. *Health: An Interdisciplinary Journal of Health Illness & Medicine* 16; 2:115-133 DOI: 10.1177/1363459310364159

Corbin J, Strauss E. *Basics of qualitative research. Techniques and procedures for developing grounded theory.* 2008, SAGE Publications.

Commission on Social Determinants of Health. *CSDH Final Report: Closing the gap in a generation: Health equity through action on the social determinants of health*. 2008, Geneva: World Health Organization.

Commons ML & Ross SN. (2008). What postformal thought is, and why it matters. *World Futures* 64:321-329 DOI:10.1080/02604020802301139

Commonwealth of Australia Department of Education, Employment and Workplace Relations. *What makes for success in medical education? A synthesis report*. 2008, Urbis Pty Ltd. Retrieved from: http://hdl.voced.edu.au/10707/213994

Cookson R, Dolan P. (2000). Principles of justice in health care rationing. *J Medical Ethics* 26:323-329 DOI: 10.1136/jme.26.5.323

Connolly P, Healy J. (2004). Symbolic violence, locality and social class: the educational and career aspirations of 10-11-year-old boys in Belfast. *Pedagogy, Culture & Society* 12; 1:15-33 DOI:10.1080/14681360400200187

Corbin J & Strauss A. *Basics of qualitative research: techniques and procedures for developing grounded theory.* 3rd Ed. 2008, Sage Publications.

Coulehan J, Williams PC. (2001). Vanquishing virtue: the impact of medical education. *Acad Med* 76:598-605 DOI: 10.1097/00001888-200106000-00008

Coulehan J. (2005). Today's professionalism: engaging the mind but not the heart. *Acad Med* 80:892-898 DOI: 10.1097/00001888-200510000-00004

Coulehan J, Williams PC, Van McCrary S & Belling C. (2003). The best lack all conviction: biomedical ethics, professionalism, and social responsibility. *Cambridge Quarterly of Healthcare Ethics* 12:21-38 DOI: 10.1017/s0963180103121044

Cousin G. (2006). An introduction to threshold concepts. *Planet* 17
Retrieved from: https://doi.org/10.11120/plan.2006.00170004

Crenshaw K. (1993). Mapping the margins. *Stanford Law Review* 43:1241-99
DOI: 10.2307/1229039

Cruess RL, Cruess SR. (1997). Teaching medicine as a profession in the service of healing. *Acad Med* 72: 941-952 DOI: 10.1097/00001888-199711000-00009

Cruess RL, Cruess SR & Johnston SE. (1999). Renewing professionalism: an opportunity for medicine. *Acad Med* 74:878-884 DOI: 10.1097/00001888-199908000-00010

Cruess SR, Cruess RL. (2004). Professionalism and medicine's social contract with society. *Virtual Mentor* 6; 4:185-188 DOI: 10.1001/virtualmentor.2004.6.4.msoc1-0404

Cruess RL, Cruess SR. (2008). Expectations and obligations: Professionalism and medicine's social contract with society. *Perspectives in Biology and Medicine* 51; 4:579-598
DOI: 10.1353/pbm.0.0045

Cruess RL, Cruess SR., Boudreau JD, Snell L, Steinert Y. (2014). Reframing medical education to support professional identity formation. *Acad M*ed 89:1446-1451
DOI: 10.1097/ACM.0000000000000427

Curlin FA, Dugdale LS, Lantos JD & Chin MH. (2007). Do religious physicians disproportionately care for the underserved? *Ann Fam Med* 5:353-360

Dacin MT, Goodstein J & Scott WR. (2002).Institutional theory and institutional change: introduction to the special issue forum. *The Academy of Management Journal* 45; 1:45-56
Retrieved from: https://doi.org/10.2307/3069284

Dahlrup D. (1988). From a small to a large minority: women in Scandinavian politics. *Scandinavian Political Studies* 11; 4:275-298
Available at: https://doi.org/10.1111/j.1467-9477.1988.tb00372.x

Darlington A. (2011). Raising a critical consciousness for the reformation of health care culture. *Canadian J of Respiratory Therapy* 47; 3:6-12
Retrieved from: https://doi.org/10.1177%2F0261018318820233

Dalkir K. *Knowledge management in theory and practice.* 2005, Oxford. Elsevier.

Daly J, Willis K, Small R, Green J, Welch N, Kealy M & Hughes E. (2007). A hierarchy of evidence for assessing qualitative health research. *J Clinical Epidemiology* 60:43-49
DOI: 10.1016/j.jclinepi.2006.03.014

DasGupta S, Fornari A, Geer K, Hahn L, et al. (2006). Medical education for social justice: Paolo Freire revisited. *J Med Humanit* 27:245-251

Davey K. (2014). Social Development Theory (Vygotsky). In *Learning Theories*
Available at: https://www.learning-theories.com/vygotskys-social-learning-theory.html (Accessed 23 Mar 2017)

Davy C, Harfield S, McArthur A, Munn Z & Brown A. (2016). Access to primary health care services for indigenous people: a framework synthesis. *International Journal for Equity in Health* 15:163 DOI: 10.1186/s12939-016-0450-5

Damasio A. *Descartes' Error: Emotion, Reason, and the Human Brain*. 1994, New York; Avon Books.

Das Gupta S. (2006). Medical education for social justice: Paolo Freire revisited. *J Med Humanit* 27:245-251 DOI: 10.1007/s10912-006-9021-x

Davies M & Barnett R. (Eds.) *The Palgrave Handbook of Critical Thinking in Higher Education.* 2015, New York. Palgrave Macmillan.

Decoteau CL. (2016). The reflexive *habitus*: critical realism and Bourdieusian social action. *European J of Social Theory* Retrieved from: https://doi.org/10.1177/1368431015590700

De Cremer D, van den Bos K. (2007). Justice and feelings: toward a new era in justice research. *Social Justice Research* 20; 1:1-9 DOI: 10.1007/s11211-007-0031-2

Deely J, Semetsky I. (2017). Semiotics, edusemiotics and the culture of education. *Educational Philosophy and Theory* 49; 3:207-219 DOI: 10.1080/00131857.2016.1190265

DEET (Department of Employment, Education and Training. National Board of Employment Education and Training). *A Fair Chance For All: Higher Education That's In Everyone's Reach.* 1990. Canberra, Australia. Retrieved from: https://trove.nla.gov.au/work/5973629?selectedversion=NBD7409972 Accessed: 18/08/19

Delany C & Watkin D. (2009). A study of critical reflection in health professional education: 'learning where others are coming from'. *Adv in Health Sci Educ* 14:411-429 DOI: 10.1007/s10459-008-9128-0

Denzin NK. (2012). Triangulation 2.0. *J Mixed Methods Research* 6; 2:80-88 Retrieved from: https://doi.org/10.1177/1558689812437186

De Tiene A. (2003). Learning qua semiosis. *S.E.E.D Journal* Quiroz J, Gudwin R. (Eds). Special Issue on Computational Intelligence and Semiotics.

de Zulueta P. (2013). Compassion in the 21st Century: is it sustainable? *Clinical Ethics* 8; 4:119-128 Retrieved from: https://doi.org/10.1177/1477750913502623

Dharamsi S, Ho A, Spadafora SM & Woolard R. (2011). The physician as health advocate: translating the quest for social accountability into medical education and practice. *Acad Med* 86:1108-1113 DOI: 10.1097/ACM.0b013e318226b43b

Diaz S. Using social determinants of health data to decrease healthcare expenditures. *Healthify.org* (Feb 22, 2018). (Accessed Mar 19 2018)

Diemer MA, Kauffman A, Koenig N, Trahan E & Hsieh C-A. (2006). Challenging racism, sexism, and social injustice: support for urban adolescents' critical consciousness development. *Cultural Diversity and Ethnic Minority Psychology* 12; 3:444-460 DOI: 10.1037/1099-9809.12.3.444

Diemer MA, Rapa LJ, Voight AM & McWhirter EH. (2016). Critical consciousness: a developmental approach to addressing marginalization and oppression. *Child Development Perspectives* 10; 4:216-221 Retrieved from: https://doi.org/10.1111/cdep.12193

Dirkx JM. (2012). Self-formation and transformative learning: a response to “Calling transformative learning into question: some mutinous thoughts by Michael Newman.” *Adult Education Quarterly* 62: 4:399–405
Retrieved from: https://doi.org/10.1177/0741713612456420

Dobson S, Voyer S & Regehr G. (2012). Perspective: Agency and activism: rethinking health advocacy in the medical profession. *Academic Medicine* 87:1161-1164
DOI: 10.1097/ACM.0b013e3182621c25

Donohoe M. *Public health and social justice.* 2012, Jossey-Bass eBook.

Dron J. (2007). The teacher, the learner, and the collective mind. *AI & Soc* 21: 200-216
Retrieved from: https://doi.org/10.1007/s00146-005-0031-4

Durden E, Govender E & Reddy S. Higher degree (un)consciousness. In, Wardrop A, Withers D. (Eds). *The Para-Academic Handbook: A toolkit for making-learning-creating-acting.* 2014. Bristol, UK; Hammer On Press.

Dwyer J, O’Donnell K, Willis E & Kelly J. (2016). Equitable care for indigenous people: every health service can do it. *Asia Pacific J Health Management* 11; 3
DOI: 10.24083/apjhm.v11i3.143

Eastwood JL, Koppelman-White E, Mi M, Wasserman JA, Krug EF & Joyce B. (2017). Epistemic cognition in medical education: a literature review. *Int J Medical Education* 8:1-12
DOI: 10.5116/ijme.5849.bfce

Edgerton JD, Roberts LW. (2014). Cultural capital or habitus? Bourdieu and beyond the explanation of enduring educational inequality. *Theory and Research in Education* 12:193
Retrieved from: https://doi.org/10.1177/1477878514530231

Edwards G. (2014). Standpoint theory, realism and the search for objectivity in the sociology of education. *British J Soc Ed* 35; 2:167-184
Retrieved from: http://dx.doi.org/10.1018/01425692.2012.747588

Efklides A. (2006). Metacognition, affect, and conceptual difficulty. Chapter 4, in Meyer JHF, Land R. *Overcoming barriers to student understanding. Threshold concepts and troublesome knowledge.* Routledge, UK.

Egener BE, Mason DJ, McDonald WJ, et al. (2017). The charter of professionalism for healthcare organizations. *Acad Med* 92:1091-1099 DOI: 10.1097/ACM.0000000000001561

Egger G. (2009). Health, “illth,” and economic growth. Medicine, environment, and economics at the crossroads. *Am J Prev Med* 37; 1:78-83
DOI: 10.1016/j.amepre.2009.03.004.

Ellis B. *The new enlightenment: on Steven Pinker and beyond.* 2019, Melbourne. Australian Scholarly Publishing.

Elster J. (2017). The temporal dimensions of reflexivity: linking reflexive orientations to the stock of knowledge. *Distinktion: Journal of Social Theory* 18; 3:274-293
DOI: 10.1080/1600910X.2017.1397527

Engel G. (1977). The need for a new medical model: a challenge for biomedicine. *Science* 196;4286:129-136 DOI: 10.1521/pdps.2012.40.3.377

Enoch L, Chibnall JT, Schindler DL & Slavin SJ. (2013). Association of medical student burnout with residency specialty choice. *Medical Education* 47:173-181 DOI: 10.1111/medu.12083

Erickson RJ, Grove WJC. (2008). Emotional labor and health care. *Sociology Compass* 2; 2:704-733 DOI: 10.1111/j.1751-9020.2007.00084.x

Eron LD. (1958). D. The effect of medical education on attitudes. *J of Medical Education* 33;10:25-33

Esquivel-Lauzurique M, et al. (2019). Comprehensive care for Cuban children in the first 1000 days. *MEDICC Review* 21; 1:30-35

Ewen S, Barrett j & Howell-Meurs S. (2016). Health disparity and health professional education: a new approach. *Med Sci Educ* DOI: 10.1007/s40670-016-0230-2

Eyler J, Giles DE. *Where’s the learning in service learning?* 1999, San Francisco. Jossey-Bass.

Fane J, Ward P. (2014). How can we increase children’s understanding of the social determinants of health? Why charitable drives in schools reinforce individualism, responsibilisation and inequity. *Critical Public Health* DOI: 10.1080/09581596.2014.935703

Farrugia D. (2013). The reflexive subject: towards a theory of reflexivity as practical intelligibility. *Current Sociology* 61; 3:283-300

Retrieved from: https://doi.org/10.1177/0011392113478713

Faulkner J, Crowhurst M. (2014). ‘So far multicultural she is racist to Australians’: discomfort as a pedagogy for change. *Pedagogy, Culture & Society* 22; 3:389-403
Retrieved from: http://dx.doi.org/10.1080/14681366.2014.910251

Feather NT, McKee IR. (2008). Values and prejudice: predictors of attitudes towards Australian Aborigines. *Australian J of Psychology* 60; 2:80-90
DOI: 10.1080/00049530701449513

Federman M. (2010-11). Introducing valence theory. *A valence theory of organisation.* PhD thesis. UISE, University of Toronto.

Federman M. (2007). How do we know: the changing culture of knowledge. *Creative Commons*

Fenwick T. *Actor-network theory in education.* 2010, Routledge.

Fellenz MR. (2016). Forming the professional self: bildung and the ontological perspective on professional education and development. *Educational Philosophy and Theory* 48; 3:267-283. Retrieved from: https://doi.org/10.1080/00131857.2015.1006161

Fernàndez-Armesto F. *Out of our minds; what we think and how we came to think it.* 2005, London. One World.

Fincher RM, Sykes-Brown W, Allen-Noble R. (2002). Health science learning academy: a successful “pipeline” education program for high school students. *Acad Med* 7:7376-738
DOI: 10.1097/00001888-200207000-00023

Fine M. Dis-stance and other stances: negotiations of power inside feminist research. In A. Gitlin (Ed.) *Power and method: political activism and educational research.* 1994, London: Routledge.

Fisher M, Baum FE, MacDougall C, Newman L, McDermott D. (2016). To what extent do Australian health policy documents address social determinants of health and health equity? *Journal of Social Policy* 45; 3:545-564
Retrieved from: https://doi.org/10.1017/S0047279415000756

Fisher M. (2019). A theory of public wellbeing. *BMC Public Health* 19:1283
DOI: 10.1186/s12889-019-7626-z.

Flyvbjerg B, Landman T & Schram S. (Eds.) *Real social science. Applied phronesis.* 2012, Cambridge University Press.

Foucault M. *The archaeology of knowledge.* 1969, France. Éditions Gallimard.

Foucault M. *The birth of the clinic: an archaeology of medical perception.* 1994, New York. Vintage Books.

Fox NJ. *Postmodernism, sociology and health.* 1994, Buffalo, New York. Toronto Press.

Fox NJ. (2011). Boundary objects, social meanings and new technologies. *Sociology* 45:70 DOI:10.1177/0038038510387196

Fox JG, O'Maley P. (2017). Adorno in the classroom: how contesting the influence of late capitalism enables the integrated teaching of academic literacies and critical analysis and the development of a flourishing learning community. *Studies in Higher Education* http://dx.doi.org/10.1080/03075079.2016.1269314

Frank AW. *The renewal of generosity: Illness, Medicine and How to Live.* 2004, London. The University of Chicago Press.

Fraser N. (1998). *Social justice in the age of identity politics: redistribution, recognition, participation.* (No. FS 1 98-108). WZB Discussion paper. Berlin: Social Science Research Center (WZB).

Frederiksen M. (2014). Relational trust. Outline of a Bourdieusian theory of interpersonal trust. *J Trust Research* 4; 2:167-192
Retrieved from: https://doi.org/10.1080/21515581.2014.966829

Freeman T, Edwards T, Baum F, Lawless A, Jolley G, Javanparast S & Francis T. (2014). Cultural respect strategies in Australian Aboriginal primary health care services: beyond education and training of health practitioners. *ANZ J Pub Health* 38; 4:355-361
DOI: 10.1111/1753-6405.12231

Freidson E. *Profession of medicine: a study of the sociology of applied knowledge*. 1970, New York. Dodd & Mead.

Freidson E. *Professionalism: the third logic*. 2001, Chicago. The University of Chicago Press.

Freire P. *Pedagogy of the oppressed.* 2007, New York. Continuum.

Freire P. *Pedagogy for critical consciousness*. 1973, New York. Seabury Press.

Frenk J, Chen L, Bhutto Z, Cohen J, et al. (2010). Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. *The Lancet* 376:1923-58 DOI: 10.1016/S0140-6736(10)61854-5

Freyenhagen F. *Social Pathology and Critical Theory* [Book Chapter]. 2019, Routledge Companion to the Frankfurt School.

Fried JE, Shipman SA, Sessums LL. (2019). Advocacy: achieving physician competency. *J Gen Int Med* 34;11:2297-8 DOI: 10.1007/s11606-019-05278-y

Friedman S. (2012). Cultural omnivores or *culturally homeless*? Exploring the shifting cultural identities of the upwardly mobile. *Poetics* 40:467-489
DOI: 10.1016/j.poetic.2012.07.001

Friedman S. (2015). Habitus clivé and the emotional imprint of social mobility. *The Sociological Review* 64:129-147 DOI: 10.1111/1467-954X.12280

Friel S. (2018). A time for hope? Pursuing a vision of a fair, sustainable and healthy world. *Global Policy* DOI: 10.1111/1758-5899.12557

Frye V, Camacho-Rivera M, Salas-Ramirez K, et al. (2020). Professionalism: the wrong tool to solve the right problem? *Academic Medicine* 95:860-863

Fullan M, Scott G. *New pedagogies for deep learning whitepaper: Education plus*. 2014, Seattle, Washington. Collaborative Impact SPC.

Fyfe MV, Kumar S, Maini A & Golding B. (2020). Widening participation: moving from diversity to inclusion. *BMJ* 368:m966 DOI:10.1136/bmj.m966

Gabbay J & Le May A. (2004). Evidence based guidelines or collectively constructed “mindlines?” Ethnographic study of knowledge management in primary care. *BMJ* 329:1-5 Retrieved from https://doi.org/10.1136/bmj.329.7473.1013

Gale T. (2012). Towards a southern theory of student equity in Australian higher education: enlarging the rationale for expansion. *RISE – International Journal of Sociology of Education* 1; 3:238-262 Retrieved from: http://hdl.handle.net/10536/DRO/DU:30051449

Gale T, Wingard B. (2015). Evoking and provoking Bourdieu in educational research. *Cambridge J Education* 45; 5:1-8

Retrieved from: https://doi.org/10.1080/0305764X.2014.998626

Garay J, Harris L & Walsh J. (2013). Global health: evolution of the definition, use and misuse of the term. *Face à Face Revues* 12. Retrieved from: https://faceaface.revues.org/745 (Accessed 14 Sep 2017)

Gardner SP, Roberts-Thomson KF, Winning TA, Peterson R. (2014). Intrinsic rewards experienced by a group of dentists working with underserved populations. *Aust Dent J* 59; 4:302-308 DOI: 10.1111/adj.12192

Global Consensus for Social Accountability of Medical Schools (GCSA). 2010, East London: South Africa. Retrieved from: http://www.healthsocialaccountability.org

General Medical Council. (1995). *Good Medical Practice*. Retrieved from: http://www.gmc-uk.org/static/documents/content/GMP_0910.pdf (Accessed 20 Nov 2012)

Germov J. (Ed.) *Second Opinion: An introduction to health sociology.* Sixth Ed. 2018, OUP.

Geuss R. *The idea of a critical theory: Habermas and The Frankfurt School.* 1982, CUP.

Giddens A. *The constitution of society.* 1986, The University of California Press.

Giddens A. *The consequences of modernity.* 1990, Stanford CT. Stanford University Press.

Giddings B, Hopwood B & O'Brien G. (2002). Environment, economy and society: fitting them together in sustainable development. *Sustainable Development* 10:187-196 Retrieved from: https://doi.org/10.1002/sd.199

Gilligan C. *In a different voice. Psychological theory and women's development.*1982, Harvard University Press.

Gioia DA, Corley KG & Hamilton AL. (2012). Seeking qualitative rigor in inductive research: notes on the Gioia methodology. *Organisational Research Methods* 16; 1:15-31 Retrieved from: https://doi.org/10.1177/1094428112452151

Glaser B & Strauss A. *The Discovery of Grounded Theory: Strategies for Qualitative Research.* 1967, Chicago. Aldine.

Glenn JE. (2012). The eroding principle of justice in teaching medical professionalism. *HEC Forum* 24:293-305 DOI: 10.1007/s10730-012-9199-4

Goli F. (Ed.) *Biosemiotic Medicine. Healing in the world of meaning.* 2016, Springer.
DOI: 10.1007/978-3-319-35092-9

Gonzalez CM, Kim MY & Marantz PR. (2014). Implicit bias and its relation to health disparities: a teaching program and survey. *Teaching & Learning in Medicine* 26; 1:64-71
DOI: 10.1080/10401334.2013.857341

Gonzalo JD, Baxley E, Borkan J, Dekhtyar M, Hawkins R, Lawson L, Starr SR & Skochelak S. (2017). Priority areas and potential solutions for successful integration and sustainment of health systems science in undergraduate medical education. *Academic Medicine* 92:63-69
DOI: 10.1097/ACM.0000000000001249

Gordon J. (2003). Fostering students' personal and professional development in medicine: a new framework for PPD. *Medical Education* 37:341-349
DOI: 10.1046/j.1365-2923.2003.01470.x

Gore J, Patfield S, Holmes K & Smith M. (2018). Widening participation? New insights from school students' aspirations. *Medical Education* 52:227-238 DOI: 10.1111/medu.13480

Grace MK. (2017). Subjective social status and premedical students' attitudes towards medical school. *Social Science & Medicine* 184:84-98 DOI: 10.1016/j.socscimed.2017.05.004

Greatbatch D, Heath C, Campion P & Luff P. (1995). How do desk-top computers affect the doctor-patient interaction? *Family Practice* 12; 1: 32-36 DOI: 10.1093/fampra/12.1.32

Green AR, Betancourt JR & Carrillo JE. (2002). Integrating social factors into cross-cultural medical education. *Acad Med* 77:193-197 DOI: 10.1097/00001888-200203000-00003

Green D. *How Change Happens*. 2009, Great Britain. Oxfam.

Green J, Willis K, Hughes E, Small R, Welch N & Daly J. (2007). Generating best evidence from qualitative research: the role of data analysis. *Aust N Z J Public Health* 31:545-50.
DOI:10.1111/j.1753-6405.2007.00141.x

Greenhalgh T. (2010). What is this knowledge we seek to exchange? *The Milbank Quarterly* 88; 4:492-499 DOI: 10.1111/j.1468-0009.2010.00610.x

Greenway K, Butt G & Walthall H. (2019). What is a theory-practice gap? An exploration of the concept. *Nurse Education in Practice* 34:1-6 DOI: 10.1016/j.nepr.2018.10.005

Grenfell M, James D. (Eds). *Bourdieu and education: acts of practical theory.* 1998, London.

Falmer Press.

Giese D. (2003). Changing the world. [Profile of Fiona Stanley]. *National Library of Australia News* 14; 1:14-17

Griffin B, Porteli E & Hu W. (2017). Who do you think you are? Medical student socioeconomic status and intention to work in underserved areas. *Adv in Health Sci Educ* 22:491-504 DOI: 10.1007/s10459-016-9726-1

Griffiths B. *Deep time dreaming: uncovering ancient Australia.* 2018, Melbourne. Black Inc.

Gross ML. (2001). Medical ethics education: to what ends? *J of Evaluation in Clinical Practice* 7; 4:387-397 DOI: 10.1046/j.1365-2753.2001.00277.x.

Gruen RL, Pearson SD & Brennan TA. (2004). Physician-citizens - Public roles and professional obligations. *JAMA* 291:94-98 DOI: 10.1001/jama.291.1.94

Grunwald K & Thiersch H. (2009). The concept of the ‘lifeworld orientation’ for social work and social care. *J of Social Work Practice* 23; 2:131-146
Retrieved from: https://doi.org/10.1080/02650530902923643

Gudykunst WB. (1993). Toward a theory of effective interpersonal and intergroup communication: An anxiety/uncertainty management perspective. In RL Wiseman & J Koester (Eds.) *Intercultural communication competence* (pp. 33–71). Newbury Park, CA: Sage.

Guinto RLL, Yore D, Habibullah NK, Mares de Leon A, Tillman T, et al. (2011). Students’ perspectives on rooting out the causes of health injustice. *Lancet* 378:e19 DOI:10.1016/S0140- 6736(11)61628-0

Hafferty FW. (1998). Beyond curriculum reform: confronting medicine’s hidden curriculum. *Academic Medicine* 73; 4:403-407 DOI: 10.1097/00001888-199804000-00013

Hafferty FW, Franks R. (1994). The hidden curriculum, ethics teaching, and the structure of medical education. *Academic Medicine* 69; 11:861-871
DOI: 10.1097/00001888-199411000-00001

Hafferty FW. (2006). Viewpoint: The elephant in medical professionalism’s kitchen. *Academic Medicine* 81:906-914 DOI: 10.1097/01.ACM.0000238230.80419.cf

Haidt J, Graham J. (2007). When morality opposes justice: conservatives have moral intuitions that liberals may not recognize. *Social Justice Research* 20; 1:98-116
Retrieved from: https://doi.org/10.1007/s11211-007-0034-z

Halpern D. *Social capital.* 2005, Cambridge. Polity Press.

Hanson L. (2010). Global citizenship, global health and the internationalization of curriculum. A study of transformative potential. *Journal of Studies in International Education* 14:70 DOI: 10.1177/1028315308323207

Hardt M. (1999). Affective labor. *boundary 2* 26; 2:89-100
Retrieved from: https://www.jstor.org/stable/303793

Harman G. (1999). Moral philosophy meets social psychology. Virtue ethics and the fundamental attribution error. *Proceedings of the Aristotlean Society* 99; 1:315-331
Retrieved from: https://www.jstor.org/stable/4545312

Harries-Jones P. *Upside down gods: Gregory Bateson's world of difference.* 2016, Fordham University Press.

Harris M, Kidd M, Snowdon T. (2008). New models of primary and community care to meet the challenges of chronic disease prevention and management: a discussion paper for NHHRC. Retrieved from;
http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/discussion-papers

Hart CS. *Aspirations, education and social justice: applying Sen and Bourdieu*. Bloomsbury Publishing, 2003.

Hatchett L, Elster N, Wasson l, & Parsi K. (2015). Integrating social justice for health professional education: self-reflection, advocacy, and collaborative learning. *Online J of Health Ethics* 11; 1. Retrieved from: http://dx.doi.org/10.18785/0jhe.1101.04

Hatzenbuehler ML, Link BG. (2014). Introduction to the special issue on structural stigma and health. *Soc Sci & Medicine* 103:1-6 DOI: 10.1016/j.socscimed.2013.12.017

Havig K. (2013). Empowering students to promote social justice: qualitative study of field instructors' perceptions and strategies. *Field Scholar* 3.2
Retrieved from: www.fieldeducator.simmons.edu (Accessed 27 Feb 2017)

Hayles NK. (1994). Boundary disputes: homeostasis, reflexivity, and the foundations of cybernetics. *Configurations* 2; 3:441-467 DOI: 10.1353/con.1994.0038

Haynes E, Taylor KP, Durey A, Bessarab D & Thompson SC. (2014). Examining the potential contribution of social theory to developing and supporting Indigenous-mainstream health service partnerships. *International J for Equity in Health* 13:75
DOI: 10.1186/s12939-014-0075-5

Hays S. (1994). Structure and agency and the sticky problem of culture. *American Sociological Association* 12; 1:57-72 DOI: 10.2307/202035

Hayward D. (2021, Jan 13). *The Age*. Forget mining and gas – invest in our biggest industry to boost jobs and productivity. https://theage.com.au

Health for All. In: Kirch W. (ed) Encyclopedia of Public Health. 2018, Springer, Dordrecht. Retrieved from: https://doi.org/10.1007/978-1-4020-5614-7_1357

Hennessy A. (2018, Nov 1). Empowerment shows there's more to health than absence of disease. *The Australian*.

Hennig-Schmidt H, Wiesen D. (2014). Other-regarding behaviour and motivation in care provision: an experiment with medical and non-medical students. *Soc Sci & Med*
DOI: 10.1016/j.socscimed.2014.03.001

Hernandez LM, Blazer DG. (Eds). *Genes, behavior, and the social environment: moving beyond the nature/nurture debate*. 2006, Committee on Assessing Interactions Among Social, Behavioral, and Genetic Factors in Health, Board on Health Sciences Policy.

Hertzman C, Boyce T. (2010). How experience gets under the skin to create gradients in developmental health. *Annu Rev Public Health* 31:329-347
DOI: 10.1146/annurev.publhealth.012809.103538

Herzog B. (2018). Invisibilization and silencing as an ethical and sociological challenge. *Social Epistemology* 32; 1:13-23 Available at: https://doi.org/10.1080/02691728.2017.1383529

Hilgers M. (2009). Habitus, freedom, and reflexivity. *Theory & Psychology* 9; 6:728-755
DOI: 10.1177/0959345892

Hilton SR & Slotnick HB. (2005). Proto-professionalism: how professionalisation occurs across the continuum of medical education. *Medical Education* 39:58-65
DOI: 10.1111/j.1365-2929.2004.02033.x

Hirsh D, Walters L & Poncelet AN. (2012). Better learning, better doctors, better delivery system: possibilities from a case study of longitudinal integrated clerkships. *Medical Teacher* 34:548-554 DOI: 10.3109/0142159X.2012.696745

Hixon AL, Yamada S, Farmer PE & Maskarinec GG. (2013). Social justice: The heart of medical education. *Social Medicine* 7; 3:161- 168
Retrieved from:
https://www.socialmedicine.info/index.php/socialmedicine/article/view/671

Hockey J. (2014, May 14). Joe Hockey: We are a nation of lifters, not leaners. *The Australian Financial Review*.

Hocking C. (2017). Occupational justice as social justice: The moral claim for inclusion. *Journal of Occupational Science* 24; 1:29-42.
Retrieved from: https://doi.org/10.1080/14427591.2017.1294016

Hoffman ML. *Empathy and moral development: implications for caring and justice.* 2001, Cambridge University Press.

Hoffmeyer J. *Biosemiotics: an examination into the life of signs and the signs of life.* 2008, Scranton, Philadelphia. Uni of Scranton Press.

Hoffmeyer J. (2010). A biosemiotic approach to the question of meaning. *Zygon* 45; 2:367-390

Hojat M, Mangione S, Nasca TJ, Gonella JS & Magee M. (2005). Empathy scores in medical and ratings of empathic behaviour in residency training 3 years later. *The Journal of Social Psychology* 145; 6:663-67 DOI: 10.3200/SOCP.145.6.663-672

Holloway KJ. (2015). Teaching conflict: professionalism and medical education. *Bioethical Inquiry* 12:675-685 DOI 10.1007/s11673-015-9648-2

Holmes et al. (2020). Perspective. Misdiagnosis, mistreatment and harm. *NEJM Health Policy* 1083-86 DOI: 10.1056/NEJMp1916269

Holmes C, Lindsay D. (2018). “Do you want fries with that?”: The McDonaldization of university education – some critical reflections on nursing education. *SAGE Open* July- Sept: 1-10 DOI: 10.1177/2158244018787229

Honneth A. (1992). Integrity and disrespect: principles of a conception of morality based on the theory of recognition. *Political Theory* 20; 2:187-201

Retrieved from: https://doi.org/10.1177/0090591792020002001

Horowitz C. *New Dictionary of the History of Ideas.* 2004, Michigan. Thomson Gale.

Horton ES. (2007). Neoliberalism and the Australian health care system (factory). In *Proceedings 2007 Conference of the Philosophy of Education Society of Australasia.* Wellington, New Zealand.

Horton R. (2015). Offline: chronic diseases- the social justice issue of our time. *Lancet* 386:2378 Retrieved from: https://doi.org/10.1016/S0140-6736(16)00568-7

Howard JA. (2003). Tensions of social justice. 2002 presidential address to the Pacific Sociological Association. *Sociological Perspectives* 46; 1:1-20
Retrieved from: https://doi.org/10.1525/sop.2003.46.1.1

Huang GC, Newman LR & Schwartzstein RM. (2014). Critical thinking in health professions education: summary and consensus statements of the millennial conference 2011. *Teaching & Learning in Medicine* 26; 1:95-102
Retrieved from: https://doi.org/10.1080/10401334.2013.857335

Huddle TS. (2013). The limits of social justice as an aspect of medical professionalism. *J Medicine & Philosophy* 38:369-387 DOI: 10.1093/jmp/jht024.

Humphrey C. (2006). Ways of seeing: biomedical perspectives on the social world. *J of The Royal Society of Medicine* 99:602-606 DOI: 10.1258/jrsm.99.12.602

Hutchings HA, Rapport F. (2012). Patient-centred professionalism. *Patient Intelligence* 4:11-21 Retrieved from: http://dx.doi.org/10.2147/PLS19821

Iedema R, Degeling P, Braithwaite J & Kam Yin Cham D. (2004). Medical education and curriculum reform: putting reform proposals in context. *Med Ed Online 9:17*
Retrieved from: http://www.med-ed-online.org

Illich I. *Medical nemesis: the expropriation of health*. 1976, New York: Pantheon.

Illeris K. (2014). Transformative learning and identity. *J of Transformative Education* 12; 2:148-163 Retrieved from: https://doi.org/10.1177/1541344614548423

Inui TS. *A flag in the wind: educating for professionalism in Medicine*. 2003, Association of American Medical Colleges.

Jakubik M. (2011). Becoming to know. Shifting the knowledge creation paradigm. *J of Knowledge Management* 15; 3:374-402 DOI:10.1108/13673271111137394

James P & Magee l. Domains of sustainability. In A. Farazmand (Ed.) *Global Encyclopedia of Public Administration, Public Policy, and Governance.* 2016. Springer International Publishing DOI 10.1007/978-3-319-31816-5_2760-1

Janoff-Bulman R, Carnes NC. (2014). Motivation and morality: insights into political ideology. *Behavioural & Brain Sciences* 37; 3:316-317
Retrieved from: https://doi.org/10.1017/S0140525X13002604

Jenkins I. (2013). Too smart for primary care. *Ann Int Med* 160; 6:439 DOI: 10.7326/L14-5006-3

Jenkins R. *Pierre Bourdieu.* Revised edition. 2002, London & New York: Routledge.

Jenks C. (Ed.) *Core Sociological Dichotomies.* 1998, SAGE.

Johnson A, Nguyen H, Groth M, Wang K & Ng JL. (2016). Time to change: a review of organisational culture change in health care organisations. *J of Organizational Effectiveness: People & Performance* 3; 3:265-288
Retrieved from: htpps://doi.org/10.1108/JOEPP-06-2016-0040

Johnson EK. (2015). The business of care: the moral labour of care workers. *Sociology of Health & Illness* 37; 1:112-126 DOI: 10.1111/1467-9566.12184

Jordanova L. (1995). The social construction of medical knowledge. *Social History of Medicine* 7; 3:361-381 Retrieved from: https://doi.org/10.1093/shm/8.3.361

Jotkowitz AB, Glick S & Porath A. (2004). A physician charter on medical professionalism: a challenge for medical education. *European J Internal Med* 15:5 -9
DOI: 10.1016/j.ejim.2003.11.002.

Jureidini J, McHenry LB. *The illusion of evidence-based medicine. Exposing the crisis of credibility in medical research.* 2020, South Australia. Wakefield Press.

Kadota Y. (2021). *Emotional Female.* Penguin Books, Australia.

Kahlke R & White J. (2013). Critical thinking in health sciences education: considering “three waves”. *Creative Education* 4; 12A:21-29 DOI.org/10.4236/ce.2013.412A1004

Kam J, Tai J H-M, Mitchell RD, Halley E & Vance S. (2012). A vertical study programme for medical students: peer-assisted learning in practice. *Medical Teacher* 35; 2
DOI: 10.3109/0142159x.2012.715782

Kamel-ElSayed S, Loftus S. (2018). Using and combining learning theories in medical education. *Medical Science Educator* 28:255-258
Retrieved from: https://doi.org.10.1007/s40670-017-0519-9

Karadinos G & Bourgois P. (2019). The structural violence of hyperincarceration. A 44 year old man with back pain. *N Engl J Med* 205-209 DOI: 10.1056/NEJMp1811542.

Kasper D. (2014). Codifying figurational theory and mapping common ground in sociology … and beyond. *Creative Commons* 3; 1
Retrieved from: http://hdl.handle.net/2027/spo.11217607.0003.104

Katz AM, Alegria M. (2009). The clinical encounter as local moral world: Shifts in assumptions and transformation in relational context. *Social Sci & Medicine* 68: 1238-1246
DOI: 10.1016/j.socscimed.2009.01.009

Katz AR. (2010). The politics of primary health care. Prospects for a genuine revival of primary health care – through the visible hand of social justice rather than invisible hand of the market. *International J of Health Services* 40; 1:119 -13 DOI: 10.2190/HS.40.1.g.

Kee KY, Rippingale C. (2009). The prevalence and characteristics of patients with acopia. *Age Aging* 38; 1:103-105 DOI: 10.1093/ageing/afn238

Kegan R. *In over our heads, the mental demands of modern life.* 1994, Harvard UP.

Keleher H. (2001). Why primary health care offers a more comprehensive approach for tackling health inequities than primary care. *Australian Journal of Primary Health* 7; 2:57-61
DOI: 10.1071/PY01035

Kerridge I, Lowe M & Stewart C. *Ethics and law for the health professions*. 3rd Ed. 2009, Australia: The Federation Press.

Kickbusch I, Allen L & Franz C. (2016). The commercial determinants of health. *Lancet* 4:e895 Retrieved from: https://doi.org/10.1016/S2214-109X(16)30217-0

Kind AJH, Buckingham WR. (2018). Making neighbourhood-disadvantage metrics accessible – the neighbourhood atlas. *N Engl J Med* 378:2456-2458 DOI: 10.1056/NEJMp1802313

Komerasoff P, Kerridge I, Carney S & Brooks P. (2013). Is it too late to turn the clocks back on managerialism and neoliberalism? *Internal Medicine Journal* 43:221-222
DOI: 10.1111/imj.12078

Kopelman P. (2014). The future of medical education curriculum – what type of medical graduates do we need? *Future Hospital Journal* 1; 1:41-46 DOI: 10.7861/futurehosp.14.011

Korsgaard MT. *Bearing with strangers: Arendt, education and the politics of inclusion.* 2018, Routledge, Taylor & Francis.

Kramsch C. (2008). Ecological perspectives on foreign language education. Plenary Paper presented on 21 Sept 2017, Berkeley Language Center of the University of California.
DOI: https://doi.org/10.1017/S0261444808005065

Krieger N, Birn A-E. (1998). Comment. A vision of social justice as a foundation of public health. *American Journal of Public Health* 88; 11:1603-1606 DOI: 10.2105/ajph.88.11.1603

Krieger N. (2001). Theories for social epidemiology in the 21st century: an ecosocial perspective. *International J Epidemiology* 30:668-677 DOI: 10.1093/ije/30.4.668

Kromydas T. (2017). Rethinking higher education and it relationship with social inequalities: past knowledge, present state and future potential. *Palgrave Communications* 3: 1
DOI: 10.1057/s41599-017-0001-8

Kruk ME, Gage AD, Arsenault C et al. (2018). High quality health systems in the Sustainable Development Goals era: time for a revolution. The Lancet Global Health Commission. *Lancet Global Health* 6: e1196-252 Available at: http://dx.doi.org/10.1016/S2214-190X(18)30386-3

Kull K, Velmezova E. (2019). Jesper Hoffmeyer: biosemiotics is a discovery. *Biosemiotics* 12: 373-379 Retrieved from: https://doi.org/10.1007/s12304-019-09367-7

Kumagai AK, Lypson ML. (2009). Beyond cultural competence: critical consciousness, social justice, and multicultural education. *Academic Medicine* 84; 6:782-78
DOI: 10.1097/ACM.0b013e3181a42398

Kumagai AK & Naidu T. (2020). On time and teabags: *chronos*, *kairos*, and teaching for humanistic practice. *Acad Med* 95:512-517 DOI: 10.1097/ACM.0000000000003083

Kuper A, Veinot P, Leavitt J et al. (2017). Epistemology, culture, justice and power: non-bioscientific knowledge for medical training. *Med Ed* 51; 2:158-173
DOI: 10.1111/medu.13115

Langer PC. (2016). The research vignette: reflexive writing as interpretive representation of qualitative inquiry – a methodological proposition. *Qualitative Inquiry* 22; 9:735-744
Retrieved from: https://doi.org/10.1177/1077800416658066

Laughlin RB. *A different universe. Reinventing physics from the bottom down*. 2005, Basic Books.

Launer J. (2015). Guidelines and mindlines. *Postgrad Med J* 91;1081:663-664
Retrieved from: http://dx.doi.org/10.1136/postgradmedj-2015-133766

Lave J, Wenger E. *Communities of practice: Learning, meaning, and identity.* 1998, Cambridge University Press.

LaVeist TA & Nuru-Jeter A. (2002). Is doctor-patient race concordance associated with greater satisfaction with care? *J of Health and Social Behavior* 43; 3:296-306
DOI: 10.2307/3090205

Laven G, Wilkinson D. (2003). Rural doctors and rural backgrounds: how strong is the evidence? A systematic review. *Australian J Rural Health* 11; 6:277-284
DOI: 10.1111/j.1440-1584.2003.00534.x.

Lea T, de Witt J & Reynolds R. (2014). Minority stress in lesbian, gay, and bisexual young adults in Australia: associations with psychological distress, suicidality and substance abuse. *Arch Sex Behav* 43:1571-1578 DOI: 10.1007/s10508-014-0266-6

Lehmann W. (2012). Habitus transformation and hidden injuries: successful working class university students. *Sociology of Education* 87; 1:1-15
Retrieved from: https://doi.org/10.1177/0038040713498777

Lempp H, Seale C. (2006). Medical students' perceptions of ethnicity and gender: a qualitative study. *BMJ Medical Education* 6;17:1-7 DOI: 10.1186/1472-6920-6-17

Lewin LO, McManamon A, Stein MT & Chen DT. (2019). Minding the form that transforms: Using Kegan's model of adult development to understand personal and professional identity formation in medicine. *Academic Medicine* 94:1299-1304
DOI: 10.1097/ACM.0000000000002741

Lewis B. Medical professionals and the discourse of professionalism. In Wear D, Aultman JM. (Eds.) *Professionalism in medicine: critical perspectives.* 2006, Springer.

Liebenberg L. Ungar M & Ikeda J. (2013). Neoliberalism and responsibilisation in the discourse of social service workers. *British J Social Work* 1-16 DOI:10.1093/bjsw/bct172

Light DW. Health-care professions, markets, and countervailing powers. In Bird C, Conrad P, Freemont AM & Timmermans S. (Eds). 2010. *Handbook of Medical Sociology 6th Ed.* Vanderbilt University Press.

Limaye RJ, Sullivan TM, Dalessandro S & Hendrix-Jenkins A. (2017). Looking through a social lens: conceptualising social aspects of knowledge management for global health practitioners. *J of Public Health Research* 6:761 DOI: 10.4081/jphr.2017.761

Lindlof TR, Taylor BC. *Qualitative Communication Research Methods.* 2002, SAGE.

Litzelman DK, Gardner A, Einterz RM, Owiti P & Umoren RA. (2017). On becoming a global citizen: transformative learning through global health experiences. *Annals of Global Health* 83; 3-4:596-604 Retrieved from: https://doi.org/10.1016/j.aogh.2017.07.005

Loftus S. (2015). Understanding integration in medical education. *Med Sci Educ* 25:357-360 Retrieved from: https://doi.org/10.1007/s40670-015-0152-4

Loughland T, Sriprakash A. (2016). Bernstein revisited: the recontextualization of equity in contemporary Australian school education. *British J Sociology of Education* 37; 2:230-247 Retrieved from: http://dx.doi.org/10.1080/01425692.2014.916604

Louw G. (2010). *Conceptualising differentiated forms of knowledge: the medical (MBChB) curriculum of the University of Cape Town.* (Unpublished MPhil dissertation). School of Education, University of Cape Town, South Africa.

Lucey CR. (2013). Medical education: part of the solution, part of the problem. *JAMA Intern Med* DOI:10.1001/jamainternmed.2013.9074

Luke H. *Medical education and sociology of the medical habitus: "It's not about the stethoscope!"* 2003, Springer e-book.

Luykx A, Heyman J. (2013). The limits of critical pedagogy: teaching about structural obstacles to students who overcame them. *International J of Qualitative Studies in Education* 26; 3:346-368 Retrieved from: http://dx.doi.org/10.1080/09518398.2012.762479

Macdonald G. (2002). Transformative unlearning: safety, discernment and communities of learning. *Nursing Inquiry* 9; 3:170-178 DOI: 10.1046/j.1440-1800.2002.00150.x.

MacDonald MN. (2002). Pedagogy, pathology and ideology: the production, transmission and reproduction of medical discourse. *Discourse & Society* 13; 4:447-467
Retrieved from: https://doi.org/10.1177/0957926502013004453

Macken-Horarik M. (2003). Appraisal and the special instructiveness of narrative. *Text* 23; 2:285-312 Retrieved from: http://www.languageofevaluation.info/appraisal/textspecial/macken-horarik-narrative.pdf Accessed 25/04/2019

Macnaught L, Maton K, Martin JR & Matruglio E. (2012). Jointly constructing semantic waves: implications for teacher training. *Linguistics and Education* 24:50-63
Retrieved from: http://dx.doi.org/10.1016/jlinged.2012.11.008

Macpherson CC. (2014). Climate change matters. *J Med Ethics* 40:288-290
DOI:10.1136/medethics- 2012-101084

Mackie P. (2010). Social justice and social responsibility: a values base for global public health. *Public Health* 124:620-625
Retrieved from: https://doi.org/10.1016/j.puhe.2010.08.010

Macnaughton J. (2000). The humanities in medical education: contexts, outcomes and structures. *J Medical Ethics* 26:23-30 Retrieved from: http://dx.doi.org/10.1136/mh.26.1.23

McArthur J. (2010). Achieving social justice within and through higher education: the challenge for critical pedagogy. *Teaching in Higher Education* 15; 5:493-504
DOI:10.1080/13562517.2010.491906

McAuliff KE, Williams SM & Ferrari JR. (2013). Social justice and the university community: does campus involvement make a difference? *J of Prevention and Intervention in the Community* 41:244 -254 Retrieved from: https://doi.org/10.1080/10852352.2013.818486

McCartney M. (2020). Perspectives. The art of medicine. Before COVID-19, and after. *Lancet* 395:1248-9 Retrieved from: htpps://doi.org/10.1016/S0140-6736(20)30756-X

McCrea ML, Murdoch-Eaton D. (2014). How do undergraduate medical students perceive social accountability? *Medical Teacher* 36;10:867-875
Retrieved from: https://doi.org/10.3109/0412159X.2014.916784

McDermott R, McCulloch BG, Campbell SK & Young DM. (2007). Diabetes in the Torres Strait Islands of Australia: better clinical symptoms but significant increase in weight and other risk conditions in adults. *Med J Aust* 186;10:505-508

Retrieved from: https://www.ncbi.nlm.nih.gov/pubmed/17516896

McEwen BS & Gianaros PJ. (2010). Central role of the brain in stress and adaptation: links to socioeconomic status, health, and disease. *Ann N.Y. Acad. Sci.* 1186:190-222
DOI: 10.1111/j.1749-6632.2009.05331.x

McEwen C & Trede F. (2016). Educating deliberate professionals: beyond reflective and deliberative practitioners. Chapter 15, in F. Trede F, McEwen C. (Eds.) *Educating the Deliberate Professional*: *Professional and Practice-based Learning*. Springer International
DOI 10.1007/978-3-319-32958-1_15

McGoey L. (2012). The logic of strategic ignorance. *The British J of Sociology* 63; 3:553-576
DOI: 10.1111/j.1468-4446.2012.01424.x

McKenna S. (2004). The intersection between academic literacies and student identities. *SAJHE* 18; 3:269-280 DOI: 10.4314/sajhe.v18i3.25496

McKeown T. *The Role of Medicine: Dream, Mirage, or Nemesis?* 1976, London: Nuffield Provincial Hospitals Trust.

McKivett A. (Nd). Quiet advocacy. www.quietadvocacy.com

McKivett A. Paul D, Hudson N. (2018). Healing conversations: developing a practical framework for clinical communication between Aboriginal communities and medical practitioners. *Journal of Immigrant and Minority Health*
Retrieved from: https://doi.org/10.1007s10903-018-0793-1

McLaren P. (2010). Afterword: the contradictions of class and the praxis of becoming. In, Kelsh D, Hill D & Macrine S. (Eds). *Class in education: knowledge, pedagogy, subjectivity.* New York: Routledge.

McLean M, Walker M. A capabilities approach to educating the deliberate professional: theory and practice. Chapter 10. In Trede F, McEwen C. (Eds). 2016. *Educating the deliberate professional, professional and practice-based learning.* DOI: 10.1007/978-3-319-32958-1_10

McMichael AJ, Haines A. (1997). Global climate change: the potential effects on health. *BMJ* 315:805-809 DOI: 10.1136/bmj.315.7111.805

McNall SG. *The problem of social inequality. Why it destroys democracy, threatens the planet and what we can do about it*. 2016, New York; Routledge.

McNaughton N. (2013). Discourse(s) of emotion in medical education: the ever present absence. *Medical Education* 47:71-79 DOI: 10.1111/j.1365-2923.2012.04329.x

McPherson M, Smith-Lovin L & Cook JM. (2001). Birds of a feather: homophily in social networks. *Annual Review of Sociology* 27:416
Retrieved from: https://doi.org/10.1146/annurev.soc.27.1.415

Madaras L, Stonington S, Seda CH, Garcia D & Zuroweste E. (2019). Social distance and mobility – A 39 year old pregnant farmworker. *N Engl J Med* 380;12:1093-1096
DOI: 10.1056/NEJMp1811501

Magill K, Rodriguez A. (2014). Critical humanist curriculum. *J for Critical Education Policy Studies* 12; 3:205-227 Retrieved from: https://eric.ed.gov/?id=EJ1061136

Magnussen L, Elhiri J & Jolly P. (2014). Comprehensive versus selective primary health care: lessons for global health policy. *Health Affairs* 23; 3:167-76

Maheux B, Beland F. (1987). Changes in students' sociopolitical attitudes during medical school: socialization or maturation effect? *Soc Sci Med* 24; 7:619 -624
DOI: 10.1016/0277-9536(87)90067-0.

Mai F. (2014). Masterly inactivity: a forgotten precept. *CMAJ* 186; 4:312
DOI:10.1503/cmaj.131820

Marchman Anderson MR, Smith L & Sidel VW. (2006). What is social medicine? *Monthly Review* Retrieved from: http://monthlyreview.org/2005/01/01/what-is-social-medicine

Marchman-Andersen MM, Dalton SO, Lynch J, Johansen C & Holtug N. (2013). Social inequality in health, responsibility and egalitarian justice. *J Public Health* 35; 1:4-8
Retrieved from: https://doi.org/10.1093/pubmed/fdt012

Marfelt MM. (2016). Grounded intersectionality. Key tensions, a methodological framework, and implications for diversity research. *J Equality, Diversity & Inclusion* 36; 1:31-47
DOI: 10.1108/EDI-05-2014-0034

Marginson S. (2009). AUSTRALIA: Bradley: a short-term political patch-up. University World News 58:1 Retrieved from;
https://www.universityworldnews.com/post.php?story=20090108192939538

Marmot MG, Rose G, Shipley M & Hamilton PJS. (1978). Employment grade and coronary heart disease in British civil servants. *J Epidemiol Community Health* 32:244-249

DOI: 10.1136/jech.32.4.244

Marmot M. (1998). Improvement of social environment to improve health. *Lancet* 351:57-60 DOI: 10.1016/S0140-6736(97)08084-7

Marmot M. (2005). Social determinants of health inequalities. *Lancet* 365:1099-1104
DOI: 10.2105/AJPH.2014.302200

Marmot M, Friel S, Bell R, Houweling TA & Taylor S. (2008). Closing the gap in a generation: health equity through action on the social determinants of health. *Lancet* 372:1661-1669
Available at: https://doi.org/10.1016/S0140-6736(08)61690-6

Marmot M, Allen J & Goldblatt P. (2010). A social movement, based on evidence, to reduce inequalities in health. *Social Science & Medicine* 71:1254-1258
DOI: 10.1016/j.socscimed.2010.07.011.

Marmot M et al. *Working for Health Equity: The role of health professionals. Executive Summary*. 2013, London; UCL Institute of Health Equity.

Marmot M. (2017). Capabilities, human flourishing and the health gap. *J Human Development and Capabilities* 18; 3:370-383
Retrieved from: https://doi.org/10.1080/19452829.2017.1342362

Marmot M. (2017). The health gap: doctors and the social determinants of health. *Scandinavian J of Public Health* 45:686-693 DOI: 10.1177/1403494817717448

Maslow AH. (1943). A theory of human motivation. *Psychological Review* 50:370-396
Retrieved from: https://doi.org/10.1037/h0054346

Mason M. (2008). Complexity theory and the philosophy of education. *Educational Philosophy and Theory* 40; 1:4-18
Retrieved from: http://dx.doi.org/10.1111/j.1469-5812.2007.00412.x

Masson N, Lester H. (2003). The attitudes of medical students towards homeless people: does medical school make a difference? *Medical Education* 37:869–872
DOI: 10.1046/j.1365-2923.2003.01625.x.

Mathews B, Bismark MM. (2015). Sexual harassment in the medical profession: legal and ethical responsibilities. *MJA* 203; 4:189-192 DOI: 10.5694/mja15.00336

Maton K. (2003). Reflexivity, relationism & research. Pierre Bourdieu and the epistemic conditions of social scientific knowledge. *Space and Culture* 6; 1:52-65
DOI: 10.1177/1206331202238962

Maton K. (2009). Cumulative and segmented learning: exploring the role of curriculum structures in knowledge-building. *Br. J Sociol Educ* 30:43-57
DOI: 10.1080/01425690802514342

Maton K. (2010). Canons and progress in the arts and humanities: knowers and gazes. Chapter 8. Maton K, Moore R. (Eds). *Social realism, knowledge and the sociology of education. Coalitions of the mind.* London, Continuum Books.

Maton K & Moore R. (Eds). *Social realism, knowledge and the sociology of education. Coalitions of the mind.* 2010, London. Continuum Books.

Maton K. (2013). Making semantic waves: a key to cumulative knowledge-building. *Linguistics and Education* 24:8-22

Maton K. *Knowledge and knowers: toward a realist sociology of education.* 2014, London & New York; Routledge.

Maton K & Chen RT. LCT in qualitative research: creating a translation device for study constructivist pedagogy. In Maton K, Hood S & Shay S. *Knowledge building. Educational studies in Legitimation Code Theory.* 2015, Taylor & Francis.
DOI:10.4324/9781315672342-11

Maton K, Hood S, Shay S. (Eds). *Knowledge-building. Educational studies in Legitimation Code Theory.* 2016, London & New York; Routledge.

Maxwell B, Racine E. (2010). Should empathic development be a priority in biomedical ethics teaching? A critical perspective. *Cambridge Quarterly of Healthcare Ethics* 19:433-445
DOI: 10.1017/S0963180110000320

Mayes C, Kerridge I, Habibi R, & Lipworth W. (2016). Conflicts of interest in neoliberal times: perspectives of Australian medical students. *Health Sociology Review* 25; 3:256-271
DOI: 10.1080/14461242.2016.1198713

MDANZ, AIDA. (2012). A review of the implementation of the indigenous health curriculum framework and the healthy futures report within Australian medical schools. Available at: https://medicaldeans.org.au/md/2018/07/Medical-Deans-AIDA-Review-Final-Report.pdf
Accessed 10/07/2020

Mechanic D. (2000). Managed care and the imperative for a new professional ethic. *Health Affairs* 19: 5:100-111 DOI: 10.1377/hlthaff.19.5.100

Medical Professionalism Project. (2002). Medical professionalism in the new millennium: A physicians' charter. *Lancet* 359:520–22 DOI: 10.7326/0003-4819-136-3-200202050-00012

Merton RK, Reader GG & Kendall P. (Eds.) *The Student Physician. Introductory studies in the sociology of medical education.* 1957, Harvard UP.

Metzel JM, Hanson H. (2014). Structural competency: theorizing a new medical engagement with stigma and inequality. *Social Science & Medicine* 103:126-133
DOI: 10.1016/j.socscimed.2013.06.032

Meulen R Ter. (2015). Solidarity and justice in health care. A critical analysis of their relationship. *Diametros* 43:1-20 Retrieved from: https://doi.org/10.1093/phe/phz008

Meyer JHF & Land R. (2003). Threshold knowledge and troublesome knowledge: linkages to ways of thinking and practicing within the disciplines. *ETL Project Occasional Report 4*

Meyer JHF & Land R. (2005). Threshold concepts and troublesome knowledge (2): epistemological considerations and a conceptual framework for teaching and learning. *Higher Education* 49:373-388 DOI: 10.1007/s10734-004-6779-5

Meyer S & Ward P. (2014). 'How to' use social theory within and throughout qualitative research in healthcare contexts. *Sociology Compass* 525-539
Retrieved from: https://doi.org/10.1111/soc4.12155

Miller D. *Principles of social justice.* 2001, Harvard UP.

Mills CW. *The sociological imagination.* 2000, Oxford UP.

Mintz AI. (2013). Helping by hurting: the paradox of suffering in medical education. *Theory and Research in Education* 11; 3: 215-230 DOI:10.1177/1477878513498179

Mitchell TD. (2007). Critical service-learning as social justice education: a case study of the Citizens Scholars Program. *Equity & Excellence in Education* 40:101-112
Retrieved from: https://doi.org/10.1080/10665680701228797

Mizrahi T. *Getting rid of patients: contradictions in the socialization of physicians.* 1986, New Brunswick, NJ Rutgers University Press.

Monrouxe LV. (2009). Negotiating professional identities: dominant and contesting narratives in medical students' longitudinal audio diaries. *Current Narratives* 1:41-59
Retrieved from: https://ro.uow.edu.au/currentnarratives/vol1/iss1/5

Monrouxe LV. (2011). Identity, identities and medical education: why should we care? *Medical Education* 44:40-49
Retrieved from: https://doi.org/10.1111/j.1365-2923.2009.03440.x

Mooney G. (1996). And now for vertical equity? Some concerns arising from Aboriginal health in Australia. *Health Economics* 5:99-103
Retrieved from: DOI: 10.1002/(SICI)1099-1050(199603)5:2<99::AID-HEC193>3.0.CO;2-N

Morton KR, Worthley JS, Testerman JK & Mahoney ML. (2006). Defining features of moral sensitivity and moral motivation: pathways to moral reasoning in medical students. *J Moral Education* 35; 3:387-406 Retrieved from: https://doi.org/10.1080/03057240600874653

Mudge SL. (2008). What is neo-liberalism? *Socio-Economic Review* 6; 4:703–731
Retrieved from: https://doi.org/10.1093/ser/mwn016

Murphy M. (2016). Hiding in plain sight: the production of heteronormativity in medical education. *J Contemporary Ethnography* 45; 3:256-289 DOI: 10.1177/0891241614556345

Murray RB, Larkins S, Russell H, Ewen S & Prideaux D. (2012). Medical schools as agents of change: socially accountable medical education. *MJA* 196;10:1-5 DOI: 10.5694/mja12.11095

Mustakova-Possardt E. *Critical consciousness: a study of morality in global, historical context*. 2003, Greenwood Publishing Group.

Mustakova-Possardt E. (2004). Education for critical moral consciousness. *J Moral Education* 13; 3:245-269 Retrieved from: https://doi.org/10.1080/0305724042000733046

Muzzin L, Mickleborough T. (2013). What does 'race' have to do with medical education research? *Medical Education* 47:760-767 DOI: 10.1111/medu.12186

Meyer JHF & Land R. Threshold Concepts and Troublesome Knowledge 1 – Linkages to Ways of Thinking and Practising; in *Improving Student Learning – Ten Years On*. Rust C. (Ed). 2003, Oxford; OCSLD.

Motta SC. (2013). Teaching global and social justice as transgressive spaces of possibility. *Antipode* 45; 1:80-100 DOI:10.1111/j.1467-8330.2012.00995.x

Moyer MW. (2018). American epidemic. *Scientific American* 318:44-57
DOI: 10.1038/scientificamerican0518-44

Muntinga ME, Krajenbrink VQE, Peerdeman SM, Croiset G, Verdonk P. (2016). Toward diversity-responsive medical education: taking an intersectionality-based approach to a curriculum evaluation. *Adv in Health Sci Educ* 21:541-559 DOI: 10.1007/s10459-015-9650-9

Musso CG. (2020). Biosemiotic medicine: from an effect-based medicine to a process-based medicine. *Arch Argent Pediatr* 118; 5:e449-453
Retrieved from: http://dx.doi.org/10.5546/aap.2020.eng.e449

Mykhalovskiy E, Weir L. (2004). The problem of evidence-based medicine: directions for social science. *Social Science & Medicine* 59:1059-1069
DOI: 10.1016/j.socscimed.2003.12.002.

Nagel T. *The view from nowhere.* 1986, New York, NY: Oxford University Press.

Naidu T, Kumagai AK. (2016). Troubling muddy waters: problematizing reflective practice in global medical education. *Academic Medicine* 91; 3:317-321
DOI: 10.1097/ACM.0000000000001019

Naqshbandi M, Harris SB, Esler JG & Antwi-Nsiah F. (2008). Global complication rates of type 2 diabetes in Indigenous peoples: a comprehensive review. *Diabetes Research and Clinical Practice* 82:1-17 DOI: 10.1016/j.diabres.2008.07.017

National Aboriginal Health Strategy. (1989). Definition of health. *Aboriginal Health and Medical Research Council*. Retrieved from:
http://www.ahmrc.org.au/index.php?option=com_content&view=article&id=35&Itemid=37
(Accessed 05 Feb 2017)

National Academies of Sciences, Engineering, and Medicine. 2018. *Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Sciences, Engineering, and Medicine*. Washington, DC: The National Academies Press.
Retrieved from: DOI: https:// doi.org/10.17226/24994.

Navarro Z. (2006). In search of a cultural interpretation of power: the contribution of Pierre Bourdieu. *IDS Bulletin* 37; 6 DOI: 10.1111/j.1759-5436.2006.tb00319.x

Nazar M, Kendall K, Day L & Nazar H. (2009). Decolonising medical curricula through diversity education: lessons from students. *Medical Teacher* 37; 4:385-393

DOI: 10.3109/0142159X.2014.947938

Neff J, Holmes J, Knight KR et al. (2020). Structural competency: curriculum for medical students, residents, and interprofessional teams on the structural factors that produce health disparities. *MedEdPORTAL* 16:10888 DOI: 10.15766/mep_2374-8265.10888

Nerlinger AL, Shah AN, Beck AF, Beers LS, Wong SL, Chamberlain LJ & Keller D. (2018). The Advocacy Portfolio: a standardized tool for documenting physician advocacy. *Academic Medicine 8*;93:860-868 DOI: 10.1097/ACM.0000000000002122

Nessa J. (1996). About signs and symptoms: can semiotics expand the view of clinical medicine? *Theoretical Medicine* 17:363-377

Neufeld VR, Barrows HS. (1974). The McMaster philosophy: an approach to medical education. *J of Medical Education* 49:1040-50

Neuliep JW. (2012). The relationship among intercultural communication apprehension, ethnocentrism, uncertainty reduction, and communication satisfaction during initial intercultural interaction: an extension of Anxiety and Uncertainty Management (AUM) theory. *J Intercultural Communication Research* 41; 1:1-16
Retrieved from: https://doi.org/10.1080/17475759.2011.623239

Neumann M, Edelhäuser F, Tauschel D, et al. (2011). Empathy decline and its reasons: a systematic review of studies with medical students and residents. *Academic Medicine* 88; 8:996-1009 DOI: 10.1097/ACM.0b013e318221e615

Nickerson RS. (1998). Confirmation bias: a ubiquitous phenomenon in many guises. *Review of General Psychology* 2; 2:175-220
Retrieved from: https://doi.org/10.1037/1089-2680.2.2.175

Nicholson S, Cleland JA. (2017). “It’s making contacts”: notions of social capital and implications for widening access to medical education. *Adv in Health Sci Educ* 22:447-490
DOI: 10.1007/s10459-016-9735-0

Nilsson S. (2010). On the meaning of higher education in professional practice: the case of physicians and engineers. *J Education and Work* 23; 3:255-274
DOI: 10.1080/13639080.2010.486397

No health care without social care. Editorial, *Lancet* (2019:2096) Available at :
https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(19)32266-4.pdf

Oliver-Baxter et al. (2013). Integrated care: What can be done at the micro level to influence integration in primary health care? PHC RIS Report 5. *Towards integrated primary health care: Integration within primary health care and between primary health care and other sectors*.

Olteneau A. (2014). Learning as the passage from icon to argument or why do students have teachers (or learning as falling in love). Philosophy of Education Society of Great Britain Annual Conference. Retrieved from: Academia.edu

Osberg D, Biesta G & Cilliers P. (2008). From representation to emergence: Complexity's challenge to the epistemology of schooling. *Educational Philosophy and Theory* 40; 1:213-227 Retrieved from: https://doi.org/10.1111/j.1469-5812.2007.00407.x

Osman R, Ojo E & Hornsby DJ. (2018). Transforming higher education towards a socially just pedagogy. *J of Human Behaviour in the Social Environment* 28; 4:393-396
Retrieved from: https://doi.org/10.1080/10911359.2018.1476641

Pálsdóttir B, Neusy A-J. (2011). Transforming medical education: lessons learned from THEnet. *Training for Health Equity Network*
Retrieved from: http://www.healthprofessionals21.org/docs/TransformingMedEd.pdf
(Accessed 11 Mar 2017)

Palmer M, Bexley E & James R. *Selection and participation in higher education. University selection in support of student success and diversity of participation.* 2011, Centre for Study of Higher Education, University of Melbourne.

Pandit NR. (1996). The creation of theory: a recent application of the grounded theory method. *The Qualitative Report* 2; 4:1-15
Retrieved from http://nsuworks.nova.edu/tqr/vol2/iss4/3

Paradies Y, Ben J, Denson N, Elias A, Priets N, Pieterse A, et al. (2015). Racism as a determinant of health: a systematic review and meta-analysis. *PLoS One* 10; 9:e0138511
Retrieved from https://doi.org/10.1371/journal.pone.0138511

Paradis E, Nimmon L, Wondimagegn D & Whitehead CR. (2019). Critical theory: broadening our thinking to explore the structural factors at play in health professions education. *Acad Med* DOI: 10.1097/ACM.0000000000003108

Parsell GJ, Bligh J. (1995).The changing contexts of undergraduate medical education. *Postgrad Med J.* 71;837:397-403 DOI:10.1136/pgmj.71.837.397

Patenaude J, Niyonsenga T & Fafard D. (2003). Changes in medical students' moral development during medical school: a cohort study. *CMAJ* 168:140-14
Retrieved from: https://pubmed.ncbi.nlm.nih.gov/12668541/

Paul D, Hill S & Ewen S. (2012). Revealing the (in)competency of "cultural competency" in medical education. *AlterNative: An International Journal of Indigenous Peoples* 8; 3:318-32
Retrieved from: https://doi.org/10.1177/117718011200800307

Payne M. (2014). Social care and social justice. Chapter 25, in Reisch M. (Ed.). *Routledge International Handbook of Social Justice*, New York.

Peacock M, Bissell P & Owen J. (2014). Shaming encounters: reflections on contemporary understandings of social inequality and health. *Sociology* 48; 2:387-402
Retrieved from: https://doi.org/10.1177/0038038513490353

Pease B. *Undoing privilege: unearned advantage in a divided world.* 2010, New York; Zed Books Ltd.

PHCRIS. (2015). Introduction to… Primary Health Care.
Retrieved from: http://www.phcris.org.au/guides/about_phc.php (Accessed 15 Jan 2017)

Pellow DN & Brehm HN. (2011). An environmental sociology for the 21st century. *Annu. Rev. Sociol*. 39:229-250 Retrieved from: https://doi.org/10.1146/annurev-soc-071312-145558

Pellegrino ED. (1989). Teaching medical ethics: some persistent questions and some responses. *Academic Medicine* 64; 12:701-3 DOI: 10.1097/00001888-198912000-00002

Pekrun R. (2006). The control-value theory of achievement emotions: Assumptions, corollaries, and implications for educational research and practice. *Educ Psychol Rev* 18:315–341. Retrieved from: https://doi.org/10.1007/s10648-006-9029-9

Periyakoil V, Chaudron L, Hill E, Pellegrini V, Neri E, Kraemer H. (2020). Common types of gender-based microaggressions in medicine. *Academic Medicine* 95; 3:450-457
DOI: 10.1097/ACM.0000000000003057

Petrilli S. *Sign studies and semioethics: communication, translation and* values. 2014, Berlin/ Boston; De Gruyter.

Phillips G. *CDAMS Indigenous Health Curriculum Framework*. 2004, VicHealth Koori Health Research and Community Development Unit, Centre for the Study of Health & Society.

Available at: https://medicaldeans.org.au/md/2018/07/CDAMS-Indigenous-Health-Curriculum-Framework.pdf Accessed 12/08/2019

Pickstone J. Chapter 1. Production, community and consumption: the political economy of twentieth century medicine. In Cooter R, Pickstone J. (Eds). *Companion to Medicine in the Twentieth Century.* 2001, Routledge.

Pinker S. *Enlightenment Now. The case for reason, science, humanism and progress.* 2018, Penguin.

Playford D, May J. (2020). MJA Podcasts Episode 14: *Decline in general practice.* https://themja.podomatic.com/enclosure/2020-04-12T19_50_39-07_00.mp3 13/04/2020 Available at: https://www.mja.com.au/podcast/212/7/mja-podcasts-2020-episode-14-decline-general-practice-aprof-denese-playford-and-prof Accessed: 12/07/2020

Poncelet AN, Mazotti LA, Blumberg B, Wamsley MA, Grennan T & Shore WB. (2014). Creating a longitudinal integrated clerkship with mutual benefits for an academic medical centre and a community health system. *The Permanente Journal* 18; 2
DOI: 10.7812/TPP/13-137

Preston R, Larkins S, Taylor J & Judd J. (2016). Building blocks for social accountability: a conceptual framework to guide medical schools. *BMC Medical Education* 16:227
DOI: 10.1186/s12909-016-0741-y

Prideaux D, Bligh J. (2002). Research In medical education: asking the right questions. *Medical Education* 36:1114-1115 DOI: 10.1046/j.1365-2923.2002.01411.x.

Prideaux D, Lindemann I & Cottrell A. (2013). Community and workplace expectation of graduates in the health professions. Chapter 7. Vol 8. Practice, education, work and society. In *Educating health professionals: becoming a university teacher.* Loftus S, Gerzina T, Higgs J, Smith M & Duffy E. (Eds.). Rotterdam/ Boston/ Taipei; Sense publishers.

Prilleltensky I. (2012). Wellness as fairness. *Am J Community Psychol* 49:1-21
Retrieved from: https://doi.org/10.1007/s10464-011-9448-8

Public Health Association of Australia. (2018). What are the determinants of health? Retrieved from: https://www.phaa.net.au/documents/item/2756 Accessed 15/10/2018

Purser RE. *McMindfulness: how mindfulness became the new capitalist spirituality.*
2019, Repeater Books.

Putnam RD. *Bowling alone: the collapse and revival of American community.* 2000, New York: Simon & Schuster.

Rabow MW, Remen RM, Parmelee DX & Inui TS. (2010). Professional formation: extending medicine's lineage of service into the next century. *Acad Med* 85:310-317

RACP. (2005). Inequity and health. A call to action. Addressing health and socioeconomic inequality in Australia. Policy statement. Available at: http://nla.gov.au/nla.arc-49206-20050412-0000-www.racp.edu.au/hpu/pdf%20files/inequality.pdf

Rafieian S. (2010). Cybersemiotic medicine: a framework for an interdisciplinary medicine. *Cybernetics and Human Knowing* 17; 3-4:1-29

Rafieian S & Davis H. (2016). Dissociation, reflexivity and habitus. *European J of Social Theory* 19; 4:556-573 Retrieved from: https://doi.org/10.1177/1368431016646516

Ravasi D & Verona G. (2001). Organizing the process of knowledge integration: the benefits of structural ambiguity. *Scandinavian J Management* 17; 1:41-66 DOI:10.1016/S095-5221(00)00032-4

Rawls J. *A theory of justice.* 1971, Cambridge: Harvard University Press.

Ray L. (2015). Critical theory: contemporary. In James D. Wright (editor-in-chief) *International Encyclopedia of the Social and Behavioural Sciences.* Second Edition. Volume 5. Oxford: Elsevier. pp. 304-310

Raymond L. Understanding the challenges of coordinating care around social needs. *Healthify.org* (Accessed March 16, 2018)

Razack S, Lessard D, Hodges BD, Maguire MH & Steinert Y. (2013). The more it changes the more it remains the same: a Foucauldian analysis of Canadian policy documents relevant to student selection to medical school. *Adv in Health Sci Educ* DOI: 10.1007/s10459-013-9468-2

Reason RD, Terenzini PT & Domingo RJ. (2006). First things first: developing academic competence in the first year of college. *Res High Educ* 47:149 DOI:10.1007/s11162-005-8884-4

Reay D. Cultural reproduction: mothers' involvement in their children's primary schooling. *Chapter 4*, in Grenfell M, James D. (Eds). *Bourdieu and education: acts of practical theory.* 1998, London; Falmer Press.

Reay D, Crozier G & Clayton J. (2010). ‘Fitting in’ or ‘standing out’: Working-class students in UK higher education. *British Educational Research Journal*, 36; 1:107–124. DOI:10.1080/ 01411920902878925

Reay D. (2015). Habitus and the psychosocial: Bourdieu with feelings. *Cambridge J Education* 45; 1:9-23
Retrieved from: http://dx.doi.org/10.1080/0305764X.2014.990420 Accessed: 1 May 2018

Reichertz J. (2009). Abduction: The Logic of Discovery of Grounded Theory. *Forum: Qualitative Social Research* 11;1 Art. 13.
Available at: http://nbn-resolving.de/urn:nbn:de:0114-fqs1001135, Accessed: 24 Mar 2018

Reynolds H. *The other side of the frontier. Aboriginal resistance to the European invasion of Australia.* 2006, New South Wales Publishing, Australia.

Reynolds H. *Truth-telling. History, sovereignty and the Uluru Statement.* 2021, Sydney. NewSouth Books.

Rhodes R. (2002). Two concepts of medical ethics and their implications for medical education. *The Journal of Medicine and Philosophy: A forum for Bioethics and the Philosophy of Medicine* 27; 4:493-508 Retrieved from: htpps://doi.org/10.1076/jmep.27.4.493.8608

Rhodes R, Cohen D, Friedman E & Muller D. (2004). Professionalism in medical education. *Am J Bioethics* 4; 2:20-22 DOI: 10.1162/152651604323097673

Richards L. *Handling qualitative data. A practical guide.* 2005, SAGE Publications.

Ridley D. (2017). Institutionalising critical pedagogy: lessons from against and beyond the neo-liberal university. *Power and Education* 9; 1:65-81
Retrieved from: https://doi.org/10.1177/1757743817693250

Rimke H. Sickening Institutions: a feminist, sociological analysis and critique of religion, medicine and psychiatry. Chapter 2. In Kilty JM, Dej E. (Eds.) *Containing Madness.* 2018, Springer. Retrieved from: https://doi.org/10.1007/978-3-319-89749-3_2

Risdon C & Edey L. (1999). Human doctoring: bringing authenticity to our care. *Acad Med* 74:896-899

Ritz SA, Beatty K & Ellaway RH. (2014). Accounting for social accountability: developing critiques of social accountability within medical education. *Education for Health* 27; 2:152-157 DOI: 10.4103/1357-6283.143747

Robb N, Dunkley L, Boynton P & Greenhalgh T. (2007). Looking for a better future: identity construction in economically deprived 16 year olds looking for a career in medicine. *Social Science & Medicine* 65:738-745 DOI: 10.1016/jsocscimed.2007.03.011

Robbins D. (1993). The practical importance of Bourdieu's analyses of higher education. *Studies in Higher Education* 18; 2:151-163
Retrieved from: https://doi.org/10.1080/03075079312331382339

Rogers WA. (2004). Evidence based medicine and justice: a framework for looking at the impact of EBM upon vulnerable and disadvantaged groups. *J Medical Ethics* 30:141-145 DOI: 10.1136/jme.2003.007062

Rogers W, Ballantyne A. (2010). Towards a practical definition of professional behaviour. *J Medical Ethics* 36:250-254 DOI: 10.1136/jme.2009.035121

Roland M, Everington S, Marshall M. (2020). Social prescribing – transforming the relationship between physicians and their patients. *NEJM* 383; 2:97-99

Rollett S. 2020, May 18. Putting knowledge to work remotely. [Blogpost] Retrieved from: https://stephenrollett.com/2020/05/18/putting-knowledge-to-work-remotely/amp/

Rosaen CL, Foster-Fishman & Fear FA. (2001). The citizen-scholar: joining voices and values in the engagement interface. *The Scholarship of Engagement* 12; 4:10-29

Rose G. (2001). Sick individuals and sick populations. *International J of Epidemiology* 30; 3:427-432 Retrieved from: https://doi.org/10.1093/ije/30.3.427

Rosenstreich G, Comfort J & Martin P. (2011). Primary health care and equity: the case of lesbian, gay, bisexual, trans and intersex Australians. *Australian J Primary Health Care* 17: 302-308 DOI: 10.1071/PY11036

Ross PT, Williams BC, Doran KM & Lypson ML. (2010). First year medical students' perceptions of physicians' responsibilities to the underserved: an analysis of reflective essays. *J Nat Med Assoc* 102:761-765 DOI: 10.1016/s0027-9684(15)30672-6

Rothstein WP. *American medical schools and the practice of medicine. A History.* 1987, Oxford UP.

Roughead EE, Semple SJ & Rosenfeld E. (2016). The extent of medication errors and adverse drug reactions throughout the patient journey in acute care in Australia. *International J of Evidence-Based Healthcare* 14; 3:113-122 DOI: 10.1097/XEB.0000000000000075

Royal College of Physicians and Surgeons of Canada. (2005). CanMEDS Framework. Retrieved from: http://www.collaborativecurriculum.ca/en/modules/CanMEDS/CanMEDS-intro-background-01.jsp (Accessed 29 Aug 2012)

Rubin BA. (2012). Shifting social contracts and sociological imagination. *Social Forces* 91; 2:327-346 Retrieved from: https://doi.org/10.1093/sf/sos122

Ruger JP. (2004). Health and social justice. *The Lancet* 364; 9439:107
Retrieved from: https://www.who.int/bulletin/volumes/89/1/10-082388/en/

Samra R & Hankivsky O. (2021). Comment. Adopting an intersectionality framework to address power and equity in medical education. *Lancet 397:857-859*
Retrieved from: https://doi.org/10.1016/S0140-6736(20)32513-7

Samuel A, Konopasky A, Schuwirth LWT, King SM & Durning SJ. (2020). Five principles for using educational theory: strategies for advancing health professions education. *Academic Medicine* 95; 4:518-522 DOI:10.1097/ACM.0000000000003066

Sandhu G, Garcha I, Sleeth J, Yeates K & Ross Walker G. (2013). AIDER: a model for social accountability in medical education and practice. *Medical Teacher* 35:e1403-e1408
DOI: 10.3109/0142159X.2013.770134

Sandhu G. (2014). When I say… social accountability in medical education. *Medical Education* 49:23-24 DOI:10.1111/medu.12380

Santos B. (2007). Beyond abyssal thinking. From global lines to ecologies of knowledges. *Review,* XXX; 1:45-89

Sales CS, Schlaff AL. (2010). Reforming medical education; a review and synthesis of five critiques of medical practice. *Social Science & Medicine* 70:1665-1668
DOI: 10.1016/j.socscimed.2010.02.018

Sandberg F. *Recognition of prior learning in health care – from a caring ideology and power to communicative action and recognition.* 2012, Linkoping Sweden; LiU-Tryck.

Sanders D, Nandi S, Labonté R, Vance C, Van Damme W. (2019). From primary health care to universal health coverage - one step forward and two steps back. *The Lancet* 394:619-621

DOI: 10.1016/S0140-6736(19)31831-8

Sapolsky RM. (2004). Social status and health in humans and other animals. *Annual Review of Anthropology* 33:393-418 DOI: 10.1146/annurev.anthro.33.070203.144000

Sapolsky RM. *Monkeyluv: and other essays on our lives as animals.* 2005, Penguin Books.

Sartorius N. (2009). Medicine in the era of decivilization. *Medical Sciences* 33:9-28t
Retrieved from: https://hrcak.srce.hr/42377 Accessed 10/7/2020

Savin-Baden M. Disjunction as a form of troublesome knowledge in problem-based learning. Chapter 11, in Meyer JHF, Land R. *Overcoming barriers to student understanding.* 2006, New York, London; Routledge.

Savransky M, Rosengarten M. (2016). What is nature capable of? Evidence, ontology and speculative humanities. *Medical Humanities* 0:1-7 DOI:101136/medhum-2015-010858

Schirato T, Webb J. (2003). Bourdieu's concept of reflexivity as meta-literacy. *Cultural Studies* 17; 3-4:539-553 Retrieved from: https://doi.org/10.1080/0950238032000083935

Schiff T & Rieth K. (2012). Projects in medical education: "Social justice in medicine." A rationale for an elective program as part of medical education curriculum at John A. Burns School of Medicine. *Hawaii J Medicine & Public Health* 71; 4: S1

Schon DA. *The reflective practitioner: how professionals think in action.* 1991, Routledge.

Schultze U, Stabell C. (2004). Knowing what you don't know? Discourses and contradictions in knowledge management research. *J of Management Studies* 41; 4:549-573
Retrieved from: https://doi.org/10.1111/j.1467-6486.2004.00444.x

Schütze H, Jackson Pulver L & Harris M. (2017). What factors contribute to the continued low rates of indigenous status identification in urban general practice? – A mixed-methods multiple site case study. *BMC Health Services Research* 17:95
DOI: 10.1186/s12913-017-2017-6

Schuwirth L & Ash J. (2013). Assessing tomorrow's learners: In competency based education only a radically holistic method of assessment will work. Six things we could forget. *Medical Teacher* 35; 7:555-559 DOI: 10.3109/0142159X.2013.787140

Scott WR. (2010). Reflections: the past and future of research on institutions and institutional change. *J Change Management* 10; 1:5-21

Retrieved from: https://doi.org/10.1080/14697010903549408

Seale C, Gobo G, Gubrium JF & Silverman D. *Qualitative Research Practice.* 2004, London; SAGE.

Self DJ, Baldwin DC & Wolinsky FD. (1992). Evaluation of teaching medical ethics by an assessment of moral reasoning. *Medical Education* 26:178–184
DOI: 10.1111/j.1365-2923.1992.tb00151.x

Self D, Jecker NS & Baldwin DC Jnr. (2003). The moral orientations of justice and care among young physicians. *Cambridge Quarterly of Healthcare Ethics* 12:54-60
DOI: 10.1017/S0963180103121068

Semetsky I. (Ed.) *Semiotics education experience*. 2010, Netherlands: Sense Publishers.

Sen A. *Development as freedom*. 1999, New York: Alfred A. Knopf, Inc.

Sen A. *The idea of justice.* 2009, London: Penguin.

Sen's Capability Approach. *Internet Encyclopedia of Philosophy*.
Retrieved from: https://www.iep.utm.edu/sen-cap/ Accessed 20/03/2020

Shaffer HR. *Social development.* 1996, Oxford, UK: Blackwell Publishers.

Saito M. (2003). Amartya Sen's capability approach to education: a critical exploration. *J of Philosophy of Education* 37; 1:17-33
Retrieved from: https://doi.org/10.1111/1467-9752.3701002

Savransky M, Rosengarten M. (2016). What is nature capable of? Evidence, ontology and speculative humanities. *Med Humanit* 0:1-7 DOI: 10.1136/medium-2015-010858

Shanafelt TD, Schein E, Minor LB &Trockel M. (2019). Healing the professional culture of medicine. *Mayo Clinic*

Shapiro J. (2008). Walking a mile in their patients' shoes: empathy and othering in medical students' education. *Philosophy, Ethics, and Humanities in Medicine* 3:10
DOI: 10.1186/1747-5341-3-10

Shay S. (2013). Conceptualization of curriculum differentiation in higher education: a sociology of knowledge point of view. *Br. J. Sociol. Educ.* 34; 4:563-582
Retrieved from: http://dx.doi.org/10.1080/01425692.2012.722285

Sinclair S. *Making doctors: an institutional apprenticeship.* 1997, UK. Routledge.

Singh G, Cowden S. *Acts of knowing. Critical pedagogy in, against and beyond the university.* 2013, London; Bloomsbury Publishing.

Singh P. (1997). Review Essay: Basil Bernstein (1996). *Pedagogy, symbolic control and identity.* London: Taylor & Francis. In, *British Journal of Sociology of Education* 18; 1:119-1

Skarlicki DP, Hoegg J, Aquino K & Nadisic T. (2013). Does injustice affect your sense of taste and smell? The mediating role of moral disgust. *Journal of Experimental Social Psychology* 49: 852-859 Retrieved from https://doi.org/10.1016/j.jesp.2013.03.011

Skulmowski A & Rey GD. (2018). Embodied learning: introducing a taxonomy based on bodily engagement and task integration. *Cognitive Research: Principles & Implications* 3; 6 Retrieved from: https://doi.org/10.1186/s41235-018-0092-9

Smeby J-C & Vågan A. (2008). Recontextualising professional knowledge – newly qualified nurses and physicians. *J Education and Work* 21:2:159-173
DOI: 10.1080/13639080802018014

Smith AC, Kleinman S. (1989). Managing emotions in medical school: students' contacts with the living and the dead. *Soc Psychol Q* 52; 1:56–69 DOI:10.2307/2786904

Smith KL, Saavedra S, Raeke JL & O'Donell AA. (2007). The journey to making a campus-wide culture of professionalism. *Academic Medicine* 82:1015-1021
DOI: 10.1097/ACM.0b013e318157633e

Smith L. (2011). Experiential 'hot' knowledge and its influence on low-SES students' capacities to aspire to higher education. *Critical Studies in Education* 52; 2:165-177
Retrieved from: https://doi.org/10.1080/17508487.2011.572829

Social Justice Report 2011. *2.2 Understanding lateral violence.* Australian Human Rights Commission. Retrieved from: http://www.humanrights.gov.au/publications/chapter-2-lateral-violence-aboriginal-and-torres-strait-islander-communities-social (Accessed 22 Feb 2017)

Sointu E. (2017). 'Good' patient/'bad' patient: clinical learning and the entrenching of inequality. *Sociology of Health & Illness* 39; 1:63-77 DOI:10.1111/1467-9566.12487
DOI: 10.1111/1467-9566.12487

Sokol DK. (2013). "First do no harm" revisited. *BMJ* 347:f6426 DOI: 10.1136/bmj.f6426

Solbrekke TD, Englund T. (2011). Bringing professional responsibility back in. *Studies in Higher Education* 36: 847–861 Available at: https://doi.org/10.1080/03075079.2010.482205

Solbrekke TD, Karseth B, Beck EE & Englund T. Educating for professional responsibility: from critical thinking to deliberative communication, or why critical thinking is not enough. Chapter 3, in Trede F, McEwen C. (Eds.) *Educating the Deliberate Professional,* Professional and Practice-based Learning 17. 2016, Switzerland; Springer.
DOI 10.1007/978-3-319-32958-1_3

Sommerlad H. (2007). Researching and theorizing the processes of professional identity formation. *J of Law and Society* 34; 2:190-21
Retrieved from: https://doi.org/10.1111/j.1467-6478.2007.00388.x

Sommers C, Boos M, Conradi E, Biller-Adorno N & Wiesemann C. (2011). Care and justice arguments in the ethical reasoning of medical students. *Ramon Llull J of App Ethics* 2:9-32
DOI: 10.5167/uzh-49252

Southgate E, Kelly BJ & Symonds I.M. (2015). Disadvantage and the capacity to aspire to medical school. *Medical Education* 49; 1:73-83

Southgate E, Brosnan C, Lempp H, Kelly B, et al. (2017). Travels in extreme social mobility: how first-in-family students find their way into and through medical education. *Critical Studies in Education* 58; 2:242-260 DOI: 10.1080/17508487.2016.1263223

Stacy R & Spencer J. (2000). Assessing the evidence in qualitative medical education research. *Medical Education* 34:498-500 DOI: 10.1046/j.1365-2923.2000.00710.x

Stapleton G, Schröder-Bäck P, Laaser U, Meershoek A & Popa D. (2014). Global health ethics: an introduction to prominent theories and relevant topics. *Global Health Action* 7:235-69 Retrieved from: http://dx.doi.org/10.3402/gha.v7.23569

Star SL. (2010). This is not a boundary object: reflections on the origin of a concept. *Science, Technology & Human Values* 35; 5:601-617 DOI: 10.1177/0162243910377624

Staub E, Bar-Tal D, Karylowski J & Reykowski J. (Eds.) *Development and maintenance of prosocial behavior. International perspectives on positive morality.* Critical Issues in Social Justice Series. 1984, New York; Plenum Press.

Steptoe A & Marmot M. (2002). The role of psychobiological pathways in socio-economic inequalities in cardiovascular disease risk. *Eur Heart J*. 23; 1:13–25
DOI: 10.1053/euhj.2001.2611

Stetsenko A & Arievitch IM. (2004). The self in cultural-historical activity theory. Reclaiming the unity of social and individual dimensions of human development. *Theory & Psychology* 14; 4:475-503 Retrieved from: https://doi.org/10.1177/0959354304044921

Stetsenko, A. Transformative activist stance for education: The challenge of inventing the future in moving beyond the status quo. In: T. Corcoran (ed.) *Psychology in Education: Critical Theory-Practice*. 2014. Melbourne, Australia: Sense Publishers, pp. 181–198.

Stolk J, Hubbard K & Çetinkaya S. (2017). Critical mass or critical culture? Gendered perceptions of women and men in an Engineering School. Conference: 2017 IEEE Frontiers in Education Conference (FIE). Available at: www.researchgate.net/publication/321814217

Stolz SA. (2015). Embodied learning. *Educational Philosophy & Theory* 47; 5:474-487 Retrieved from: https://doi.org/10.1080/00131857.2013.879694

Stone JR. (2010). Saving and ignoring lives: physicians' obligations to address root social influences on health – moral justifications and educational implications. *Cambridge Quarterly of Healthcare Ethics* 19:497-509 DOI: 10.1017/S0963180110000393

Sturmer S, Snyder M & Omoto AM. (2005). Prosocial emotions and helping: the moderating role of group membership. *J Personality and Social Psychology* 88; 3:532-546
DOI: 10.1037/0022-3514.88.3.532

St-Pierre I. (2012). Horizontal Violence: Foucault and the nexus between violence and power: the context of intra/inter professional aggression. In Rudge T, Holmes D. (Eds). *(Re)-Thinking violence in health care settings: a critical approach.* Taylor & Francis, UK.

Sullivan WM. (2000). Medicine under threat: professionalism and professional identity. *CMAJ* 162; 5: 673-675

Sveiby K-E, Skuthorpe T. *Treading lightly*: *the hidden wisdom of the world's oldest people*. 2006, Australia; Allen & Unwin.

Sveiby K-E. (2009). Aboriginal principles for sustainable development as told in traditional law stories. *Sustainable Development* 17:341-356 DOI: 10.1002/sd.389

Swanson AG. (1989). Medical education reform without change. *Mayo Clin Proc* 64; 9:1173-1174 DOI: 10.1016/s0025-6196(12)64987-8

Sweetman P. (2003). Twenty-first century dis-ease? Habitual reflexivity or the reflexive habitus. *The Sociological Review* 51; 4:528-549
Retrieved from: http://dx.doi.org/10.1111/j.1467-954X.2003.00434.x

Sweller J, Ayers P & Kalyuga S. *Cognitive load theory*. 2011, Springer.

Szenes E, Tilakaratna N & Maton K. (2015). The knowledge practices of critical thinking. Chap 33, in *The Palgrave Book of Critical Thinking in Higher Education.* Davies M, Barnes R, Eds. Palgrave-Macmillan. DOI: 10.1057/9781137378057.0043

Tawfik DS, Profit J, Webber S & Shanafelt TD. (2019). Organizational factors affecting physician well-being. *Current Treatment Options in Pediatrics* 5:11-25
DOI: 10.1007/s40746-019-00147-6

Taylor C & White S. *Practising reflexivity in health and welfare: making knowledge.* 2000. Buckingham, Open University Press.

Taylor DCM & Hamdy H. (2013). Adult learning theories: implications for learning and teaching in medical education: AMEE Guide No. 83. *Medical Teacher* 35:e1561-e1572
DOI: 10.3109/0142159X.2013.828153

Taylor JS. (2003). Confronting "culture" in medicine's "culture of no culture". *Acad Med* 78:555-559 DOI: 10.1097/00001888-200306000-00003

Teherani A, Nishimura H, Apatira L, Newman T & Ryan S. (2017). Identification of core objectives for teaching sustainable healthcare education. *Med Educ Online* 22: 1:1386042
DOI: 10.1080/10872981.2017.1386042

Tennis JT. (2013). Ethos and ideology of knowledge organization: toward precepts for an engaged knowledge organization. *Knowledge Organization* 40; 1:42-49
DOI: 10.5771/0943-7444-2013-1-42

The Ethics Centre. (2017). IQ2 Debate: Political correctness has failed itself. Retrieved from: http://www.ethics.org.au/events/past-event-gallery/iq2-debate-political-correctness-has-failed-itself (Accessed 10 April 2017)

THEnet framework. (2010). Faculty of Medicine, Nursing and Health Sciences, Flinders University. Retrieved from:

https://www.flinders.edu.au/mnhs/community-programs/social-accountability.cfm (Accessed: 23 Sep 2016)

Therborn G. (Ed). *Inequalities of the world.* 2006, UK. Verso.

Therborn G. *The killing fields of inequality*. 2013, Cambridge, UK. Polity Press.

Thomas AJ, Barrie R, Brunner J, Clawson A, Hewitt A, Jeremie-Brink G & Rowe-Johnson M. (2014). Assessing critical consciousness in youth and young adults. *J of Research on Adolescence* 24; 3:485-496 DOI: 10.1111/jora.12132

Thompson LG & Davis PM. (2008). Best medical practices in social accountability and continuing professional development: a survey and literature review. *J Interprofessional Care* 22(S1):30-39 DOI: 10.1080/13561820802013347

Thompson P. (2014). 'Scaling up' educational change: some musings on misrecognition and doxic challenges. *Critical Studies in Education* 55; 2:87-103
Retrieved from: http://dx.doi.org/10.1080/17508487.2014.863221

Tobin GA & Begley CM. (2004). Methodological rigour in a qualitative framework. *J of Advanced Nursing* 48; 4:388-396 DOI: 10.1111/j.1365-2648.2004.03207.x

Torres-Harding SR, Steele C, Schulz E, Taha F & Pico C. (2014). Student perceptions of social justice and social justice activities. *Education, Citizenship & Social Justice* 9; 1:55-66
DOI: 10.1177/1746197914520655

Törrönen J. (2018). Using vignettes in qualitative research as clues, microcosms or provokers. *Qualitative Research Journal* 80; 3:276-286 DOI: 10.1108/QRJ-D-17-00055

Townsend L, Brunetti K & Hofer A. (2011). Threshold Concepts and Information Literacy. Portal: *Libraries And The Academy* 11; 3:853-869 DOI: 10.1353/pla.2011.0030

Trede F. (2009). Becoming a professional in the 21st Century. *J Emergency Primary Health Care* 7; 4 Retrieved from: http://ro.ecu.edu.au/jephc/vol7/iss4/6 (Accessed 11 May 2017)

Tredinnick-Rowe J. (2015). In search of Thure von Uexküll: Psychosomatician? Biosemiotician? or Clinical educator? *Semiotics 2015: Virtual Identities* 223-235
Retrieved from: https://doi.org/10.5840/cpsem201524

Tredinnick-Rowe J. (2018). Presentation. Medical semiotics and medical education: can medical semiotics be part of the humanising turn in medical education?

DOI: 10.13140/RG.2.2.15501.03047

Tromp N & Baltussen R. (2012). Mapping of multiple criteria for priority setting of health settings: an aid for decision makers. (2012). *BMC Health Services Research* 12:454 http://www.biomedcentral.com/1472-6963/12/454

Tsey K & Hunter E. (2002). Indigenous health and the contribution of sociology: a review. *Health Sociology Review* 11; 1-2:79-86
Retrieved from: https://doi.org/10.5172/hesr.2002.11.1-2.79

Tsey K, Whiteside M, Haswell-Elkins M, Bainbridge R, Cadet-James Y & Wilson A. (2010). Empowerment and Indigenous health: a synthesis of findings from Family Wellbeing formative research. *Health and Social Care in the Community* 18; 2:169-179
DOI: 10.1111/j.1365-2524.2009.00885.x

Tsouroufli M, Rees CE, Monrouxe LV & Sundaram V. (2011). Gender, identities and intersectionality in medical education research. *Medical Education* 45:213-216
DOI: 10.1111/j.1365-2923.2010.03908.x

Tudor Hart J. (1971). The inverse care law. *Lancet* 297:405–412.

Turner RH. (1982). The self-concept. *Annual Review of Sociology* 8:3

Twohig PL, MacDonald C. (2004). Professionalism and the social role of medicine. *The American J of Bioethics* 4; 2:3-5 Available at: https://doi.org/10.1162/152651604323097844

Universities Australia. (2019). *Facts and publications.* Retrieved from: https://www.universitiesaustralia.edu.au/stats-publications/ Accessed 24/09/2019

Unterhalter E, Ladwig JG & Jeffrey C. (2014). Review Symposium. Decoding aspirations: social theory, the capability approach, and the multiple modalities of education. *British J of Sociology of Education* 35; 1:133-145

Vandenberghe F. Chapter 3. Sociology at the scale of the individual: Archer and Lahire contra Bourdieu. Robbins D. (Ed.) *The Anthem Companion to Pierre Bourdieu*. 2016, Anthem Books.

Van De Ven AH, Johnson PE. (2006). Knowledge for theory and practice. *Academy of Management Review* 31; 4:802-821 DOI: 10.2307/20159252

van Dijk TA. (1993). Principles of critical discourse analysis. *Discourse & Society* 4; 2:249-283

Verdonk P. (2015). When I say… reflexivity. *Medical Education* 49:147-148 DOI: 10.1111/medu.12534

Verdonk P & Abma T. (2013). Intersectionality and reflexivity in medical education research. *Medical Education* 14:752-759 DOI: 10.1111/medu.12258

Verdonk P & Janczukowicz J. (2018). Editorial: Diversity in Medical Education. *MedEdPublish* Retrieved from: https://www.mededpublish.org/manuscripts/1415 Accessed: 22/04/2019

Vermeulen KM & Krabbe PFM. (2018). Value judgements of health interventions from different perspectives: arguments and criteria. *Cost Eff Resour Alloc* 16:16 DOI: 10.1186/s12962-018-0099-6

Veronesi MC & Gunderman RB. (2012). Perspective: The potential of student organizations for developing leadership: One school's experience. *Academic Medicine* 87:226-229 DOI: 10.1097/ACM.0b013e31823fa47c

VicHealth. 2015. *Promoting equity through social innovation*. Victorian Health Promotion Foundation.

Von Uexkull J. (2001). An introduction to umwelt. *Semiotica* 134;107-110

Vygotsky LS. Interaction between learning and development. In Gauvain & Cole (Eds.) *Readings on the development of children.* 1978, New York: Scientific American books, 34-40.

Wainwright SP, Williams C, Michael M & Cribb A. Stem cells, translational research and the sociology of science. Chap 4. In Atkinson P, Glasner P & Lock M. (Eds.) *The handbook of genetics and society: Mapping the new genomic era.* 2009, London; Routledge.

Waitzkin H. (1989). A critical theory of medical discourse: ideology, social control and the processing of social context in medical encounters. *J Health and Social Behaviour* 30; 2:220-239 DOI: 10.2307/2137015

Walker M & Wilson-Strydom M. (Eds.). *Socially just pedagogies, capabilities and quality in higher education. Global perspectives.* 2016, London: Palgrave MacMillan.

Walker RJ, Smalls BL, Campbell JA, Strom Williams JL & Egede LE. (2014). Impact of social determinants of health on outcomes for type 2 diabetes: a systematic review. *Endocrine* 47:29-48 DOI: 10.1007/s12020-014-0195-0

Walker M, Unterhalter E. *Amartya Sen's Capability Approach and Social Justice Education.* 2007, MacMillan.

Wallerstein N. (2006). *What is the evidence on effectiveness of empowerment to improve health?* Copenhagen, WHO Regional Office for Europe (Health Evidence Network report; http://www.euro.who.int/Document/E88086.pdf, (Accessed 20 May 2016)

Walton E. (2018). Decolonising (through) inclusive education. *Education Research for Social Change* 7:31-45 Retrieved from: http://dx.doi.org/10.17159/2221-4070/2018/v7i0a3

Walton MM. (2006). Hierarchies: the Berlin Wall of patient safety. *Qual Saf Health Care* 15:229-230 DOI: 10.1136/qshc.2006.019240

Ward P. (2006). Trust, reflexivity and dependence: a 'social systems theory' analysis of/in medicine. *European J of Social Quality* 6; 2:143-158 DOI: 10.3167/ejsq.2006.060208

Ward P & Coates A. (2006). 'We shed tears, but there is no-one there to wipe them for us': narratives of (mis)trust in a materially deprived community. *health: An Interdisciplinary Journal for the study of Health, Illness and Medicine* 10; 3:283-381
DOI: 10.1177/1363459306064481

Ward PR. (2009). The relevance of equity in health care for primary care: creating and sustaining a fair go for a fair innings. *Quality in Primary Care* 17:49-54

Ward J. (2015). Improving health equity in Australia: practical advice for those ready to act. *MJA* 203; 8:317-318e DOI: 10.5694/mja15.00415

Wasserman JA. (2014). On art and science: an epistemic framework for integrating social science and clinical medicine. *J Medicine and Philosophy* 39:279-303
DOI: 10.1093/jmp/jhu015

Watson J. (2010). *Palm Island Through A Long Lens.* Aboriginal Studies Press.

Watson J, Widin J. (2014). Maintaining the status quo: symbolic violence in higher education. *Higher Education Research & Development* DOI:10.1080/07294360.2014.973374

Wayne S, Timm C, Serna L, Solan B & Kalishman S. (2010). Medical students' attitudes toward underserved populations: changing associations with choice of primary care versus non-primary care residency. *J of Health Care for The Poor and Underserved* 21:438-447
DOI: 10.1353/hpu.0.0317

Wear D & Bickel J. (Eds). *Educating for professionalism. Creating a culture of humanism in medical education.* 2000, University of Iowa Press.

Wear D & Kuczewski MG. (2004). The professionalism movement: can we pause? *Am J Bioeth* 4; 2:1–10 DOI: 10.1162/152651604323097600

Wear D & Aultman JM. (Eds.). *Professionalism in medicine. Critical perspectives.* 2006, Springer.

Weber M. The theory of social and economic organization. 1947, New York; The Free Press.

Weiner EJ. *Deschooling the imagination. Critical thought as social practice*. 2014, Paradigm Publishers.

Wen LS, Greysen SR, Keszthelyi D & Bracero J. (2011). Comment: Social accountability in health professionals' training. *Lancet* April 7 :*e12* DOI: 10.1016/501406736(10)62314-8

Wharton AS. (1999). The psychosocial consequences of emotional labour. *ANNALS of the American Academy of Political and Social Science* 561:158-176
Retrieved from: https://doi.org/10.1177/000271629956100111

Wheeler W. *The whole creature. Complexity, biosemiotics and the evolution of culture.* 2006, London; Lawrence & Wishart.

White J. Ludwik Fleck: Thought collectives and the sociology of medical knowledge. In Collyer (Ed.). Chapter 9. *The Palgrave Handbook of Social Theory in Health, Illness and Medicine*. 2015, Palgrave Macmillan.

White W. (2014). Professional self-regulation in medicine. *Virtual Mentor* 16; 4:275-
DOI: 10.1001/virtualmentor.2014.16.4.hlaw1-1404.

Whitehead M, Dahlgren G. *Concepts and principles of tackling social inequities in health. Levelling up Part 1.* 2006, WHO Europe.

Whiteside M, Bould E, Tsey K, Venville A, et al. (2017). Promoting twenty-first-century student competencies: a well-being approach. *Australian Social Work* 70; 3:324-336

Whittenbury KJ. (2016). Doing justice to the psychosocial history in the oral case presentation: critical thinking about the patient and the person. *Academia.org*

WHO, UNICEF. Declaration of Alma-Ata. International Conference on Primary Health Care, Alma-Ata, USSR, 6–12 September 1978. Retrieved from: https://www. who.int/publications/almaata_declaration_en.pdf (Accessed Sept 3, 2019)

WHO Regional Office for Europe (Health Evidence Network report). Retrieved from: http://www.euro.who.int/Document/E88086.pdf, (Accessed 01 Feb 2016)

WHO. *Global health risks. Mortality and burden of disease attributable to selected major risks.* 2009, World Health Organization.

WHO. (2015). *Health and human rights.* Factsheet No. 323. Retrieved from: http://www.who.int/mediacentre/factsheets/fs323/en/ (Accessed 03 Feb 2017)

WHO. (2016). *Health Impact Assessment: The determinants of health*. http://www.who.int/hia/evidence/doh/en/ (Accessed 27 Dec 2016)

WHO. (2017). Health is a fundamental human right. Retrieved from: www.who.int/mediacentre/news/statements/fundamental-human-right/en/ (Accessed 16 April 2018)

Wilensky H. (1964). The professionalization of everyone. *American J of Sociology* DOI:10.1086/223790

Wiles JL, Allen RES & Butler R. (2016). Owning my thoughts was difficult: encouraging students to read and write critically in a qualitative research methods course. *J of University Teaching & Learning Practice* 13; 1 Retrieved from: http://ro.uow.edu.au/jutlp/vol13/iss1/8

Wilkes MS, Hoffman JR, Slavin SJ & Usatine RP. (2013). The next generation of doctoring. *Academic Medicine* 88:438-441 DOI: 10.1097/ACM.0b013e318285b019

Williams G & Popay J. (2001). Lay health knowledge and the concept of the lifeworld. In (Scambler G. (Ed.). *Habermas, critical theory and health.* London & New York, Routledge.

Williamson V, Murphy D, Greenberg N & Stevelink S. *Moral injury: violating your ethical code can damage your mental health – new research.* The Conversation. April 30th, 2019. Retrieved from: https://theconversation.com/moral-injury-violating-your-ethical-code-can-damage-mental-health-new-research-115654

Wilson AP. (1993). The promise of situated cognition. In: Merriam SB, editor. *An update on adult learning theory. New directions for adult and continuing education*. San Francisco, CA: Jossey-Bass.

Wilson IG, Roberts C, Flynn EM & Griffin B. (2012). Only the best: medical student selection in Australia. *MJA* 196; 5 DOI: 10.5694/mja10.11388

Wilson M. (2002). Six view of embodied cognition. *Psychonomic Bulletin & Review* 9; 4:625-636 Retrieved from: https://doi.org/10.3758/BF03196322

Wilson-Strydom M, Walker M. (2015). A capabilities-friendly conceptualisation of flourishing in and through education. *J of Medical Education*
Retrieved from: http://dx.doi.org/10.1080/03057240.2015.1043878

Winchester S. *The man who loved China: The fantastic story of the eccentric scientist who unlocked the mysteries of the Middle Kingdom.* 2008, NYC; Harper.

Woloschuk W, Harasym PH & Temple W. (2004). Attitude change during medical school: a cohort study. *Medical Education* 38:522–534 DOI: 10.1046/j.1365-2929.2004.01820.x

Woollard RF. (2006). Caring for a common future: medical schools' social accountability. *Medical Education* 40:301-313 DOI: 10.1111/j.1365-2929.2006.02416.x

Worley P, Murray R. (2011). Social accountability in medical education – An Australian rural and remote perspective. *Med Teach* 33:654-658 DOI: 10.3109/0142159X.2011.590254

Worsdale R. (2017). Recognition, ideology and the case of "invisible suffering". *Eur J Phil* 1-16. Retrieved from: https://doi.org/10.1111/ejop.12287

Working Party of the Royal College of Physicians. *Doctors in society: medical professionalism in a changing world.* 2005. Technical supplement to a report of a working party of the Royal College of Physicians of London. Available at: https://pubmed.ncbi.nlm.nih.gov/16408403/

Wright S. (2015). Medical school personal statements: a measure of motivation or proxy of cultural privilege? *Adv in Health Sci Educ* 20:627-643 DOI: 10.1007/s10459-014-9550-4

Wright E, Osman R. (2018). What is crucial for transforming higher education? The transformative potential of pedagogic framework of phenomenography and variation theory of learning for higher education. *J of Human Behavior in the Social Environment* 28; 3:257-270 Retrieved from: https://doi.org/10.1080/10911359.2017.1419898

Wynia MK, Latham SR, Kao AC, Berg JW & Emanuel LL. (1999). Medical professionalism in society. *NEJM* 341:21:1612-1616 DOI: 10.1056/NEJM199911183412112

Yardley S, Brosnan C & Richardson J. (2013). The consequences of authentic early experience for medical students: the creation of metis. *Medical Education* 47:109-119

DOI: 10.1111/j.1365-2923.2012.04287.x

Yeager KA, Bauer-Wu S. (2013). Cultural humility: essential foundation for clinical researchers. *Applied Nursing Research* 26:251-25 DOI: 10.1016/j.apnr.2013.06.008

Yeung AS, Li B, Wilson I & Craven RG. (2013). The role of self-concept in medical education. *J Further and Higher Education*
Retrieved from: http://dx.doi.org/10.1080/0309877X.2013.765944

Yoder KJ, Decety J. (2014). The good, the bad, and the just: justice sensitivity predicts neural response during moral evaluation of actions performed by others. *J Neuroscience* 34; 12: 4161-4166 DOI: 10.1523/JNEUROSCI.4648-13.2014

Young IM. (1990). *Justice and the politics of difference*. Princeton University Press.

Young IM. (2012). Responsibility and global justice: a social connection model. *Social Philosophy and Policy* 23; 1:102-130 DOI:10.1017/S0265052506060043

Young ME, Ryan A. (2020). Post-positivism in health professions scholarship. *Acad Med* 95:655-699 DOI: 10.1097/ACM.0000000000003089

Youngclaus JA, Koehler PA, Kotlikoff LJ & Wiecha JM. (2013). Can medical students afford to choose primary care? An economic analysis of physician education debt repayment. *Academic Medicine* 88:16-25 DOI: 10.1097/ACM.0b013e318277a7df

Yunkaporta T. *Sandtalk. How Indigenous thinking can save the world.* 2019, Melbourne; Text Publishing.

Zipin L, Sellar S, Brennan M & Gale T. (2015). Educating for futures in marginalized regions: a sociological framework for rethinking and researching aspirations. *Educational Philosophy and Theory* 47; 3:227-246 Retrieved from: https://doi.org/10.1080/00131857.2013.839376

APPENDICES

APPENDIX 1. Ethics Approval Notice

INTRODUCTION

Dear Kingsley,

The Chair of the Social and Behavioural Research Ethics Committee (SBREC) at Flinders University considered your response to conditional approval out of session and your project has now been granted final ethics approval. This means that you now have approval to commence your research. Your ethics final approval notice can be found below.

FINAL APPROVAL NOTICE

Project No.: **6877**

Project Title: Critical Health Advocacy in Medicine Project (CHAMP)

⍰

Principal Researcher: Dr Kingsley Whittenbury

Email: kingsley.whittenbury@flinders.edu.au

⍰

Approval Date: 1 July 2015

Ethics Approval Expiry Date: **1 March 2019**

The above proposed project has been **approved** on the basis of the information contained in the application, its attachments and the information subsequently provided with the addition of the following comment(s):

Additional information required following commencement of research:

1. Permissions
   Please ensure that copies of the correspondence granting permission to conduct the research from any individuals / organisations still required are submitted to the Committee *on receipt.* Please ensure that the SBREC project number is included in the subject line of any permission emails forwarded to the Committee. Please note that data collection should not commence until the researcher has received the relevant permissions (item D8 and Conditional approval response – number 9).
2. Other Ethics Committees
   Please provide copies of any outstanding ethics approval notices from *on receipt*. Please note that data collection should not commence until the researcher has received the relevant ethics committee approvals (item G1 and Conditional approval response – number 11).

APPENDIX 2. Recruitment notice for student online bulletin boards

Hi Year X students! Have you heard about the 2015 CHAMP study?

All Year X medical students are being invited to volunteer to be interviewed by a researcher, and complete an online Survey of questions about their views of Social Justice in the practice of Medicine.

The main purpose of the study is to improve our approach to the teaching and learning of social justice to medical students.

The researcher is Kingsley Whittenbury, a medical graduate and educator at the University of Adelaide, who is performing the study as a Doctor of Philosophy candidate in Medicine at Flinders University.

You will be asked to attend an Interview with the researcher and complete a Survey before AND after the interview.

I will need 60 - 80 minutes of your time, outside of scheduled and compulsory attendance requirements.

The interview will be conducted by the researcher only, in a spare room in the Medical School or University, and will be electronically voice-recorded. The recording will not be released publicly.

On completion, you will be able to add this voluntary service to your Curriculum Vitae (C.V.) and will be offered a $20 Coles Food voucher.

APPENDIX 3. Consent Form for CHAMP Study

CONSENT FORM FOR PARTICIPATION IN RESEARCH

by interview and questionnaire.

Critical Health Advocacy in Medicine Project

I …...

being over the age of 18 years hereby consent to participate as requested in the 2015 CHAMP study for the research project on social justice in medicine.

1. I have read the information provided above.
2. Details of procedures and any risks have been explained to my satisfaction.
3. I agree to audio recording of my information and participation.
4. I am aware that I should retain a copy of the Information Sheet and Consent Form for future reference.
5. I understand that:

    - I may not directly benefit from taking part in this research.
    - I am free to withdraw from the project at any time and am free to decline to answer particular questions.
    - While the information gained in this study will be published as explained, I will not be identified, and individual information will remain confidential.
    - Whether I participate or not, or withdraw after participating, will have no effect on my progress in my course of study, or results gained.
    - I may ask that the recording be stopped at any time, and that I may withdraw at any time from the session or the research without disadvantage.

6. I agree/ do not agree* to the transcript being made available to other researchers who are not members of this research team, but who are judged by the research team to be doing related research, on condition that my identity is not revealed. (* circle your preference)

APPENDIX 4A. Demographic Questions (Panel 1).

Quantitative	Survey questions
Personal Identification	1. Please provide an ongoing personal email address. 2. What is your gender? 3. What was your age in years at last birthday?
Student identification	4. Which Year of Medicine are you studying? 5. Which university do you attend? 6. Are you an International student? 7. Are you an Indigenous or ATSI student? 8. Do you currently live with your parents? 9. Are you the first in your family to attend university?
Social and political tastes / habitus (Bourdieu)	10. Do you regularly discuss current events and politics with family or friends? 11. What are your cultural interests? e.g. in art, music, literature, performance, sport, etc. 12. What forms of performance do YOU participate in? e.g. play guitar, violin, sport, dance, etc.
Preferred professionalism (Wear & Aultman 2006)	13. Which ONE of the following types of medical professionalism (even if you are unsure) do you find yourself drawn to? A. Traditional doctor, working long hours, dedicated to patients B. Medical practice as a means to business ventures C. Combine medical practice with teaching and research D. Part-time doctor, part-time other interests e.g. family, lifestyle E. Technical mastery, specialist, financial success F. Follow your own personal morality, what works for you G. Practice in an area of need, concern for disadvantaged groups

APPENDIX 4B. **Interview Questions** (Panel 2)

Interview topics	**Interview questions**
The Charter of Medical Professionalism, 2002.	**Interview Q1.** At the start of the new millennium, an international group of medical educators met at the United Nations and agreed in a 'Charter on Medical Professionalism' to educate for greater social responsibility by the medical profession. The Charter mandates that, "...the medical profession must promote justice in the health care system, including the fair distribution of health care resources. Physicians should work actively to eliminate discrimination in health care, whether based on race, gender, socioeconomic status, ethnicity, religion, or any other social category." (Medical Professionalism Project, 2002, p. 244) The above statement is about doctors working towards greater social justice in health care. What do you understand is meant by the quoted statement?
Health care discrimination in Australia	**Interview Q2.** Which groups of people do you consider are discriminated against in health care, and why do you think this happens?
Social accountability in clinical medicine	**Interview Q3.** Many doctors experience 'learned helplessness' when treating people who continue to engage in unhealthy behaviours despite receiving good advice for keeping healthy. What is your perspective of this problem? What are the fundamental causes of this problem?
Social and health inequity	**Interview Q4.** Sociologists and health experts have recently written; "Social inequity is killing people on a grand scale", "Health inequity really is a matter of life and death." What do you understand is meant by these statements, and what do you think needs to be done to address this health problem? What do you understand is the difference between 'equality' and 'equity' in health care? What role/s do you think medical students and doctors should play in addressing inequalities in society that affect people's health status, if at all?

APPENDIX 4C. Interview Questions (Panel 3)

Interview topics	**Interview questions**
Medicine and the societal error	**Interview Q5.** "In the U.S. since 1950, only 3 out of the 7 years of improved life expectancy can be attributed to improvements in Medicine." What does this statistic suggest to you? What is your perspective of the role of the medical profession in improving differences in life expectancy between and within countries?
Medicine and salugenesis	**Interview Q6.** "Since social inequalities can be improved, doctors should also learn how to advocate for improvements in health for socially disadvantaged people in society." Please discuss your perspective of this statement.
Identity, stigma & self-stigma	**Interview Q7.** An Adelaide general practitioner knows that about 10% of the population is homosexual, but she is not aware of any homosexual patients in her practice. What could be the problem and what could she do to change the situation?
Social health improvement	**Final Interview Q8.** Imagine as a doctor you are paid to both treat patients and to improve their health. What are some innovative or imaginative ways you can think of, to improve the health of people in your community?

APPENDIX 4D. Survey Questions (Panel 4)

Values topic	**Survey questions**
Group memberships	14. How many groups or organisations do you belong to within Medicine?
	15. How many groups or organisations do you belong to outside of Medicine?
	16. Do you regularly volunteer to help others or raise funds for charity?
Time management	17. Do you need to earn money while you are doing Medicine?
	18. Did you take a gap year before commencing Medicine? If Yes, what activities, including travel, did you do during the gap year?
Social injustice in Australia	19. What is a community problem in Australia that you think is unjust or unfair?
	20. Which groups of people in Australian society do you think are not dealt with fairly or not given a 'fair go'?
Humanist interests	22.Name your main source of information of current events in the world e.g. TV Channel (?) News, Online news outlet (?), Radio station (?), Newspaper (?)
	23. What is the name of a humanitarian organisation that you admire?
Family capitals	24. What is the highest level of education your Mother has achieved?
	25. What is the highest level of education your Father has achieved?
	26. What is your estimate of the combined family income?
	27. What is the postcode or name of the suburb where you parent/s live?
	28. How many medical graduates are there in your family? Insert a number 0,1,2, etc.
	29. What cultural activities do people in your family enjoy? (e.g. theatre, telemovies, sport, books, games, racing, opera)
	30. Which religion does your family identify with? (e.g. Buddhist, Muslim, Christian, Hinduism, none, etc.)

APPENDIX 4E. Survey Questions (Panel 5)

Values topics	**Multiple Choice Questions**
Social justice	39. I have a firm belief in the principles of social justice. Strongly agree/Mostly agree /Mostly disagree/ Strongly disagree (4 point Likert scale)
Prosocial disposition	40. I would describe myself as altruistic. (Having unselfish concern for the welfare of others) Strongly agree/Mostly agree /Mostly disagree/ Strongly disagree (4 point Likert scale)
Health and justice	41. I do not consider the principles of social justice important to health. Strongly agree/Mostly agree /Mostly disagree/ Strongly disagree (4 point Likert scale)
Social health remediation	42. Doctors cannot change the social environment of patients. Strongly agree/Mostly agree /Mostly disagree/ Strongly disagree (4 point Likert scale)
Medicine and salugenesis	43. Medical training should include learning of skills for improving health in society. Strongly agree/Mostly agree /Mostly disagree/ Strongly disagree (4 point Likert scale)
Hidden curriculum	44. In your opinion, training at your Medical School influences students toward careers in... Primary health care / Hospital based health care
Social determinants knowledge	45. Which of the following is considered to be a social determinant of health? Please choose one answer. A. Sport B. Stigma C. Depression D. Smoking

APPENDIX 4E. Survey Questions (Panel 6)

Values topics	**Multiple Choice Questions**
Medicine and social inequalities	46. Inequalities in living conditions that affect health are social injustices that medical practitioners have a duty to help change. Strongly agree/Mostly agree /Mostly disagree/ Strongly disagree (4 point Likert scale)
Dualism of health care & salugenesis	47. Doctors should learn how to both treat patients and advocate for improved living conditions in the community. Strongly agree/Mostly agree /Mostly disagree/ Strongly disagree (4 point Likert scale)
Student prosocial activism	48. Australian medical students are entitled to engage in social and political activism to support social justice. Strongly agree/Mostly agree /Mostly disagree/ Strongly disagree (4 point Likert scale)
Underserved care intentions	49. I have often thought about working as a medical practitioner in an under-served international community. Never / Sometimes / Often
Prosociality - voluntariness	50. Donating blood for transfusion is something I currently do, or plan to do. Yes / No. Comment:
Global health concern	51. What is your greatest concern in global or international health? (Free answer)
Medical & social health policy	52. Social justice is a political issue and it should not be taught in Medicine. Strongly agree/Mostly agree /Mostly disagree/ Strongly disagree (4 point Likert scale)

APPENDIX 4F. Survey Questions (Panel 7)

Values topics	Survey Questions
Medical education of health equity	53. Medical students should learn how to improve the health status of disadvantaged people in society. Strongly agree/Mostly agree /Mostly disagree/ Strongly disagree (4 point Likert scale)
Universal health care	54. Free, universal access to medical care should be available in all countries. Strongly agree/Mostly agree /Mostly disagree/ Strongly disagree (4 point Likert scale)
Social determinants knowledge	55. Which ONE of the following is a social determinant of health? A. Sport B. Smoking C. Income D. Drug addiction
Social justice role model	56. Name a role model who is an advocate for social justice whom you admire. (Free answer)

APPENDIX 5. Dichotomous health structures in participant discourses.

Narrative dichotomy	**Ethical discourse**	***Participant quotes***
Public / Private health	Fair quality of health care	"Those who afford private care…[vs] those stuck on waiting lists" (A68)
Health needs / demands	Fair distribution of actions on health determinants & health services vs 'Commodified' ($) health care paradigm	"People are often treated very differently as they age" (A14)
High status / Low status	Professional hierarchy vs Respect for diverse knowledges & expertise	Hierarchy "very frustrating" (F45) How does it "affect patients"? (F46)
Hard science / Soft science	'Certainty' of bioscience vs Humanism in health care	"People's religions and beliefs are very important and that could be health for them" (F46)
Unreflexive / Reflexive	Self-serving vs Socially accountable professionalism	"Realign how we think of ourselves and how we think of people" (F47) "We all have a role to play in aiming for a just world" (A16)
Male / Female	Gender hierarchy & resistance to female leadership	"Quite a lot of casual sexism in the medical workplace" (F48)
Equality / Equity	Discrimination vs Fairness	Discriminate to "only treat the ill" (A61)
	Time needs for equity vs health care demands	"This extra time to get the same outcome for one person, are you then taking away time from someone else?" (F41) No time to sit down and talk with patients "it's terrible, but it's the reality" (A613)
Activism / Passivism	Public activism, advocacy and solidarity & the profession's contract to serve society	*AMA leadership: "good; but you could want them to go further" (F45) *Australian Medical Association

Figure A.5 Dichotomous health structures and sustainable medical professionalism

APPENDIX 6. Scope of sociological imagination in participant discourses

Figure A.6 Scope of sociological imagination in participant discourses.

Reflexivity on health context:	**Local**	**National**	**Global**
First Year Adelaide	Poverty (A13) Education (A13)	Poverty (A13) Sexuality (A14) Addiction (A14) Indigenous health (A16)	Poverty (A15)
First Year Flinders	Racism (F14), Addiction (F12) SDH (F11) Bounds of consent (F13) Education level (F13) Bounds of responsibility (F12)	Health systems (F13), Structural racism (F14), Health system adaptability (F16), Health system access (F14), Domestic violence, racism (F11) Racism, hegemony (F111)	Racism (F14) Refugee health (F16),
Final Year Adelaide	Types of practice knowledge (A63) Patient capacity (A63)	Indigenous, rural health (A63) Violence /women (A63)	Neoliberalism (A62) Equal human worth, justice (A61) Human diversity (A63)
Final Year Flinders	Marginalisation (F45)	Aged care (F41)	Climate change (F41, F45) Human rights (F45)

APPENDIX 7. Proposed values-based knowledge management system.

Fig. A.7 Proposed values-based knowledge management system for medicine.

SUSTAINABILITY	**Quantitative paradigm**	**Bioscience health practice ethics**	**Human research ethics**
Qualitative paradigm	Holistic paradigm of biological and social accountability	Human safety. Intervention efficacy, parsimony, specificity.	Research fraud; transparent construction of social facts.
Human rights	Service & education needs vs demands	Quality health care for all. Universal health insurance.	Research for all. Informed autonomy & participation.
Social justice	Equity principle in patient & community care.	Sufficient & equal quality care and follow-up. Care for caregivers	Community & expert consensus.
Health economics	Regular review of health funding & distribution model. Identify service gaps.	Incentivised practice priorities. Public funding arbitration, NDIS.	Research funding priorities & sponsorship.
Population health	Proxies for target social outcomes	Target local, national & global determinants of health. Level up health gradients.	Health surveillance, information & interventions.
Health policy	Interprofessional health team approach.	Ecosocial impact considerations. Close health gaps.	Health-in-all-policies approach. Cross-party agreements, long-termism.

APPENDIX 8. Socioeconomic status and choice of medical professionalism

Family income	Participant code (Type)	Types of medical professionalism (Wear & Aultman 2006)
High income **≥ A$150,000 /year**	A61(D), F16(D), A62(C), A64(A), A12(C), F18(F), A68(C), F110(F), F!!2(C), A613(C).	A. Traditional doctor, working long hours, dedicated to patients B. Medical practice as a means to business ventures C. Combine medical practice with teaching and research D. Part-time doctor, part-time other interests e.g. family, lifestyle E. Technical mastery, specialist, financial success F. Follow your own personal morality, what works for you G. Practice in an area of need, concern for disadvantaged groups
Medium income **$80,000-150,000 /year**	F11(G), F13(C), F14(A), F15(D), F17(F), A11(D), A65(D), A13(G), A66(C), A67(G), F111(A), F45(F), A69(C), A610(D), A611(C), A612(D), F46(D), F47(G), F48(F), A15(A), A16(G).	
Low income **< A$80,000 /year**	F12(F), F41(D), A63(G), F42(D), A14(F), F19(G), F43(C), F44(D).	

Appendix 8. Socioeconomic status *(SES) and choice of medical professionalism

*Estimated family income is used as a proxy for SES.

APPENDIX 9. **Thematic Analysis of Combined Data.**

A.9. **THEMATIC ANALYSIS**: Triangulated participant vignettes.

Themes and subthemes identified in the data

A. Transformation to a social justice perspective of medical practice

B. The medical practice of social accountability

- B1. Awareness
- B2. Ellipsis of habitus in response to The Charter
- B3. Agency
- B4. Reflexivity & supersubjectivity

C. Education as a medical practice to overcome health inequities

D. Critiques of contemporary medical professionalism

F. Space-time as a commodity for socially accountable health care

Key to participants: Adelaide = A, Flinders = F; First Year = 1, Final Year = 6 or 4

THEME A: Transformation to a social justice perspective of medical practice

Introduction

A gap identified in the social justice literature is our knowledge of the perspective transformation process observed in university students to an ethos of social justice. This question is of considerable interest to medical educators planning to inculcate the values and phronesis of SA in their professional development programs.

The interview data reveal a spectrum of perspectives on social justice, from objection to the SA ethos of medical professionalism, to resistance - that social health practice is only for some physicians, or for social workers; to full acceptance and aspirations to embody a social justice ethic as a physician. Participants shared their experiences of social injustice, their reflections, reflexivity, and moments of perspective transformation.

In the first analysis, I aimed to test the warrant articulated in the report *Education of Health Professionals for the 21st Century* (Frenk et al 2010) that recommends reforms to medical education, "from informative, to formative, to transformative learning" (:1952). Accordingly, headings followed the proposed transformation sequence, from *INFORMATIVE* to *FORMATIVE* to *TRANSFORMATIVE*.

INFORMATIVE

Informative (adjective): instructive, revealing, thought provoking

During their interviews, many participants related practical experiences that have informed new perspectives of SA medical practice.

Nate (F46), a white Australian male, reported several incidents or experiences during his training that were memorably unfair. Several of these involved Indigenous people. Nate recalled playing football with Indigenous boys from his rural home town when he was younger, commenting that they were "rough as guts" but he could admire their playing skills. His close experience of Indigenous people, their living conditions, and his perception of their humanity were likely formed when his father drove around town to pick up boys for football. These dispositions were part of the rural habitus Nate brought to his medical education.

At Flinders Medical School, Nate recalled becoming tearful when a mixed race Indigenous woman, one of the 'stolen generations', talked about her life after being taken from her mother as an infant. While Government policy at the time, it has since been the subject of an official apology to Indigenous people by an Australian Prime Minister. The question Nate asked, "How can people do that to other people?" was a moral, humanitarian plea that appeared unrelated to anti-miscegenation laws that reflected the values of the time. It was a discourse of human rights.

Later, in the Northern Territory, Nate observed a physician instructing a student to take a history from an Indigenous man, saying “Smell that aboriginal over there? Go see him.” The unfairness of this racial objectification of a patient shocked Nate. The deprecating language and banality of the physician’s delivery, in a context he had no control over, created a conflict in his habitus. Valuing people as deserving of respect was a product of the habitus he brought to medical school and to his physician identity; a benefit of the ‘widening participation’ agenda in higher education. Nate’s empathy was likely aided by his self-disclosure as a gay man; a stigmatised sexuality group in society. In his interview he openly compared his life with others through such self-disclosure, and by reflexivity on social inequalities he observed in his travels.

One incident Nate (F46) found strange, led him to reflect on how his white privilege rendered him ignorant of the realities of life for people living in a subsistence economy. In Lebanon, a merchant opening his stall on a rainy day seemed counter-intuitive to Nate, until he realised the merchant’s existential need for income. Arguably, the moral nature of the incident resided in Nate’s reflection on his perceptions of the incident: no sales meant no food to feed the family. Nate spoke with the merchant and became more *informed*. He gained moral knowledge of the storekeeper’s motivations and was embarrassed by his false assumptions; his poverty blindness (Baumann & Donskis 2013). One view of moral perceptions argues; “we should think of values as ‘in the world’… it is by way of our affective responses that we come to recognise these values” (Audi 2010:87*8).

From these experiences, Nate became more critically conscious; able to ‘read the world’ sociologically. This ‘embodied potentiality’ in his habitus, energy that shaped “identity and social practices” (Coffey & Farrugia 2013) suggested prosocial agency would become part of his identity and future medical practice. Nate was also reflexive of self-interested medical professionalism that worked against SA: he was critical of doctors not interested in health prevention if it meant their income was affected. This financial mindset may signal ellipsis of physician habituses to the neoliberal context pervading universities and national economies.

Matt (F47), a white Australian male of rural background, reported close experiences with disadvantaged communities in the geopolitical region north of Australia. His reflections on his first medical encounter with Indigenous people in the Northern Territory underlined the imperative of becoming *informed*. He showed reflective insight to his cognitive awakening to the order and complexity of indigenous ways of being; a revelation. His assumptions of Indigenous people, dispositions informed by his predominantly white, rural upbringing, as being ‘they’ - a uniform group, were shattered. Assumptions about Indigenous agency are commonly revealed to be pre-judgments or prejudice; and socially unjust.

> “They say ‘they’, this catch-all term, just like; It’s easy. Go and get an education! or Go to school! And it’s like - ’they’ – already wrong; ‘just’… it’s easy – wrong!”

‘Embodied cognition’ is how Stolz (2007) described this mode of thinking, in which Matt was learning *in situ*. His habitus was ‘in relation’ to the new field, unlike the disembodied and dis-integrated nature of medical science learning. To strengthen this new awareness, Matt sought to *inform* himself of the statistics and sociology of Indigenous health. He was one of the few study participants to acknowledge *information* about historical failures of medical professionalism; the only participant that referred to the Tuskegee experiment and the Holocaust. This finding alone may be significant in a Bourdieusian sense. It indicated uncritical *ellipsis* of other participants’ medical habituses to the *status quo* that regarded medical professionalism an undeniable societal good.

In his testimony, Matt posed Platonic questions about the purpose of the profession. His phronesis or practical wisdom, exemplified the meta-reflexivity that allows re-examination of what the profession is doing and what it is meant to be doing. With phronesis, values *inform* action.

Phronesis: (noun) phronesis leads to break-through thinking and creativity and allows the individual to discern and make good judgments about what is the right thing to do in a situation. (Oxford Review online).

> “Let’s try and think about what it is that doctors are doing; are they just restoring health and promoting longevity or are they perhaps doing something else?
> We don’t look at it and go; ‘Okay, what have we done here?’ or, ‘What are doing currently that is the problem or that is propagating this? There’s certainly no easy answers to what cause and effect is, but we’re scrambling to fix things and everything’s a little bit reactive to what’s happening in public health…”

Here, Matt questioned the basis of medical professionalism. What was happening in public health, in the sociology of health production, was chronic non-communicable diseases that consumed huge time and medical practice resources. Most Final Year participants attested that the ‘downstream’ context of health care was extremely busy. This overactivity was at the expense of under-resourcing of mitigating actions on structural determinants of health; the societal error (Stone 2010). Matt recognised the profession was *conforming* with the hegemony of economic neoliberalism. What the profession was meant to be doing, he decided, was assisting neoliberalism’s human casualties.

> “I think that the current world we live in is very caught up in the cost of things, and we’re obviously not winning at that because the costs keep going up. And equity is often considered as how much money we spend, and who gets access to that spending; that’s always the analogy that’s drawn.”

Matt’s comment suggests that reflexivity on the social order and the purpose of medicine can *inform* a new professional orientation. He was one of the few participants to directly acknowledge the ‘societal error’ in contemporary medical phronesis (Stone 2010); the omission of vulnerabilities to societal structures from deliberations of health causation.

While First Year participants appeared uninformed about medical professional failings, some nevertheless had strong perceptions of professional shortfalls they willingly shared.

Safiya (A14) had *informed* herself about the relationship of social conditions to health in a number of settings in Singapore prior to entering Adelaide Medical School. First of these was her own social position in Singapore society: marginalised by conservative policy structures alongside other LGBQTI, Muslim, and ethnic minority youth. Consequently, her equity identities were ‘intersectional’. Safiya gained first-hand experience of the lifeworld of patients inside a mental asylum; and of those living in a poor area of Singapore where health literacy was low. She recognised social hierarchies in wealth, religion, and sexual identity. Despite or because of her intersectionality, Safiya’s had strong affective responses to the unfair structural situations she described. Her *informed* perspectives sanctioned a gaze of disparities that signified a gap between the reality for disadvantaged people and what the health professions could do for them. Against expectations for a First Year student, Safiya’s phronesis matched that of a Final Year peer, Matt (F47). She suggested that physicians prejudging drug addicts for their risky and illegal behaviour ought to realise that their primary duty was provision of justified treatment; not being constables of the social order. The too-late diagnosis of many people with chronic non-communicable diseases, *informed* Safiya of an unfair gap in medical professionalism. Women situated low in the Singapore social hierarchy who mis-read the purposes of breast cancer screening *informed* her of a knowledge-understanding gap in health literacy. Doctors who selected patients on the basis of their being able to pay on time, and patients that avoided medical help to protect the family finances, informed Safiya of a problematic economic agenda in medical professionalism. Safiya, who had been in medical school just one month, imagined solutions.

Olivia (F112) had intersecting equity identities as a young Indian, Sikh woman and immigrant to Australia. One difference in perspective between Olivia and some of her medical student peers related to learning about the social determinants of health. Her peers privately argued that a poor health outcome "could happen to anyone", but Olivia recognised that outcomes differed in different populations. Her sociological imagination, a product of habitus, derived from a context of gross social inequalities, in a caste and religion divided society. The habitus borne of Australian society is often considered less hierarchical.

> "I think one of the biggest things is acknowledging it, in my opinion. Because once you acknowledge it, then you are aware of it; you can subconsciously do things…"

What Olivia observed was the need to *inform* one's perspective of social impacts on health; to acknowledge or face the truth of class-based human inequalities and stigmatising social interactions. A social gradient of health functioned in every society. Olivia also talked about becoming critically aware (*informed*) of her own social position; and, gaining critical consciousness to overcome her own social disadvantages and anxieties. She appeared to be on a path to achieving that through reflexive self-examination and higher education.

Martin (A61) related no sociological experiences that might *inform* revision of his perspective about the need for a change in medical professionalism. He viewed social activism reasonable when people used their own money to fund it. Martin's testimony was kept at an abstract level such that no subjectivity was ascribed to particular patients. As he stated, he is *informed* by "those people in the medical professions" about disparities in mental health treatment. He 'supposed' that migrants with poor English skills had unfair disadvantage in medical communications. He suggested that physicians engaging in social activism ought to do so within medical guidelines and professional oversight. Advocating social justice can mean that "people think they are free to do whatever they like, and the community must empower everyone to do what they like, which is wrong." 'Affirmative action' was really reverse discrimination, and "silly". These ideas appeared fixed and *uninformed* by any modifying reflexivity on his own privilege or others' social disadvantages. In Martin's upper middle class habitus, the existing social order followed the economic order, and was "mostly" fair. This habitus can objectify categories of people as a defence against 'the hidden injuries of class' (Sennett & Cobb 1972); a worldview that served to maintain distance from the working class and preserve class distinctions.

Few participants shared information about the relationship of global phenomena to local health. First Year participants varied in their knowledge of global health issues; some from International studies taken during their secondary education, others from joining medical student groups that focus on climate change, poverty and health inequalities.

Elle (A15) was a white, urban, middle class Australian woman, whose family was involved in an international charity providing heart surgery for disadvantaged children. She nominated maldistribution of health care and education as global health issues. Elle had no first-hand experiences of poverty or social disadvantage, and used a constructive discourse of SA that advocates for social assistance, welfare or charity rather than critical empowerment. This neoliberalised discourse licensed traditional medical practice, income and lifestyle; with virtuous prosocial activities on the side. In this view, social health was a *cordon sanitaire* or defensive barrier around biomedicine (Armstrong 2011). Unless *informed* by a critical theory conception of social injustice during her medical education or in prosocial student groups, Elle's practice orientation to SA was unlikely to change. In Bourdieu's sociology, her habitus could easily adjust to the doxa of higher education; and reproduce and invest family capitals to achieve upward social mobility. Elle's preference was professionalism type A. (Traditional doctor, working long hours) (Wear & Aultman 2006).

Violet (A13), was born in Australia to a Vietnamese refugee father, and a Vietnamese migrant mother. She was *informed* about the sociopolitical nature of health from reflection on her visits to Vietnam and a South Australian Indigenous community. She recognised how corrupt governance in Vietnam kept people poor, and used a critical discourse of social justice to advocate for empowerment of women through education. Her preferred professionalism was type G. (Practice in an area of need) (Wear & Aultman 2006).

Final Year students actively concerned about global, climate-related health, used a discourse that stresses priority and urgency.

Julie (F45) firmly located The Charter in the setting of health care; but was critically aware of global economic disparities, inequities in health care, and the unequal health impacts of climate change. She used critical discourse to evaluate the political economy of health in the U.S. that inequitably distributed least health resources to the most vulnerable populations: "…one of the most egregious examples of injustice and inequality in health care – in such a wealthy country." Julia directly implicated the greed and power of the 'medical elite' in the United States; saying, "rich doctors who have the keys to the system don't allow change."

Julie perceived shortfalls in the profession's conduct toward eleven different disadvantaged groups in Australian society; and noted

> "discrimination in health care follows marginalisation in society, so any group that is marginalised in society will experience barriers in access to health care."

Julia also reflected on favourable features of Australian society that enabled effective political and social justice action by leaders in the medical profession on matters related to health and healthcare: "although… you could want them to go further." Julia's practice intentions covered a combination of the listed professionalism types.

FORMATIVE

Formative (adjective): serving to form something, especially having a profound influence on someone's development

A socially accountable medical professionalism may *form* when physicians are reflexive of their own moral characters (or habituses), moral purpose and moral 'reading of the world'.
Unreflexive approaches to medical professionalism, especially those that mirror uncritical political, social, and economic structures, can perpetuate harms on those most vulnerable to structural inequalities.

Several Final Year participants recognised in The Charter the need for 'discrimination' in their practice with individual patients; and wrangled with this term to *form* a conception of fairness. Objections were raised by Martin (A61), who disagreed with equity on the basis of social identity; suggesting instead, the profession ought only discriminate between "the sick and the well". Most participants acknowledged the requirement in The Charter to eliminate stigmatising forms of discrimination in health care interactions. However, individual conceptions of 'positive discrimination' sometimes needed to be clarified.

Matt (F47) likened his concept of positive discrimination to the feminist argument for equality and equity; not at the expense of what freedoms men had. His preferred term, 'calculated positive discrimination' to interpret the intent of The Charter, was closely allied to provision of *equity* in health care, discriminating in favour of the already (negatively) discriminated. To do this, he realised the physician needs to "consider the patient that sitting in front of them" – to *form* awareness of the patient's equity needs. In critical theory, this awareness involved *recognition* (Bourdieu 1977); affirmation of dis-empowered status to avoid moral harm to 'the other'. Matt reflected on his experience of an epistemic shift in relation to Indigenous people, as their world became more 'readable'. He recalled; "[there is] what I thought I thought and understood, and what actually is the case". He advocated for medical students and physicians to practice reflexivity and meta-cognition about the hegemonic nature of society and our role in it.

> Matt (F47)
> "Everyone can and should play a role… if that includes changing the way you think about it. And thinking about what you think; which is a huge ask in reality, getting someone to be self-critical."

The 'inconvenient truth' of Indigenous health that implicates western, non-Indigenous social and policy structures in its causation, requires a humbling self-critique for many Australians. In acknowledging this hard reality, instead of 'objectifying the subjectivity' (Foucault 1963) of the people whose lives participants were witness to, their subjectivities and uniqueness were brought to the foreground. This humanist, metacognitive shift in 'gaze' seemed to begin the transformative process noted in participant transcriptions, and outlined here.

The personhood of the patient was then valorised; despite all its existential complexity and 'otherness'. The precarious position of 'the other' in the social hierarchy was problematised. The 'health-illness dialectic' arising from structural determinants of health operating in the other's lifeworld was better understood. Foreground and ground shape-shifted, and a new imaginary and gaze *formed*. Justification of new knowledge through communal and *formative* values was synthesised to *transform* meaning; and, a new discourse and moral practice orientation *formed* a new professional culture.

Matt (F47) described his initial discomfort in approaching an Indigenous man to take a history, signalling a deformation or *hysteresis* of his habitus as he entered the new field of Indigenous health. He recalled; “I didn’t like how uncomfortable it made me, but had to deal with it, and it made me reflect on why that was…”. This was a moment in which *ellipsis* of his white, rural, male, medical habitus found him floundering; like ‘a fish *out* of water’- to paraphrase Bourdieu (1977). In this novel, caring relationship to Aboriginal people, all the embodied structuration of his white habitus to Indigenous Australia was in tension. Adjustments to his habitus effected by emotion, reflection and reflexivity allowed a more comfortable ‘re-entry to the field’ - with a different set of dispositions adaptive to the task. Over time he clearly succeeded; and shared his ‘swimming’ sense of accomplishment. The ellipsis closed, and his habitus *re-formed* to accommodate competence in the new field.

Nate (F46) recognised why the paradigm of Indigenous health was easier for Indigenous medical graduates. In accord with Bourdieu (1977), Nate said “they don’t have to second guess” - they are ‘like a fish in water’ in the Indigenous milieu. *Formed* of the same stuff, Indigenous graduates’ habituses were like ‘second nature’ in the Indigenous lifeworld, allowing them to do greater justice to peoples’ health needs. Such sociological insights allow *meaning formation* that reduces the complexity of clinical knowledge management (Sveiby & Skuthorpe). Similarly, Nate’s knowledge of Darwin’s reputation among Indigenous people as the place you went to have your leg amputated, *informed* Nate’s approach to gaining consent for surgery; and *informed* improved Indigenous diabetes management. Storage of amputated limbs for later burial with the body removed a structural barrier to timely amputation, and saved lives. Nate gained new practice knowledge and meaning.

First Year participants lacked insider experience of the Australian health system, but learned about the poor health status of Indigenous people, and maldistribution of health care.

While Jade (A16) supported both personal and institutional changes to health system practices to match what societies need, Eugene (F16) believed that lack of health system flexibility ‘paternalized’ Indigenous people and an alternative was needed. Eugene argued that Indigenous people have a different way of “thinking about health” and “fear that they’ll be mistreated”; that education is needed if Indigenous people were to accept Western medicine. This sentiment was echoed by Simon

(F13), a psychologist from Singapore, who suggested that the western health system may be less appropriate and acceptable to Indigenous people than an oriental health system, like Chinese medicine. Adrian (F19), a political science graduate from Singapore, also understood Indigenous health to be compromised by the incongruence of the Australian health model; and by practitioner discrimination on the basis of patients' non-compliance with health plans.

Safiya (A14), also from Singapore, had no experience and little knowledge of Australian Indigenous health, but observed disparities in access to health services by the underclass of Singapore society. She described people's lack of understanding of basic medical conditions, medical diagnosis, screening, and treatments. Ignorance, and fear of the costs, pervaded people's conceptions of the health system, such that even when *in extremis* (such as experiencing a heart attack), they avoided seeking health care. Safiya's grounded narrative of her relational experiences with disadvantaged people in Singapore society, held in sharp contrast to her compatriots' perceptions of the adequacy of the Singapore health system.

Jade (A16) and Violet (A13), both Asian-Australians, sought the opportunity to visit a South Australian Indigenous community; an experience that challenged pre-visit expectations. The contextual reality of Indigenous peoples' lives *formed* strong impressions. Jade: "it's… when you see it, when you're there and experience it, you feel it, you smell it, you touch it." Jade reflexively surmised that media messages and lack of personal interactions with Indigenous people may have contributed to her prior mis-perceptions.

Alison (F11), a white, Australian woman regarded western medicine "very white dominated" and this posed ongoing problems for Indigenous health care in addition to the "baggage" of past, unresolved problems of Australian settlement. Although Alison had no experience in Indigenous communities, she believed that personal interactions with stigmatised others, together with reflexivity on one's capital advantages in relation to others, could assist the necessary change. This suggests a conception of 'awareness' as a process of recognition of difference to 'the Other' as a necessary action to avoid moral harm. The Charter, Alison proposed, prompts physicians to be conscious of how modifiable social factors may be contributing to a patient's illness.

Final Year participants, with direct student experience of health care, were witness to disparities in physician and health system practices toward marginalised groups.

Final Year students reported; a racist verbal insult directed at an Indigenous patient by a hospital clinician (Nate F46); inadequate Indigenous consent for surgery (Nate F46); and, inadequate analgesia for an Indigenous patient (Matt F47). Matt recited statistics that reveal gross discrepancies in Indigenous compared to non-Indigenous admissions to hospital in the Northern Territory; something he witnessed as a student. Nate (F46) regarded hierarchy a professional issue in medicine; saying he felt compromised in reporting the racist comment made by a physician because the same physician was required to 'sign off' his training evaluation. Sally (F48) noted a rise in casual Islamophobia, and commented that "societal prejudice against women is quite systemic". She reported "quite a lot of casual sexism in the medical workplace" and agreed with Nate (F46) regarding hierarchy; that it can pose an obstruction to change in medical culture.

Hope (A611), a black African-Australian woman, prioritised Indigenous health as a social justice issue but believed *fear* of Indigenous people was a constraint for many of her white peers. Fear may relate to limited experiences of Indigenous people in public that made them strangers; to media stories; to white guilt about Australian history post-colonisation; or to uncertainties and anxieties arising from cultural humility training. On a visit to a rural hospital in Kenya, Hope observed the patriarchal nature of medical practice and associated corruption. She regarded The Charter as reinforcing a professional framework; an ideal *formation* "where everybody is acting professionally in the interests of the patient."

TRANSFORMATIVE

Transformative (adjective): causing a major change in someone or something, especially in a way that makes them or it better. (Cambridge English Dictionary)

The *energy* requirement to effect transformation of identity, and potentially, change the culture of medical professionalism, is said to be high (Illeris 2014). Bourdieu (1977) characterised power as money and other 'capitals' that accrue in the habitus; units of transmutable energy that can be invested in a field with an expectation of dividends.

In the literature review, we learned that identity defences were also required to protect against negative transformation to withdrawal or regression (Illeris 2014). Unconscious identity defences were not examined in this study, but student membership and investment in the voluntary, prosocial medical student groups, also believed to be protective, were noted. Conflicts in the habitus, in participants' interactions with the doxa of the medical education environment, can also effect change but always for the better.

Conflicts in the habitus were expected in participants from non-traditional backgrounds entering Medicine. Such conflicts protected (against the *status quo* of the formal and hidden curricula) these students' non-doxic perspectives in extra-curricular groups and activities, where prosocial values were reinforced among peers. Transformation to a social justice mindset may equate to the balance of one's capital assets (Bourdieu), the doxic bounds of 'social justice' in one's peer learning context (Bernstein), and affective stimulation and maintenance of prosocial moral values (Audi 2010).

In the following descriptions, elements of these deforming and transforming energies were traced in participants' discourses.

For Martin (A61), having a habitus empowered by capital rich, white male dominance, posed no conflicts with structural conditions in the field of medicine. No reflexivity on inequalities in the social order, nor on his own social position relative to patients was evident in his testimony, and no change in his practice was deemed necessary.

Matt (F47), a white, rural, heterosexual male, reported a transformative experience that respects diversity of ontologies among Indigenous peoples. He demonstrated reflexivity on inequalities in the social order of the country town where he was raised; and used critical consciousness to articulate his empathy for the closeted experience of LGBQTI people. He could then 'see' in the mind's eye what was once hidden in plain sight.

> "Coming from a tiny country town I have no doubt there actually were some gay/ queer/ whatever people in the town; but it's so small, no-one's ever come out to be openly gay: which, in hindsight is horrifically tragic."

A change in doxa likely contributed to Matt's reflection. The national discourse of marriage equality for same sex couples preceded the Australian referendum and led to policy change. This structural change in society not only increases social freedoms (and health) for same-sex couples, but permits a perspective change of homosexual people in the non-homosexual majority. Although Matt (F47) did not mention the same sex marriage referendum, it may have unconsciously influenced his retrospective comment. The use of the qualifier 'horrifically' likely indicates that he understood, using theory of mind, the human suffering that repressed sexual identity and self-stigma represented. Such emotional identification, although not over-identification, may be a driver of prosocial perspective change.

Olivia (F112) was a dark-skinned woman, and Sikh immigrant, whose primary social justice concern was inequality in Indigenous health. She was critical of denial by her medical student peers of the evidence linking socioeconomic inequality to health outcomes when they said, “It’s not really – that could happen to anyone.” This discourse was likely evidence of a hidden curriculum (Hafferty 1998) communicated through uncritical peer and societal attitudes. Embodied learning of socioeconomic inequalities may have fuelled Olivia’s dispute. Olivia (F112) had been on the receiving end of racial and religious discrimination, and admitted to dishing it out herself. Aged 22 years at the time of interview, and an Australian post-graduate, she considered implicit bias a universal human trait. Reflexivity allowed Olivia to *transform* her perspective, and see her mindfulness as developmental or perhaps spiritual ‘growth’. Experiencing and reflecting on the pain of stereotyping, a moral harm, was how she was ‘becoming to know’ (a *transformation*) how stigma impacted her patients. When reflecting on her migrant status, she realised that she was neither fully Indian nor fully Australian. As a result, she advocated (perhaps as a product of habitus clivé or divided habitus) that disadvantaged Indigenous and migrant groups learn English in order to mitigate the disadvantages of being stereotyped in Australian health care. In doing this, they can ‘play by the rules of the game’ (Bourdieu 1977) to fit into the extant health system, and gain better quality of health care.

This practical solution was not acceptable to all participants; some were critical of the inflexibility of the Australian health system itself. This suggested that further *transforming* experiences lay ahead for Olivia as she progressed through her medical training and entered the health system. Olivia’s effort of *transformation* extended to self-concept; she sought to “become comfortable with who I am” free of others’ perceptions of her.

Jade (A16) with Singaporean-Chinese parents, was educated in Adelaide and identified as Christian. She denied any significant social stigmatisation of her identities. She was raised to think independently, and schooled not to be dependent on men. Unlike Olivia, Jade held a deontological viewpoint of the intent of The Charter and what it meant for medical professionalism. Her practical experience in an Indigenous community served to reinforce her symbolic prosocial and human rights values. Her social justice values were not informed by critical problematising, but followed a neoliberal discourse of ‘seeking opportunities’ and ‘getting ahead’. Her goal appeared to be self-transformation and empowerment through medical education. She learned in her medical course that activism was not expected of her; that respectful relationships with Indigenous patients had a positive impact on their health.

Jade's habitus was likely imbued with social justice dispositions through academic discourse with her mother; formative influences during schooling, church and religion; and extra-curricular medical school activities. Jade (A16) expressed a constructive but conservative discourse of SA, that perhaps awaited *transformation* to a more critical discourse of community empowerment. Her intention to work in an area of need was likely a vocation; a religious calling.

Safiya (A14), with multiple intersectional equity identities, felt the injustice of structural limitations on her LGBQTI friends imposed by Singapore society, where she was raised. This experience heightened her political awareness of the machinations of power, and imparted critical consciousness. She transferred a critical eye for social injustice to her voluntary health experiences in a mental asylum and poor residential areas of Singapore. Safiya's critique extended to gaps in the western health system model that she observed unequally distributed health promotion and health care in Singapore society. Singapore was of sociological interest as a meeting place of eastern and western cultural economies. Insights to poverty, addiction and mental illness were the sociological lenses through which Safiya's justice emotions were *transformed* to critical consciousness. She could 'see' how a lack of literacy, education or conscientization dis-empowered poor people from achieving equality in health; and became an advocate for socially accountable policy changes.

Violet (A13) reported that witnessing the poverty in her parents' home country of Vietnam was a game changing, *transformative* experience. Raised in Adelaide, Violet had capitals that exceeded her parents'; derived from political, financial and educational security. She attended an International high school with a social justice ethos, with a like-minded peer group; a community of practice (Lave & Wenger 1991) that informed the prosocial values she brought to medicine. Subjective experiences of socially disadvantaged communities in Vietnam and Central Australia reinforced Violet's prosocial affects and objective learning. This accorded with Bourdieu's 'situated learning' principle (Smith 2003). Violet's values were supported during her training in the parallel curriculum of prosocial medical student groups like *Insight*. Her intersectionality as the daughter of a Vietnamese refugee, likely underpinned her self-concept and her social justice concerns for refugees, women and education. She was aware of how anti-Asian migration sentiment in Australian politics imposed structural vulnerabilities for people like herself. Violet's prosocial identity made her choice of medical professionalism type (Wear & Aultman 2006), to practice medicine in an area of health need, seem like common sense.

Summary: Transformation to a social justice perspective of medical practice

That different ways of "being exposed to the world" (Reay 2015) in participants' experiences of social injustice produced affects and perceptions of social justice, held true in this study.

Habitual reflexivity on social inequity, or reflexive habitus, was seen in both First and Final Year participants at both Medical Schools reporting close experiences with social inequities. A First Year International participant and undergraduate (A14), with high intersectionality of equity identities, expressed an exemplary supersubjective discourse of social inequity, education, health, and medical professionalism. First and Final Year participants lacking reflexivity on habitus and social inequities, also lacked critical consciousness of the health-illness dialectic related to the social determinants of health.

Formative experiences of social injustice in the participant's family; and in explicit personal learning experiences in relation to marginalised people; informed and transformed participant habitus; effecting liminal awareness of the health-illness dialectic of social disadvantage.

Most International participants were aware of racism in Australia, and were critical of inflexibility of the Australian public health system in relation to Indigenous health, and disparities in health care quality between private and public health services. An eastern health care approach was suggested as an alternative.

Change in the societal doxa by macro structuring discourses (e.g. sexuality, displacement, race, climate and environment) acted to have minor impact in transforming participants' perspectives of social justice and health. An exception was Julia (F45), a low equity status participant, who reported strong, active interests in human rights, law, ecosocial health, and social justice.

THEME B. The medical practice of social accountability

B.0.1. Introduction

In participants' accounts of the reform intention of The Charter of Medical Professionalism, were perceptions of the practice actions required of SA professionalism. The question seeking participants' perceptions of The Charter was the first in the Interview; so unsullied by later interactions. Most participants assumed The Charter only applied to individual health care. The term frequently used by participants to describe the required practice change was *awareness*. In the following sections, participant perspectives are grouped according to Year level, gender, and Australian or International background.

B.0.2. First Year The medical practice of social accountability

Jade (A16) interpreted The Charter in terms of moral principles; that both "as human beings" and as physicians, we all had "a role to play in aiming for a just world." Physicians, she had learned in the formal curriculum, had a role in relation to society: that "we don't just think of ourselves but we think of others, and particularly how we distribute resources." This perspective recognised the gate-keeper role of the physician in provision of health care, particularly in the distribution of Government funded resources; access, clinical time and material goods. Physicians can appeal to health institutions for the practice of systemic justice, and practice personal justice in relation to disadvantaged patients. Jade depicted this practice principle as "we should also aim for justice where we are." She recognised how physicians may need to remain conscious of their practice of interpersonal justice to avoid unconscious discrimination of particular patients. For Jade, practitioner 'awareness' was an act of conscious recognition of the social identity and equity status of patients. Jade's habitus made common sense of moral philosophy, and provided her with a semiotic toolkit to problem solve ethical dilemmas in future practice with patients and community health.

Violet (A13), of Vietnamese refugee background, agreed that The Charter advocated for "better equality in the distribution of health care" and related this directly to the need for "sustainable health care and resources to treat and monitor" the health of Indigenous people. She reiterated the principle of equal worth of persons, and their universal right to "improve their lives and live their life [sic] to a human standard". When the outcome of health care was sub-optimal, Violet suggested physicians "consider the background of the patient"; their economic and contextual problems. To practice interpersonal justice, Violet suggested physicians needed to be reflexive of projecting their "cultural ideas, ideals and education" onto Indigenous people. *Taking the patient's background into consideration* and *reflexivity on one's own habitus in relation to patients* were principles guiding her practical response to The Charter. The other 'awareness' Violet discussed was patient empowerment and how empowering messages were distributed among a community. For women this can mean knowing what opportunities were available for health care and prevention, and not permitting access be controlled by powerful others (e.g. men or dominant others). At the population level, Violet suggested “if your voice isn’t getting heard, and you get power, then you can sort of like increase awareness of that and improve the health of your community”. Her social justice identity, informed by a habitus moulded by South-East Asian refugee and migrant parents, International Baccalaureate schooling, like-minded Australian peers, Australian political context, and experiences with disadvantaged communities, had set her orientation towards prosocial medical professionalism.

Safiya (A14), with multiple intersectionality of equity groups, agreed with the aim of The Charter in promoting “justice in the healthcare system”; and recognised social inequalities between patients on the basis of wealth, education, religion and race. These inequalities were part of her own experience as a member of marginalised groups in Singapore society; she had observed social health inequities during interactions with Singapore’s poor and mentally ill.

There is no law that required doctors to treat patients equitably; it remained a professional judgement to perceived health needs. Safiya was highly critical of the pragmatism of those physicians that discriminated against patients on the basis of ability to pay upfront for services. She regarded status judgements by physicians, including responsibilisation or social blaming and shaming, as harming the very people that most needed health care. Advocating on behalf of low socioeconomic groups in Singapore, Safiya saw the need for greater ‘awareness’ and ‘support’ for their access to appropriate health care information, timely treatment, and prevention. Her testimony exemplified a critical discourse in which patient empowerment and physician ecosocial awareness lead to greater health equity outcomes. In effect, Safiya advocated critical consciousness for ‘unaware’ patients and physicians.

Jake (F110), a Singaporean-Australian paramedic, was working in Adelaide prior to entry to Medicine at Flinders. He witnessed the nexus of poverty and illness during his career in the ambulance service. The Charter, he believed, required doctors to “make sure that people get the care that they need” regardless of finances; and required they “just don’t judge anyone.” Jake was aware that people held different health beliefs; and critiqued the practice that “many medical professionals… don’t tailor their care” to individual needs. This person-centred, needs-based care discourse advocated equity and SA in health care. Jake pointed to dual responsibilities by physicians; to identify risk behaviours like smoking *and* to discern the problems driving the smoking behaviour. This accorded with the clinical edict to identify the causes of symptoms. By problems, Jake referred to the contextual and structural conditions of living that made day-to-day living stressful. He recognised how the medical imperative to reduce the patient's risk factors came up against what appeared like their resistance to change; and rather than actions on modifiable structural conditions, acts of will and status become the combat zone. This insight suggested that practitioner reflexivity could prevent this 'societal error' of problem identification.

Pandora (F111), of Hong Kong Chinese background, framed the purpose of The Charter as serving "to ensure that everyone is getting… the right medical care." Although she was privately ambivalent about inter-personal discrimination, Pandora recognised that in health care, racial discrimination can result in people "not getting the care that they need". She learned in her course that physicians have greater responsibility for distributive justice because they have more power in the health system. In the individual health care context, when a patient's health outcome is sub-optimal due to 'non-compliance', she thought she would eventually give up. She 'responsibilized' the patient ahead of considering the practice of equitable health care.

Olivia (F112), a Sikh immigrant to Australia, also related The Charter to Indigenous health. She perceived discrimination in health care related to language differences and racism, citing lack of respect in communicating consent and distribution of health resources. This perception appeared to mirror her concern for people like herself, migrants to Australia. Olivia argued that social inequalities affecting health must first be 'acknowledged' by physicians. "Once you acknowledge it, then you're aware of it; you can subconsciously do things…". Hence, the first step was to acknowledge patients' poverty, migrant or refugee status, stereotypes, difficulty with English and other social disadvantages. The nexus between conscious acknowledgment and critical action is a feature of critical consciousness (Freire 1973). However, Bandura (2001) shows that there are differences in people's social cognitions regarding *who* should act on social inequities. (See Theme C.)

Rohan (F14), a Hindu Indian-American participant, distrusted charters because they could be ignored; and instead, proposed medical training in 'awareness'. He used this term to refer to physician knowledge of inequality in patient resources (such as transport) that can disadvantage their access to health care; *and* lack of system resources that could provide equity. He gave the example of a health visit to a mother and newborn following the birth. While Rohan showed personal reflexivity on social stigma, ideas such as enabling patient capacity and community capacity building, were not yet part of his lexicon.

B.0.3. Final Year: The medical practice of social accountability

Ingrid (A63) at Adelaide Medical School, had a moral identity related to her family's Christian ethos, her rural upbringing, and reflexivity on global health inequities. She understood The Charter symbolically and practically. She argued that it "extends our professional boundaries" to include "the social setting implications" or social contexts of health that "our patients face, and how that influences their health, and how we can influence those to benefit their well-being." This perspective exemplified a sociological imagination (Mills 1959) of health. She regarded an overarching value of The Charter its advocacy for "sustainability of the healthcare system". This gaze was in accord with the philosophy of the 'new public health' (Baum 2016). At the practitioner level, Ingrid believed, physicians need to maintain 'awareness' of possible social and systemic factors acting in a patient's lifeworld that can impair health and recovery from illness. She recognised as moral knowledge that those needing public healthcare were often "the most vulnerable people in society." She regarded the moral value of SA practice, the "flow-on to better health care at the baseline": an argument for health equity.

Amrita (A65), a woman of Sri Lankan heritage, believed that physician *awareness* of social inequalities in their practice needed to begin with education about what inequalities exist. To do this, she advocated medical students became "actively involved" in these issues and said; "being aware of it you are more likely to do something about it." This advice respected the process of *conscientization* (Freire 1973); in which critical awareness motivated prosocial actions on social inequalities affecting health. Amrita's gaze extended to the need for collaboration among health workers to identify and act on population level inequalities affecting health outcomes. She had not visited an Indigenous community, and lacking sociological imagination, found it hard to visualise the problems of Indigenous health care. Amrita was reflexive of the reality that working in a non-Indigenous, urban hospital context, the health priorities of Indigenous groups faded from her consciousness. This 'fading from sight' or forgetting, warrants a knowledge management system (KMS) for integrated medical and social health practices; a moral framework to keep social health priorities active in physicians' medical praxis. I return to this topic in the Discussion.

In her interview, Amrita (A65) did not responsibilize the patient, but in relation to The Charter, regarded secondary prevention of illness by 'patient education' a practitioner responsibility. She planned to do service learning in her parents' homeland of Sri Lanka, where physicians had high social status and physician reflexivity on societal inequalities was reported to conform with the unequal societal and political *status quo*. The ethos of this training context risked engendering a potential conflict to her prosocial habitus.

Mark (A612), a white, rural male, belonged to the rural health student group at Adelaide. He believed The Charter signalled the need for fair distribution of health resources in a 'value for money' sense; and in terms of better health distribution to rural and Indigenous groups. Funds for health were limited and physicians had the responsibility to allocate resources fairly. Mark also saw the political nature of system inequalities; and claimed that "health policies are politically driven" and the "loudest voice" gets the funding. This perspective echoed the critique mounted by Beata (F43) about Government policy of funding costly biomedicines at the expense of public health strategies. A patient's 'capacity' also affects the 'voice' that gets heard, so Mark (A612) advocated that physicians grant equal *respect* to those weaker voices (people with dementia, for example). Mark's statement recognised power differences in society; so, was a critical perspective. His metaphor of respect for a patient's 'capacity' and autonomy of 'voice' conveyed *awareness* of individual equity status and recognition of equity needs. Hence, Mark's social cognition was oriented more to policy changes for greater health equity and less to modifiable actions instituted by the physician.

Carmen (A610), a white, Australian, married woman; was a member of the Adelaide Medical Students' Association and Christian Fellowship. She had a strong moral identity related to Catholic theology. Australian community issues she regarded as unfair included Indigenous health disparities, abortion, refugee health; stigmata related to LGBQTI sexual identity, poverty, obesity, addiction, language differences; and mistreatment of the elderly. Carmen framed The Charter in terms of physicians' responsibility to be reflexive about further discrimination of stereotyped groups of patients. She ascribed personhood to the foetus, and in rejecting abortion she invoked the "professional responsibility to be fair to *children*".

In her interpretation of The Charter, physicians "need to take into account" of their own prejudices when seeing patients, and to ensure resources were fairly distributed such that "no-one misses out" on health care. This reflexive view respected the original 'social contract' of medical professionalism.

Carmen (A610) observed a number of shortfalls in physicians' approach to Indigenous health;

> "… doctors can perceive Indigenous people as a little too difficult to handle; too many problems; not believing they will make lifestyle changes for their health. And because [of that] they're not putting in the effort required to educate that person about their health. I think there is a fear of being mis-understood as a doctor and a fear of not communicating the right thing if they don't communicate very well."

These insights suggested that physicians could be reluctant to manage Indigenous patients for fear of not being able to do justice to their health needs; and the anxiety of not meeting expectations of cultural competence in communications. Even before seeing an Indigenous patient in clinic, Carmen observed the anticipation among health staff that it would be "a little bit too hard" (a prejudgment). The need for patient and health professional to arrive at shared meaning was at risk. The reality of the Indigenous Other's existence was strange and threatening; typifying the anxiety and uncertainty related to the intercultural context (Gudykunst 1993). Carmen noticed how this 'othering' of Indigenous people in health care could get in the way of therapeutic relationship. Her observations suggested that many physicians remain unreflexive and insecure about exposing racist societal attitudes in their dispositions to Indigenous people.

Carmen (A610) was also reflexive of how a physician's religious beliefs could be an obstacle to good clinical communication. In saying this, she was reflexive of how her own ideology may impair a therapeutic relationship. She had observed public attitudes reflecting neoliberal ideology that were inappropriately expressed in health care settings. After a student placement in psychiatry, Carmen was able to make a link between the global financial crisis and mental health, and made sense of the health inequities observed in the United States. This suggested growth in her critical consciousness (Mustakova-Possardt 2004). At the individual level, she decided, the physician "still needs to be taking care of the person in front of you… you have to meet them where they're at." This philosophy effectively accorded with patient-centred, SA care; reflexive adjustments in habitus that served to make Carmen's practice more ethical.

Hope (A611), with intersectionality as a black African-Australian woman, related the change required by The Charter as "being aware of how you go approaching different people… and [being aware of] what else is happening in their environment, and targeting it toward *them*." This suggested a patient-centred, lifeworld accountable, equity-based mindset, in accord with The Charter.

Hannah (F42) had intersectionality as a first generation Australian woman from a refugee family fleeing war in Sri Lanka. Her perspective of The Charter was that medical culture reflected contemporary culture; those attitudes and practices that failed to 'close the gap' in health outcomes for disadvantaged groups, such as Indigenous Australians. This view resonated with Julia (F45) who observed that "discrimination in health care follows marginalisation in society". Sharon argued that our perceptions of others had to change; "we must try as best we can to eliminate those existing cracks in the system… all these biases, these different prejudices." She had personal insights to the distress and insecurity experienced by refugees arriving in a foreign country and culture. She related her desire to practice psychiatry to this transformative experience. This aspect of her personal biography and identity, features of secondary habitus (Bourdieu 1977) would be brought to bear in therapeutic relationships with people traumatised by psychosocial distresses.

Kelvin (F44), a white, International student had habitus formed in a low socio-economic, rural Canadian background; his only equity identities. He had travelled extensively in developing regions of south-east Asia. However, insight to sociological factors affecting health expected of someone with this identity was lacking in his account. He considered the biggest barrier to social justice in health was "people are not aware of what they're not aware." This *awareness* take on The Charter problematised disadvantaged patients; a phrase that resonated with Freire's *conscientization*; a process of empowerment through critical education; to take greater control of one's life and health. He did not however, see this as the physician's role.

In discussing the context of health care for non-communicable disease, Kelvin (F44) thought 'education' about science was lacking among patients, and made it difficult for physicians to teach patients about self-care and the need for regular monitoring of progress. Ten minute medical consultations, he admitted, did not make this task easy. He argued that patients can be resistant to change because of intergenerational lifestyle habits, not the structural foundations of their social context. This put the onus on the patient to become reflexive of family memes. Kelvin largely framed patients, not their social contexts, as the problem; which ignored modifiable structures that physicians can influence. This meaning perspective likely pervaded the hidden curriculum of the dominant tertiary health care sector. Kelvin exhibited no reflexivity on this mindset; yet empowering patients and devalorised groups to take greater control of their lives can effect large gains in their wellbeing. His working class habitus appeared to be eclipsed by the dominant medical culture. Yet, Kelvin observed a hospital clinician institute changes to patient monitoring that improved the healthcare structure for disadvantaged patients in a SA way. Reflection on this modification may help Kelvin to shift perspective of possible actions for improving patient care; to learn that both patient-centred and practice-centred changes can modify health outcomes.

Matt (F47), a white male from rural South Australia, joined the study shortly after an intensive experience in Indigenous health care in the Northern Territory. In relation to Indigenous people, he argued; “no-one encounters the Indigenous population *as they are*” (Italics added). This moment of critical consciousness likely broke through his socially learned dichotomous thinking (McLaren 2010:198); distorted thinking that can conveniently portray Indigenous people as one group of *terra nullius* nomads. False perceptions may stem from the colonisation, oppression and dispossession of Indigenous peoples; the power dialectic from which the Australian nation was formed.

A key orientation, Matt suggested, was for physicians to inform themselves (awareness) “about the patient sitting in front of them”; and to be reflexive about the practice of objectifying people. The primary health care formula of *informed* care he suggested was;

> “taking time to engage with your patients and getting to know more about their life [sic]… because if you don’t know the full story, you’re not going to be able to treat the whole problem.”

His idea of ‘informed care’ as a requirement of The Charter resonated with other participants that promoted critical ideas of ‘awareness’.

> “So, if we can realign how we think of ourselves and how we think of people… we’ll probably stop a lot of our problems.”

The ‘realignment’ or paradigm change that Matt described was a reflexive praxis; he advocated super-subjectivity by the practitioner, and questioned which knowledge mattered in health delivery. It was a view that supported a ‘knowledge management system’ approach (Sveiby & Skuthorpe) to medical professionalism. Applied in Indigenous practice, Indigenous knowledge and ways of being, integrated into medical decision-making, could inform SA health care and improved outcomes. This suggestion, applicable to health care, health promotion and illness prevention is followed up in the Discussion chapter

B.0.4. Discussion

The medical practice of social accountability

Differences between participants' meaning perspectives regarding the change in practice required by The Charter related less to Year level, age, gender, or country of origin; and more to tacit learning in the social context of health production. A hidden curriculum that responsibilized the patient dominated the perspectives of some Final Year male participants [A61, F44]. Participants with intersectional identities [A14, A611, F42, F112, F46]; those who critically reflected on the social order following confronting experiences [A13, F46]; and those reflexive of their own intrinsic biases in relation to stigmatised patient groups [A63, A610, F46, F47] expressed a SA praxis, incumbent on the physician.

B.0.5. Final Year white males

A cluster of four Final Year, white, male participants, from the dominant social group in western societies, served to compare meaning perspectives of the praxis required by The Charter of Medical Professionalism.

Kelvin (F44) admitted to being white, male, and privileged but remained uncertain of how women are disadvantaged in society and medical practice. He didn't believe that he was more privileged than First Nations children, as the son of poor white parents raised in a remote Canadian town. He seemed unable to visualise the medical practice of SA health care; in hospital practice he argued, that's what social workers do.

James (A68), was reflexive of his white, male and privileged status but had a prosocial habitus strongly oriented by socially reflexive, highly educated, English parents. He was acutely aware of inequalities for women in society, and for patients stigmatised in health care on the basis of their equity identities. He had sought further learning about global social justice issues. For James, The Charter advocated that the profession acknowledge that "these issues exist'; in order to make "a conscious effort" to achieve equitable health outcomes. Making "a conscious effort" supported the idea of a moral framework for knowledge management; one motivated by the relevance of SA practices to contemporary society, prioritised in medical education.

Martin (A61) was unreflexive of his white, male, socio-economic privilege in relation to others. He found the Australian health system reasonably fair to Aboriginal people, socio-economic circumstances just, and without any need for artificial variation in the name of social justice. He regarded the term 'social justice' anathema. Martin suggested that The Charter sanctioned the distribution of health goods on an illness severity basis only; a reading that sanctioned no change to the existing ethics of distributive justice in health care. Martin's economic dominance perspective failed to problematise the socioeconomic order in relation to health; a neoliberal gaze which was unique among study participants. Bill Gates was a role model for Martin, because he used his own funds on health improvement projects; not tax-sourced Government revenues. Melinda Gates failed to get a mention.

Matt (F47), a white Australian, rural, male experienced a semiotic shift in thinking when he realised that the unity implied in the term 'Indigenous' does not meet the ontological reality of diverse Indigenous identities. The praxis he related to The Charter was the need for physicians to be a 'moral compass… of society' in ethical arbitration of medical decisions. However, he was aware of global health care inequalities, and thought that distributive justice too often referred only to economic decisions.

In individual health care, Matt (F47) suggested The Charter required physicians to practice 'mindfulness' of the equity needs of each patient. In the formal sense, being 'mindful' is to not forget about something; whereas 'mindfulness' has come to mean being deliberately aware of your body, mind, and feelings in the present moment (Cambridge English Dictionary). The former definition seems to relate more to patients' equity needs. Matt added that physicians needed 'to know' their patients to best serve them, and needed to learn 'how to be effective advocates' of their patients' needs. This mindset incorporated equity values into medical practice in accord with The Charter.

B.0.6. Final Year white females

The medical practice of social accountability

The following vignettes present the meaning perspectives of four white, western female participants in relation to the practice changes implied in The Charter.

Julie (F45), a white, urban Australian, female Law graduate, had a strong social justice habitus formed in the context of Australia's leadership in global human rights, and her own leadership role in Amnesty International, and medical peer actions on climate change. Julie's discourse consisted of semiotics rather than anecdotes as she built a case to support her argument. Compared to Safiya (A14), Julie (F45) had no embodied experiences of social distress to inform her perspective. Her systematic approach to phronesis can be regarded as 'supersubjectivity' (Tredinnick-Rowe); a combination of principled arguments were brought to the problem under discussion on behalf of disadvantaged patients. While Julie (F45) voiced a *vertical* discourse of social inequity drawn from learned and intuited principles, Safiya (A14) voiced a *horizontal* discourse drawn from lived experience (Bernstein 1999).

Julie was clearly disgusted by the epic failure of the American health system to acknowledge the equity needs of its disadvantaged citizens, and the complicity of unreflexive American doctors in this. Taking this approach, Julia was acting according to her secondary habitus; squaring the blame on poor policy, leadership and professional stewardship of population health. Solidarity, advocacy and ‘speaking truth to justice’ were hallmarks of her social justice ideation. Her position however extended beyond what she saw as the intentions of The Charter to support students who entered medicine ‘out of a desire to help’ others. It advocated the Commonwealth fund adequate resources to underserviced populations. In direct patient care, Julie was aware of the frustration of failed efforts at simple behaviour change strategies. She saw the need to acknowledge the complexity of causation in chronic, non-communicable diseases, including the need to modify structural barriers to behaviour change, in order to score outcome ‘wins’. She argued that it should not become an adversarial (legal or political) battleground. Julia reasoned that the change implied by The Charter involved physicians spending more time with disadvantaged patients, and attempting a variety of strategies to achieve health targets. This perception aligns with evidence based practice of health care equity.

Kerry (F41), a white, Australian woman and mother, expressed concerns for the social disadvantages of Indigenous people, refugees, and the elderly. In health care, Kerry noticed that elderly persons were treated quite differently to babies and children. This view referred to the semiotics of what life was worth in our society at different ages of the lifespan, and assigned greater value to the life potential of young people, which then warranted extra effort in health care provision. Her perception of medical sentiment of the elderly was, “they’re at the end of their life [sic] and maybe they don’t need as much of our resources.” Kerry’s antidote was to imagine elderly patients as your own grandparents. Other value judgements Kerry noted was that people who “look after themselves” were favoured in health care more than those judged negligent with self-care; such as smokers and the obese. The latter evoked the reaction; “What a waste of my time!” The Charter signalled to Kerry the need for physicians to treat patients without prejudice, and advocate for the special needs of disadvantaged patients. Kerry understood the links between social conditions, stress and mental illness; the social health-illness dialectic. However, the extra time taken by physicians to effect equity posed a dilemma for Kerry, as she believed this took away time for other patients. This accords with 'the societal error' (Stone 2010) in past medical education in which the importance of physician actions on social inequities was undervalued at the expense of biomedicine. Kerry held to the edict of the 'greatest good for the greatest number' but also acknowledged the dilemma in deciding whose quality of life was more important. She saw the need for an alternative discourse to economic justice in health distribution, but was not sure what this could be. There was the cold calculation of "quality life years" (QALY) to guide physicians in resource allocation; but then she said, there's "that human factor". For Kerry, this meant "…what's right and wrong is always going to be a bit blurry." This supersubjective perspective (Tredinnick-Rowe 2018) endorsed physician fairness, to ensure 'due diligence' in meeting the social contract of medicine; albeit within the bounds of a limited and complex system of imperfect health resource allocation. This ethical struggle with vertical and horizontal discourses was also seen in the description that Julie (F45) gave of physician due diligence; that maintained the health of 'acopics' despite their boundary status as hospital-worthy patients. In future medical education, Stone (2010) suggests, the role of physicians in 'upstream' actions on health inequities will be validated (overcoming the 'societal error'); and students will learn "how social influences multiply interact" (:503).

Beata (F43) was a white Australian woman from a communist, eastern European migrant background; previously a pharmacist. For Beata, The Charter signalled the fair economic distribution of limited health funding. Regarding the unsustainability of health costs, she believed that expenditure needed to be directed more to the collective. Accordingly, she avoided 'the societal error'.

> "Is it then fair for you to pay ten thousand dollars a year for someone to have [expensive cancer] treatment while not for example investing that money in preventative health or, not investing it in drugs that are cheaper that could treat many more people?"

Technical breakthroughs in biomedical therapies are frequent and incur high research and development costs. Beata was the only participant to identify this dilemma of horizontal vs vertical distribution in population health (Mooney 1996). On The Charter's requirement for justice, Beata recognised the greater health needs of the disadvantaged social categories. Her concern was for mental patients, rural people and migrants; who can 'fall though the gap' and not get a fair share of funding. She noted there was now greater 'awareness' of this issue in medicine. The Charter, she believed "draws attention to the fact that its not just one particular group, but there are others that you might not necessarily think of."

Georgia (A613) was a white, urban Australian woman whose father was a surgeon. She had voluntarily sought learning experiences in remote Australian rural communities, and a disadvantaged community in The Philippines. She regarded Australian Indigenous people, asylum seekers and the immigrant Islamic community to be disadvantaged sub-groups.

Her prosocial habitus was supported by her membership in the parallel curriculum of medical student groups at Adelaide, and she became an activist for refugee health. The Charter, she believed, responsibilized physicians to redistribute health care according to need, an equity perspective; and to avoid social identity discrimination. To Georgia, this was a reality she had witnessed in hospitals and Emergency wards; "it's there, so it's the need that makes it more real." She perceived disparities in education and health literacy between doctors and patients; and ethnic differences in expectations, values, and timely access to health care. There was also a gap in patient understanding of the system operations of western public health care. Georgia was critical of the poor preparation or 'exposure' she received in medical education for skills to manage indigenous health complexity. In case-based learning, she recalled only one Indigenous case; and no Indigenous people to meet with and practice communication skills. She advocated for greater diversity of social interactions during medical school to prepare students for reality. She wanted to know how 'to help'; how to effectively act on social determinants of health. Georgia (A613) realised that patients "look to the doctor for a plan"; that if you had their support, "patients do trust what you say, your judgement. You have a lot of power in that way." Physician trust was the key professionalism issue in her discourse.

B.0.7. International participants

The medical practice of social accountability

Medical student participants from International backgrounds shared their perspectives of the intention of The Charter in the following cameos.

Safiya (A14), a First Year, first in family, undergraduate from Singapore had multiple intersecting equity identities: ethnicity, sexuality, religion and gender. Reflections on her volunteering experiences with urban poor and mentally ill Singaporeans made her critically aware of how systemic violence impairs the health of these groups. She also saw the "lack of education or awareness" of health, and poor affordability of access to the health system in Singapore, as major hurdles to health improvement. The Charter supported her condemnation of self-serving, unreflexive physicians and backed the virtues of unconditional, patient-centred care.

> "It doesn't matter who the patient is… what kind of race, what kind of background, but first and foremost it's the health; they're here because they need help and they have trust in you and you should um, we [sic] should not take advantage of this trust they place in the healthcare profession."

Safiya (A14) argued the poor sector of the population needed education to increase awareness of health opportunities; not unlike the *conscientization* or empowerment described by Freire (1977). Physicians should practice fidelity to the health of the patient, not to self-interests.

Safiya also identified the *mis-recognition* (Bourdieu 1984) that takes place when physicians engage in social stereotyping of patients. She showed sensitivity to the social 'health-illness dialectic' that young Malays and LGBQTI people experienced in Singapore as stigmatised minority groups. Safiya denounced stigmatising physicians' approach to these patients problems as *responsibilisation* or problem-shaming, rather than *problematising.* In essence, Safiya had uncovered an immanent critique of her society; a 'dialectical' crisis or contradiction in social structuration that produced 'emotion work' or suffering (Herzog 2018).

As a First Year student**,** Safiya's subjective (horizontal) accounts were yet to be matched by objective (vertical) knowledge of bioscientific medicine, nor tested by medical culture; but her political gaze of the machinations of social health inequalities was astute. She seemed aware, cognitively and emotionally, how compound social inequalities, like her own intersectionality of equity identities, can multiply affect health outcomes (Stone 2010). While her perceptions of failings in the medical profession's social contract seemed valid, she had yet to formulate a supersubjective position that could unify health care humanism and biomedicine in the service of actions on social inequities. Empowerment by sociological insight added *capability* (Sen 2009) to her social justice activism: to 'voice' advocacy for political change in Singaporean society. Safiya gained the ethical capital of critical consciousness, and brought this powerful 'fairness' lens to her medical education.

Rohan (F14), a Subcontinent Indian-American man, Hindu and post-graduate in Chemistry, had experienced stigma as a dark-skinned male; stereotyped as a Muslim; and, prejudged for his American accent. He observed racist reactions to Indigenous people in Adelaide, similar to that experienced by African-Americans in the United States. He acknowledged and supported the prosocial intentions of The Charter, but was sceptical that its principles would be transferred into practice unless it was integrated into medical training.

Nipuni (A69) was a dark-skinned young woman of Sri Lankan background, raised in Australia. She had visited London and Sri Lanka as part of her clinical training, and attended a paediatric placement in New South Wales. In Sri Lankan society, she saw a large gap between rich and poor, and saw patients passively ceding autonomy to paternalistic doctors. Health resources there were scarce; an MRI investigation could require an eight hours each way journey by train, for a patient and carer; an expense that many could not afford. In Australia, Nipuni was not aware of any medical professionalism issues that may necessitate a charter; but guessed The Charter indicated "where society is headed" in progressive actions on social discrimination. She believed The Charter required physicians to respond in particular ways;

> "not just consider their health problems but other things such as their socioeconomic status, their gender, their race and what you can do to sort of help eliminate any discrimination in those areas… so, thinking about things that might not be obvious on presentation and sort of spending a bit more time, because these things would obviously be really important to the health care of the person, as opposed to things like, you know, 'Have you had your blood pressure measured?' or 'Have you had your cholesterol levels checked?'… like figuring out their socioeconomic status and how it might drive their health…"

Nipuni was critical of physicians who treated socially diverse people the same, and those who discriminated against social disadvantaged hospital patients "coming in again and again." Here, 'awareness' was portrayed as critical inquiry into structural vulnerabilities that were active in the patient's lifeworld. These acted as obstacles to full health and complete recovery; and chronic illness could see the person return to hospital again and again; such that (over-) familiarity breeds contempt. This idea mirrored the 'acopic' dilemma at Flinders, discussed by Julie (F45).

Kelvin (F44) was a white International male, from a low socioeconomic, remote region of Canada. His initial reaction to The Charter was "that's already being done". Discussion of social justice led him to consider fairness and equity in health care, and barriers to achieving these; especially in developing countries where he had travelled and reported some voluntary experiences. He regarded people's lack of 'awareness' as an obstacle to social justice;

> “people… not having an education and not having an understanding to pursue the things that someone with more advantages knows to pursue.”

This perspective mirrored Bourdieu’s social theory (1977), in which those lacking a variety of ‘capitals’ are disadvantaged in accessing contested social goods. Sen’s theorising would argue that poverty constrained their capability to act freely. The terms ‘education’ and ‘understanding’ used here could also be interpreted as critical consciousness (Freire 1977). The physician’s role, in this interpretation of The Charter, was not voiced; as Kelvin (F44) believed this was social work, not medical work.

Subtheme B.1. ‘Awareness’ in medical practice

The medical practice of social accountability

B.1.0. Introduction

The term ‘awareness’ in participants accounts generally referred to the need for physicians to account for diversity among patients, and the ways that social adversity can disadvantage their health outcomes. Variations in perceptions related to ‘awareness’ allow insights to diverse participant structuration to the fields of medicine and social health.

Kerry (F41) reflected on her clinical experiences and what she was taught about the physician’s dual role.

> “I think one thing you hear and you learn it’s true; you learn that medicine is not just a science but it’s an art, and it’s very much about your people skills, and you know? It’s so true, it ah, there’s a lot of that social stuff comes into it, yeah?”

This aphorism aptly aligns with the dissection of medical education into horizontal and vertical discourses (Bernstein 1999). In the interview, Kerry discussed her *awareness* of social inequities in the lives of patients with drug addictions on the psychiatry ward. She recalled having to move past ‘first impressions’ (subject to primary habitus) to consider compassionate reasons why drug addiction may be a form of social coping. Any ongoing care concerns for disadvantaged patients following discharge from hospital should also be considered by the physician, she believed. Kerry commented on the social awareness of the patient’s lifeworld that physicians need to have.

> “The stress and the mental coping and rearranging that has to be overcome to physically change what you’re doing to be healthier, is probably underestimated a lot of the time.”

Unstated in Kerry’s observation was the need for reflexivity on capacity differences between physicians and patients. A failure of critical self-reflection can lead physicians to believe that patients should be capable of doing what the physician can.

Matt (F47) voiced *justification* for the extra time and other resources given to patients with equity needs; to ward off objections.

> “In my mind it would be kind of like the feminist argument, like, we’re not trying to push women’s agenda above the male agenda or anyone’s agenda, we’re just seeking equality and equity of care.”

Hannah (F42) revealed the discomfort, even fear, that students can experience when asking patients questions about personal matters; such as suicidality, sexuality, and weight. The moral dilemma she saw for the physician was between the sentiment “I don’t want to bring it up and hurt their feelings” and “learning to bring up sensitive issues” so that your patient didn’t die of an undiagnosed condition. In psychiatry training, students learned that it is incumbent on the physician to avoid assumptions; to ask every depressed patient “Are you thinking about killing yourself?” The emotion work suffered by the physician in asking difficult questions is imputed to be less than the moral injury of *not* asking; for instance, when a patient completed suicide.

Melissa (A12), a Chinese-Australian woman, studied some public health prior to commencing medicine. Her father was a rural GP. She told of her growing self-awareness and development of independent, critical thinking. In recent years, she had begun to think differently to her politically “conservative” family, and became more conscious of social justice and environmental issues. Melissa had intersectionality; her physical appearance was Chinese and she had experienced anti-Asian racism in Australia, and recovery from serious emotional problems. Yet, she had a white boyfriend and valued his unconditional love.

Melissa (A12) placed the onus of ‘awareness’ onto the health system. She argued that for both Indigenous and LGBQTI people in the community, doctors could perform research to learn what these marginalised groups want in relation to their healthcare. Research can inform practice to make health care more accessible and acceptable for stigmatised groups, and improve health outcomes. Melissa firmly believed that emotional and social factors “make up more of health outcomes than just plain medicine.” Her background as the daughter of a rural GP may implied social capital for success in biomedicine, but she had not made ‘the societal error’. Her membership of prosocial medical student organisations and interactions with like-minded peers likely protected her prosocial dispositions against the ‘hidden’ curriculum of medicine. Melissa wanted to help change adverse social conditions for her future patients, but had no knowledge of how to do that.

Rohan (F14), from the United States, was aware of social disadvantages for African-American people, and realised that to avoid discrimination, “you have to be aware of certain things’. He was aware that African-Americans were frequent users of the health system, often at personal expense; and was conscious of the need for the health system to be respectful and inclusive, and to provide tangible benefits that rewarded their attendance. The physician “awareness” that Rohan perceived was consciousness of patients’ equity needs; which he explained first symbolically, and then practically;

> “I think it’s more than… ‘everyone needs to be treated the same’, ‘cause if you do that, nothing’s going to get done, ‘cause not everyone has the same background, and I think it’s just about being more, sort of, socially conscious of these types of issues.”

> “I think sort of giving those benefits so that they have incentive to actually come to the physician initially and to get these things regularly checked out by him [sic], and when they’re actually there, they’re treated with the correct amount of respect, given very much straight answers, and say, ‘You need to change everything about your lifestyle, your diet’, and what not; like actually give them things they *can* improve on.”

Rohan’s idea of physician ‘awareness’ included the patient perspective of health system accessibility. He underlined the physician’s role in making disadvantaged people feel welcome and respected. This mindset ensured meaningful communication, opportunistic screening for common health problems, and manageable changes in modifiable health determinants. He also conceived an advocacy role for physicians; to improve funding of health care accessibility for marginalised patients. Rohan agreed that a wall poster or pamphlet in the practice waiting area was a suitable way of helping gay patients feel “comfortable” about disclosure.

Further discussion with Rohan (F14) centred on clinician ‘awareness’ when a patient didn’t seem to care about their health. In the interview, we discussed what circumstances could make this decision seem like the person’s free choice, while not in the best interests of their health and well-being. Rohan suggested that “negative emotions” that accompanied social inequity, such as stress, distress, depression and helplessness; undermined patients’ self-efficacy and motivation. This observation reflected on the emotion work of those being ‘invisibilised’ and silenced in the social economy (Herzog 2018).

> “At the same time, we do need them to take active steps so we can meet up; there’s a lot of meeting in the middle on this, isn’t there? So, the doctor and the medical student need to reach out, but at the same time, they need to reach out to us too!”

The term ‘meeting up’ referenced not only patient responsibility, but also ‘structural’ limitations of the health system; which imposed a set of constraints on accessibility to services for differently abled patients. In the above statement, Rohan had an epiphany about the medical student/ physician as the face of the health system; the contact point between patient needs and system supply; a site of SA. Abstracting from this view, it was through SA practices that physicians provided flexibility to the relative inflexibility of the western health system.

B.1.1. Physician awareness of patient identity

The medical practice of social accountability

An interview question indirectly asked participants if it was important that a general practitioner know that a patient’s sexual identity is homosexual. The implication of *knowing* is that homosexual people have greater health equity needs than those who identify as heterosexual. The question is reproduced here:

“An Adelaide general practitioner knows that about 10% of the population is homosexual, but she’s not aware of any homosexual patients in her practice. What could be the problem and what could she do to change the situation?”

Kerry (F41), a white Australian, medical science graduate, considered reasons why homosexual people may be reluctant to disclose their sexuality, and reported she was involved in research that found gay and lesbian people had higher smoking rates than heterosexuals. She thought physicians needed to “take into account” the higher incidence of “anxiety-type mental health” issues among homosexuals, related to the discrimination they are subjected to in society. Anxiety and smoking presented long-term health risks for patients, and there were medical interventions that targeted these problems. Avoidance of discrimination can be a reason for homosexual non-attendance at health services. The physician had a role in creating trust and forming a therapeutic relationship that can facilitate health. Kerry concluded,

> "…so yeah, from a health care point of view, it's good to keep mental health in mind, and I mean you would probably educate the same as any other couple in terms of sexually transmitted infections. I don't think there would be anything that you would advise differently, um."

Nate (F46) disclosed his homosexuality in the interview, and was aware of a high rate of psychological problems, including depression, among his gay peers. He mentioned how he was excluded from donating blood as he was at risk of HIV disease; a source of self-stigma that can add to the risk of mood disorder.

B.1.2. Physician awareness of stereotypes, stigma, and safe access

In the manner described as post-liminal conceptualisation, Matt (F47) saw new possibilities arise in clinical relationships, in which the ontological realities of patients' lives were now important. He believed he would never 'give up' on patients that struggled with self-care; a vow of solidarity. Despite dissonance between his habitus and the field of Indigenous ecosocial health, Matt had not succumbed to the *illusio* (Bourdieu 1986) of biomedicine, and understood that 'patient-centred' practice meant meeting the patient on their own terms.

B.2.1. Participants with intersectional equity identities

The medical practice of social accountability

The discomfort of ellipsis of habitus (Bourdieu 1977) when relating to patients was reduced in participants with intersectional identities. In the data, participants with intersectional identities expressed solidarity with patient groups whose status had counterparts in their own backgrounds. These groups included migrants [F14, F43, F112, A64]; refugees [F42, A13]; poor (F43); stigmatised [A113, A14, F47]; and, rural populations [A63, A612, F46]. No study participant self-identified as Aboriginal or Torres Strait Islander.

This solidarity, empathy and care for others with stigmatised identities is described in standpoint theory; describing perspectives that derive from one's social position in society (Edwards 2014).

Among Final Year participants, those at Adelaide reported less formal preparation and confidence in the practitioner's role in Indigenous health; and less knowledge of the practice importance of the social determinants of health.

Flinders Final Year participants displayed better understanding of the social determinants of health, but lacked knowledge of how to modify them to benefit a patient or community. An exception was Julie (F45), who detailed a critique of policies affecting structural health determinants; and a critique of the 'cultural humility' training she received. Flinders Final Year participants Nate and Matt, reflected on longitudinal clinical experiences in Indigenous communities, and reported deep insights to the social health-illness dialectic. They also reported personal and professional development through reflexivity on their prior, privilege-imbued assumptions in relation to 'the otherness' of Indigenous ways of being.

This reflexivity was absent in the testimony of Mark (A612), an undergraduate from the same rural background as Nate (F46), following his student placement in a South Australian Indigenous community. Mark held to a moral perspective that responsibilized the State for political economic stewardship in the fair distribution of health funding. A supersubjective, relational perspective of Indigenous people, and reflexivity on his own power and agency as a social health advocate, was missing in the interview.

Subtheme B.3. Agency differences between participants

The medical practice of social accountability

B.3.0. Introduction

Bandura (2001) recognised human social agency as "the ability to exercise control over the nature and quality of one's life" (:1), such that being an agent allowed one to "intentionally make things happen by one's actions" (:2). Agency remains a contested entity in sociology, with theorists making claims for more or less embodied 'structuration' of agency in relation to local, national and global power structures. While Bourdieu (1977) inscribed structuration to the notion of *habitus*, Illeris (2014) ascribes structuration and transformation to *identity*.

What seems important to professional development for SA in health care, is graduate agency that "enables people to play a part in their self-development, adaptation and self-renewal" (Illeris

2014:2). The importance of such adaptable agency may relate to the dynamic, ‘liquid’ nature of modern global society, and the ecosocial challenges to health that form the reality that populations and physicians now face. The social cognitive theory that Bandura developed may help to identify the modes of agency that join cognition to action.

The three modes of agency outlined by Bandura (2001) include “direct *personal* agency, *proxy* agency that relies on others to act at one’s behest to secure desired outcomes, and *collective* agency exercised through socially coordinative and interdependent effort” (:2 Italics added). These modes of agency were discerned in participants’ discourses in relation to artefactual ‘structures’ in the study. Interview questions were semi-structured to elicit participant responses to simulated clinical and population health dilemmas.

Mark (A612), as noted in the previous section, expected politicians to exercise *proxy* agency on his perceptions of underfunding of rural health; he was yet to activate personal agency.

Julie (F45) expressed agency as both *personal* leadership and *collective* professional actions on social health inequities. Her habitus as a lawyer and health activist, formed in a human rights framework, had given her a global sociological imagination and supersubjective cognition for social justice practices. She had found her voice and had the armaments in her secondary habitus to effect social change.

Matt (F47), against his expectations, had found *personal* agency in relation to Indigenous people and their health problems. Despite the degree of difficulty of his Indigenous health attachment, he enjoyed the experience and gained personal and professional growth. His preferred professionalism was type G. (Practice in an area of need, concern for disadvantaged groups). (Wear & Aultman 2006).

Nate (F46) had entered Medicine in middle age, and sensed that competing priorities would make it difficult to express his prosocial identity in his practice. Instead, he imagined contributing to collective projects with like-minded colleagues.

First Year participants at Adelaide Medical School reported formative learning of respectful greeting and relating to Indigenous people; the first medical student cohort at their School to do so. In the non-threatening context of the Medical School, students gained both *personal* and *collective* agency with Indigenous people in decisions affecting their health (McKivett, Paul & Hudson 2018).

Subtheme B.4. Reflexivity and supersubjectivity on societal structures

The medical practice of social accountability

B.4.0. Introduction

'Reflexivity' is a candidate for the practice of forming a new professional gaze: one that allows the physician to read the 'patient' (medical gaze) and the 'person' (sociological gaze). 'Supersubjectivity' is another; a constructionist candidate in medical education for creating "a synergy between the medical student as an applied scientist and a medical humanist" (Tredinnick-Rowe 2018:492). Rather than learning as mimicry, of clinical skills for instance, supersubjectivity allows students to form semiotic meta-concepts that shift their thinking to a new paradigm, and grasp what is required of them amongst the uncertainty of diverse clinical encounters.

Semioticians claim "the whole of human experience, without exception, is an interpretive structure mediated and sustained by signs" (Deely & Semetsky 2017:208). For instance, the semiotics of The Charter of Medical Professionalism, a supersubjective decree, informs the inter-subjective practice of patient-centred care. This skill involves *reflection*, and allows students and doctors to "draw on both objective and subjective contextual knowledge" (ibid:507): that is, bioscience and humanist praxis; to "orient themselves to the clinical environments that are profligate with new uncertainties and challenges" (:508). This semiotic supersubjectivity may be what is described by Sveiby & Skuthorpe (2006) as a 'knowledge management system'; employed by traditional Aboriginal elders in problem- solving diverse community issues.

B.4.1. Supersubjectivity

The following participant narratives aim to portray the concept of supersubjectivity.

The hospitalised Indigenous patient that Nate (F46) saw may have smelled bad to non-Indigenous noses (horizontal knowledge), but Nate knew objectively (vertical knowledge) that this man was unwell, and had a higher risk of serious illness (and death) than non-Indigenous patients.

The fact that a patient 'smells bad' may be a sign (semiotic) of poor social conditions, or a sign (clinical) of diabetes, and/or infection. Communication may be difficult if English is not the first language, and the patient may need interpreter support to signal his health preferences and to absorb health messages. Adherence to a health plan may require additional family and community supports; and additional capacity-building or empowerment measures. No competent clinician can afford to stereotype and under-treat this man.

Reflexivity on two non-clinical experiences of structural violence changed Nate's gaze and 'ability to read' (the semiotics of) critical situations involving health injustice. His own experience of stigmatised sexuality may have also be drawn into his critique and care for a patient like this. His habitus had changed and his clinical toolbox had expanded; to better deal with diverse, uncertain health contexts that derive from unequal societal conditions.

Matt (F47) reflected on the *status quo* of medical culture when he critiqued the semiotics of medical communication. He saw deference to the economic order in the way that sexual health clinicians used the term 'client' and others used the term 'health consumer'.

"They're just people working with other people", he said. He saw this "weird", objectifying way of thinking about people as integral to the inequity problem: it posed a structural barrier to doing ontological justice to the personhood of the patient.

The health sector's deference to neoliberal market ideation was another target;

> "…equity is often considered as how much money we spend and who gets access to that spending; that's always the analogy that's drawn. Again, I don't know if that's… how to address the health problem. We need to change the way we're thinking."

Matt reflected on the possible purpose of issuing The Charter, and mused;

> "I guess there was a situation that meant 'let's try and think about what it is that doctors are doing'; are they just restoring health and promoting longevity or are they perhaps doing something else?"

This was a problematising, critical discourse; one that subjected the 'awareness' theme in The Charter's intention to philosophical scrutiny. Matt used the profession's history of malpractice, and unreflexive adherence to a neoliberal social order, to pare back layers of ‘medical culture’ at cross purposes to patient and societal benefit.

Martin (A61), opposed the above positions, paid great respect to the justice of the marketplace, but seemed unaware that his position in a social (socioeconomic) hierarchy unfairly affected health outcomes for others. In his view, the market, the law and the professions were the established structures of society; and SA needed to practiced “in a specialised medical fashion”; in teams, not as independent actions by interested physicians. Here, he expressed loyalty to the institutional ethos of medicine. Medical advocacy for policy change was acceptable, but social justice was “a silly idea”. To Martin, affirmative action or social health equity was really just “reverse discrimination”. He said, “I really do think that a free market approach does solve… does bring back equilibrium.”

Martin’s assumption of a ‘level playing field’ in Australian society was at odds with evidence of structural inequalities affecting health. The patients he observed in general practice had lifestyle risks to health that needed to be eradicated. Regardless of the patient’s social context and identity, he assured they needed to become responsible and motivated to change lifestyle; and the practitioner needed to persist with the same ‘nagging’ tactics. The objective literature informed Martin that poor language skills or a mental illness signify poor health outcomes for patients. He appeared to accept these findings as fixed and therefore unmodifiable.

James (A68) was from a higher social class than Martin (A61), but in recent times had become more interested in global political events and social justice. His habitus was grounded in the highly educated and socially aware background of his English parents. Being informed and literate, with the capacity to ‘read the world’, was integral to his primary habitus. Possibly against type, his parents had no political allegiance to a conservative politics. Instead, James nominated his parents as role models of social justice.

Reflexivity on his background allowed James a perspective of those people he saw in medical practice that were less educated. He perceived that communications and trust in the doctor-patient relationship were made more difficult, and health outcomes were worse. James (A68) suggested The Charter urged physicians to “recognise these issues and make a conscious effort to try and overcome them.” He emphasised the need for people like himself to acknowledge social inequality. In this regard, he was reflexive of the tendency of “inherent defensiveness” against bias among privileged people when dealing with people of lower socio-economic status. He advocated that physicians overcome their biases and focus on what is most important; “to make gains and make sure people get the right health care.”

> “I think it is important that we say that we recognise these issues exist. It’s not about blaming people; its saying these issues do exist and there does need to be a conscious effort, because if we’re not consciously doing something about it, we’re not going to achieve what we need to.”

This ‘bringing to consciousness’ of societal inequalities is a key step in transformative learning and actions on social inequities (Freire 1973). James was aware of the stereotyping that can occur in clinical settings; with patients shamed by their residential postcode, and by diagnostic associations (e.g. pancreatitis = alcohol abuse). In his mind, James balanced out these negative associations with empathic narratives that signified “horrific things people have gone through” that he learned about Indigenous peoples’ lives. This critical perspective also allowed him to problematise rather than responsibilize disadvantaged patients that struggled with self-care. In contrast to Martin (A61), who learned to hound patients until they act on lifestyle risks, James was aware of the structural vulnerabilities that patients can face. He had a beneficence principle to inform his practice; “I have an ideal that we can still try and… and help people.” He extended this moral ideal, like Julie (F45), to the collective voice that the medical profession can use in solidarity with the health and human rights of Indigenous people, refugees and asylum seekers. James also wanted to see greater medical advocacy for policy changes on global health issues such as climate change.

When I asked James to reflect on influences on his prosocial habitus, he admitted that he wasn’t much interested in ‘public health’ in earlier years of medicine. He cited family role models, but more importantly, his maturation and learning habitus.

> “Yeah, I suppose I’m now 26, so my frontal lobes have just… finally got there. Ha, ha, hah! Um, part of it has just been thinking, widening my global experience, travelling, talking with people from different backgrounds. Trying to, you know, reading… I try and read various different newspapers and editorials and people talking about their life experiences.”

James (A68) resisted the popular notion, expressed by Kelvin (F44), that we had a less sexist and racist society as a result of recent social movements. When he introduced himself as a medical student at a social function, the presumption made by other guests was that his female partner (also a medical student) was a nurse. This incident became a cause for critical reflection on social inequality and his own habitus.

> "Having these life experiences and suddenly realising there's actually a lot of inequality out there… and we probably have a moral obligation to do something about it… particularly as… I had an easy path through life… and I should try and put some of my effort back into making society a bit better so more people can have the amazing opportunity of education I have."

This supersubjective perspective of SA in medicine aligned with Lev Vygotsky's cultural historical activity theory (1978); in which actors positioned themselves in the historic arc of progressive social improvement of their human society.

Safiya (A14) had grounded, personal and collective experience having illegal minority status as homosexual in Singapore. This context allowed her a super-subjective perspective of the dis-empowering structuration of health for homosexual people.

> "In Singapore especially, this is quite a… it's quite a big thing, this homosexuality… because even though there is a larger and larger support group, there's actually still a law in Singapore which at any time you can actually be um, prosecuted and jailed for… just for *being* a homosexual. And I think the reason the government doesn't want to overturn this law is because we have a lot of conservative groups of various religions in Singapore. So, it's more of 'We're not going to do anything to you, but um, I don't want to rock the status quo'; and you know by showing such, by overturning the law it shows a big support, there's going to be a lot of unrest in the city, especially amongst all these conservative groups. To me, some of them do have quite a considerable amount of power and influence. So, but whereas for these people, they feel that they are being disadvantaged because, when are you going to be fighting for marriage equality and things like that? Right now, all we're looking for is for us not to be prosecuted by the law, just for being who we are."

Here, Safiya disclosed how social and political sanctions produced by the dominant, normative heterosexual and anti-homosexual groups in Singapore society caused existential distress for homosexual residents of Singapore, including herself. While they suffered from the structural violence of non-recognition, discrimination and potential prosecution; and expected change to be slow and difficult; the homosexual community was starting actions from mutual solidarity.

Listening to Safiya's testimony in the interview, I became aware of her heightened emotional state; evidenced by the intensity of her voice and facial expressions. I formed the impression that the study had provided an opportunity to vent a hurt sense of injustice. Safiya had a lot to say; concerns she had thought through; and seemed gratified to find someone that *wanted to* listen. Living under the threat of arrest for being who you are, was a high price to pay for citizenship.

Adrian (F19), a Singaporean Political Science graduate, provided a developmental explanation of Singapore's conservativism regarding homosexuals and single parent families; and signalled the possibility of social change.

> "In Singapore it's more like; 'Don't ask, don't tell', that kind of thing. So even though, I think, in the past 5 years it has been a policy to state that there can be like, homosexual people in the civil service, so that's been established, so… that's good in the sense that um, according to legislation no-one can be discriminated against in employment... being homosexual, and also, I think a few years ago, the top leaders mentioned the importance of the 'pink dollar', which is like the spending power of the group."

> "I think it's necessary in Singapore's case; the population is still largely Conservative. Yeah, it's an Asian mix of peoples and a lot of them still hold on to the traditional family values, and you might know, there might not be outright uh, obvious discrimination but there's still a lot of entrenched mindsets about what is proper or what is right. So, I think at this stage, their approach is quite safe and also, I guess, very helpful for the transition phase. In a couple of decades or maybe a decade's time the opinions might change and you can go for active recognition and acceptance policies."

In contrast to Safiya's embodied perspective of inequity, and standpoint informed by her intersectional identities, Adrian provided a practical, dispassionate analysis of the structuring of sexual inequality in Singapore society as a political scientist. His habitus as a both a member of the dominant ethnic group, and someone trained in political science, allowed a super-subjective perspective of the long arc of sociopolitical development in Singapore as a rational and predictable process. He was aware of the Government's cynical exploitation of the 'pink dollar' while simultaneously denying human rights freedoms to residents with LGBQTI identities.

Both Singapore residents, Safiya and Adrian identified themselves as agents in the progressive improvement of their society, in the manner theorised in Vygotsky's cultural, historical, activity theory (CHAT). However, it was only Safiya who experienced the distress of being trapped in a space-time warp of social inequity. Until societal change eventuated, and the unjust Singapore Government 'border' policy that restricted the gathering of LGBQTI people to a single city park was overturned, her health and the health of others like her were liable to suffer. While Adrian brought greater cultural capital to the orthodox medical culture, Safiya brought greater social capital to a medical culture yet to establish SA values.

THEME C: 'Education' as a medical practice to overcome health inequities.

C.0. Introduction

In the study, participants' equity responses to health disparity were often expressed as a form of 'education'. Education of the individual patient, the community, or in early childhood, were perceived needs to overcome health inequalities. Within this data, education was purported to serve a variety of functions that served the individual patient, their carers, or community; or adaptation to the structural constraints of the health system. These perceptions contrasted with more SA, critical perspectives, of actions on social injustice that other participants expressed.

The following selection allows the reader to compare First and Final Year participants' perspectives of socially accountable education for improving health equity outcomes.

C.1. First Year participants

'Education' as a medical practice to overcome health inequities.

Adrian (F19), a Political Science graduate from Singapore, believed improved education and nutrition accounted for observed gains in non-medical causes of health in the United States.

> "So, people are… more aware of outcomes of certain health behaviours on their health. So, eating better and eating more as well. So, those are some of the reasons I think people are living longer as well."

This perspective centred on mediators: individuals reflecting on psychological and behavioural control of eating and health is claimed to improve health outcomes. In this view, education and nutrition awareness were conflated. However, basic education completion and improvements in other social determinants of health have a strong evidence base for health improvements (Marmot 2005). A steep social gradient in income, and lack of universal health insurance, made health care for chronic non-communicable diseases in the U.S. unaffordable for many Americans.

Elle (A15), a French-Australian white woman from Melbourne, reported a privileged education at an all-girls school that strongly validated students' identities, independent capabilities as women, and diverse career opportunities. As a result, she had little claim to an equity identity. Yet, Elle was a member of the global health student group *Insight*, and planned to visit a South Australian indigenous community in the near future.

She talked about disadvantaged groups in health care;

> "I think socio-economic background can obviously play a role because some forms of health care are a lot less accessible if you're struggling financially; additionally, if there's lack of education. Sometimes people don't know they need to have check-ups, and even when they do have regular check-ups, choose not to take the given advice."

Elle reported that medical student societies at Adelaide were "looking at how we can improve education about healthcare and access to healthcare in Indigenous communities."

She imagined how social inequities and being disadvantaged can make people feel;

> "…people are experiencing inequality that makes them feel inferior or undervalued for no fair reason, and that's going to affect your mental state… Like, I really believe in the power of a positive mind. It can get quite run down by stress and all those things and you get the overload that can like, tip you over the edge, whether it be mental health or physical health."

Elle (A15) used lay, metaphorical language to portray her conception of the health-illness dialectic. The emotion work of internalised subordination is captured in her social injustice critique. However, 'stress and all those things' were not the target of an intervention, because Elle was enamoured by 'positive psychology': a mind-focussed means of coping with stress. This self-help strategy is clearly not commensurate with the distress of severe social disadvantage.

Social reasons why patients may have difficulty in the health system were discussed by Elle;

> "… like maybe lack of social support. You know, maybe a little bit of the mentality that… I don't know, if the patient is feeling really down and there's not a lot to be excited about, it might be difficult to engage in behaviours that are difficult, that… you know, take a bit of effort to feel better. I don't know."

Here, Elle made a connection between social isolation and patient capability, but the locus of social causation was considered proximal. She was using her imagination, but this was not resourced by any personal experiences in contexts of social disadvantage. There was no conception in her narrative of the structural dis-*ease* that migrants or Indigenous people, for example, may experience when navigating the Australian health system. However, having worked in a pharmacy, Elle was aware that some essential treatments can be too expensive for people. She believed education was very important, and this was something that doctors can do; "share that knowledge so more people have access to it." The 'basic education' she believed patients needed was rote-learned knowledge of self-care;

> "… like hand hygiene and all those things like that can prevent diseases that can then be potentially be really, really life threatening; with just simple steps. If only we could all know that and practice them."

The foregrounding of personal hygiene education was perhaps not surprising in a First Year medical student. Elle awaited a visit to an indigenous community to learn about more fundamental, social determinants of health. Her philosophical stance was oriented to progressive societal improvement, in the manner of Vygotsky's cultural, historical, activity theory (CHAT). However, the education she imagined for health improvement can unwittingly reproduce the same social order that oppresses Indigenous freedoms.

Safiya (A14), from the same Year group as Elle (above), had multiple intersecting equity identities, and personal, volunteer experiences of the social disadvantages people faced in Singapore society. These experiences pervaded her perspectives of the kind of education that may benefit oppressed people. Safiya had critical consciousness (Freire 1973) of the health impacts of unfair structural limitations on LGBQTI people in Singapore, from her lived or embodied experience of marginalisation.

She perceived a power axis related to socioeconomic status;

> “… the poor; because they are poor, they are not as, maybe not be as well educated, and… there may be a lot more health issues that are brought about by that, and um, because of the lack of education or awareness, a lot of things that are possibly preventable… they are exacerbated.”

Here, Safiya (A14) positioned ‘education or awareness’ in the social conditions of poverty; as a fundamental determinant of health outcomes. She underwrote this argument with anecdotes from her own experiences as a health volunteer in a poor area of Singapore. As an example of lack of ‘education or awareness’ Safiya recounted meeting women who thought breast cancer screening was only for women with breast cancer. She described doctors who wouldn’t treat patients that couldn’t pay medical fees promptly. There were doctors who stereotyped the poor as ignorant and didn’t explain health issues with them. There were people who first sought spiritual healing; delaying timely medical treatments.

Wealthy people, on the other hand,

> “…they have the education, they have awareness, and they also have the wealth when it comes to… not just money but information to seek out help when they do have any problems with their health.”

This idea of ‘education or awareness’ resembles *social network theory*; in which a web of interconnections in a homophilous population (McPherson, Smith-Lovin & Cook 2001) would spread information and inform behaviour change.

Safiya’s comments on the wealthy and communication of information were astute. The wealthy have more ‘capital’ assets than the poor; not only affordable access but access to valued cultural resources such as information, influence, long private appointments, recreation, security, travel, expertise, quality and insurance. They are also ‘in the know’; they hold advantageous insider knowledge about how their society operates. Those lower in social hierarchy are not generally privy to such ‘critical’ information, nor to the learning that can more easily interpret disciplinary information.

In Singapore society, Safiya's generation had formal education, and as digital natives familiar with the Internet, access to global, critical information and thinking that informed their understanding. While parents were fearful of diabetes treatment, and associated the illness with limb amputation, "the kids say… 'This is a good thing and you should go for it.'"

C.2. Final Year participants

'Education' as a medical practice to overcome health inequities.

Beata (F43), a white European woman whose parents migrated to Australia, gained medical experience as a student in the Solomon Islands. There, she observed the harshness of living conditions, and poor health literacy among Islanders; "you often see dehydrated kids at death's door and parents that didn't recognise the need to bring them in." She felt an urge to "start up a whole education program all over the place." Reflecting on this experience, she said;

> "…so, having experiences like that make you more aware of the situations people may be in, like they might not have the education to realise that they need help at certain points; so that certainly changed the way I see things when I communicate with patients."

The form of awareness described by Beata, critical consciousness, allowed her to recognise social disadvantage. The 'education' she advocated, categorised as health literacy, can be delivered by targeted community education programs. A more 'critical' education would allow Solomon Islanders greater transparency and capacity to assert their collective power in political decisions that affect their lives. Development of community capacity building could endow them with greater autonomy (capability) in decisions affecting health.

Nipuni (A69), visited her parents' homeland of Sri Lanka. She characterised Sri Lankan society as starkly unequal; "there's no real middle ground there; you're either poor or you're very well off." Public health resources were limited and maldistributed, although the standard of medical training was similar to the west.

Poverty in Sri Lanka was associated with limited formal education; unaffordable for most, but highly valued. Nipuni placed greater value on basic education than on medicine to improve life expectancy; and attributed the situation for women in Sri Lanka to the long-standing tradition of early marriage and menial employment to provide for their families.

> "They're put straight to work for peanuts, just so they can sort of… they don't understand this idea of… not they don't… the concept of not having to earn money for a little while longer to get them an education, is quite foreign."

The concept Nipuni struggled to articulate may be closer to the liberatory consciousness or critical awareness that Freire (1970b) conveys in *Pedagogy of the Oppressed.* In this sense, ethnic tradition can be viewed as a structural obstacle to greater freedom and prosperity for these women and their children. The critical question is, 'Whose interests are being served by this arrangement?' Nipuni was reflexive about the privilege of her own education compared to these traditional Sri Lankan women, and held to the principle that all professionals (who benefit from favourable structural conditions), shared a responsibility to improve structural conditions for disadvantaged others.

> "I mean, being a doctor or any health professional puts you in a very… unique position because you see the effects that inequalities have um, which makes it easier for us to advocate, but it shouldn't be limited to health professionals or doctors."

This egalitarian, responsibility principle, which recognised the interconnectedness of global structural systems, was described by Iris Marion Young (2012) as a 'social connection model'. Nipuni's reflection on her own educational journey, and reflexivity on her roles as a medical professional, signified a moral responsibility to improve structural conditions for less privileged others. Nipuni advocated early childhood education, with good evidence of long term health benefits, be instituted in Sri Lanka. Another innovation is school based health clinics that aim to improve inequities in health and education.

Hope (A611), a black, African-Australian woman, visited an African community in Kenya as a medical student. She recognised how poor people often needed correction of misinformation about HIV infection, and to learn about basic health nutrition. The education and status gap between Kenyan patients and doctors presented its own problems;

> "…medicine in Kenya is very paternalistic. You know, whatever doctor says, you do. The doctor is virtually god. You engage in a discussion with the patient about 'What would you like to do?' but they almost tell you you're not doing your job, 'cause 'Why are you asking me?'"

Corrupt doctors deceived patients into paying more for their expertise. Women from patrilineal cultures were often represented at the clinic by men. Hope regarded late presentation for treatment as due to multifactorial, systemic problems in the patient's environment. She considered it not really feasible to separate the impacts of education and other factors that contributed to health; and over time, complacency became a problem.

> "I think it's also the amount of time the problem's been going on for without anything being done about it, has created a sense of… I don't want to say complacency, but I think people are just, you know; 'That's just how it is.'"

Freire's pedagogy of *conscientization* (1973), the form of education he practiced with Brazilian peasants, applied to people that lacked consciousness of their ontological rights and collective power to make changes to improve their living conditions. It is a pedagogy of individual empowerment and community capacity building that aims to effect changes in agency; for oppressed people to overcome nihilism and tackle unfair structural conditions in their environment.

Hope (A611) agreed about the dilemma that disadvantaged patients face and the opportunity physicians have to practice health advocacy;

> "… part of the reason these people are disadvantaged is because they're not even able to stick up for themselves and if you are the doctor and you have that set of ways that can improve the situation, aren't stepping up and saying 'Well I think you people are being disadvantaged' then you're not really doing… you're not really doing your job."

The disempowerment inferred by 'people not able to stick up for themselves' is close to the conception of oppression that Freire (2007) sought to remediate in his emancipatory pedagogy. The physician role of social health advocacy; promoting agency and capacity in the best interests of a disadvantaged group, can empower justice and health-affirming structural changes.

THEME D: Critiques of contemporary medical professionalism.

D.0. Introduction

Commentary in the medical education literature on the purpose of The Charter of Medical Professionalism (2002), referred to

> concerns by professional leaders about a decline in patient-centred humanism in medical practice in the context of dramatic advances in biomedical technology and the doctor-centred commercialism of medical enterprise.
>
> (Pellegrino 2000; Hafferty 2006)

Also drawn from my literature review was this evaluation;

> In essence, *A Physician's Charter* promotes the 'fundamental principles' of "patient welfare, patient autonomy, and social justice" (Jotkowitz, Glick & Porath 2004:5) as values that should be adopted by all physicians.

An internationally agreed charter on medical professionalism is a rare entity; issued to correct a perceived failure in the implicit social contract physicians held with society, to provide 'health for all'. Historical concerns for abuse of medical professional status in the 20th C include the activities of German physicians and surgeons during The Holocaust, and American medical researchers in the Tuskegee experiment, among others. Unreflexive physician-centred profit and hierarchy, rather than patient-centred health outcomes, is a professionalism concern in late 20th C, neoliberal societies.

The huge success of technological advances in communication, information and biomedical products may be responsible for the ellipsis of habitus (Bourdieu 1977) in contemporary medical students to a greater biomedical rather than sociological imagination of health. Not all medical students learn about the vexed history and criticisms of the profession they are entering; a situation that promotes *presentism* – "the analytic neglect of historical forces shaping" (Rimke 2018:19) the discourse of medical professionalism. Unreflexive ellipsis of habitus (Bourdieu 1977) to the neoliberal context of western medicine may preserve *illusio* (Bourdieu 1986) of modern medicine as an unconditional good; and suppress critical consciousness of the health-illness dialectic implied by SA professionalism. Continued solidarity with disadvantaged groups in society may preserve medical student participants' prosocial intentions for medical practice.

Early in the interview process, I began to ask participants if they could imagine why issue of the 2002 Charter of Medical Professionalism may have been necessary. The following selections from participant data aim to distinguish modes of thinking about the nature of professionalism.

D.1. <u>First Year participants</u>: Critiques of contemporary medical professionalism.

Violet (A13), a young Vietnamese-Australian woman, perceived the goal of The Charter as "better equality in the distribution of health care." She had a strong interest in social justice, and was a member of a Rural Health medical student group. Violet related The Charter to the problem of distributive health justice in Australia; to physician shortages in rural Australia, and in particular, medical services to Indigenous communities.

> "I guess it's hard to get doctors to move to rural areas, to rural Australia as well, and getting doctors to stay there; so, sustainable health care and resources needed to treat, and like monitor the health of these people."

The only international medical professionalism concern that Viola expressed, was the lack of affordable health care for poor people in the United States, and in Vietnam. Although a First Year student, she knew what health equity required; and agreed that physician fairness and consideration of patients' social needs should be guiding principles of medical professionalism.

Pandora (F111) from Hong Kong, and Safiya (A14) from Singapore, perceived unfairness in physicians giving preferential treatment to wealthier, private patients. This was a critique of the influence of neoliberal capitalism on medical practice. Safiya (A14) was alarmed by the negative consequences of physicians choosing which patients they treated; poor and marginalised groups were unfairly under-treated, and were under-educated about their health. The social contract was broken.

Viola (A11) a Vietnamese-Australian woman, was bonded to work as a rural physician, and was a member of the *Insight* medical student global health group. She regarded The Charter as addressing disparities in health care; to "promote as much equality with health care as possible… which hasn't happened very much in the past."

Melissa (A12), a Vietnamese-Australian woman, abstracted from social and political norms in society regarding race, women, and poverty to the medical professionalism that The Charter aims to reform. She said,

> "… there's been quite a bit of discrimination from [sic] … asylum seekers, and Muslims, as well as

> um, people in the lesbian, bisexual, transgender and so forth community. So, I think that [The Charter] could be a response to that.”

This perspective echoes that of Julie (F45), who recognises that “discrimination generally follows marginalisation in society”. Other groups that Melissa (A12) believed discriminated against included the anti-abortion (pro-choice) movement in America; and women because “their reproductive rights have been severely constricted in America.” This view was also supported by Julie (F45) in her appraisal of ‘egregious’ distributive injustices in American health care. In contrast, an anti-abortion, pro-children’s rights sentiments were expressed by Carmen (A610) as a critique of modern medical ethics.

The professionalism reform of The Charter, Melissa (A12) argued, was to ensure that these societal attitudes do not affect physician conduct; “as doctors you should, um… some do; you shouldn’t discriminate or provide unequal care to your patients.”

Alison (F11), a white woman from Victoria, engaged in online activism in support of Indigenous people, refugees, and humanitarian causes; aiming to keep her friends informed and engaged. She also planned to work as physician in an underserved area of health care. (Professionalism type G.) (Wear & Aultman 2006).

Alison was reflexive of her First Year status and lack of knowledge of the Australian health system. Nevertheless, she recognised a mismatch between the “white dominated” Australian health care system and poor Indigenous health outcomes. She also observed biased societal attitudes among peers in medical school, and believed

> “…we’re not going to be able to change anything unless we know what is… what the problem with ourselves is, um and so, I think reflection’s really important. Talking about things with other people is also a good way to do that, so tutorials or discussions over lunch, um and also listening to other people’s stories and once you listen to someone who might be very different to you, you can start to understand what, I don’t know, just a lot of different things, I guess.”

Alison made an argument for both personal and professional reflection and meaningful narrative communication as means for students to become disposed to human diversity, and to understand how structural vulnerability operated to disadvantage health. In Bourdieu’s terms, this effort prevented ellipsis of habitus (Bourdieu 1977) to the doxic ‘hard science’ of medicine, and enabled Alison to retain her prosocial humanism. C*ritical* reflection on one’s personal and professional development, and reflexivity on one’s embodied dispositions, were professional practices that could overcome physicians’ discriminatory treatment of marginalised patient groups.

Alison (F11) agreed with Julie (F45) and Melissa (A12) about the need for social justice in medicine. Alison claimed

> “…you have to have social justice in medicine, um, and I think it goes hand in hand because a lot of the people that doctors deal with, are not only sick, but probably are in a group that are marginalised in society or face injustice. I think this [The Charter] is just highlighting um, for medical professions how important it is to keep this in mind and why it’s important to do particular things and maybe doctors forget it sometimes.”

This narrative regarded the *need* for social justice; for physician mindfulness (not forgetting) non-biomedical knowledge (Kuper et al 2017) relevant to health; as integral to professional reforms.

D.2. Final Year participants: Critiques of contemporary medical professionalism.

James (A68) was a British immigrant with academically accomplished parents. He read The Charter as a statement affirming “health care as a human right, and medicine is one of the key parts toward that.” He had a historical view of medical care as something that few could afford; and now, with universal health care in Australia there was

> “still a big difference between those who afford private care, for those stuck on waiting lists, ah, um, and those who because of language and cultural backgrounds or um, education, will actually get a much lower standard of care.”

This social inequality critique of medical professionalism, placed the onus on physicians to be SA by meeting patient’s equity needs; more than was practiced in the past. James (A68) *recognised* (in Bourdieu’s sense of acknowledging power differences) that the education gap between many patients and himself required reflexivity on subconscious biases. He explained why such reflexivity can be normative;

> “… like I said I come from a pretty privileged background; it can be seen as quite attacking to us that we don’t understand or we discriminate against that…”

In Australia, the professionalism issue James saw as sub-optimal, was health care outcomes in Aboriginal and Torres Strait Islander communities. Despite ‘cultural respect’ training, he observed physicians exercising common racist stereotyping and socioeconomic profiling of patients. Judgemental attitudes regarding the poor, drug users, and alcoholism was also common. Lack of practitioner reflexivity on subconscious judgements meant that some physicians hubristically believed they could have ‘risen above’ the social disadvantages that the patient has succumbed to, “and made better choices”. James reasoned that, for some in the profession, “inherent defensiveness” against others’ poverty and disorder had to be overcome. This observation recalls the ‘psychopathy’ of aversion to patients observed in some medical students exposed to the white sheets, face masks, and anti-septic clinical setting (Skarlicki et al 2013).

> “I think it is important that we say that we recognise these issues exist. It’s not about blaming people, its saying these issues do exist and there does need to be a conscious effort because if we’re not consciously doing something about it, we’re not going to achieve what we need to.”

James pointed to the goals that should take priority in professional thinking, like achieving equity health outcomes. Providing a safe environment, free of judgement, for stigmatised patient groups to receive health care screening, education and treatment, was of greater importance. Although he did not comment on historical atrocities of medical professionalism, physician-centred commercialism, or the unsustainability of health care costs, James expressed concern for fairness and equity in future health care provision.

Matt (F47), a white, Medical Science and Humanities graduate, was from rural South Australia and planned to work in an area of medical need. He was aware that The Charter spoke to moral failings by the medical profession.

> “I mean, obviously, there’s famous situations of horrific treatment of patients by doctors, who historically have always been put in that power or moral compass position, and when that fails, people see that as a greater failing.”

The past failings Matt referred to include The Holocaust and the Tuskegee experiment; and he was the only participant to do so. He saw The Charter as the profession's reflexivity on its purpose in relation to '*broader society'*. He paraphrased the presumed intent;

> "Let's try and think about what it is that doctors are doing; are they just restoring health and promoting longevity or are they perhaps doing something else? And if they are… what are the things that affect their [sic] health, and should we be looking at those things as well? They've generated this list of race and gender and so forth, and each of these things can affect a person's health in different ways."

This perspective accorded *first*, with a dualism of medical and social health accountability; *second*, a moral framework that evaded the traps of past medical atrocities; and *third*, a purposeful agenda for a new start to medical professionalism. The Charter signified to the physician a need to "check yourself" - be reflexive of your own biases to avoid unfair judgement of others, and discriminate critically in distributing health care. Matt was aware of controversy inherent to the term 'positive discrimination' and instead likened the discrimination reform intended by The Charter to the feminist argument.

> "We're not trying to push women's agenda above the male agenda or anyone's agenda, we're just seeking equality and equity of care."

Like James (A68), Matt(F47) was reflexive of how white domination in the western health care system distorted the nature of the problem being approached. Working as a student in Indigenous health, in close proximity to Indigenous people and their political context, he became aware of his prior false assumptions. He explained, employing meta-cognition; there was "what I thought I thought and understood, and what actually is the case".

In this narrative, Matt's encounter with the new *field* (Bourdieu 1977) of Indigenous health no longer felt alien and uncomfortable, but readable.

This way of seeing can be paraphrased as; *think about the person in front of you; learn about the person 'as they are'; how sick are they? and what capacities do they have in their present structural circumstances*? The 'rules of the game' (Bourdieu 1977) become clear, and there is a 'becoming to know' (Jakubik 2011) that is transformative. This process illustrated Foucault's idea from 'Birth of the

Clinic', that changing one's gaze and language transformed what can be seen and known. This conscious transformation allowed Matt to adapt, rather than impose, his standard medical practice onto the context of Indigenous health.

Nate (F46), was a white, rural, Engineering graduate with medical student experience in Australian Indigenous health. His parents were migrant market gardeners with little formal education. The Charter, he believed, was about distributing health care "as equally as possible." However, he observed for Indigenous communities that where you live matters (Marmot 2005). Nate viewed health maldistribution almost a *fait accompli* – "most people want to live in urban areas and most doctors want to work in urban areas." This statement of *tastes* related to social position, were observed by Bourdieu (1978) as distinctions that reproduce power and hierarchy in societies. Nate supported the widening participation agenda in higher education that allowed more women, rural and Indigenous students to enter medicine and work in underserved areas; and referred to this strategy as promoting 'justice in the health care system'.

The hierarchical nature of traditional medical culture bothered Nate. Despite having two brothers that are doctors, Nate claims he has no "medical pedigree" and wondered how a hierarchical structure may impact patient care. This insight has parallels to Bourdieu's depiction of the 'medical habitus' – of those conforming to the *doxa* or 'rules of the game' in the dominant *field* of medicine (Bourdieu 1977). Nate's speculation on possible patient outcomes of medical hierarchy has evidence. Walton (2006) reports 'sub-optimal' outcomes for patients and medical trainees of hospital-based hierarchies. The relationship between consultant and trainee needed to be more like teacher and learner than expert and subordinate (Ibid). Distributive inequalities of health care may also be perpetuated. Competition for valued specialty training positions generally takes place in urban hospitals; while Australia suffers a chronic, distributive shortage of both primary care and specialist physicians in rural areas.

> "Yeah, I'm not sure when it comes to delivering health care, how that… that ladder climbing, which is the nature of the beast, kind of thing, how it affects them, other people, the patients as such."

Following his experience in the Northern Territory, Nate reported a lack of consistency in 'cultural safety' practices toward Indigenous people.

> "…some of the physicians I've seen are very good at learning language, learning customs, being culturally safe as possible, whereas others will speak over or not address the patient and not take into consideration the family concerns. I've seen both."

While Nate viewed The Charter as advocating for fair treatment of patients, some of his peers rejected the claims for 'cultural safety'. Nate observed in his colleagues the *ellipsis* of habitus (Bourdieu 1977) to a biomedical imagination of health: "If it hasn't got an evidence base, some doctors don't want to touch it, sort of thing." This reflected the 'science as all' heuristic of devotion to 'hard' biomedicine that can be part of a hidden curriculum in clinical training. Health sociology, a human science, can be dismissed as 'soft' by this reckoning, and less worthy. The cultural mismatch was also evident to Nate; "on a spiritual level, people's religions and beliefs are quite important, and that could be health for them". Here, he was being reflective and accountable to the Indigenous definition of health.

In regard to health care inequalities, Nate suggested that there "should be different levels of health care" such that if doctors were not available, trained primary health care workers could serve disadvantaged communities. He supported the idea of SA medical schools, such as those in Cuba, that trained students from low socioeconomic regions of the world to work in underserviced areas. Although Nate could envisage technology changes in future medical practice, he did not foresee changes in the existing health system to deal with inequalities affecting population health. He was cynical about human nature and self-serving professionalism.

> "Some doctors may not be interested to do prevention… hah, hah! It sounds pretty bad, but it takes away their own income if people are well."

In effect, this was a discourse that cynically recognised neoliberal dominance in medical professionalism as too entrenched to change.

Julie (F45) had a strong social activist identity, with leadership roles in a number of prosocial organisations, including *Amnesty International* and *Doctors for the Environment Australia*. Julie was assisted by a scholarship to a private college education, and retained a firm interest in legal and social justice. Her parents encouraged social awareness in their children, and Julie recalled that her "political consciousness" was awakened by climate change; and by the Howard Government detaining children in offshore camps for asylum-seekers.

Julie recognised in The Charter the historical fact of “competing trends in medicine.” Her understanding of The Charter was that it is not talking about broad social issues, but “about discrimination and justice in *health care*.” She added to this, physician “advocacy to the Commonwealth” for more funding to areas of under-service; to primary health care, Aboriginal and Torres Strait Islander health, and for better mental health services. Julie commented on commercial greed as a major medical professionalism issue in the United States. Powerful and wealthy American physicians directed funding away from the health care needs of socially deprived groups.

Contemporary problems in medical professionalism that Julie (F45) observed related to health system inadequacies in dealing with the complex, multifactorial nature of chronic non-communicable diseases (NCD). Speaking about the contemporary pandemic of diabetes, she said, “You can try and help individuals, but the problem is so big that without *system* changes we’re not going to be successful with those people.” She felt that the complexity of diabetes causation was disempowering to GPs, who could explore bespoke interventions with their patients, but were often pressured by time constraints to make a specialist referral. She pointed to Cuban medical education that trained graduates for a more effective model of sustainable, primary health care. Julie was gratified by physician advocacy for measures to prevent the health harms of climate change, but was frustrated by the low uptake and commitment to this movement by colleagues in the medical profession. Climate change had clear links to human health and justified activism by the medical profession, she claimed; whereas other political issues could be supported as either a citizen or a professional.

A professional culture issue that Julie found “very frustrating” and de-moralising was the assumed dominance of the medical hierarchy. In medical organising committees, instead of having merit as a capable lawyer and national student leader, Julie was treated as a lowly, female medical student. This pointed to the hidden power of the medical hierarchy, exclusion that actively avoids scrutiny of the status quo (Gaventa 2011:11).

Sally (F48) was female participant that experienced (male) resistance to having a female in the leadership position.

Julie (F45) regarded training for Indigenous health practice another professionalism concern. She lamented that Indigenous cultural safety,

> "… doesn't lead to students becoming more empowered to becoming active on this issue, which is probably one of the most important social justice issues in Australia."

Conversely, First Year participants in the Adelaide course expressed greater confidence about their potential for a collective impact on Indigenous health.

Martin (A61) was a white male from a privileged background in Adelaide, with zero equity identities. He was the first participant interviewed, and only after his interview did I begin questioning participants' knowledge of past concerns in medical professionalism that may have triggered the issue of The Charter of Medical Professionalism.

Martin immediately challenged the veracity of the expression 'social justice' and claimed that the only 'fair' distribution of patient health care was discrimination "according to their health status, so that we only treat the ill." So, Martin iterated 'the rules of the game' or *doxa* (Bourdieu 1977) of traditional medicine as firmly positioned in the downstream context of health care; and declared his position as a stalwart of the *status quo*. No extra critique of medical professionalism was offered in his testimony.

Martin knew that Indigenous health outcomes were poor by Australian standards, but disputed that Indigenous people were discriminated in health care;

> "They receive a whole lot of extra support, in fact. So, I wouldn't say they are discriminated against in health care, personally. I may be wrong but that's just…"

However, Martin did not take advantage of opportunities to experience rural and Indigenous health as a student. He was defensive about suggestions that medical professionals made anything other than "a generalized effort to do the right thing". Consistent with his high cultural capital, Martin expressed *illusio* (Bourdieu 1986) to the existing culture of medicine; that ensured reproduction of its dominance. His discourse regarded patient agency, rather than the social structures of health production, responsible for poor health choices and outcomes.

> "As for fundamental causes of this problem, I think its people generally putting immediate… comfort or pleasures ahead of long term benefit, which is what poor people are trying to do."

Martin believed that most people were sufficiently “educated as children” to know how to care for themselves, “and motivation’s the bigger trouble.” This view regarded education as rote learning rather than socialised inculcation shaped by societal forces (Freire 1970b). In regard to distributive health justice to Indigenous people, he commented

> “there’s a degree to which you can’t fix the remoteness without… unless the people choose to move, so that never… that problem will never be solved…”

Here, Martin highlighted the *economic* accountability espoused by Australian conservative politicians, that regarded remote Indigenous communities economically unviable, and proposed closing them down. This view accorded with global neoliberal policy, but ignored the central importance to Indigenous health of spiritual relationship to the land.

THEME E: Time as a commodity for socially accountable health care.

Frequent mention or allusion to ‘time’ and metaphors of ‘space-time’ as valued and contested commodities was evident in participants’ discourses of SA medicine. In physics, the concepts of space and time are inextricably fused in a four-dimensional continuum (Einstein).

Subthemes:

E.1. Introduction

E.2. The time-pressured clinical context of care

E.3. Physical distance, social distance, and time

E.4. Just-in-time health education

E.5. The crisis of disparities in timely health care

E.6. Extra time required for health equity actions

E.7. Time of lifespan

E.8. Career decision time

E.9. National political progress and election cycles

E.10. Summary: Time as a commodity for socially accountable health care.

E.1. Introduction

In modern, demand-led, ‘downstream’ health care, time is a scarce commodity. Existing health care systems are funded by massive and unsustainable, government health budgets in most developed economies. The rhetoric around ‘health’, ‘hospitals’ and ‘staffing’ can win or lose elections in political contests. Chronic non-communicable diseases, arising from the ‘upstream’ context of social health production, are prevalent (Baum 2016). One indicator of these time demands was media accounts of ‘ambulance ramping’; when the number of ambulances and patients to be seen in hospital Emergency Departments escalates and can overwhelm health services. General medical practices in city settings may also be busy and need to triage health services.

In the following excerpts from participant interviews, I collate evidence of the ways that *time* and *space-time* were distributed in medical students’ thinking about medical practice.

E.2. The time pressured clinical context of health care

Time as a commodity for socially accountable health care.

Adrian (F19) reported how high level of patient turnover affected health care, and patients’ adherence to a doctor’s health advice, in Singapore. Patients, physicians and health outcomes were disadvantaged in this arrangement.

> “…a doctor only sees a patient for a few minutes for a consultation… perhaps not even that. So, it’s very hard to have that continuum of care or ensure follow-up on whatever health advice the doctor gives… So, I think causes [of doctor frustration with patients’ non-compliance with management plans] include the lower engagement in terms of time, and also, I guess, every time you come for a new consultation you might see a new doctor and so it’s a new relationship and there might not be the trust and rapport, so the patient might feel very disconnected or disjointed, and so not follow-up with the previous advice…”

Here, shortened consultation time reduced patient engagement, rapport, relationship, trust, and communication.

E.3. Physical distance, social distance, and time

Time as a commodity for socially accountable health care.

'Social distance' was defined by Madaras et al (2019) "the gap created by marked cultural, socioeconomic, linguistic, or other differences between groups of people" (:1094). The 'tyranny of distance' (Blainey 1968) in Australia refers to the remote location of the nation in the world, and how it shaped the nation's history. *Tyranny of distance* may have extended relevance to the remote isolation of many Indigenous peoples, and the 'social distance' between the modern urban Australian habitus and rural Indigenous habitus. The metaphor could also extend to the perceived mis-match in health systems. A health system designed for static populations may fail to provide safe and ongoing care for populations with high mobility (such as traditional Indigenous groups).

Violet (A13), a Vietnamese Australian woman, was aware of the maldistribution of space-time for health care in remote Australian Aboriginal communities.

> "It's hard to get doctors to move to rural areas, to rural Australia as well, and getting doctors to stay there."

To achieve equity in health for rural Indigenous people, Violet suggested;

> "…we would have to provide more doctors and I guess, people who are going to stay there, so a constant presence of medical professionals, not like rotations. Um, we would also need to educate the doctors that are going there about the cultural… like taking into account cultural considerations of indigenous people, how they like to be, like… because they like to have a centre for men and a centre for women. Take all that into consideration so that people are happy to access that health centre, and feel invited."

Asked if the medical profession should be doing more to improve health conditions in society, Violet answered;

> “I think so. I don’t think it would be the whole body of doctors, I don’t think everyone would be interested or perhaps not have the time, or not be on their priorities, but I think in the future, hopefully the larger body would be able to undertake this task.”

Violet (A13) expressed hope for a prosocial profession, with more doctors prioritising rural health inequities.

Melissa (A12), a Chinese-Australian student, imagined the space-time problem from the perspective of inter-cultural relations and communications between health staff and Indigenous people;

> “…one of the problems they have um, with the clinic in the remote indigenous communities is that [health service] people cycle through really quickly and [indigenous] people don’t feel like they can make a connection or um, they are that close they can talk to people, to share what they think.”

Melissa observed the need for mutual recognition (Honneth 1992) to make intercultural communication and therapeutic relationship with Indigenous people more effective and trusted.

Jade (A16), a Chinese-Australian, Christian woman, did not perceive physical distance as a problem as much as socio-political distance from under-developed Indigenous communities.

> “I’ve been to Indulkana, which is an indigenous community just south of Alice Springs. That was in 2014. That was my first experience and exposure to what it was like in an indigenous rural remote community. I guess I saw the disparity - compared to what I’ve been used to here, there is quite stark. I didn’t really get to see much of the medical side of things but there was a clinic, but - I can understand that its - would be quite different to here; shortage of doctors or shortage of specialised care that they need. They’re just a couple of hours up north from us and it’s not even that you have to leave this country, this State, to see that, the injustice.”

Jade critically observed the ‘resource desert’ separating over-serviced, urban fringe Australia, and outback, underserviced, Indigenous Australia. This ‘desert’ mentality was reflected in participants’ depictions of the tendency to ‘forget’ about the space-time geography of social and health inequities. The physical location of Indigenous settlements was no problem in Jade’s perceptions.

(Note: the road distance between Adelaide, the capital of South Australia, and Indulkana is 1,136.6 km).

Alison (F11), a white Australian woman from regional Victoria, considered The Charter a reminder to physicians about the nature of their work.

> "I think it [social justice] goes hand in hand because a lot of the people that doctors deal with, are not only sick, but probably are in a group that are marginalised in society or face injustice. I think this [The Charter] is just highlighting um, for medical professions, how important it is to keep this in mind and why it's important to do particular things and maybe doctors forget it sometimes."

This was another discourse in which social justice was a *forgotten* value; despite being 'hand in hand' with societal health. The nature of medical work was responsibilized for re-prioritising the health economy to biomedicine, diverting physician practice time away from SA actions. Bourdieu's social theory of practice attributes this forgetting to *doxa* – a heuristic of material and symbolic distinctions (Bourdieu 1986) that obscure from consciousness unequal relations in society. The 'contextualising principle' in medical education that contributes to social inequality (Bernstein 1999) was not perceptible to Alison (F11), but she will likely be subject to this habitus-shaping force during her training.

Adrian (F19), a Chinese, Political Science graduate, imagined the space-time continuity of care for patients in the busy Singapore health system.

> "… what I understand from the Singapore context as well, that there's very little patient contact or individual patient contact the doctor can indulge in, so um, just like for instance, a doctor only sees a patient for a few minutes for a consultation uh, perhaps not even that. So, its very hard to have that continuum of care or ensure the follow up on whatever health advice that the doctor gives."

Here, time for personalised patient engagement, follow-up or continuity of therapeutic relationship, were portrayed as *indulgences*. These restrictions presumably dissolved if the patient was private, producing inequality with public patients. Hence, money is time, and time is money. Low social class deserved less consultation time, and by consequence, worse health outcomes.

Safiya (A14) had multiple intersectional equity identities and acquired both embodied and situated learning of social inequities in Singapore society. She observed physicians evading the profession's contract as a 'collective public trust' (Stone 2010). In individual health care, she saw physicians responsibilize and stereotype patients for illnesses that had a social basis; based on dominant societal norms.

> "When you have someone coming in with an issue, drug addiction or anything like that, you can see on their faces of some of these people – it's 'Oh, it's just another problem that's here', you know? And like, and I guess from the doctor's point of view they feel it's preventable but it's just, you know, that they can be better than that, but it's just someone else with the same issue from the same cultural background, the same socioeconomic background, and I feel some doctors feel that they are taking up a lot of time and space in healthcare, especially in terms of beds. Um, there are times when there's not enough beds in the hospital and you know these people are coming in because of drug addiction or overdose and things like that, and those people are, they feel actually sick, but regardless of your own personal opinion of these people, they are still your patients… and you shouldn't have to… they shouldn't be like 'Oh, I'm not going to prioritise this patient because she brought this on herself', whereas, 'This patient, she's actually sick.'"

This observation resonated with that of James (A68), about physicians that stereotyped and responsibilized patients; making 'snap' judgements on the basis of drug and alcohol abuse, indigenous identity, and residential postcode. Social justice judgements would better serve health equity. The problem likely referred to the *misrecognition* (Bourdieu 1984) by physicians of the social aetiology of illness ('the societal error'), and lack of reflexivity on social status differences between physicians and public patients.

Safiya (A14) also observed the lack of education among low socioeconomic groups in Singapore about health screening, the structure of the health care system, and early intervention of illness. She suggested that because homosexuality is illegal in Singapore, physicians needed to attend to non-verbal cues that intimated a patient's sexuality and enabled equitable access to health care. To Adrian (F19) the unofficial 'don't ask, don't tell' policy in Singapore represented the societal *modus operandi*.

E.4. Just-in-time health education

Time as a commodity for socially accountable health care.

Some participants saw the space-time of childhood as opportune for a ‘just-in-time’ approach to health promotion.

Hannah (F42), an Australian woman from a Sri Lankan refugee family, discussed early childhood as an appropriate space-time for prevention of obesity and diabetes; and valued pacing communication, and tailoring health advocacy to the individual.

> “So, I think that step-by-step education and advocacy would be probably the best thing that doctors and students can do… slow advice and not threatening or lecturing, but just in that motivational interviewing type of pattern. So… communication skills but also relationship skills, getting to understand the patient.”

E.5. The crisis of disparities in timely health care

Time as a commodity for socially accountable health care.

Disparities in access were conceptualised as obstacles to timely health care by some participants.

Kathryn (F15), a white Australian Science graduate, observed how the poor may be multiply disadvantaged in the public health care system compared to the private system.

> “Yes, ahh…, I think in my mind it’s more difficult for lower socioeconomic groups, particularly in the public health care system because they need to… they’re kind of victim to um, ah, public health waiting lines, waiting queues, um, and the Government dictates [what] prices should be as well. Whereas in the private system, from my limited understanding, you can jump up in the queue, and probably get more access to medications and procedures.”

Sasha (A67), a white Australian woman and Science graduate from Perth, saw space-time disparities in the shift to a neoliberal approach to health services;

> “I think we’re seeing an increasing divide between public and private systems in Australia, and that is… like America, the American system, the health system is kind of an epitome of that scenario where its almost entirely ‘user pays’ for service.”

Jake (F110), a Malay Paramedical Science graduate, had family living in Singapore. He saw how the poor were restricted for space-time to get their health needs met.

> "Generally then, the low socioeconomic status people; 'cause they might not even have the time to go to the doctors, 'cause they may have to juggle so many responsibilities. Like, they might be just trying to earn enough to survive and 'cause of that they can't get to visit the doctors and sometimes they just can't really afford to visit them."

Safiya (A14) echoed this affordability argument from a different perspective; in Singapore, poor adults would avoid needed health care to prevent loss of income to their extended family.

E.6. Extra time required for health equity actions

Time as a commodity for socially accountable health care.

Equity actions also have a time dimension; more time and resources need to be spent improving the health outcomes of 'horizontal' (or cross-population) disadvantaged groups and 'vertical' groups (patients with the same medical condition) (Mooney 1996).

Kerry (F41), a white Australian woman, struggled with the space-time demands she perceived were necessary for equitable health care. She compared patients with different vertical health equity needs, as a Final Year student acculturated to busy 'downstream' clinical health settings.

> "Yeah, so I suppose if you want the same outcome, you have to take into account their social `situation to work out how you can get that same outcome for the both of them and it might mean that you have to do something slightly different. Yeah, then I suppose you have to take into account your own resources and time, and if you're spending this extra time to get the same outcome for one person, are you then taking away time from someone else that needs just as much care? So, there comes that tricky balance I suppose… everyone getting the best outcome possible."

Here, Kerry was heard working through the space-time equation of equitable health care, but seemed unaware of the 'societal error' in her argument.

Georgia (A613), a white Australian woman, had student experience of the busy clinical contexts of health care and found that space-time for equitable health care can be elusive;

> "…in the hospital it gets too hard a lot of the time. Um, and I think one of the main causes of that is time; it places pressures on people. You've got no time to sit down and have a twenty minute conversation. Um, it's terrible, but it's the reality and I don't really know how you change that. It will probably fall more on primary care providers…"

Final Year student Georgia, encultured into the busy norms of hospital practice, delegated SA actions to the primary health care context. Theoretically, the crisis of busy hospital practice 'broke through' her *illusio* (Bourdieu 1986) of the medical *field*, to reveal its flawed structure. Georgia (A613) planned to combine medical practice with teaching and research (professionalism type C) (Wear & Aultman 2006).

Hope (A611), a black African-Australian woman, despaired about the long arc of social change in African societies. Regarding social inequities, Hope observed critical actions that can help empower change.

> "I think the issue sometimes is the time course it takes to completely change society's perception of the issue, um. And also, I think, largely, something I've always thought about is empowering people. Sometimes I think people lack the knowledge to know that their situation isn't right - that it is not a coward to demand that things are done differently or demand change in a sense. Then, they're just happy… well not happy, but they just sit there and think, 'Well that's just how it is'. But no-one has told them that 'This isn't how it has to be'. There are aspects of it that are, that are amenable to change, I think sometimes um, it's the time course that it takes; and what can happen in the interim period while this society is going through change? People are still dying, things are still happening, so what can we do in that period that will... Yeah?"

Hope's situated learning as a black woman with intersectional equity identities, and clinical experiences in an African health care context, produced a discourse that aligns with Freire's *conscientization* – education for developing agency among the unconsciously oppressed. Hope witnessed a unique form of pedagogy in Kenya; physical theatre performed as a means to convey preventive health messages to semi-literate villagers. Her choice of professionalism was type C. (Medical practice combining teaching and research) (Wear & Altman 2006).

Naomi (F12), a white Australian woman and Medical Science graduate, considered community advocacy a possible remedy for the limitations of the consultation space-time. Here, she thought 'outside the box' to suggest a possible solution to the space-time dilemma *and* the mental well-being of the practitioner.

> "I think its important they take on a kind of like, advocacy or community-based role, and it's not just for the community but also for themselves; to avoid that, whatever it was called before, fatigue [learned helplessness]. Yeah… the same problems coming in again… and keep optimistic about what they do. Um, yeah and I guess its just about asking [about] those extra problems, and probably changing it from a seven minute consultation to a ten, or whatever."

> "Um, yeah I guess being able to recognise trends and think about how a community can do something about it, and like, I guess just being involved in whatever the community is, be in some leadership role, which probably doesn't need to take much of your time. But I don't know, I think that's something that people, that certain people will do anyway."

Naomi's reasoning about the time required for equity activities may have been unrealistic, but she hit on the importance of physician observation of 'trends' over time as a source of insights to changing population health. Of importance to physician wellbeing, she intuited that prosocial colleagues in medicine would find work satisfaction in community advocacy, collaboration and education roles that complemented their medical praxis. Activities that Naomi engaged in, external to medicine, included volunteering in a refugee and migrant centre, and on a food truck for homeless people with the Salvation Army. She had also volunteered in an orphanage for HIV-infected children in India. Naomi selected professionalism type F. (Follow your own personal morality) (Wear & Aultman 2006).

E.7. Time of the lifespan

Time as a commodity for socially accountable health care.

In the aging and degenerative space-time of the human lifespan, health care can lose its urgency and purpose.

Kerry (F41) critiqued the disparity in how the health system dealt with the start and end of the lifespan; a justice examination of medical doxa.

> "Sometime I think the elderly are, and I think, I've seen a real difference from being on a paediatric ward, and the way that they are cared for… babies and children… and just taking all the steps to see that nothing's missed and its great; and just comparing to someone on a Gen Med [General Medicine] ward with dementia… and its just… and I think there's just maybe a sense of "Aww… they're at the end of their life, and maybe they don't need so much of our resources". Its almost that thing... and you have to get to a point of 'Well, our resources are limited and maybe that is the way that it should be'; but another way to look at it is… "If that was my grandmother or my grandfather, how would I like them to be treated?" I always think that's good to think about; whether you're discriminating against someone or not."

Kerry's concerns were for both distributive justice as the moral responsibility of the physician, and for compassionate care of patients with low functional capabilities; in a health system under severe economic strain. Her humanism presented an ethical dilemma; a form of physician distress that is the 'emotion work' (Wharton 2009) of doctoring. Avoidance of distress would be better for her own health, but could risk moral dissonance between her self-concept and professional identity. Kerry (F41) was a mother and wife, and listed her professionalism preference as type D. (Part-time doctor, part-time other interests) (Wear & Aultman 2006).

Sasha (A67) agreed about the inherent disadvantage faced by elderly, demented and neurologically disabled patients in hospital care.

> "Yeah, I think it would be fair to say, people are often treated very differently as they age.
> I think it can be quite variable and sometimes different treatment can be a good thing. They're treated with appropriate understanding of like, life stages, and with thorough discussion with their family about what is appropriate; but then sometimes they can be a little bit forgotten at the back of the Gen Med ward where they've …like an elderly person has been left there for a while."

Sasha's observation of 'forgetting' about elderly patients also spoke to a space-time domain relevant to SA health care; one that accorded with Julie's depiction of 'acopics'. This suggested that in the neoliberal, capitalist context of the health system, aged patients were de-valued as consumers of medical care; until active intervention is required for ‘palliative care’. The problem Sasha (A67) observed reflected the ‘societal error’ in types of medical professionalism (Wear & Aultman 2006) that risk hegemonic allegiance to a predominantly bioscience perspective of practice. Sasha justified the change in practice as people age; but her concern for ‘forgotten’ patients reflected a care orientation.

Julie (F45), a white Australian woman and Law graduate, had spent considerable personal time and skilled capital advocating for global social and legal justice issues. She recognised the irony of space-time pressures in hospital medicine, when category labels of patients (sometimes the same patient) – such as ‘acopic’ or ‘palliative’ – determined the resource intensity of health care.

> “I think internationally, its probably… discrimination in health care follows marginalisation in society, so any group that is marginalised in society will experience barriers in access to healthcare.”

A further, tragic, irony Julie mentioned in a story about the ‘user pays’ U.S. health system; about patients who need palliative care but can’t afford it. In this sense, palliative care presented a moral, space-time dilemma for distributive justice in U.S. public health.

> “I was just reading an article yesterday about a man, I think he was from San Salvador, and his daughter had emigrated to the U.S. and got a ‘green card’ and arranged for the father to come out and became unwell, but they weren’t able to work out whether he could access any of the low income health projects like Medicare and Medicaid. So, he was dying at home, in pain, in terrible distress and eventually someone from the hospice came and got him access to the essential care, but… and they started a morphine infusion but he died 24 hours later.”

Julie believed it was professionalism failures such as this that underscored the necessity for The Charter. Her moral concerns had a distinct justice, rather than care orientation.

E.8. Career decision time and social accountability

Time as a commodity for socially accountable health care.

The space-time at the completion of the medical course posed decision dilemmas for prosocial Final Year participants.

Amrita (A65), a Sri Lankan-Australian woman, discussed how her peers struggled with the space-time imperatives of post-graduate career development and the desire to work in areas of personal, prosocial interest.

> "Um, you know, doing the specialty that you want, so we're thinking on that sort of, we're thinking in that mindset, and it's very easy to forget about the greater picture, and um, as I've said, unless you're actively involved in societies or groups or um, unless it's a personal interest for you, it's very easy to forget about. And I think it's every doctor's responsibility to either provide their time or resource…, yeah, provide their time in going out to these communities. Ah, um, and I do hope to do that in the future, and I think just working together to address issues that have a personal interest to you…"

Amrita remarked how membership of medical student societies and groups (representing prosocial space-time) had kept alive her peers' personal interests and desire to work together 'in the future' (a community of practice) in underserved communities. 'Forgetting' in this narrative, was the risk of graduate *ellipsis* (Bourdieu 1977) to the neoliberal context of health care, in which underserved communities were given low priority. A context politicised by neoliberal values favoured individualist rather than communal approaches, and excluded the 'big picture' of structural inequalities affecting population health. For the physician, the lure of this context was the possibility of high symbolic, cultural and material capitals or rewards (Bourdieu 1986).

Kelvin (F44), a white, male Medical Science graduate from Canada, was beginning his medical career at the age of 34 years. He had many interests outside of medicine, and anticipated practicing in underserved communities. Student debt meant that these plans may get delayed or postponed.

> "So, you're a GP two years after graduation in Canada, you're a qualified GP, whereas here, you do an intern year and then a nominal year and then another three or four years of training… but you take that better than an intern. They're two different models but… I'm worried about going back to Canada, because minimum payment to service my debt is less than I would make in a year working as a… so like really, even if you don't count the ten years that I… or could be nine

> years of university that I've spent… I'm essentially working for five years to pay off that. It's kind of like fifteen years where I haven't gotten ahead at all."

Kelvin's concerns about paying his student debt reflected a trend reported in the U.S.A. of medical graduates seeking higher paid specialty training, leaving service gaps in primary health care across America (Youngclaus et al 2013). His space-time calculations were financial and self-focussed; and posed the risk of *ellipsis* of habitus (Bourdieu 1977) to the neoliberal context of medical professionalism, in which prosocial intentions can remain unmet.

Nate (F46), a white, Australian male, commenced his medical career at 42 years of age. Income to compensate for his commitment to medical training was likely to be a priority in future practice plans. While he had embodied potentiality in his habitus for prosocial practice, his partial endorsement of SA reflected *habitus clivé*: a conflict. Yet, he signalled preference for a type of professionalism that would permit him to become a part-time doctor (Wear & Aultman 2006.

> "Like, I talked about education and stuff like that. Do I set up some sort of school when it comes to teaching kids or adults about whatever, about health and stuff? I don't know, and is there a way of um, mass producing that or multiplying that, or scaling it up? I don't know. I've got so much to think about for the future. Do I sacrifice all the time and end up ruining my own health in doing that? Driving that? I dunno! You know…? But you can certainly get other people involved, you know; you don't have to do it all yourself."

Here, Nate reflected on and articulated his moral dilemma; reasoning that he could mobilise his prosocial dispositions by working collaboratively in an inter-professional health team.

E.9. National political progress and election cycle

Time as a commodity for socially accountable health care.

In a democracy, the political election cycle imposes another constraint on time. It can reproduce populism (e.g. appeasing the conservative majority in Singapore society), complacency and 'short-termism' in decision making; which cut across rational, long-term actions on the social determinants of health.

Adrian (F19), explained the 'health gap' between the wealthy and poor in Singapore, as the result of the wealthy buying time;

> “they can afford private health care, they can afford to spend more on their health care or they can afford to spend more on nutrition, their diet, lifestyle, gym memberships…”

Meanwhile, the poor need to regulate their time and resources;

> “I think those who… like, the higher end, they can afford private care, they can afford to spend more on their health care or they can afford to spend more on nutrition, their diet, ah, lifestyle, gym memberships; so, they enjoy a better standard of health overall. Those at the lower end with less disposable income, …they will choose more affordable choices in food, in diet, in lifestyle also. Perhaps more stressed to earn more, to make a living, so pay less attention to their health overall…”.

This depiction accorded with Bourdieu’s notion of inequality of ‘capital’ assets, in which the social semiotics of cultural taste signalled distinctions in social position and distribution of social goods; including recreational space-time and health (Bourdieu 1986). This observation was an indication of Adrian’s critical reflexivity on social inequalities in Singapore society. A sociological ‘gaze’ of Singapore society was likely enhanced by political science training. Adrian was a Christian and member of the Seventh Day Adventist Church, and planned to practice in a disadvantaged area (professionalism type G) (Wear & Aultman 2006). He regarded poverty and the maldistribution of health care a community problem in Australia, and believed Indigenous people were not given a fair go in the health system.

Safiya (A14) was invested in social justice for the LGBQTI community in Singapore society, and was acutely aware of space-time obstacles to societal change. The Government only permitted gathering of LGBQTI community in a single park in Singapore, from where they voiced their emancipatory claims. A double standard existed whereby the Government gained from the ‘pink dollar’ (high disposable income among homosexuals) but ‘turned a blind eye’ to their human rights. Adrian (F19), with a degree in political science, foresaw inevitable change; but for Safiya and her peers in Singapore, the freedoms and social mobility experienced by gays in western nations seemed aspirational but remote. The quotidian stressors of devalorised social identity meant that she could not forget about injustice until the law was repealed.

E.10. Summary: Time as a commodity for socially accountable health care.

a. There was strong mindfulness of social inequity among participants with intersectional equity identities. Prosocial First and Final Year participants with low intersectionality reported a physician tendency to forget, neglect, or regret the lack of time and space to act on social injustices affecting health; particularly the elderly, neurologically impaired, and socially disadvantaged. The busy hospital context of health care revealed to prosocial Final Year participants the doxa of medical practice to lack SA to patients; perpetuating the societal error and the *illusio* of medicine as an unconditional social good.

b. Some Final Year participants were conscious of a hidden curriculum that anticipated, discriminated, and labelled patients according to their marginal status in the biomedical health system. This curriculum targeted the socially disadvantaged (‘acopic’), Indigenous, those from poor neighbourhoods, and those with drug and alcohol disorders: the same groups marginalised in society.

c. Time and space, or distance (both physical and social), were tropes for participants’ disengagement (‘the societal error’) from the medical profession’s moral and historical role in societal improvement. ‘Forgetting’ the social contract to society was another trope or ‘cultural product’ (Bourdieu 1986) of the professional culture that participants recognised formed the doxa of contemporary medical practice.

d. Student debt and lifestyle priorities swayed older, Final Year participants toward high income medical practice options, and put personal prosocial aspirations on hold or at risk. Working in a collaborative team or community of practice in underserved settings was seen as a possible solution. Several participants recognised that some medical graduates would prioritise biomedical careers over social health concerns.

e. Most International participants were aware of more liberal policy differences between their home society and Australia; particularly after medical training experiences in their natal homeland. An oriental perspective of social change towards greater freedoms regarded ideal change as cautious, harmonious, cyclical, and eventual. One participant from Hong Kong voiced opposition to the dominant political discourse of the Chinese Communist Party in her interview responses.

f. Time and money were correlated by participants reflecting on differences in health care access between wealthy and poor citizens. This underscored the need for ‘space-time’ for self-care as a social determinant of health; exacted by the globalised, 24/7 context of the neoliberal workspace. This observation reflected Marxist theory referring to class conditions that oppressed both patients and medical trainees (McLaren 2010).

g. Participants were made conscious of their subordinate position in the medical hierarchy; with no account taken of prior professional status or capabilities. Medical hierarchy was problematised for its maleficent influences on patient outcomes and student wellbeing.

FINIS