

HOW TO BE A PRODUCTIVE RESEARCHER
AN EXPLORATION OF SUCCESSFUL VIETNAMESE RESEARCHERS'
EXPERIENCES

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ABBREVIATIONS

AUN-QA	: Asian University Network-Quality Assurance
CAQDAS	: Computer Assisted Qualitative Data Analysis Software
CoP	: Community of Practice
ECAs	: Early Career Academics
ECRs	: Early Career Researchers
HE	: Higher Education
HERA	: The Higher Education Reform Agenda
IELTS	: International English Language Testing System
IT	: Information Technology
ISSN	: International Standard Serial Number
MOET	: Ministry of Education and Training
MS	: Mentoring Scheme
NAFOSTED	: The National Foundation for Science and Technology Development
PhD	: Doctor of Philosophy
RI	: Research Institute
R&D	: Research and Development
SNU	: Seoul National University
TOEIC	: Test of English for International Communication
TOEFL	: Test of English as a Foreign Language
VNU-HCM	: Vietnam National University, Ho Chi Minh City
URGE	: The University Research for Graduate Education Project

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SUMMARY

This study focuses on the successes and challenges faced by individual academics and Vietnam universities to engage in and be productive in research, as required by HERA for the period 2006-2020 (Harman, Hayden, & Pham, 2010). This study is grounded on an assumption that answers can be found for improving research in Vietnam through investigating research engaged academics who are known to be successful in Vietnamese universities (Harman et al., 2010). The understandings derived from this investigation are of value to both early career academics (ECAs) and Vietnamese universities to enhance their research engagement and productivity.

The project was conducted in three diverse Vietnamese universities within their Humanities and Social Sciences faculties. An interpretive research design was undertaken to examine the experiences and strategies of successful researchers in their university contexts. The study was conducted in two phases. Phase 1 involved a face-to-face interview survey of 29 individual academics in three participating universities. The purpose of this was to both confirm the literature review based definition of a Vietnamese successful researcher, and to seek nominations of well-known successful researchers for Phase 2 of this study. Phase 2 was the key focus of this study. It used in-depth, semi-structured interviews with nine successful researchers nominated by Phase 1 participants to gain a detailed insight regarding the factors successful researchers identified as contributing to their success in research.

This study found that successful researchers were passionate about their research, and were highly motivated to engage in and to enhance their own research capabilities. They were dependent on informal mentoring and membership of international research networks, and took personal responsibility for their own professional learning. They did this through a personal program of learning through the reading of international, Vietnamese and English language research journals, and seeking opportunities to engage in the research of others. By contrast, it was found that many young, often female, less successful, ECAs merely complied with the 'publish or perish' agenda currently influencing research in Vietnam universities. Their focus is on the quantity of publications, often from their master's studies, resulting in poor quality publications that lacked focused, expert engagement in research that would contribute towards national development. Successful researchers identified that English proficiency, which is difficult to achieve, plays a key role in productive research engagement, and lack of proficiency can be a considerable barrier for individual academics' research productivity and research quality, particularly in seeking international

publication. This research also found that the many challenges for ECRs to engage in research were compounded for female academics, as they are still expected to shoulder a greater burden for family responsibilities.

Vietnamese universities must look to their own practices in order to transform themselves into high performing research universities where a strong research culture is established across all institutional levels. The solution should be multifaceted and should not rely solely on changing the behaviour of young academics. Rather, a systematic approach is needed, and must be aimed at mutual benefit for academics, institutions, government and society in general, so that the research focuses on what is most important for the advancement of Vietnam as a nation.

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.....

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CHAPTER 1: INTRODUCTION

"Research holding the torch of knowledge"

(Olin Liver Warner)

In a speech to the National Parliament prior to the end of his prime ministerial term, Mr. Phan Van Khai, the Former Prime Minister of Vietnam, stated, *"We, Vietnam, have not yet succeeded in Education and Research"* (Hoang, 2007, p. 1). Professor Hoang reconfirmed this is the first time ever the shortcomings of Vietnam's research activities were officially affirmed by the nation's leader. Numerous papers also indicate that one of the weakest sectors of Vietnamese education is university research in which investment is urgently needed for the sustainable future development of Vietnam (Harman & Le, 2010, p. 87; Marginson, Tran, & Do, 2014, p. 229). It is widely acknowledged that the research function of universities plays a key role in knowledge production, selection, and adaption at national, regional and international levels (Brew, 2006b; Kearney, 2009; Tran & Marginson, 2014). As such, The Higher Education Reform Agenda (HERA) aims to reform the whole system during the period 2006-2020, according to Resolution No. 14/2005/NQ-CP, dated 2 November 2005, by Vietnam Government. In relation to university research, the Vietnam Government specified an objective that by 2020 universities must play a leading role in research across a range of fields and research activities must account for 25% of the HE systems' total revenue (Chính Phủ, 2005).

Research is one of the primary measurable indicators of global university rankings for the notion of a 'world-class' university (Altbach, 2004; Marginson, 2007). Basically, this notion dictates that a 'world-class' university is a research university where excellence in research is demonstrated, including the concentration of top-quality researchers, institutional autonomy, academic freedom, adequate facilities for academic work, and long-term public funding (Altbach, 2004; Marginson, 2007; Marginson & Van der Wende, 2007). The prestige of a research university enables it not only to recruit international students and top academics from around the world, but also attract more research funds from the government and other industry (Scott, 2004).

Since 2006, the Vietnamese Government has attempted to establish the first four world-class universities in Vietnam (Nguyen, 2014b, p. 202). The first two were established in Ho Chi Minh City in 2008 and Ha Noi Capital in 2009 – the Vietnamese-Germany University and the University of Science and Technology Hanoi, respectively; the other two are still being considered. According to the latest Decree No. 73/2015/ND-CP, dated 8 September 2015, by the Vietnamese Government, all Vietnamese universities are stratified in three types, namely research, applied, and vocational universities. The stratification commenced in October, 2015, (Xuan, 2015). It is evident that the establishment of research universities is emerging as a top priority for Vietnamese education.

Over the past decade, research and teaching have been integrated into universities in line with the massification of the higher education (HE) sector (Kearney, 2009). This is also because research or inquiry skills are crucial and essential for graduates in a knowledge-based society (Brew, 2006b, p. xiii). These skills enable highly qualified graduates to produce, select, or adapt knowledge that a society needs (Tran & Marginson, 2014, p. 17). Altbach (2009) states that the primary focus of all universities is to conduct research, including producing the future generation of talented researchers, scholars, and teachers. According to Vietnam's Higher Education Law of 2012, there are three key objectives for university research as follows:

- Improving the quality of HE and lecturers' research competence.
- Teaching, producing graduates with research capacity, and educating research talents.
- Generating new knowledge, technology and solutions, which contribute to national socio-economic development. (Quoc hoi, 2012 cited in Nguyen, 2014b, p. 202)

The evidence provided above confirms that research engagement, research productivity, and research quality all become pivotal and crucial indicators for all Vietnamese universities and academics.

1.1 Background and Context of Research in Vietnamese Universities

1.1.1 The research expectations for the Vietnamese HE setting

HERA proposed that by 2020 all Vietnamese universities and academics must both develop research capacity and play a leading role in research across a range of fields (Chính Phủ, 2005). Research activities, for example, must account for 25% of the HE systems' revenue by 2020, though according to Pham (2010c, p.52), it is less than 2% in 2010. According to Circular No. 47/2014/TT-BDGĐT, dated 31 December 2014, by the Ministry of Education and Training (MOET) in terms of research requirement, all academics are required to produce research outcomes with at least one published research paper annually (MOET, 2014). The intended purpose is to involve all academics in research activities, thereby increasing research productivity. The research expectations are also reinforced by the university stratification by the Vietnamese Government, which commenced in 2015, as mentioned earlier.

Since these research expectations emerged, they have caused intense and ongoing debate about its relevance in the national media. A core argument is that the primary function of Vietnamese universities currently rests on its teaching-orientation, rather than its research activities (Harman & Le, 2010; Nguyen, 2014b; Tran & Marginson, 2014). This split focus is a legacy of the Soviet HE model which allocates responsibility for research and teaching to two separate bodies-Research Institutes (RIs) and Universities (Harman & Nguyen, 2010; Hayden & Lam, 2010; Tran & Marginson, 2014). Consequently, it has become a challenge for both Vietnamese universities and individual academics to engage in research and be research productive, as required by HERA. Specifically, the challenges have been seen to be a lack of research capacity; limited research funding, facilities, and support; and heavy teaching loads, with teaching the primary source of academics' incomes. These issues become particularly problematic for early career academics (ECAs).

1.1.2 Challenges of ECAs in research engagement

Research capacity

Nguyen (2014b, p. 195) reported that only 13% of all Humanities and Social Sciences academics actually conducted research in 2012. HE statistics in 2012 revealed that 86% of academics held a master's degree, with only 14% holding a qualification at PhD level or above (MOET, 2013). It is claimed that academics with a master's level qualification are inadequately prepared to be independent researchers or to undertake high quality

research (Harman & Le, 2010). Tran (2014a) raised a question about quality of research education in postgraduate training in Vietnam. As such, it is evident that ongoing development and specific research support is needed for those master level academics. Faced with challenges in the development of research capacity, ECAs find research engagement quite challenging.

Research support

Harman and Le (2010) indicated that an irrelevant institutional structure for research, which treats teaching and research as two separate bodies-RIs and Universities, not only causes Vietnamese universities to focus more on teaching than on research, but also impacts the provision of resources for research. Only about 11.1% of RIs are located in Vietnamese universities (Nguyen, 2014b, p. 195; Tran & Nguyen, 2008, p. 8). A lack of research resources including database access has demotivated academics to engage in research (Do & Do, 2014). In reality, only a few research support programs are currently located within Vietnamese universities, and their sustainability and relevance have been questioned among academics (Harman & Le, 2010; Nguyen, 2014b).

In Vietnam, which is based on a centrally planned economy, the main source of research funding comes from the state budget. Only 'key' public universities are allocated research funding in the forms of grants for national research projects, projects funded by particular ministries, and limited block research funding from MOET for ministerial research projects (Harman & Le, 2010, p. 92; Nguyen, 2014a). However, the current RIs receives most of the government research funding allocation (Nguyen, 2014b). Moreover, universities provide very low funding for university-level research projects; just below 20 million VND (equivalent to 1,200 AUD) per research paper and below 700.000 (30 AUD) per published paper (Harman & Le, 2010, p. 93). Marginson et al. (2014, p. 235) recommended that more resources for research should be available for developing academics' research capacity in Vietnam.

Teaching load at Vietnamese universities

The teaching load might be one of the biggest barriers for academics to engage in research. The teaching load assignment is ultimately based on academics' educational

qualification, with over 320 teaching hours per year for PhD lecturers and 280 for those with master's level qualifications (Nguyen, 2010). This author, however, found that most academics do many more teaching hours than they need to, even teaching for over 1000 hours per year. Harman and Le (2010) indicated that a basic salary in the education sector for those with HE degrees is slightly lower than those in other sectors. Regarding this issue, Marginson et al. (2014, p. 235) recommended that academics should be paid at above the living wage to avoid them having to seek second jobs to make ends meet. Consequently, they have even less time to spend on research. Nguyen (2010) concluded that such heavy teaching loads do not leave busy academics with spare time and energy to engage in research activities.

Despite the challenges above, around 3,800 sub-projects and 90 ministerial level projects were reported to be undertaken by researchers in Vietnamese universities across various disciplines during the period 1996-2002. Of those research projects, 43% were undertaken in education, humanities and social sciences (MOET, 2005) (See Appendix 1). It was also reported to be 1,200 papers published in international journals in 2012 (Tran, 2014a). Those statistics, albeit still low in productivity, suggest that there are some well-qualified academics in Vietnamese universities achieving success in research and making a good contribution to the research growth of Vietnamese HE (Harman & Le, 2010, p. 90). Their success stories in research along with their strategies to overcome the challenges that have been identified, if fully understood, will be invaluable lessons to assist ECAs in increasing their personal research capacity and productivity. In addition to this, it enables Vietnamese universities to gain insight into what they might do to support their ECAs to increase both research productivity and research quality.

1.2 The Study

1.2.1 Purpose of the study

The purpose of this study is to generate a body of knowledge and understanding of what strategies successful Vietnamese researchers most depend on to be successful in research in terms of research capacity, research productivity, research support, motivation, and engagement. Such understanding will be of value to be shared with

both ECAs and Vietnamese universities to enhance their research engagement and research productivity.

1.2.2 Research questions

What can be learnt from successful researchers in Humanities and Social Sciences within Vietnam universities that can assist the ECAs learn to become active and productive in research?

Sub-questions:

1. What defines a successful researcher in the Humanities and Social Sciences in Vietnamese universities?
2. What strategies do successful researchers employ to be productive researchers?
3. What motivates and supports successful researchers to sustain their research engagement?
4. What are the features of a sustainable research support program that Vietnam universities might provide to build research capacity and skills?

1.2.3 Significance

It remains difficult for ECAs in Humanities and Social Sciences to engage in research and be productive, as required by HERA. Although the issues have been previously raised by Vietnamese educators, the strategies, motivation, and research support that ECAs need in order to be active and productive in research are still being questioned at the practical level in the Vietnamese HE context. Thus, once this question is answered, the development of research activities in HE institutions has the potential to be practical and attainable (Harman et al., 2010). Additionally, to enable them to make a meaningful contribution to the attainment of HERA's goals, Vietnamese universities want to know what strategic programmatic information they will need to employ to support ECAs in their research engagement and productivity. Understanding of the above issues will contribute to the practical implications for both ECAs and Vietnamese universities.

1.3 Thesis Structure

Overall, there are seven chapters in this study. This chapter, Chapter 1, introduces the study and provides an outline for the whole thesis.

Chapter 2 provides an analytical review of existing research, offering an overview of the role of research in Western universities and addressing the current issue of research activities in the Vietnamese HE context that underpin the need for this study. In the first section, an overview of the research role of Western universities is provided, including the importance of research via universities, factors associated with an academic's research productivity, and mentoring schemes for research productivity. The second section briefly reviews the Asian context through the recent reforms of three representative countries (Indonesia, Korea, and China) aimed at improving research outputs in HE. In the last section, Vietnamese universities and the HERA policies are reviewed and critically analysed, namely HERA's five objectives for the 2006-2020 period, challenges for Vietnamese university research in the global HE contexts, and challenges for individual academics' research engagement and productivity.

Chapter 3 provides a rationale for the choice of epistemology and the methodology for the study. The research design then describes the selection of research sites and participants, and outlines the two phases conducted. Next, the stages of data collection and analysis are described. The ethical considerations and limitations associated with this approach are also taken into account.

The findings resulting from the analysis of Phase 1 and 2 are reported in two chapters. Chapter 4 examines Phase 1 and reports on how 27 everyday academics define a successful researcher in Humanities and Social Sciences. A description of research contexts at the three participating universities as research sites is also included in this chapter. Chapter 5 then unpacks either the strategies or key issues that nine successful researchers employ to achieve success in research, including their motivation that is demonstrated through four selected narratives of successful researchers.

Chapter 6 discusses the findings in light of assisting ECAs and Vietnamese universities in research productivity and research quality. Potential solutions are also featured.

Chapter 7 concludes the thesis by summarizing the key findings in brief. Recommendations also are made to ECAs, Vietnamese universities, and Vietnamese government regarding research productivity and research quality.

CHAPTER 2: LITERATURE REVIEW

This chapter provides the literature review of both Western and Vietnamese HE contexts associated with regard to the issue of research in universities, which underpin this study. The focus of this research is to understand what contributes to success in research for Humanities and Social Sciences academics in Vietnamese universities. Such understandings derived from this study will be of value to both ECAs and Vietnamese universities. This literature review consists of three parts. Firstly, the role of research in Western universities is reviewed, including the impact of research on universities, factors associated with research productivity, and mentoring schemes (MS) for research capacity. The chapter then briefly examines the recent reforms of three representative Asian contexts (Indonesia, Korea, and China) in improving their research outputs. The final and most important section, the recent reform of Vietnam universities, is critically analysed, namely HERA objectives for the period 2006-2020, the challenges of Vietnamese university research in the global HE contexts, and challenges of academics' research engagement and productivity.

2.1 The Role of Research in Western Universities

2.1.1 Research and University

What is research? Brew (2001; 2006a) argued that it is impossible to define research in general, especially after Boyer (1990) redefined the concept of research as the scholarship of discovery, of integration, of application, and of teaching. For the sake of this review, the definition synthesized by Brew (2001, p. 21), will be viewed as a starting point:

Research is finding out something and making it public. Research provides a means of generating, testing and validating knowledge. Research is a systematic process of investigation, the general purpose of which is to contribute to the body of knowledge that shapes and guides academic and/or practice disciplines. Research is about advancing knowledge and understanding.

Kearney (2009, p. 10) stated that “knowledge generated by research is the basis of sustainable social development”. In a knowledge economy, knowledge which is no longer “a body of fixed truths” assists a nations development (Tran & Marginson, 2014,

p. 16). Furthermore, research itself enables all nations to preserve history and culture, develop society, and produce new knowledge through its anticipatory dimension. Social development characterised by equality, justice, and sustainability partly results from HE and research (Kearney, 2009). As mentioned in Chapter 1, the primary focus of all universities is to conduct research that produces new knowledge for the development of the nation. This has become particularly important for middle or low-income countries where a national research capacity has not yet been adequately invested in (Kearney, 2009, p. 12; Tran & Marginson, 2014, p. 16).

Research is a one of the key measurable indicators for both university rankings and university prestige. Global university rankings are closely related to the notion of a world-class university with competition at both intra-national and international levels (Marginson & Van der Wende, 2007). A world-class research university includes excellence in research by top-quality scholars, institutional autonomy, academic freedom, adequate facilities for academic work, and long-term public funding (Altbach, 2004; Marginson, 2007; Marginson & Van der Wende, 2007). The three most accepted global ranking systems are *Shanghai Jiao Tong University*, the *Times Higher Education Supplement*, and the *Higher Education Evaluation and Accreditation Council of Taiwan* (Altbach, 2004; Marginson, 2007; Marginson & Van der Wende, 2007). Moreover, as mentioned in Chapter 1, a highly ranked research university with a group of elite researchers is a strong driver for the recruitment of international students and top academics from around the globe (Homewood, Rigby, Brew, & Rowe, 2011; Scott, 2004).

It claims that there is a mutually beneficial relationship between research and teaching. Despite the fact that past quantitative studies found that there was a 'zero' relationship between teaching and research (Hattie & Marsh, 1996; Ramsden & Moses, 1992), further qualitative studies revealed that teaching and research relate to each other in a variety of ways, with a complicated set of relationships. These relationships are both positive and negative (Coate, Barnett, & Williams, 2001; Durning & Jenkins, 2005; Healey, 2005; Jenkins, Blackman, Lindsay, & Paton-Saltzberg, 1998; Lindsay, Breen, & Jenkins, 2002; Robertson & Blackler, 2006; Zamorski, 2002). In addition, it has been argued that the relationship between research and teaching is one of 'symbiosis' or 'mutuality' (Elton, 1986 cited in Lindsay et al., 2002; Ramsden,

1994). Research-led teaching mutually benefits academics in the roles of teachers and researchers in terms of intellectual knowledge and teaching methodologies (Harman, 2005; Pham, 2010c). In order to be a good teacher at HE level, an academic needs to be an active researcher, assisting them in developing their students' research skills- a key skill in a knowledge economy (Baldwin, 2005; Jenkins, Healey, & Zetter, 2007; Rowland, 1996; Zamorski, 2002).

Brew (2006b, p. 12) argues that in a knowledge-economy that is often described as 'uncertain, uncontrollable, and unpredictable', University graduates need to be equipped with research skills so that they can live in such a complex society. To train students in the skills of inquiry, Brew posited that all universities need integrate research and teaching. Tran and Marginson (2014) stated that universities are expected to produce graduates trained in research so that they in turn develop and apply knowledge that is useful to the nation. According to students' perspectives, academic research brings teaching and learning quality (Jenkins et al., 1998; Lindsay et al., 2002). There is also a growing need for graduates to have inquiry skills as an important skill set for employability (Tennant, McMullen, & Kaczynski, 2009).

Various concepts such as research-led teaching and learning, research-based teaching, research-informed teaching, and research-enhanced teaching and learning have emerged for the purpose of integrating teaching and research into universities. It was reported, for example, that some Australian universities have succeeded in applying these concepts into practice, especially within undergraduate studies in a range of disciplines (Baldwin, 2005; Brew, 2006b; Homewood et al., 2011; Russell, n.d). However, it would be a challenge to apply these concepts to the Vietnamese HE context as they are framed specifically for Western HE. This is because, though the importance of research has recently been strengthened in Vietnam universities and most individual academics have not yet become involved in research, either in their own studies or in their academic practices (Harman & Le, 2010). More importantly, there have been no empirical studies on how research and teaching can be better integrated in the Vietnamese HE context, specifically with regard to curriculum. Therefore, it is imperative to investigate further how individual academics and Vietnamese universities can integrate research into their teaching practices.

2.1.2 Factors associated with research productivity

Ramsden (1994) defined that the primary indicator of research productivity is publication. Based on a literature review of the large American research databases covering the last three decades, Bland and Ruffin (1992) found that research productivity is impacted by both personal and institutional factors. A great number of subsequent studies reinforced this result (Bland, Center, Finstad, Risbey, & Staples, 2005; Grbich, 1998; Lodhi, 2012; Ramsden, 1994). The literature review of this study found that the issue of gender equality needs to be taken into account as an additional factor associated with research productivity.

Personal factors

The personal factors or characteristics attributed to a successful or productive researcher include “personal motivation, research training, mentors, early scholar habits, socialization to academic values, network of productive colleagues, resources, and substantial uninterrupted time” (Bland & Ruffin, 1992, p. 385). The authors also indicated that successful researchers are more highly motivated by the intrinsic factors of their work, such as challenge, creativity, problem-solving, and being valued by other colleagues, rather than by extrinsic rewards. Vaccaro (2009), who surveyed a sample of doctoral students, found that personal passion in research had a positive correlation with research self-efficacy. Chen and Anderson (2008) posited that ECAs should self-manage their own motivation and engagement.

In relation to research training, Bland and Schmitz (1986) concluded that an academic should participate in an extensive period of training, and the time spent in research training should be systematically structured. It should be congruent with the different backgrounds of academics in terms of skills, methodology, or experience. Phillips and Russell (1994) surveyed 125 postgraduate students in counselling psychology and found that there is a positive relationship between research-self-efficacy and the research training environment, and between research-self-efficacy and research productivity. Mallinckrodt and Gelso (2002) found that successful training must produce an interest in research and positive attitudes toward scholarly activity. Brocato and Mavis (2005), through a national survey of academics in U.S. medical departments, found that research training engagement is one of three characteristics

highly correlated with an individual academic's research productivity. The other two are motivation and professional networks.

Research has proved that most successful researchers understand the benefits of participating in mentoring and that mentoring experiences have a significant correlation with academics' research productivity (Bland & Schmitz, 1986; Corcoran & Clark, 1984; Nundulall & Reddy, 2011; Peters, 2014). This correlation is reviewed in more detail later in this section.

Productive researchers establish scholarly habits very early in their careers (Cole & Cole, 1967; Creswell, 1985; Reskin, 1977). The authors confirmed that it was hard for researchers to be highly productive if they started their career too late. Clemente (1973) who surveyed the publication records of 2,205 PhDs in Sociology for the period 1940-1970 concluded that early publication is strongly correlated with subsequent productivity. Similarly, Creswell (1985) indicated that a productive researcher publishes early in his/her career.

Past studies have found that successful researchers establish collaborative, meaningful relationships with their internal and external colleagues (Bland & Ruffin, 1992; Corcoran & Clark, 1984; Creswell, 1985; Grbich, 1998). Specifically, they often communicate with colleagues via face-to-face interaction, telephone, visits, and exchange of documents. Bland and Schmitz (1986) stressed the importance of other colleagues for a productive researcher to both build on their body of knowledge and critique their work. It was also found that publishing increased once collaboration occurred among researchers and with graduate students (Mayrath, 2008; McCormick & Barnes, 2008).

Research has demonstrated that having access to adequate research resources plays an important role in research productivity (Bland & Ruffin, 1992; Metcalfe, Esseh, & Willinsky, 2009; Rebne, 1995). Bland and Ruffin (1992) indicated that less commitment to research results from lack of time, resources, finances, and research facilities. Mullen, Murthy, and Teague (2008) also found that academics rank financial and material resources as critical factors for supporting their research efforts. Harrington (1987) found that if the amount of available books in libraries increases, research productivity will increase. Fan (2005) study suggested that university libraries should

build up electronic resources to contain more research information and journal information for academics' research publications.

Productive researchers commit a significant amount of uninterrupted time to their research. Hattie and Marsh (1996) conducted a meta-analysis and found that time spent on research was positively correlated with research productivity. Ito and Brotheridge (2007) surveyed a sample of 278 Canadian professors to examine strategies employed to enhance research productivity and found that the amount of time committed to research is a significant predictor for the level of research productivity. Grbich (1998) indicated that a successful researcher often gets involved in more than one project at a time and spends an average of 40% of working time on research. Creswell (1985) also clarified that a productive researcher spends at least one-third of their time on research activities. For example, Mayrath (2008) found that successful educational psychologists devoted a certain amount of time to focus on their writing without distraction. In addition, a productive researcher knows how to manage time effectively and how to achieve a balance between research and personal life (Chen & Anderson, 2008; Peters, 2014).

Institutional factors

Ramsden (1994) found that the environmental and personal factors have a direct impact on research productivity and concluded that these two factors need to be combined to produce high research productivity. Such a conclusion is aligned with that of Pratt, Margaritis, and Coy (1999), who reported that when both individual attitudes to research and organisational factors change, research productivity can be increased within a faculty. Long and McGinnis (1981), for example, found that highly productive researchers experience less productivity when transferring to less research-conducive institutions.

Numerous studies have proved that institutional factors are more powerful predictors of research productivity than personal factors (Grbich, 1998; Madden, 2009; Pratt et al., 1999; Rebne, 1995). Bland and Ruffin (1992, p. 378) identified twelve organisational factors that affect research productivity, namely (1) clear goals that serve a coordinating function; (2) research emphasis; (3) culture; (4) group climate; (5) assertive participative governance; (6) decentralised organisation; (7) communication;

(8) resources; (9) size, age, and diversity; (10) rewards; (11) recruitment and selection; and (12) leadership.

Without the emphasis of institutions upon research, research productivity would be negatively impacted (Bland et al., 2005; Creswell, 1985; Drew & Raymond, 1985; Kapel & Wexler, 1970). Bland et al. (2005) surveyed 615 participants in the University of Minnesota Medical School to understand how to facilitate faculty research productivity in an established research university. The authors concluded that if institutions want all of their academics, instead of just a few stars, to be highly research-productive, they should emphasise institutional and leadership characteristics such as clear coordinating goals, research emphasis, communication, and assertive-participative governance (P. 236).

Research has shown that building a research culture in universities is an important predictor of research productivity and research capacity (Dill, 1986; Lodhi, 2012; Pratt et al., 1999). Dill (1986, p. 17) indicated five key factors to strengthen a research culture at any institution, namely (1) recruitment, (2) policies on academic workload, (3) support for communication, (4) standards for evaluation, and (5) a supportive structure for research. It is concluded that the cultivation of research culture requires long-term processes including sustainable strategic planning, committed leadership, and research environment (Lewis & Simmons, 2010; Lodhi, 2012; Pratt et al., 1999).

Rebne (1995) found that environmental factors affecting research productivity include institutional size, affluence, resources, prestige and student quality. Dundar and Lewis (1998), who studied more than 3,600 doctoral research programs in America, found that there was a significantly negative association between the ratio of students per academic and department research productivity in Social Sciences. In addition, Hemmings, Rushbrook, and Smith (2007) surveyed 534 academics from a large regional Australian university across five faculties, namely Education, Health Studies, Art, Commerce, Agriculture and Science, to explore their views about publishing or not publishing in refereed sources. They concluded that promotion and financial rewards were seen as important factors to academics' publishing in refereed sources. In contrast, the factors considered as the most prominent in discouraging academics

from publishing were workload, lack of institutional support including having a positive research culture, support from mentors or research assistants, and financial support.

Of the twelve organisational factors above, Bland and Ruffin (1992) indicated that leadership was the most critical. In other words, research productivity positively correlates with quality of institutional leadership. Research proved that a leader must be a highly skilled researcher who in turn influences research productivity in their institution (Andrews, 1979; Dill, 1986; Drew & Raymond, 1985). For example, Dill's (1986) study of academics in research and development units in Europe stated that a leader's research experience positively impacts on the other members' research productivity. Collaborative leadership, as Ramsden (1994) suggested, is one of the critical factors in enhancing research performance within an institution.

Gender factors.

Sax, Hagedorn, Arredondo, and Dicrisi III (2002) conducted a study on a sample of 8,544 full-time teaching academics (2,384 female and 6,160 male) at 57 American universities. Their purpose was to explore the role of several family-related factors in academics' research productivity. Results showed that factors affecting academics' research productivity are nearly identical for male and female academics. In addition, family-related variables, such as having dependent children, have no effects on research productivity for female academics. Nakhaie (2002) analysed a large survey of Canadian professors to examine why females publish less than their male counterparts. Similar to the findings of Sax et al. (2002), they found that in the Humanities and Social Sciences there were fewer publications by males than from females. This, difference, however can be explained by the fact that there are more female academics in Humanities and Social Sciences. As a result, the number of publications from female academics is higher.

Leahey (2006) surveyed a sample of academics in Sociology (N=196) and Linguistics (N=222) to examine the extent that research specialisation can explain gender difference in research productivity, and found it to be a critical intervening factor affecting female academics' research productivity. They posited that female academics tend to diversify their research areas more than males, because they believe it demonstrates their scholarly breadth. However, research specialisation

promotes productivity because it enables academics to engage in-depth knowledge in research areas, including methodologies or new theories (Leahey, 2006).

This existing literature has been largely produced in a western context, though it still provides us with a valuable basis to consider the strategies that successful Vietnamese researchers employ as a means of enhancing their personal research productivity.

2.1.3 Mentoring schemes (MS) for research capacity building and research productivity

MS has been found to significantly contribute to academics' research capacity and productivity, particularly for ECAs (Gardiner, Tiggemann, Kearns, & Marshall, 2007; Hollingsworth & Fassinger, 2002; Paul, Stein, Ottenbacher, & Liu, 2002; Van Balen, van Arensbergen, van der Weijden, & van den Besselaar, 2012; van der Weijden, Belder, van Arensbergen, & van den Besselaar, 2014; Zea & Belgrave, 2009). Peters (2014) concluded that good mentorship plays a key role in ECAs' development, and that universities should assist academics by facilitating this mentoring.

MSs in which successful experienced researchers mentor less experienced successful researchers have been widely implemented in most Western universities (Gardiner, 1999; Mihkelson, 1997; Nundulall & Reddy, 2011; Weiland, 2008). In terms of research productivity, Nundulall and Reddy (2011, p.46) define mentorship as "the provision of research assistance and guidance to novice researchers in either an informal or formal basis." Gardiner (1999; 2007) found, for example, that a MS enables female academics at Flinders University to become productive researchers which is evidenced by their successful grant funding and their increased publication.

More specifically, MSs helps ECAs build strong professional networks, integrate within an academic environment, enhance research skills, and improve teaching skills (Abreu, Peloquin, & Ottenbacher, 1998; van der Weijden et al., 2014). Ried, Farmer, and Weston (2007) concluded that MSs, including small grants, provide important pathways to build confidence, research experience, and research interest for early career researchers (ECRs). Mihkelson (1997), who reported how the University of Tasmania applied MS to enhance ECAs' research skills, indicated that MS enhanced academics' human factors, such as increased confidence, better communication skills,

and time and task management. However, this model used the source of external researchers as mentors.

Past studies have also found that MS has brought great benefits not only for academics as mentees, but also for senior researchers as mentors and for institutions. This is because it enables senior researchers to build their network in collaboration with other academics, and provides an opportunity to think about their own careers (Gardiner, 1999; Nundulall & Reddy, 2011; Paul et al., 2002). In addition, mentoring presents mentors with a sense of pride and importance in transferring their intellectual knowledge to the next generation (Nundulall & Reddy, 2011).

Research indicates that MS has benefited HE institutions in four ways. Firstly, it increases the prestige and research profile of universities, partly due to academics' research productivity (Gardiner et al., 2007; Paul et al., 2002). Secondly, it has been seen as a means to address equity and diversity in institutions (Nundulall & Reddy, 2011). Thirdly, it strengthens the commitment and loyalty of academics to institutions (Waterman & He, 2011). Finally, institutions benefit from a cost-efficient investment in their staff through increased links among professionals, and a confident and skilled staff working in a trusting learning environment (Mihkelson, 1997).

This literature review, however, found that the success of MS is ultimately based on two significant factors, namely the structure and the mentoring relationship (Cohen et al., 2012; Gardiner, 1999; Nundulall & Reddy, 2011; Records & Emerson, 2003).

Recent research found that a formal MS is more effective than an informal one (Gardiner, 1999; Mihkelson, 1997; Nundulall & Reddy, 2011). Nundulall and Reddy (2011) explained that informal mentoring does not provide accountability of research output. Cohen et al. (2012), who conducted a case control study, suggested that MS can be much more effective for research productivity if it is integrated with accountability features such as formalised reports of progress and mentorship feedback in fellowship training. A multifaceted evaluation strategy should be implemented to ensure an accurate assessment of the MS's benefits for research capacity building and productivity of academics, as research capacity building and productivity needs both sustained long-term investment and periodic evaluation of goals (Barratt-Pugh, 2012; Gardiner et al., 2007).

MS requires the recruitment of sufficient number of senior researchers as potential mentors (Mihkelson, 1997; Nundulall & Reddy, 2011). Keyser et al. (2008) indicated that institutional recognition and faculty support for MS are essential for encouraging senior researchers to serve as mentors. Such support enables them to dedicate their time, energy, and thought to the tasks involved.

Currently, the availability of senior researchers as mentors seems to be problematic for Vietnamese universities because the number of academics who are active researchers is low. Furthermore, most senior researchers also occupy leadership roles and thus are busy contending with their associated commitments (Nguyen, 2014b; Nguyen, 2010).

Nundulall and Reddy (2011) proposed a solution for the lack of senior researchers which might work for Vietnam. They suggested that a source of potential mentors resides firstly in the retention of retired senior researchers and, secondly, in the recruitment of former mentees who have successfully benefited from the previous participation in the scheme. Similarly, Schulze's (2009) successful model uses a group mentoring scheme as in which an experienced researcher can mentor a small group of two to four academics.

The commitment from senior researchers as mentors, and ECAs as mentees must be established for the success of MS. Gardiner (1999) found that the only limitation of MS is the lack of academics' time to fully participate in their research mentoring partnership. Nundulall and Reddy (2011) indicated that frequency and length of meetings should be determined. Mentoring should be programmed within working hours as Keyser et al. (2008) indicated that MS should be flexibly scheduled with either regular meetings or other events within an institution. A scheme coordinator and technology have vital roles here. Weekly email reminders to academics are found to be an effective tool to attract participants' interest as well as to inform them about the services and upcoming workshops. The participation in a scheme should be voluntary and motivational in a non-threatening environment.

Past studies found that institutions should provide adequate funding for the operation and sustainability of MS (Nundulall & Reddy, 2011). Paul et al. (2002) found that institutional funding support is an essential factor including release time for staff, dean

support, grant writing seminars, statistical support, and IT support for research productivity of academics. Specifically, Nundulall and Reddy (2011) indicated that a financial incentive should be available to attract both mentor and mentee. Ried et al. (2007), for example, found that a small grant scheme and MS through HE institutions can provide important pathways to build research skills, confidence, and research interest of primary health care practitioners.

Mentoring relationships seem to be hierarchical in nature (Johnson-Bailey & Cervero, 2004). Gardiner (1999) found that despite efforts to support sound mentoring relationships, MS can break down at the very initial stage if the mentoring relationship loses momentum because of a mismatch between mentor and mentee. The process of mentor selection and matching with mentees must be paid thorough attention. Research indicates that a good MS is based on the exact matching between mentors and mentees and the quality of their partnerships; a mismatch can be problematic for the development of mentees (Mihkelson, 1997; Nundulall & Reddy, 2011; Zea & Belgrave, 2009). Zea and Belgrave (2009) posited that if the mentoring relationship becomes problematic, both mentors and mentees need to dissolve it, rather than blaming each other.

Keyser et al. (2008) posited that the sustainable mentor-mentee relationship relies on three factors, namely the matching of candidates, guidelines for the mentoring relationship, and mechanisms for dealing with any problems or conflicts that might arise during the course of the relationship. Where institutions assign mentors to mentees, this process should be based on factors in which both parties share research interests, values, skills, and styles of interaction. In contrast, if mentors are not assigned to mentees, institutions should provide an academic profile of mentors to mentees and advise them in selecting their mentors (Keyser et al., 2008).

The mentoring relationship must be proactive and collaborative with the primary purpose of transferring knowledge (Records & Emerson, 2003). Trust and open communication are essential components in the relationship (Nundulall & Reddy, 2011). Moreover, Records and Emerson (2003) argued that at an initial meeting, a mentor and mentee should discuss academic needs and goals they want to achieve

because mentees should be passionate about the choices they make. Explicit goals for each year should be identified.

Budge (2006) discussed that the gender issue needs to be understood to realize why some mentoring relationships have failed. The issue of gender mentoring has been widely researched. Many studies have proved that cross-gender mentoring is unsupportive and dysfunctional. The reason behind this is female mentees may feel uncomfortable with male mentors in the mentoring relationship because of sexual embarrassment or fear of public inquiry about the relationship (Long, 1997). Wilson, Valentine, and Pereira (2002) and Sosik and Godshalk (2000), however, found that there is a positive impact when female mentees participate in mixed-gender groups led by male mentors, as mentees in a cross-gender mentoring relationship received more support from their mentors than the mentees in same-gender mentoring relationships.

2.2 The Recent Reforms of Asian Universities in Improving Research Outputs

This section briefly reviews recent and effective reforms in Asian countries to evaluate their efforts to enhance research productivity. The following three countries' imperatives and efforts to improve their research productivity within their university contexts will be considered - Indonesia, Korea, and China.

Indonesia

From the mid-1990s, a great number of effective research policies were announced in Indonesia (Nguyen, 2014b). A competitive research grant scheme, for example, was established to support the publication of research results. The University Research for Graduate Education Project (URGE) was founded by the Indonesian Government. The primary focus of URGE is on university research and postgraduate research training (Nguyen, 2014b, p. 192). In 2012, the Indonesian Directorate General for Higher Education issued a policy in which undergraduate and postgraduate students are required to have their theses published to be eligible for graduation (Dyna, 2012). The main purpose of this policy is to increase research publication productivity and enhance research quality in Indonesian HE. The policy, however, is questioned due to

the insufficient number of current national journals for those emerging papers. A proposed solution is that each university needs to develop its own e-journal to facilitate publication of those papers. It is acknowledged that such initiatives initially have positive impacts on university research capacity building (Nguyen, 2014b, p. 192).

Korea

Building world-class universities has become Korea's national top priority. Kim (2007), through a case study of Seoul National University (SNU), explained the reform of Korean universities in increasing research performance. The Korean Government allocated about 1.2 billion USD for its HE for the 1999-2005 period (Kim, 2007). Research funds do not go directly to the faculty in the form of grants. Instead, three quarters of the project budget is allocated to assist graduate students in the forms of stipends, financial support for overseas study, and research infrastructure. International collaborations have been established by regularly inviting international scholars in various fields for short and long-term visits. There is considerable research support, including access to various academic databases and high-tech computer labs (Kim, 2007). As a result, the annual publication growth rate for Korean academics was 10.1% in 2011 (Jung, 2012). In 2015, SNU was in the top 101-150 range according to Shanghai Ranking and another four Korean universities were in the top 201-300 (ARWU, 2015).

China

A number of HE reforms in research emerged in the 1980s and 1990s (Nguyen, 2014b). China has recently placed an emphasis on creating 'world-class' research universities since Project 985 commenced in 1998 (Nguyen, 2011; Nguyen, 2014b). Project 985 was allocated an impressive budget of 3.4 billion USD invested in 33 key universities (Kim, 2007). Since then, research has become a top priority of Chinese universities and, as a result, more Chinese academics focus on research (Wang & Zhou, 2011). The Chinese Government has also restructured its HE so that universities have greater autonomy in teaching and research (Xu, 2005). China is one of the Asian countries heavily influenced by Confucian education and used to follow the former Soviet HE model, yet the nation has made a dynamic change in strengthening research in universities (Marginson, 2010; Tran et al., 2014; Tran & Marginson, 2014).

A competitive funding mechanism has been implemented. Chinese universities have pursued the right to undertake collaborative research with enterprises. As a result, research funding increased from those enterprises, accounting for 35.05% of total research funding in universities (Wang & Zhou, 2011). Academics' income sharply increased by 101% from 1982 to 2000 (Postiglione, 2015). There has been a significant increase in financial reward for research papers published in international, high-impact journals. Quandong Medical College (QMC), for example, rewards 32,000 USD for papers published on Nature or Science. As a result of such effective reforms, universities have impressively increased the total number of research projects, national invention awards, and research papers (Nguyen, 2014b). It was reported, for example, that the annual publication growth rate for Chinese academics was 16.8% in 2011 (Jung, 2012), and China currently has more scientific publications than any other country, except the U.S (Postiglione, 2015).

In short, the success stories of university research in Indonesia, Korea, and China offer good lessons for Vietnam universities. Bui (2013) believes that other Asian universities and Vietnamese universities all share similar cultural, educational, and economic values, as well as an English language barrier. Asian universities have succeeded in research and, therefore, there is no reason why Vietnam universities will not become another success story with increased deliberation in their approach to enhance their research productivity.

2.3 Vietnamese Universities and Research through the Government HERA

This section reviews the research activities of Vietnamese universities after the implementation of HERA. Firstly, the five objectives of HERA are presented, followed by international scholars' views of the role of research in Vietnamese universities. The next section critically analyses the current challenges for Vietnamese university research in the global HE contexts, namely an irrelevant institutional structure for research, research publication, research funding, and research personnel. The final section briefly summarises the challenges of academics in research engagement and research productivity, much of which was reviewed in Chapter 1.

2.3.1 HERA for the period 2006-2020

HERA specified five detailed objectives for the period 2006–2020, with the ambitious aim to establish a Vietnamese HE system by 2020 that is advanced by international standards, highly competitive, and appropriate to the socialist oriented market system (Harman & Nguyen, 2010). The package of measures is as follows (Hayden & Lam, 2010, p. 18):

- A significant expansion of the HE system, providing for 45% of the relevant age group by 2020 (up from 13% in 2006–2007);
- A significant increase in the number of qualified HE staff, sufficient to ensure a staff/student ratio of 1:20 by 2020 (currently about 1:30), with at least 35% of academic staff having doctoral qualifications (up from 15% at present);
- The establishment of two types of HE institutions, one to be research-oriented (accounting for 20% of all enrolments) and the other to be more vocationally applied;
- A significant expansion of the non-public sector, to account for 40% of all HE enrolments by 2020 (up from about 13% at present); and
- The development of an advanced research and development culture, with research activities to account for 25% of the system’s income by 2020 (currently it accounts for about 1%).

HERA reveals that research engagement and research productivity must both be top priority goals and pivotal indicators for both Vietnamese universities and academics. As mentioned in Chapter 1, currently one of the weakest sectors of Vietnamese education is university research, and investments in university research are needed for the long-term future development of Vietnam. At a macro level, building a national research capacity is of national significance because it will enable Vietnam either to achieve its objectives of modernisation and industrialisation and to escape from being stuck in “a position of dependence” (Harman & Le, 2010, p. 89; Tran & Marginson, 2014, p. 17). At a micro level, research is the most pivotal indicator for global university ranking and as evidence of university prestige (Ramsden, 1994; Ito & Brotheridge, 2007). There has not yet been a Vietnamese university in the list of 500 top universities in international rankings (Tran, 2014a).

As stated in Circular No. 47 above, an individual academic is expected to produce research outcomes, producing at least one research paper annually, which is based on MOET's subjective opinion rather than on empirical evidence. Vietnamese academics view this imperative as a 'mission impossible' task for them because of the challenges of their limited research capacity, as identified in Chapter 1. Tran (2014) and Nguyen (2014b) indicate that there is still a gap between policy and practice due to lack of political support, unclear strategies, and the limited capacity of Vietnamese universities. Thus, Vietnamese universities are currently facing significant challenges in research activities. Those challenges will be reviewed in the following section.

2.3.2 Challenges for Vietnamese university research in the global HE contexts

An overview of Vietnamese HE context indicates that five significant challenges for research in Vietnamese universities are as follows: (1) the differences between public and private (non-public) universities (2) an irrelevant institutional structure for research; (3) research publication; (4) research funding mechanism; and (5) research personnel (Harman & Le, 2010; Hayden & Lam, 2010; Nguyen, 2014b; Tran et al., 2014; Tran, 2014a).

The differences between public and private (non-public) universities

Public universities

According to Dao (2014), by June 2013, there were 204 universities and 215 colleges in Vietnam. Among those universities, 16 public universities located mainly in the two major cities of Hanoi and Ho Chi Minh City were officially selected as "key" HE institutions. All government public including "key" universities are strongly supported by the Government in terms of funding or policies (Dao, 2014).

All public universities are responsible for undertaking research within their faculties, departments and their own research institutions. In reality, only a few "key" public sectors, however, are seen as having enough capacity to undertake serious research in terms of their personnel, facilities, libraries and other resources (Harman & Le, 2010). Most research still continues to be conducted in research institutes (Dao, 2014, p. 2)

(Chau, 2009) found that those public universities are more advantageous than private universities in recruiting and retaining best academics by providing them opportunities for professional development, but she also concluded that more effective needs to be established on academic staff development for both public and private universities. There has been a held common assumption in Vietnam society that graduands from public universities have much higher or better 'academic capital' than those from private institutions and thereby more highly regarded in the job market (Nguyen, 2007). In other words, public universities are generally regarded as having higher social status than private ones (Dao, 2014).

Private universities

Private universities are owned, managed and financed by individuals, groups of individuals, or foreign higher education institutions (Chau, 2009). The private provision of education in Vietnam was accepted by the Government in 1989 when the leaders of communist party officially committed themselves to systematic economic reforms (Chau, 2009). The privatization of education in Vietnam actually explored in 1990s when "socialization" policies were initiated (London, 2010). As a result, there was a huge increase of private universities from 18 in 2001 to 82 in 2012 (Nguyen & Tran, 2013)

In contrast to public universities, the financing of private universities is relied entirely on tuition fees. They generally have a high level of financial autonomy and forms of governance (Dao, 2014). Similar to public universities, private universities must comply with admission quotas and national curriculum frameworks from MOET (Hayden & Lam, 2007). These quotas determine whether or not a university can accept additional enrolments in regular, full-time programmes of study. Quotas apply both to the overall student load of an institution and to student load within individual programmes of study. In terms of research, only about 5% of research centres are located in the private universities while about 11% in the public universities (Harman & Le, 2010).

Pham and Fry (2002) indicated, however, three existing problems private universities need to be solved. Teaching methods are still traditionally teacher-centred; there is a shortage of teaching staff and academic researchers; and they have yet to conduct

research because of limited research background of teaching staff and limited research resources.

An irrelevant institutional structure for research

As mentioned in Chapter 1, Vietnamese HE context has been affected by the legacy of the Soviet HE model which treats research and teaching as two separate bodies, namely RIs and Universities. Research activities are allocated to RIs while the primary focus of Vietnamese universities is more teaching-oriented. Nguyen (2014b) affirmed that even emerging public research-conducive universities are not considered as the primary actors in research activity. Further, due to such separate structure, only a few doctorate training programs are available in Vietnam universities, which has a negative impact on the commitment of universities to research, and contributes to low research output by postgraduate research students who are expected to undertake empirical studies (Harman & Le, 2010, p. 99).

Specifically, such a separate structure is the cause of the following three negative impacts on Vietnam universities' research capacity, namely academics' attitude to research; resources for research; and academic integrity and research ethical issues. Regarding academics' attitude towards research, the structure makes them feel that their key role is as a teacher, not a researcher. Dealing with the research productivity required by MOET, most academics are likely to replace research hours with extra teaching hours. Surprisingly, such strategy has been adopted and accepted by many universities (Phan, 2015). This means that the knowledge that most academics transfer to their students is not produced from their own research activities, but only based on what these academics themselves had learnt from either their undergraduate or postgraduate study (Nguyen, 2013). Consequently, the quality of Vietnamese HE is at risk of becoming stagnant in a global knowledge economy.

Moreover, the structure causes limited resources for research in most Vietnamese universities, such as research funding, rewards for research achievement, and database access. Lacking such research resources demotivates academics' research engagement and partly causes Vietnamese universities' research capacity to lag behind in the global HE contexts (Do & Do, 2014, p. 49; Harman & Le, 2010, p. 49)

Finally, Do and Do (2014) indicated that academic integrity and research ethics have not been adequately attended to in Vietnamese HE research environments. Application for research ethics approval is not required in Vietnam. Consequently, ethical issues generate challenges for Vietnamese university research in the global HE contexts where publication submissions often encounter difficulties in international journals.

A proposed solution is that RIs should be either combined or collaborate with universities, and that universities should be the institutions where research higher degree students are trained in research (Harman & Le, 2010, p. 87; Bui, 2013; Tran & Marginson, 2014, p. 17). In such circumstances, university research will be strengthened, national research capacity will be developed, and the Vietnamese society will gain benefit from the advanced research skills of those graduates. However, how RIs and universities can effectively collaborate has yet to be investigated.

Research publication

Despite the fact that academics at a few 'key' public universities have recently made considerable contribution to the growth of Vietnamese education through research activities, the figures have yet to meet the expectation of Vietnamese education (Harman & Le, 2010; Nguyen, 2010).

As mentioned in Chapter 1, 1,200 papers was reported to be published in 2012. Nguyen (2010) indicated, however, that 23.1% have not yet been cited and that 44.5% were cited fewer than five times. The low citation index reveals the fact that Vietnamese university research does not contribute much academic value and knowledge to international scholars (Pham, 2010c).

Vietnam has the highest number of professors (9000) and doctorates (24,000) in Southeast Asia, yet such a high number inversely correlates with the number of international publications (Bui, 2013; Tran, 2014a; Vu, 2012). For example, there was reported to be only 1,200 papers published in peer reviewed international journals in 2012, with only 39 from 1996-2010 in Education Sciences (Tran, 2014a). It was found that in 2015 research publication of Vietnam outnumbered that of Indonesia and

Philippines, but still below Singapore, Malaysia, and Thailand (Nguyen, 2015). Specifically, research publication of Vietnamese universities is still claimed to be lagging behind Thailand by 50 years (Bui, 2013; Pham, 2010a). Pham (2010a) found that the international publication rate of 'key' public Vietnamese universities is 15 to 30 times lower than that of any one single university in Thailand. The author also indicated that research activities in Thailand are located in universities where international publication accounts for 95% of all academic publication in the nation.

Three significant reasons which explain the low international publication rate in Vietnam include poor research quality, lack of mentoring from senior researchers, and lack of language capacity (Nguyen, 2013b). In relation to research quality, one of the significant problems relates to lack of academics' research capacity, including knowledge of, and experience in, research methodologies, methods, and research skills (Tran, 2014c). MOET (2011 p.16 cited in Tran, 2014a) also affirmed that this problem has a negative impact on the quality of most academics' research, especially research in Education Sciences. In addition, a great number of studies found that the focus of many of the research problems that academics investigate are neither transformative nor do they contribute any new value to knowledge of humanity (Nguyen, 2013a; Tran, 2014d; Vu, 2012).

The second reason, as Nguyen (2013b) posited, is that ECAs' currently lack mentoring from senior experienced researchers for research capacity building. In reality, Vietnamese universities do not have an adequate supply of these senior researchers for MSs, and MSs still seem to be a new phenomenon in Vietnamese universities. Finally, English language capacity is highly acknowledged as one of Vietnamese academics' huge barriers for international publication. Above 90% of international journals currently publish in English, including journals from Asian countries (Nguyen, 2013b). The author indicated that most Vietnamese academics do not have enough academic language capacity to write a complete journal paper in English. Tran (2013) explained that limited English capacity does not allow academics to approach new research methodologies, keep up with latest research reports, or build up an international network. Bui (2013) concluded that no single specific solution has been developed for the improvement of the rate of international publication.

Research funding

In Vietnam, the main source of research funding comes from the state budget, with a small amount coming from other sources (Harman & Le, 2010; Nguyen, 2014b). Research funding for most Vietnamese universities is entirely sourced from the state budget, yet RIs take the lion's share. Only 'key' public universities are allocated research funding in the form of grants for national research projects, projects funded by particular ministries, and limited block research funding from MOET for ministerial research projects (Harman & Le, 2010). For the period 2001-2009, the state budget, for example, allocated 4,812 million VND (equivalent to 229 million USD) for Research and Development (R&D) in Vietnamese universities (Nguyen, 2014b, p. 204). Table 2-1 below clearly indicates the significant gap in R&D expenditure between national universities and national research academies.

Table 2-1: Highest Estimated Expenditure for Two National Research Academies and Two National Universities R&D in 2013

Institutions	Total institutional expenditure (million VND)	Total R&D expenditure	Share of total state R&D expenditure (per cent)
Vietnam Academy of Science and Technology	784,000	555,110	12.9
Vietnam Academy of Social Sciences	397,330	282,490	6.6
Ho Chi Minh City National University	925,850	73,090	1.7
Hanoi National University	679,960	68,640	1.6

Source: Adapted from Nguyen (2014b, p. 198)

The First World Bank Higher Education Project has been another source of research funding for Vietnamese universities in the last decade (Harman & Le, 2010). The purpose of the project is to enhance university teaching and research capacity. Interestingly, the amount of 83.5 million USD had been received by 36 universities by April, 2005. One third of the funding was allocated to the top three public universities, while two thirds was allocated to the other remaining public universities (Harman,

2005). However, it is argued that the funding needs to be expanded to all research-conducive universities, rather than key public universities only.

Nguyen (2014a) pointed out that in 2012, the state budget allocated 15,000 billion VND for research funding, but 90% of the funding has been spent on the administrative activities of 1,600 RIs. In other words, only the remaining 10% was allocated for all research activities at university level. Similarly, Nguyen (2014b, p. 204) indicated that only 4% of the 61% of the state budget allocated to Vietnamese HE is spent for research. Moreover, university-level research projects are currently funded at very low levels, as identified in Chapter 1.

In brief, the current funding allocation mechanism does not motivate academics to engage in research, and their research papers, if published, do not usually have high impact. Hayden (2012 cited in Nguyen & Anh, 2012a) stated that the current funding allocation mechanism needs to be shifted by competitive research grants and that these grants need to be expanded into universities. Vietnamese universities need to increase financial research support for academics' research engagement (Harman & Le, 2010; Nguyen, 2014a; Vu, Anh, & Nguyen, 2012).

Research personnel

Table 2-2: The Qualification of Vietnamese University Lecturers from 2009-2012.

	2009-2010	2010-2011	2011-2012
University lecturers	45,961	50,951	59,672
Female	20,849	23,306	28,051
PhD	6,448	7,338	8,519
Master	19,856	22,865	27,594
Bachelor or Other	19,657	20,748	23,559

Source: MOET (2013)

Table 2-2 indicates that the proportion of academics in Vietnam universities gradually increased over the 2009-2012 period and that around 45% of academics were female, which is a very high rate among Asian universities (Harman & Le, 2010). In 2012, only around 14% (8,519) of university academics held PhD qualifications while Nguyen

(2014c) found that the percentage rate in Australian universities was 58%. Harman and Le (2010) found that the lack of academics with PhD qualifications has been one of the huge barriers for boosting research activities in Vietnamese universities. This is because those PhD academics can play a crucial role in undertaking high-quality research and support other academics in terms of research capacity building. Nguyen (2010) also indicated that most senior experienced academics usually become involved in leadership and management roles, making commitment to research a challenge for them. In addition, in spite of their educational level and high status positions, most of them still lack the English language capacity for international publication.

Moreover, a very high percentage of master's qualified academics (86%) is also a barrier for the research productivity of Vietnam universities. Harman and Le (2010) found that master's qualified academics are not adequately prepared to be independent researchers or to undertake high quality research. After examining 662 postgraduate thesis papers on education, Tran (2014a) raised a question about the quality of postgraduate research training in Vietnam. Records and Emerson (2003) found that postgraduate studies may not provide graduates with adequate research capacity to be successful researchers. Harman & Le (2010, p.100) also concluded that it is crucial to have substantial investment in academic development and research education if university research productivity is to be enhanced. Therefore, those master's qualified academics need specific guidance in the developing of research capacity building, creating networks, and preparing publications.

In short, it remains difficult at present to see how Vietnamese universities will manage to have sufficient financial and research capacity during the next decade in order to be able to make a meaningful contribution to the attainment of HERA goals. Questions have been raised about the viability or feasibility of many of the measures adopted in HERA, including research expectations (Hayden & Lam, 2006). Harman and Le (2010) indicated that unless the challenges of Vietnamese universities in research are effectively overcome, university research productivity will not be improved. Thus, Vietnamese universities currently attempt to seek answers to two crucial questions-how the research quality and productivity in Vietnamese universities can be enhanced and what actions they should take in order to support or motivate ECAs to actively

engage in research. The next section will review the challenges of Vietnamese academics' research engagement and research productivity.

2.3.3 Challenges of academics' research engagement and productivity

Many of the challenges have been reviewed in the background and context section of Chapter 1. It can be summarised that the challenges are lack of research capacity and research funding, high teaching load, and lack of research support. Harman et al. (2010, p. 7) stated:

...university-based research is severely hampered by infrastructure limitations, the lack of adequate time for research (because of high teaching loads and high student numbers), the lack of appropriate working conditions (with many academics not having their own offices or places to conduct research) and the widespread absence of any institution-based systems of financial support for research. The absence of a well-developed research culture across the nation's universities is a significant challenge for the attainment of HERA's reform ambitions, as well as for Vietnam's aspiration to achieve industrialised country status by 2020.

Key issues and challenges of Vietnamese HE have been fully reviewed by both Western and Vietnamese scholars in two book chapters - "*Reforming Higher Education in Vietnam: Challenges and Priorities*" edited by Harman, Hayden, and Pham in 2010 and "*Higher Education in Vietnam: Flexibility, Mobility and Practicality in the Global Knowledge Economy*" by Marginson in collaboration with a group of Vietnamese researchers in 2014. In the former, it says that, "The authors of individual chapters in this book have tended to perceive an appreciable gap between official aspirations and realistic expectations for higher education in Vietnam by 2020" (Harman et al., 2010, p. 5). In the latter, Nguyen (2014b, p. 207) concluded:

Given that universities in Vietnam have been at a disadvantage because of being late in conducting research but, at the same time, universities are often a key knowledge creator, more favourable and specific strategies should be developed to help them build research capacity and gradually boost research performance.

The literature review shows these issues are merely discussed through both local and international scholars' personal perspectives; they are not grounded by systematic empirical studies. At present, enhancing research engagement, research productivity, and research quality all remain unresolved problems for ECAs and Vietnamese universities.

2.4 Summary of Chapter

It is evident that the research function remains a prime source for the global and sustainable development of a nation and its universities. For a nation, knowledge generated by research contributes to sustainable future development. For a university, research is one of the most pivotal indicators of academic prestige in competition for high international ranking. In a knowledge-based society, it is widely argued that research and teaching needs to be integrated into universities where graduates are educated to attain research inquiry skills for knowledge production.

Past literature reviews make a valuable contribution to our understanding of the three broad factors associated with research productivity, namely personal, institutional, and gender factors. MS was found to be one of the most widely used and effective programs for increasing ECAs' research capacity and research productivity. Two aspects have been found to be lacking in the research literature. The literature review does not explain the strategies that individual researchers employ as a means of enhancing their personal research productivity. In particular, past studies have focused exclusively on Western countries, especially America, to determine the understanding of research productivity worldwide. It is obvious that there exists a significance impact of cultural heritage upon the styles of knowledge production by Asian academics, HE context differences, and English language barrier.

Governments in the Asian region have attempted to reform their HE systems in which research universities have been strengthened and established by effective research policies. As a result, there have been significant increases in research productivity and research quality, particularly in Korea and China. The success in research of these countries can provide positive examples for other Asian countries including Vietnam.

In order to contribute to the attainment of HERA goals, the challenges for research for both Vietnamese universities and academics need to be taken into account. For Vietnamese universities, the challenges include an irrelevant institutional structure for research, low research publication, research funding mechanisms, and research personnel. For ECAs, the challenges are seen as lack of research capacity, limited research funding, limited research support, and heavy teaching load. No empirical studies have been conducted to address the challenges, which underpin the purpose of this study. Some academics in Vietnamese universities have achieved success in

research and make a good contribution to the growth of Vietnamese education. Their research success stories and their strategies will be of value to both ECAs and Vietnamese universities to enhance research engagement, research productivity, and research quality.

With these gaps aims in mind, this study seeks to gain insight into what can be learnt from successful researchers in Humanities and Social Sciences within Vietnamese universities. This information can assist institutions and ECAs become productive and active in research. In the following chapter, the methodology for this study will be considered in relation to this research question.

CHAPTER 3: METHODOLOGY-METHODS

3.1 Overview

An interpretive qualitative research design was selected to interpret the experiences of successful researchers in their university contexts, thereby providing the basis of an understanding of the factors that contribute to success in research. The survey interview aimed to address specific sub-research question relating to the concept of a successful researcher from academics' perspectives. This chapter explains an overview of how this study was conducted. This chapter is outlined as follows:

- Research aims
- Epistemology
- Methodology
- Research design
- Methods
- Ethical practices and limitations

3.2 Research Aims

The broad purpose of this research is to generate a body of knowledge regarding the practical processes that successful Vietnamese researchers most depend on to be productive in research. Such understanding will be of value to both ECAs and Vietnamese universities for research engagement, research productivity, and research quality. Three Vietnamese university settings were selected and two phases were conducted in order to achieve this purpose. Phase 1 is to briefly reconfirm the concept of a successful researcher within a group of academics and to identify successful researchers to recruit in Phase 2. Phase 2 explores the factors that have contributed to success in research for a group of successful researchers. With this purpose in mind, the primary research question and four sub-research questions were constituted as identified in Chapter 1. The selection of research sites, participants, appropriate methodology, and methods will be discussed more details in the following sections of this chapter.

3.3 Epistemology

Crotty (1998) defined epistemology as “the theory of knowledge embedded in the theoretical perspective and thereby in the methodology” (p. 3). The researcher takes the view that knowledge is constructed through the processes of individuals’ interaction in a social context or in the real world. Knowledge will be advanced and more valuable once used within specific contexts and constructively assessed by other individuals. Accordingly, the researcher adopts “social constructivism” as his epistemological assumptions in this study. Social constructivism is extended from constructivism which is defined by Crotty (1998, p. 42).

All knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context.

Creswell (2007) indicated that researchers using the theory of social constructivism address the process of individuals’ interaction and also focus on the specific contexts in which individuals live and work in order to understand their historical and cultural settings. In terms of research, knowledge is produced through systematic academic inquiry (Shulamn, 1986, p. 3). In this study, the researcher concerns himself with the interaction of individual academics with their colleagues and their university settings with which they have been engaging or engaged, in order to meet the requirements for research productivity.

3.4 Methodology

This study adopts interpretivism as its theoretical perspective, which provides the context for the processes selected (Crotty, 1998). Interpretive research differs from its related term, qualitative research, in that it is a more specific term and is defined in terms of epistemology (Rowlands, 2005). It is also assumed for interpretive research that knowledge is constructed through social constructions (Rowlands, 2005, p. 81). Interpretive research aims to unpack or capture the meaning of experiences of individuals involved in the context of social practices (Walsham, 1995; Wignall, 1998). In other words, interpretive research allows the researcher to gain a detailed insight into the social context of successful researchers, and the processes in which they impact, and are impacted by, their university settings as the social contexts (Walsham, 1995).

Interpretivist research encompasses a wide variety of methodological approaches, such as ethnography, empirical phenomenology, grounded theory, discourse analysis, and naturalistic inquiry (Elliott & Timulak, 2005; Ferguson, 1993). In this study, the researcher adopts a coding technique used in grounded theory which allows him to interpret the experiences of successful researchers in their university contexts (Urquhart, 2013, p. 63).

3.5 Research Design

3.5.1 Sites

This study was conducted in three Vietnamese universities within their Humanities and Social Sciences faculties. The three universities that participated in the study are two public universities and one non-public university, coded as “Summer”, “Spring”, and “Autumn” University, respectively. All three universities, located in the South of Vietnam, were selected on the basis of their willingness and with their written consent.

The purpose of choosing the research sites with public and non-public universities is to draw comparisons as to whether the differences in research activities or strategies between these two systems would motivate academics to actively engage in research. Dao (2014) insisted that public universities, considered as ‘key’ in Vietnam HE, are strongly supported by the government in terms of funding and policies. As such, one of the government universities’ responsibilities is conducting research in Vietnam (Harman & Le, 2010)

This study limits its focus to Humanities and Social Sciences because research in Humanities and Social Sciences has not had the attention that has been given to Natural Sciences by the Vietnamese Government. There is a tacit assumption that research projects in Humanities and Social Sciences do not expect to be funded as highly as those of hard science or technology faculties. The context and demographics of the three participating universities are described in some depth in the next chapter.

3.5.2 Participants

The following table summarises demographics of the 36 participants in the two phases of this study. This summary will be followed by a more detailed description of the participant recruitment procedures.

Table 3-1: Demographics of the Participants in the Study.

Phase	Participants	Gender	Degree	Faculty
1	27 (academics)	<ul style="list-style-type: none"> • 6 males • 21 females 	<ul style="list-style-type: none"> • 1 Bachelors • 18 Masters • 4 PhD • 4 PhD candidates 	<ul style="list-style-type: none"> • 19 Language • 2 Psychology • 1 Philosophy • 1 Sociology • 2 Geology • 2 Tourism
2	9 (successful researchers)	<ul style="list-style-type: none"> • 2 females • 7 males 	<ul style="list-style-type: none"> • 1 Professor • 4 PhD • 4 PhD candidates 	<ul style="list-style-type: none"> • 4 Linguistics • 2 Philosophy • 1 Psychology • 1 Banking • 1 Education

In Phase 1 of this research, there were 27 participating Vietnamese academics (table 3-1) - nine participants from each participating university. In Phase 2, nine successful researchers (table 3-1) were selected on the basis of the nomination by the Phase 1 participants in their university sites.

All participants were recruited through snowball sampling and on the basis of their willingness to participate in the study (Creswell, 2012). The researcher did not have any research partnership relations with them, yet it was necessary for the researcher to build a rapport and trust with those successful researchers who were more senior academics (Erickson, 1986, p. 142). This trust was important for the researcher to gain valid insight into those successful researchers' experiences and because they are either scholars or educational leaders with high professional and social status. As such, the initial formal approach had been made by the researcher via either phone or face-to-face introduction before in-depth interviews conducted.

All 27 academics are responsible for three primary tasks, namely teaching, research, and service in their university settings. They all, more or less, have been involved in research, as required by both MOET and their university settings. Accordingly, they are appropriate participants to answer the sub-research question one, regarding how

they define academics as having succeeded in research and to nominate some colleagues as successful researchers.

The nine participating successful researchers are the most appropriate informants to address the remaining sub-research questions because their experience-sharing in research can contribute to explaining the motivation, personal disposition, and strategies as well as the resources and support they most depend on to be productive researchers.

3.5.3 Overview of conducted phases

This study was undertaken in two phases with survey interviews in Phase 1 and in-depth interviews in Phase 2. The two phase approach was created to provide rich data to respond to the research questions. All data collection and data analysis were conducted by the researcher.

Phase 1, a preliminary strategy, briefly confirmed which factors those 27 academics regard as attributable to a successful researcher in Humanities and Social Sciences in a Vietnamese university setting. The purpose is to confirm and adapt the literature review-based definition of a successful university researcher, largely derived from western HE contexts, to the Vietnamese HE context. More importantly, the primary aim is to serve as a necessary strategy to assist the researcher to selectively recruit commonly known successful researchers for Phase 2 on the basis of the academics' identification. The rationale for conducting Phase 1 is that the number of successful researchers in Vietnamese HE settings is still low, as mentioned in Chapter 1. Furthermore, it is not appropriate in the Vietnamese cultural context to ask successful researchers to self-nominate. This phase consisted of face-to-face survey semi-structured interviews with a combination of closed and open-ended questions (see Appendix 2). Data collected in this phase was analysed to answer the sub-research question one.

Phase 2, the key focus of this research, aimed to gain a detailed insight into the factors that successful researchers reported as contributing to their success in research. This included their motivation, personal disposition, and strategies as well as what they require in terms of resources and support to achieve research productivity. In depth

interviews with nine successful researchers were undertaken. The interview consisted of open-ended questions (see Appendix 3) underpinned by the central questions and sub-questions two to four. Data collected in this phase were analysed to answer those sub-research questions.

3.6 Methods

3.6.1 Phase 1: survey interviews

All survey interview questions were designed in such a way that they elicit valid and relevant data. The researcher takes into account such features as question length and order, question wording, specificity and simplicity, grammar, and social desirability when constructing questions for interviews (Foddy, 1993; Leitz, 2010). With open-ended questions for interviews, the researcher can elicit diverse kinds of information as well as control the types of information that should be collected in this study (Creswell, 2012; Foddy, 1993).

The survey interview was devised with a combination of semi-structured and open-ended questions, and grouped within four primary domains of inquiry, as follows:

- The participants' demographic information
- The research experiences
- The challenges for research engagement
- The views of the participants on colleagues as successful researchers

The structure of the survey interview questions began with two demographic questions of the 27 academics regarding their working years and the proportions of their work time that is spent on research, teaching and service. The next five questions then centred on their research experiences and their views of the challenges for research engagement. The academics were then asked to describe a colleague they would consider to be a successful researcher and what the indicators of success are. Question 9 allowed the academics to rate their perspectives on indicators of a successful researcher on 5 different Likert scales from 1 (the least important) to 5 (the most important). Those indicators of a successful researcher were identified and adapted from the literature review. Bland and Schmitz (1986) and Bland and Ruffin (1992), through their comprehensive literature review in a wide range of fields,

concluded that besides in-depth research knowledge and skills, successful or productive researchers are generated from two primary factors- their personal and environmental characteristics. They also identified ten critical features pertaining to productive researchers, namely socialisation to the values and attitudes, mentors, work habits, personal communication, local peer support, simultaneous projects, sufficient work time, orientation, autonomy and commitment, and supportive environment.

3.6.2 Phase 2: in-depth interviews

Interviewing is not just the simple process of asking and answering questions, but it is the best method to assist the researcher to step into the realm of the meanings, experiences, and social contexts of the participants as successful researchers in Vietnamese universities (Marvasti, 2004). This method enables the researcher to gain a detailed insight into the experiences of those successful researchers and the meanings they make of those experiences through telling their stories. Seidman (2012) asserted that the researcher, through in-depth interviewing, can obtain a detailed insight into educational and social issues. The in-depth interviews devised with open-ended questions are shaped from both the objectives of this research, and sub-research questions two to four. With open-ended questions, the researcher can elicit diverse kinds of information as well as control the types of information that are collected in this study (Creswell, 2012; Foddy, 1993).

3.6.3 Data collection

Web page content analysis was applied for the purpose of collecting information from the websites of three participating universities. It aims to see whether there are research strategies, research policies, or research supports available in these universities. Web page content analysis is one of the four main areas of webometrics study, the others being web link structure analysis, web usage analysis, and web technology analysis (Björneborn & Ingwersen, 2004, p. 1217). Such web analysis also serves as a triangulation strategy which assesses the validity of data (Creswell & Miller, 2000; Elliott & Timulak, 2005)

During Phase 1, data was gathered from the face-to-face survey interviews with the

participants. All survey interviews took place in the staff rooms of the faculties in their university settings, as negotiated with the participants, at a mutually convenient time. The choice of the staff rooms as the most appropriate meeting spot for interviewing was because the location is private and safe for the participants to share their perspectives. The length of each interview varied from 15 to 30 minutes and all interviews were audio-taped. All survey interviews were conducted in local Vietnamese language, transcribed verbatim, and then translated into English.

During Phase 2, data was collected from the one-on-one in-depth interviews with the participants. Each interview lasted from 45 minutes to an hour. An interview protocol (see Appendix 4) and audio-tape were used in the process of the interviews. The interviews took place in a quiet and safe place selected by the participants at a mutually convenient time. Three interviews with a vice chancellor (professor) and two deans (both PhDs) were carried out in their own offices; the remaining interviews were conducted in quiet coffee shops which are considered a common place for either formal or informal meetings according to Vietnamese culture. The underlying reason that the three interviews with educational leaders took place in their offices, whereas the others did not, is that only educational leaders have their own offices in their university settings. The researcher was both the interviewer and the transcriber. As Seidman (2012) mentioned, the interviewer who does transcription is likely to know his or her own interview better.

A total of nine interviews took place with nine participants as multiple-phase interviews which enabled the researcher to reach theoretical saturation. Saturation is defined as a stage in which the researcher determines subjectively that new data collection will no longer provide new insights or new information (Creswell, 2012). Goulding (1998) confirmed that most studies achieve data saturation from eight interviews. Interview transcriptions were emailed to the participants for 'interviewee checking' in which the participants were asked to check the accuracy of the researcher's transcriptions (Urquhart, 2013). As all processes were conducted in Vietnamese local language, all the transcriptions were able to be approved as accurate by the participants. This procedure lends support to the credibility of the findings from the study (Creswell & Miller, 2000).

3.6.4 Data analysis

The researcher applied a coding manual in this study, rather than any Computer Assisted Qualitative Data Analysis Software (CAQDAS) programs. The choice was informed by the scale of the study, time available, and the inclination of the researcher. Use of the coding manual also offered the researcher more control over, and ownership of his work (Saldana, 2009).

Phase 1

Thematic analysis was used to analyse the data in order to address the sub-research question one. Braun and Clarke (2006, p. 79) briefly defined this method, stating, "Thematic analysis is a method for identifying, analysing and reporting patterns or themes within data." Such conceived themes or patterns drawn from across data sets must be the description of a phenomenon or be related to a specific research question (Joffe, 2011).

Joffe (2011) asserted that a coding frame, developed on either the basic codes grounded in the data itself or codes drawn from the theoretical ideas should be aligned with guiding thematic analysis. In addition, there are six phases in which themes are derived from the process of coding across data sets, namely: "familiarization with data, generating initial codes, searching for themes among codes, reviewing themes, defining and naming themes, and producing the final report" (Braun & Clarke, 2006, p. 87).

Initial codes of this survey interview data were generated from a data-driven approach using In Vivo Coding Method. Themes were then identified among those initial codes and grouped using Code Frequency method. Finally, the themes with supporting themes, associated with the concept of a successful researcher, were categorised according to the theoretical ideas drawn from the literature review as discussed in Chapter 2. In addition to this, the overarching themes are supported by excerpts or quotations from the raw data to ensure that data interpretation remains directly linked to the words of the participants. The fact that the themes are derived from both the raw data itself and from the theoretical concepts ensures reliability and validity of the data (Auerbach & Silverstein, 2003; Joffe, 2011). In other words, a hybrid approach

of inductive and deductive theme development contributed to rigour within Phase 1 analysis (Fereday & Muir-Cochrane, 2008).

In Vivo Coding, applying the direct language of participants as codes rather than researcher-generated words or phrases, allowed the researcher to preserve the academics' meanings of their views of a successful researcher in the coding itself (Charmaz, 2006; Saldana, 2009). Boyazit (1998, p. 1) suggested that a 'good code' is one capturing the qualitative richness of the phenomenon. This method thus provides imagery, symbols, and metaphors for rich theme development (Saldana, 2009, p. 76).

With regard to the use of Code Frequency method, Namey, Guest, Thairu, and Johnson (2008) suggest "determining frequencies on the basis of the number of individual participants who mention a particular theme, rather than the total number of times a theme appears in the text" (p. 143). Thus, a Code Frequency report helps the researcher to identify which themes are the most commonly occurring and which are the least. Namey et al. (2008) discussed their assumption that "the number of individuals independently expressing the same idea is a better indicator of overall thematic importance than the absolute number of times a theme is expressed and coded" (p. 143).

The frequency of the preconceived themes also allows the researcher not only to incorporate context into analysis but also to compare themes within data from 27 participants across three research sites (Namey et al., 2008, p. 143). Such comparison identifies the similarities and differences among those themes.

Phase 2

The narrative and coding technique of grounded theory create a skeleton for the researcher's data analysis. The rationale for a hybrid approach is that the narrative approach captures specific insights relating to personal research experiences of the four selected successful researcher participants in their actual universities, whereas a coding technique is intended to synthesise data from the nine participants (Creswell, 2012; Floersch, Longhofer, Kranke, & Townsend, 2010).

Initially, concepts or codes were appropriately applied to fragments of the data

including words, line-by-line, incidents, and segments. In vivo codes and gerunds were used in the act of coding. Gerunds helped the researcher to gain a strong sense of actions or processes in the successful research journey and in vivo codes enabled him to preserve the participant's expression (Strauss & Corbin, 1998; Charmaz, 2006). Both of them actually made the researcher stick closely to his data, rather than applied preconceived categories.

The researcher then employed 'focused coding' (Charmaz, 2006). Saldana (2009) pointed out that focused coding is particularly appropriate for the development of major categories. More specifically, the researcher selected the most significant and/or frequent codes emerging throughout large amounts of his data. Categories were then generated from those focused codes and the properties and dimensions of each category were specified. Those emerging categories also were further broken down into subcategories (Strauss & Corbin, 1998). At each level of analysis, the researcher made constant comparisons known as 'constant comparative technique' in which codes to codes, codes to data, data to data, or categories to other categories were compared to find similarities and differences (Charmaz, 2006). Strategies that the nine successful participating researchers most employ to be successful researchers were explored. Contextual and personal interventional factors that influence the strategies were also identified.

3.7 Ethics and Informed Consent

This study required the participation of human subjects. Ethics approval (6759) was applied for, and granted by the Social and Behavioural Research Committee (SBREC) of Flinders University in South Australia. Ethical practices have been adhered to at all times during this study. Interview questions, the letter of introduction from the Dean of the School of Education at Flinders University, an information sheet, and consent forms were translated into Vietnamese as required by the university's ethics department. The translations were verified by a Vietnamese colleague undertaking a Doctorate of Education at Flinders University.

Permission was sought from the leaders of the three Vietnamese universities from which the participants were invited to participate in this study. The letter of

introduction from the Dean of the School of Education at Flinders University and information sheet were sent to the three Vietnamese universities to assure that each of the Vietnam universities' identity was kept confidential and was unidentifiable in the report by assigning pseudonyms to them. A letter of consent was obtained from the three research sites. The research sites have been coded as "Summer", "Autumn" and "Spring" University and referred to only as public and non-public universities with no further identifying information.

All participants had been informed of ethics approval from Flinders University (6759), and a letter of consent was received from their research sites. All participants also signed an individual consent form prior to taking part in the interviews. The participants were advised that they could withdraw from the study at any time if they anticipated potential risk of vulnerability or discomfort. Their withdrawal would carry no penalty. The researcher informed the participants that their identity would be kept confidential and they would be made unidentifiable in the report through the use of pseudonyms. Signed informed consent forms were obtained from all academics who participated in the study.

3.7 Limitations

The research has a certain number of limitations as follows:

- This study is limited to the experiences of nine successful researchers in Humanities and Social Sciences from three Vietnamese universities located in the South of Vietnam. The findings might not necessarily be able to be applied to other Vietnamese researchers from other disciplines.
- Qualitative data is inevitably influenced by the researcher's own beliefs stemming from personal experience as well as from the reviewed literature.
- The researcher was the only person involved in transcribing and translating interview texts from Vietnamese local language to English.

3.8 Summary of Chapter

This chapter has outlined the researcher's epistemological stance which underpins the interpretive approach taken in this study. It has also provided a rationale for the

selection of three Vietnamese universities (two public and one non-public) and the recruitment of participants. The rationale for the two research phases conducted has been provided. Phase 1 was to both briefly identify alignment between the largely western literature and how 27 academics in three participating universities define a colleague as a successful researcher, as well as to identify successful researchers as potential participants for Phase 2. Phase 2 was to explore the factors contributing to the research success of nine participating successful researchers. This chapter has also explained the methods employed during Phase 1 and Phase 2, including data collection and the data analysis process. Ethical issues relating to this study have been explained.

CHAPTER 4: FINDINGS - A CONCEPT

This chapter presents the findings from the analysis of Phase 1 in two sections. The first section briefly describes and interprets the findings regarding the research context of the three participating universities, namely their history, some critical factors, and differences in research activities and strategies. The second section reports the findings from Phase 1 addressing the sub research question one, “What defines a successful researcher in the Humanities and Social Sciences in Vietnamese universities?” Such findings included what motivates academics to engage in research, what challenges exist for academics to sustain research engagement, and what defines a successful researcher in Vietnamese HE contexts.

4.1 Section 1: Research Context of Participating Universities

This section describes and interprets research contexts of three participating universities, namely Summer, Spring, and Autumn University. It aims to briefly explain the foundation of those universities, the critical factors that might positively impact on academics’ research activities, and differences in research strategies amongst these universities. As identified in Chapter 3, web page content analysis was applied to the three participating universities official websites. The interpretation highlighted significant differences in research activities between ‘key’ public universities (Summer and Spring) and the non-public university (Autumn).

4.1.1 Summer University

Summer University was established in 1966 by the Government of the Former Republic of Vietnam known as the ‘Saigon Government’. There existed only four faculties at the time of its inception, namely Sciences, Letters, Education, and Law and Social Sciences. After the collapse of the Saigon Government in 1975 that led to the replacement of the Communist Government, the university was developed to become the largest multi-disciplinary university in the southern region until the year 2000. The number of faculties increased to incorporate areas of study including Agriculture, Nature Education, Social Education, and Aquaculture and Fisheries. Later in 2003, the Faculty of Medicine was partitioned to form the Medical University. Summer University was selected to be one of 16 key public universities by the Vietnamese

Government. Currently, the university has 14 faculties and is responsible for a variety of training programs, from undergraduate to postgraduate levels including doctoral training.

As one of 16 key universities, Summer University is expected to be a leading institution, especially in research. Some of its critical factors have had a positive impact on its research activities, especially the development of a research vision. For example, one of the main missions of the university is to conduct scientific research. Their vision is to be recognised as one of the top universities for research in the Asia Pacific region by 2022. Not only has Summer University recently been recognised as part of the Asian University Network-Quality Assurance (AUN-QA), but also as a university with prestige in training and research activities. Furthermore, the university has three RIs undertaking research activities throughout the entire region. The university also has a Department of Research Affairs whose primary function is to be responsible for all research activities, namely conducting research administration, providing research support programs, and organising conferences.

Summer University has actively participated in both local and international research projects. Currently, it participates in a variety of international cooperative research programs with collaborating academics in more than 80 countries. It is evident that these projects have produced a number of products and technological processes that benefit Vietnamese people's lives and promote exports. For example, it was reported on its official web site that the university won 15 research awards in 2014 and 11 in 2012 in the Vietnam Young Talented Researchers competition.

Summer University has its own Journal of Science that is published monthly. It is noted that universities in Vietnam can only establish a journal if it is approved by MOET. The journal also has an approved International Standard Series Number (ISSN). The Deputy Editors-in-Chief of the Journal are the Vice-Chancellor and Chancellor of this university. The journal's papers are published in Vietnamese language but abstracts are in English. The journal has its own web page in which all published papers can be accessed free of charge. All information regarding research activities, such as projects, funding, and conferences are officially announced via this web page. There are also numerous accessible links with other Departments of Sciences and Technologies as

well as other RIs on the web page.

Summer University has developed explicit research strategies and policies for its academics. The purpose is to ultimately involve all academic staff in research so that they can meet HERA's research expectations as described in Chapter 1. These strategies officially require all academics to conduct research activities. Specifically, it is stipulated that each academic staff has to complete 80 research hours in a year. Writing papers for conferences or having at least one paper published in a journal, is considered as satisfactory completion of those research hours. A faculty vice-dean from this university stated:

As a doctorate academic, the teaching hours in a year I have to meet are 420; 80 of which must be for research activities.

4.1.2 Spring University

Spring University was established in 1976 in Ho Chi Minh City, formerly known as Saigon, which is the largest city in South Vietnam. In 1996, the Prime Minister decided to expand it by merging it with three other universities. It has been under the hierarchical administration of MOET since it detached from the administration of the Vietnam National University, Ho Chi Minh City (VNU-HCM) in 2000. Currently, the university has 11 faculties and three institutes. The Institute for Economic Development Research is one of those three institutes. This university provides undergraduate and postgraduate education for Vietnam and neighbouring countries, namely Laos and Cambodia, and prides itself on its team of qualified academics who have graduated from high-ranking overseas universities. Similar to Summer University, this university is also one of 16 key public universities in Vietnam.

Similar to Summer University, there is an expectation for Spring University to be a leading research institution. The university is a renowned centre of scientific research in Vietnam. The mission of the university, aside from training, is to transfer and apply achievements of scientific research into practice. The Department of Research Affairs at Spring University also has similar functions to that of Summer University.

Spring University has also actively taken part in national and transnational research projects. For example, its official web site reported that there were 212 projects conducted by its students in 2014. Of those projects, 11 won the award for the

Vietnam Young Talented Researchers. From 2012-2014, the academics of this university had 35 research papers published in international journals. Thus, with excellence in research activities, this university received “Labour Orders” from the Government for the years 1996, 2001, 2006, and 2010. The Labour Order is an award conferred on individuals or organisations that have recorded outstanding achievements in invention, scientific research, or national construction.

The Journal of Spring University is published monthly and has an approved ISSN. The journal is published in both Vietnamese and English languages. The editorial staff includes 29 editorial members, 12 of whom are international editors. Those international members come from a range of disciplines from such well-developed academic countries as Australia, US, India, Germany, and Taiwan.

The official research strategy of Spring University requires all academics to conduct research activities including publishing. The purpose of this strategy is similar to that of Summer University, but the quantity required is different. A Spring University junior academic stated:

To complete the research hours required by my university, I only need to write two papers for conferences in my university. I will complete my research requirement if those two papers are published in my internal university yearbook because one paper is viewed as equivalent to 100 research hours. All academics are required to carry out 150 research hours annually.

4.1.3 Autumn University

Autumn University was established in 1994 in Ho Chi Minh City as the first private university in South Vietnam. It was formerly a language school. This university is recognised as a tertiary education institution and currently under the administration of MOET. Autumn University, besides undergraduate training programs, is accredited to deliver master’s programs in a few selected majors. The objective of this university is to educate its students to gain specialised knowledge and professional skills that meet the needs of the market economy.

For Autumn University, research activities have not been a high priority, although this university does have a Division of Research. Recently, a new vision has been generated in which the university aspires to become a training and research university by 2020.

In reality, this university has focused mostly on teaching rather than on research. Very little information regarding its research activity is formally announced on the university's official web page. For example, only two outdated news announcements regarding research activities were found on the web page throughout the years 2009, 2010, 2011, and 2014. The Vice-Chancellor of this university affirmed:

In this university, the initial aim was to generate a team of academics who excel in research and teaching, but we have been focusing much more on teaching than research. Research activities have recently been proposed.

The first ever Journal of Autumn University with an ISSN was approved by MOET early in 2015. This university hopes that the emergence of the journal will boost the university's status as well as increase the quantity of its research activities. The Vice-Chancellor Professor stated:

The yearbook of the university was approved to become a scientific journal with an ISSN. I am still involved in the editorial board. All papers will be subject to peer-review. Therefore, all academics will be more concerned about the quality of their papers. I'm very glad because this journal will engage academics in research. As such, I am assured that the research activities of the university will be developed.

Similar to both Summer and Spring University, Autumn University has developed the research guidelines that require all academics to conduct research activities.

However, the statement below, made by a female academic in this university, indicated a negative strategy employed to meet the research hours.

(laugh) What I'm doing is recycling or re-editing papers that were written during my master's study. An academic in my university must complete the requirement of 100 research hours per year. Submitting three papers to our faculty level is considered fulfilment of the research requirement. To be honest, if they just sound like academic papers, that will be fine because basically there is no peer-review of them. You can write just two papers, and they must be published in our internal university journal. That's the reason why we just try to submit our previous papers to our faculty. Therefore, I can say that we just try to deal with such research requirements in such a way that they meet the quantity, but not the quality.

In summary, both the following statement made by the Autumn University Dean and the institutional profile in table 4-1 below highlighted a significant gap in research activities between key and non-public universities.

The difficulty for non-public universities is that the Government does not provide

research projects for non-public universities, only for key universities. They have great advantages in research due to the Government support. Therefore, they can have research projects with hundreds of millions of ‘dong’ funding while non-public universities cannot.

Table 4-1: Profiles of the Three Participating Universities.

INSTITUTIONS	SUMMER	SPRING	AUTUMN
Type	Key public	Key public	Non-public
Date of inception	1966	1976	1994
Doctorate training programs	Yes	Yes	No
Journal with ISSN	Approved in 2008	Approved in 2001	Approved in early 2015
Research institutes	3	1	0
Requirement of research hours per year per individual academic	80	150	100
Awards for research	Yes	Yes	No
Has a Department of Research Affairs	Yes	Yes	No
Receives research funding from the government	Yes	Yes	No

To become successful researchers, all academics need to actively engage in research and be concerned about the quality of their research papers, rather than merely complying with policy by recycling previous essays. Furthermore, universities themselves need to reconsider their role and make this deeper engagement feasible and successful.

4.2 Section 2: Phase 1

This section outlines the analysis of Phase 1 addressing the research sub-question one, “What defines a successful researcher in the Humanities and Social Sciences in Vietnamese universities?” Semi-structured survey interviews were conducted with 27 academics recruited using a snowballing technique in the three participating universities described above. As identified in Chapter 3, interview questions were designed using a combination of closed and open-ended questions (see Appendix 2) and thematic analysis was applied to the interview data. The findings are reported as follows:

- (1) Academic participants demographics
- (2) Academics’ motivation for research engagement

- (3) Challenges faced by academics into sustaining research engagement
- (4) Academics' definition of a successful researcher

4.2.1 Academic Participant Demographics

Table 4-2: Demographics of 27 Academics in Three Participating Universities.

INSTITUTIONS Total +27		SUMMER N=9			SPRING N=9			AUTUMN N=9		
		Male	Female	All	Male	Female	All	Male	Female	All
Level of educational qualification	PhD	1	3	4						
	PhD Candidate	1	1	2		2	2			
	MA		2	2	2	5	7	2	7	9
	BA		1	1						
Length of employment in university	< 5 years		1	1	2	3	5	2	5	7
	< 10 years	1	1	2		4	4		1	1
	< 15 years		3	3						
	> 16 years	1	2	3					1	1
Career status	Junior academic*		1	1	2	3	5	2	5	7
	Senior Academic	2	6	8		4	4		2	2
	Academic Leader	1	1	2					1	1

*Junior academics are those who have been working for fewer than five years.

All the academics come from a variety of Humanities and Social Science fields as described in Chapter 3, table 3-1.

Table 4-2 indicates that female academics outnumber their male counterparts in all three participating universities. Most female academics stated that they found it a challenge to balance their time between research, teaching, and family responsibilities. This challenge for both genders is reported in detail in subsequent sections in this chapter, while the factors related specifically to gender are addressed here. A PhD candidate, when asked to describe the characteristics of a successful researcher, stated:

They are usually males. I see my male professors having many achievements with their research projects.

Table 4-2 also shows that academic participants from Summer and Spring Universities have a higher educational qualification than those of Autumn University. In contrast, all Autumn University academic participants have only achieved a master's level degree. These academics reported that their lack of doctoral qualifications significantly challenged them in taking part in research due to their limited research capabilities and experience. The further challenges academics faced to sustain their research engagement are reported in-depth later in this chapter.

Of 27 academics, three faculty vice-deans who held senior appointments participated in Phase 1 interviews. The length of their employment exceeded 15 years. They reported that besides leadership and managerial tasks, teaching tasks are also an integral part of their work.

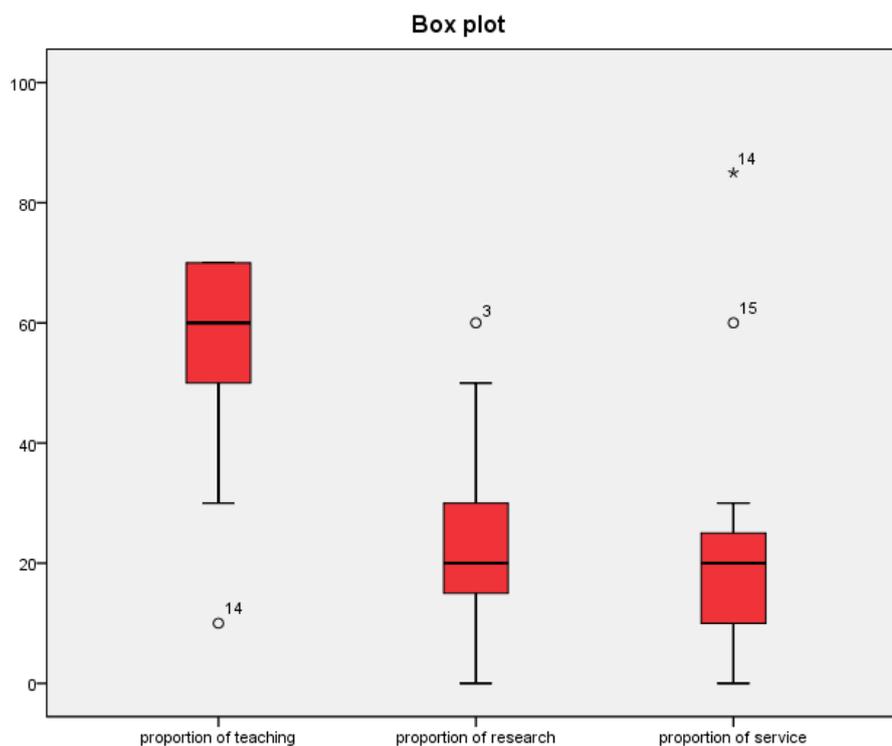


Figure 4-1: The Percentage Proportion of 26* Academics' Work Time Spent on Teaching, Research, and Service Activities.

*One Autumn University female academic is excluded because she had just started her academic service when this survey interview was conducted.

Figure 4-1 reports the percentage proportion of these 26 Vietnamese academics' work time that is spent on teaching, research, and service activities in a year. It is clear that

these academics spent most of their work time teaching, with a mean of 54.81%, which is more than double the time they spent on research (23.46%) and service (21.73%). Of the participating academics, 75% spent less than 30% of their work time on research while only 25% spent less than 50% of their work time teaching. Research activity is only marginally higher than service activity with a mean of 23.46% and 21.73% respectively. From this data, it can be concluded that teaching is still the main focus of these academics.

Case 14, a faculty vice-dean from Autumn University, is a special outlier in terms of her proportion of teaching and service responsibilities. She reported:

I moved to managerial tasks in a Vice-Dean position, so I no longer do much teaching as my university only allows me to teach one day a week. I think the proportion of my work time for teaching is less than 10%; around 85% is for service in my faculty, and the remaining proportion for research.

Case 3, in contrast, is a special outlier for the highest proportion of research of all participants (60%). This female academic, who is currently a PhD candidate, explained that she spent the highest proportion of her work time in research:

Currently, I'm doing my PhD, so I don't do much teaching; I'm only focusing on research.

4.2.2 Academics' Motivation for Engagement in Research

The academics were asked to describe in which ways they engage in research. Both personal and organisational categories of factors have been identified in table 4-3 as factors that motivate academics to engage in research. Some academics identified that their motivation for research engagement is provoked by more than one factor in each of those two categories.

Table 4-3: Motivation for Academics to Engage in Research

Categories	Proportion indicated by academics (N-27)
Personal factors	
<ul style="list-style-type: none"> • Desire for professional advancement • Personal passion for research • Interest to research issues emerging from teaching practices 	8 6 5
Organisational factors	
<ul style="list-style-type: none"> • Obligation or requirements from institutions • Opportunities and support from institutions 	13 6

Personal Factors

Regarding professional advancement, eight academics described the motivation for their research engagement was because they are currently involved in, or applying for, PhD studies. One of these academics indicated,

Now I'm a PhD candidate. That's why I have to engage in research.

Six academics stated that their personal passion was a primary motivator for them to engage in research. They perceived that research broadened their vision, expanded their intellectual knowledge, nurtured their ongoing engagement, or developed their teaching capacity. A Spring University academic confirmed:

When I was a student, I was already involved in research projects in my university. From there, I kept on writing papers for journals in relation to my projects. After the completion of my master's degree, I joined a research group of senior colleagues who share the same interest as my specific research area. I am now continuously involved in research activities.

Another important motivator came from issues that arose from their teaching practices, as reported by five academics. Thus, those educational challenges motivated and inspired them to conduct research in order to seek answers. One of those academics stated:

During teaching, I recognised some issues or problems which raised my passion to find out their answers.

Organisational Factors

The highest proportion of academics (n=13) reported that their motivation for research engagement was due to their obligations to their institutions. This emerged to be the most frequent factor that motivated these academics to engage in research. Of those academics, seven academics from Autumn University stated that their research engagement was largely due to the obligation to their institution with its emerging research-focused strategy. An academic from this university stated:

If my university didn't issue a strategy in which all academics have to do research, I think I wouldn't do it.

Lastly, six academics reported that they were motivated to get involved in research by the opportunities provided by their universities. One such factor is opportunities for academics to be involved as a part of big research projects; another is the availability of external projects in their universities. A junior academic with a bachelor's degree at Summer University confirmed:

My faculty always creates conditions for junior academics to engage in research activities, such as seminars or conferences ...for big projects, we are also given opportunities to engage in them so that we can learn more from them. Sometimes, we are given opportunities to be co-authors in those research projects.

The participating academics, however, reported that they still faced significant challenges in sustaining their research engagement.

4.2.3 Challenges for Academics to Sustain Research Engagement

Table 4-4 below illustrates that all participating academics faced challenges from personal and organisational factors to sustain their research engagement. Significantly, 'resource availability' was indicated by 23 academics as the most challenging factor for them to sustain their research engagement. Other challenges identified were 'having time for research' (21), 'lacking research knowledge and skills' (18), and 'lacking research support' (6).

Table 4-4: Challenges for Academics in Sustaining Research Engagement

Challenges	Proportion indicated by academics (N-27)
Personal	
<ul style="list-style-type: none"> • Having time for research • Lacking research knowledge and skills 	21 18
Organisational	
<ul style="list-style-type: none"> • Inadequate resource availability • Research support deficiency 	23 6

Time for research

Regarding 'time for research', the challenges that 21 academics reported included either lack of time committed to research, or their capacity to manage their time effectively. Overall, those academics stated that they spent more time on teaching, assessment, managerial tasks, and services, but less time on research. Of those tasks, teaching ultimately required the highest time commitment and was still the primary income source for academic staff. Some academics reported that they also became involved in extra teaching for other organisations in an attempt to increase their income in order to better support their families. This happens largely because the basic income from their university salaries was insufficient. A junior academic stated that:

Time commitment to research is definitely a challenge for me because of my heavy teaching load.

Additionally, those academics reported that their research engagement was significantly impeded by their time commitment to family responsibilities. This is especially true for married female academics. Accordingly, the participating academics found it a challenge to manage their time effectively. An Autumn University Vice-Dean complained that:

The biggest challenge is that I don't have much time to commit to research because after teaching and managerial tasks in my university, I feel really tired and also have to take care of my family.

Research knowledge and skills

Overall, 18 academics reported that the challenges for research knowledge and skills were basic and multiple, namely a lack of research knowledge, research skills, research orientation, foreign language proficiency and prior successful research experiences. Of those academics, ten who had only completed master or bachelor's level studies reported that they had difficulty in engaging in research due to their limited research capabilities. Thus, these academics perceived themselves as incapable of conducting independent research activities, despite the fact that they undertook research as part of their master's degree. One of those ten academics explicitly stated:

The first challenge is research capacity and research skills.

The most junior academic in Summer University who had only achieved a bachelor's degree also reported:

The first challenge is my research capability. I did not have a chance to learn as much about research methodology as other colleagues; probably because I haven't studied at postgraduate level.

Resources

The highest number of academics (n=23) reported that the limited availability of research resources and limited funding for projects caused significant challenges for them to sustain their research engagement. Most academics expressed that limited access to crucial resources was the most significant challenge for their research activities. Most of them also stated that they had not been provided with accounts for adequate database access, especially for Humanities and Social Sciences materials. The lack of relevant research methodology books in the libraries is also an obstacle to enabling them to independently enhance their research capacity. In reality, internet connection is currently accessible to all Vietnamese universities. In recognition of this, these academics reported that Google Scholar and a few other websites were the only sources to which they could refer to collect documents regarding research. However, these documents were not always accessible. A senior PhD academic in Summer University stated:

Although there is a learning resource centre where we have a 'gate' to access databases, it's really hard to access the journals we want. I feel that there are limited materials for Humanities and Social Sciences compared with Nature Sciences.

Another senior academic in Autumn University reported:

As an academic I don't have any account to access the databases I want. The only source we search here is just Google Scholar.

In Vietnam, the government's funding for research projects, which is only allocated to key public universities, is still limited and relatively low. In reality, such funding is likely to be allocated to projects in Natural Sciences, rather than those in the Humanities and Social Sciences. Also, the procedures and administrative formalities for funding applications seriously challenged academics' patience and trust in the funding system. A vice-dean, having worked in Summer University for 36 years, stated:

The second challenge is funding for research. Funding for research in Vietnam mainly comes from the government's national budget, for which it is really difficult for research projects in Humanities and Social Sciences to apply.

Research support

Six academics stated that they lacked support from their universities, namely in building research networks, announcing full information about research activities, and establishing a support program with senior researchers as their mentors. A Summer University academic stated:

The challenge is that I lack information regarding research and do not know how and where to approach research activities, such as writing papers for journals. Sometimes, I really want to be engaged with researchers so that I can learn from them, but everyone is very busy.

Another academic in Autumn University said that:

The next challenge is the network in research. It's a good idea if we have a network that can share, exchange ideas, and comment on our work. I think we're lacking such a network in research.

In short, the most significant challenge these academics faced in sustaining their research engagement was resource availability in their institutions, followed by having time for research and lacking research knowledge and skills as their personal challenges.

4.2.4 Academics' Definition of a Successful Researcher

The 27 participating academics were asked to describe a colleague they would consider a successful researcher. Following their own generated attributes, these academics were then asked to rate the importance of the indicators adapted from the academic literature as identified in the Method Section of Chapter 3. These indicators

are presented on Likert scale from 1 (the least important) to 5 (the most important). Figure 4-2 below reported the findings of the academics’ perspectives on indicators of a successful researcher. Four themes have been identified in table 4-5.

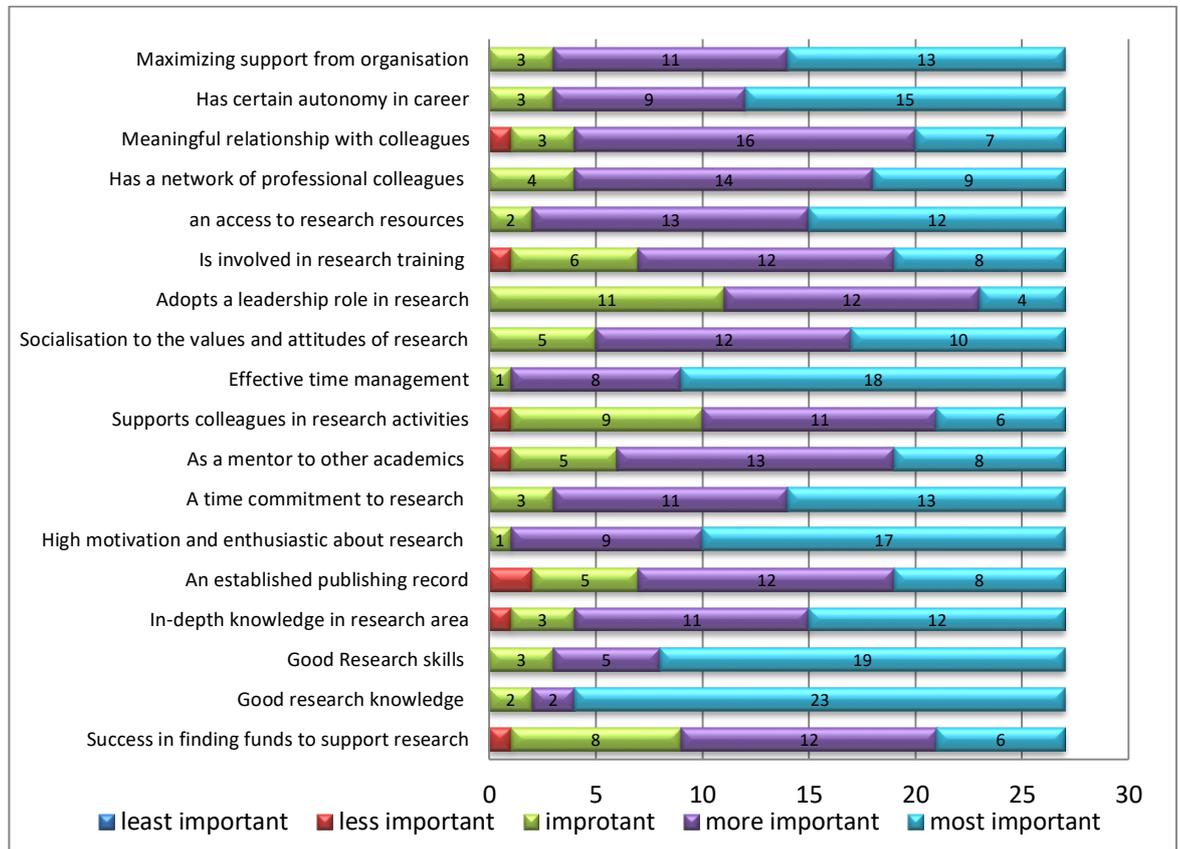


Figure 4-2: Perspectives of Academics on Indicators of a Successful Researcher.

Table: 4-5: Themes that Define a Successful Researcher.

Themes
<ul style="list-style-type: none"> • Research knowledge and capability • Track record and academic values • Personal disposition and motivation • Time issue and personal support

Research knowledge and capability

The attributes all academics described and rated most important for a successful

researcher were:

- Research methodological knowledge
- Research skills
- Having in-depth knowledge in research area
- Being a supervisor and a mentor for either students or other colleagues
- Involvement in research training
- Foreign language proficiency

It is claimed that a successful researcher must have considerable research knowledge, research skills, and in-depth knowledge in the research area. Bland and Schmitz (1986) and Grbich (1998) concluded that research methodological knowledge and research skills are vital for a successful researcher. This was confirmed by all 27 academics who rated both 'good research knowledge' and 'research skills' above 'important' on the scale in figure 4-2, followed by having 'in-depth knowledge in research area' with 26 responses. This is also evidenced by the fact that both 'research knowledge' and 'research skills' received the highest rate of 'most important' on the scale with 23 and 19 responses respectively. As identified above, research knowledge was one of the personal challenges for the participating academics' research engagement. An Autumn University academic described her former supervisor as a successful researcher:

That's my supervisor in my university... Now he has become Associate Professor. I think he masters research methodology as well as research skills.

Another academic in Summer University commented further on her rating of 'in-depth knowledge in research area':

For in-depth knowledge in the research area, it is 3 (important) because I think once they are interested in any research area, they can explore it in-depth.

Both 'involvement in research training' and 'as a mentor to other academics' were rated beyond important scale with 26 academics. A Spring University academic described someone a successful researcher as follows:

The first thing is that a successful researcher is good at English language... The third is that he/she has a capacity to supervise students, or colleagues as well as to teach research topics.

Track record and academic values

For this theme, the academics described and rated highly that a successful researcher should have the most important attributes as follows:

- An established publishing record
- High quality publishing with either a high citation index or high acceptance frequency in journals
- High impact of research
- Success in sourcing funds for research
- Possession of certain database resources
- High educational qualification (PhD degree)

Past studies found that publication has been widely accepted as the most pivotal indicator to measure the research productivity of individual academics and institutions (Ramsden, 1994; Ito & Brotheridge, 2007). It is notable that 25 out of 27 academics rated 'an established publishing record' as above 'important' on the scale. Also, 'an established publishing record' was frequently described as the top indicator of a successful researcher by the participating academics. A Summer University vice-dean described her colleague:

I know one person I think is a successful researcher. Currently he's assigned as a dean of a faculty. He's currently doing a PhD, but he has 21 published papers even though they are only in local journals. He's young but has a very high amount of published papers.

In addition, the participating academics described further that a successful researcher should have the capacity to publish his/her papers in international journals, rather than only in local ones. More than that, publications should also have either a high citation index or a high acceptance frequency in journals. A Spring University academic goes on to describe the second indicator:

The second thing is he/she has published papers, especially in international journals.

Another Summer University academic agreed that an established publishing record is one of the most important indicators, but described further that:

I think not only do successful researchers have a high publication record, but it also must be consistent. The next one relates to the quality of their published papers. It means that the papers must have high citation indexes. Also, their papers must have high acceptance frequency in journals.

Regarding 'high impact of research', the academics described that a successful

researcher should demonstrate the high impact of his/her research through contributions to practice. A Summer University academic stated:

Their research has very high clear contribution to practice.

It is claimed that the availability of research resources and research funding is vital for a successful researcher. This is evidenced as all 27 academics rated 'access to research resources' above 'important'. The previous section in this chapter also found that the limited availability of research resources was one of the significant challenges for academics' research engagement. A Spring senior academic described her colleague as a successful researcher, saying, "He has access to databases for his research." 'Success in finding funding for research' was rated above 'important' by 26 academics, but it was not considered as the most important indicator as indicated only by 6 academics. A Summer University academic commented:

Some people have a capacity to obtain funding for research projects, but they bring a research project to other researchers and only stand as co-authors.

The academics also rated the completion of a PhD degree highly. An Autumn University academic affirmed:

He's my senior colleague. I see that he has many papers published and is a PhD.

Personal Disposition and Motivation

The important attributes all academics rated highly and described for a successful researcher included:

- High level of personal passion or high motivation in research
- Motivating and supporting other colleagues in research activities
- Continuity and activeness
- Collaborative research network
- Enjoy exploring new knowledge
- Being a self-taught person in research
- Having patience in research
- Like sharing ideas and knowledge with the community
- Having an open-minded personality to accept comments from other colleagues
- Goal-setting and planning behaviours

'Personal motivation', 'early scholar habits', and a 'network of productive colleagues' are among the personal characteristics that are attributed to a successful researcher

(Bland & Ruffin, 1992, p.385). Figure 4-2 indicates that 'high motivation in research' was a leading indicator which 26 academics rated above 'more important' on the scale. Personal passion was also identified in the section above as the primary motivator for the participating academics to engage in research. Both 'supporting other colleagues in research activities' and 'a network of professional colleagues' were almost equally rated above 'important' with 26 and 27 responses respectively. The previous section also reported that the academics had difficulties in sustaining their research engagement due to the lack of a research network. One Autumn University academic described a vice-chancellor professor of her university as a successful researcher:

He's a professor, a vice-chancellor of my university. He's very passionate about research and teaching. He's conducted research with all of his heart and life. He also motivates me to engage in research. He introduced me to some other colleagues who share the same interest as me. In other words, he supports me to create a network. He's very approachable and always supports junior academics in research.

A faculty vice-dean from Summer University described her colleague, a dean of a faculty, as a successful researcher:

He has a research journey, a passion for research and likes sharing his thoughts as well as his knowledge with other people. Additionally, he has a plan to further his study.

Another Summer University academic who provided further comments on the scale of motivation in research said:

Motivation helps people to sustain research engagement, but more than that, a researcher should be persistent and consistent because motivation is relatively abstract.

Time Issue and Personal Support

The attributes the academics described included:

- Uninterrupted time commitment to research
- Effective time management
- Family support

'A time commitment to research' was rated by 24 academics as 'more important' on the scale while 'effective time management' was noted by 26 academics. It is notable that substantial uninterrupted time was one of the personal characteristics of a successful researcher noted in the review of factors supporting research productivity

(Bland & Ruffin, 1992). This analysis also reveals that the academics found it a challenge to manage their time effectively. A female academic in Summer University described her colleague as a successful researcher.

There is a colleague who works in a research institute and I admire him a lot as a successful researcher. Even though he's very busy with his work...he commits a lot of time to research. Although he's very busy, his time management is very effective in the way that he isn't affected by either family responsibilities or teaching tasks.

Additionally, seven academics, both male and female, identified 'family support' as an important factor that needs to be included in the Vietnamese HE context. These academics stated that after working hours, their time was committed to family-related responsibilities, such as their marriage, children, or ageing parents. This commitment is especially crucial for married female academics. Three academics, two of them males, in Autumn University reported the same issue. One of them said:

The support from family is also important and plays an important role in research.

Another female academic in Spring University remarked:

The support from family is very important because almost all academics are married. They should have stable income or finance from their own family. Once they have this kind of support they can focus completely on their research.

In conclusion, the four key themes the participating academics described as the attributes of a successful researcher in the Vietnamese HE settings are as follows:

- Research knowledge and capability;
- Track record and academic values;
- Personal disposition and motivation; and
- Allocating adequate time and possessing personal support.

4.3 Summary

This chapter has reported the findings from the analysis of Phase 1 in two sections. Section 1 analysed research contexts of the three participating universities - Summer, Spring, and Autumn University. It is demonstrated that there is a significant context related gap in research activities between the two key public universities (Summer and Spring), and the non-public university (Autumn) due to the primary focus and government support for key public universities. Section 2 analysed the findings from

the analysis of Phase 1, which featured survey interviews with 27 academics in the Humanities and Social Sciences in the three participating universities. This section briefly sought to gain an understanding of academics' views of what it means to be a successful researcher. The primary purpose was to ask these academics to nominate known successful researchers as participants for Phase 2.

Academics defined a successful researcher in Humanities and Social Sciences as someone with prerequisite research knowledge, skills, in-depth knowledge in research area, involvement in research training, and act as mentors or supervisors to support their colleagues and students. A successful researcher also possesses a good track record in applying for funding, and has an established publishing record in both local and international journals. Besides that, their published papers have both a high citation record and high impact on practice. Furthermore, a successful researcher is proficient in English and has the capacity to locate and access crucial research resources. In terms of personal characteristics, a successful researcher is perceived as open-minded, patient, consistent, and supportive. In addition, a successful researcher knows how to manage their time effectively, resulting in generating substantial uninterrupted time for research, and high motivation in research participation as well. A successful researcher also builds up collaborative networks with other researchers in their field.

CHAPTER 5: FINDINGS - STORIES OF SUCCESSFUL RESEARCHERS

This chapter presents the findings from the analysis of Phase 2 of this study and addresses the remaining sub research questions as follows:

- (1) What strategies do successful researchers employ to be productive researchers?
- (2) What motivates and supports successful researchers to sustain their research engagement?
- (3) What are the features of a sustainable research support program that Vietnamese universities might provide to build research capacity and skills?

The chapter is divided into two sections, both of which are based on data derived from one-on-one, in-depth, open-ended interviews with nine participating successful researchers who were recruited based on the nominations of the academics in Phase 1. In Phase 1, aside from gaining an understanding of what is meant to be a successful researcher, the 27 everyday academics were asked to nominate successful researchers for Phase 2. Hence, the nine successful researchers were recruited based on perceptions of their established publishing record, academic recognition of their success by their colleagues, and appreciation of their meaningful research support for other colleagues.

The first section of this chapter presents four selected narratives from the nine successful researchers. The four narratives briefly describe these researchers' career backgrounds, key strategies they employ to be productive researchers, and the stories they told about activities that contribute to their success in research. The second section reports the data analysis derived from the interviews with all nine participating researchers and hence explores the issues of what promotes success in research in Vietnamese universities in greater depth. The interpretation of these interview data aims to describe and explain key issues or strategies that the nine participating researchers either employed or believed to be important to contribute to success in research in Vietnam.

5.1 Section 1: The Narratives

The following table summarises the key strategies of the nine successful researchers. This summary will be followed by a more detailed reporting of their personal stories as researchers.

Table 5-1: A Summary of Nine Key Issues or Strategies Described by the Nine Participating Researchers in Phase 2.

Key strategies	Summer			Spring			Autumn			Total
	Dr John	Ms Anna	Ms Jenny	Mr Michael	Mr Terry	Dr Henry	Prof Larry	Dr Eric	Dr David	
Passion for research	√	√			√	√	√	√	√	7
Specific research area	√			√	√	√	√	√	√	7
Research network	√	√	√			√		√	√	6
Plan for research		√		√	√				√	4
Work-life balance		√		√	√			√		4
Time balance between research and teaching		√		√	√					3
Reading and writing activity		√		√				√		3
Participating in research activities	√		√							2
Alignment between research and teaching							√		√	2

The below section describes the four stories of Professor Larry's, Mr Michael's, Ms Anna's, and Dr John's successful research journey, as summarised in table 5-1. The rationale for the four selected narratives is based on the following:

- Their stories represent the full scope of factors described by the nine participating researchers.
- They were four genuine narratives referencing the single participating successful researcher and delineating the strategies these four participants employ in their successful research journeys that were vivid and personal, whereas the five remaining interviews were more about their opinions about what enabled success in research.
- As shown in table 5-1, no new issues emerged from interviews with the five remaining participants.

The template for the four narratives includes three aspects as follows:

- Background career of these four researchers and the reasons for their nominations by the academics in Phase 1.
- Their voice either in the key strategies the four researchers raised or in the factors that motivate and support them to sustain their research engagement.
- Key points the four narratives describe and the concluding statements about their narratives.

5.1.1 Professor Larry- Autumn University

Before 1975 when Vietnam was separated as two nations-the North and the South-Professor Larry was an academic staff member at a university in the North. After 1975, he became involved in leadership and managerial positions at universities in the South. He has a good track record in publishing with 14 books either as the author or co-author. He also has a number of papers published in local and international journals. Professor Larry was highly nominated by the seven Autumn University academics in Phase 1, largely because of his established publishing record, his passion for research, and his research support for other colleagues.

Firstly, Professor Larry reported that he believed that his passion for research was considered as his core motivating factor and first necessary condition for success in research.

In order to be a productive researcher, the first thing you need to have is passion. Your passion might be narrow at first, but once you have your initial success in research, this will lead to other success.

He further reported that his passion was created and sustained through ongoing involvement in research, especially after the success of his first national research project.

I can say that my first national research project leading to other projects has created my passion.

Having a specific focus in his research was what Professor Larry believed was the next most important factor contributing to his success. He described that focusing on a specific research area had contributed to gaining in-depth insight into his research field, which contributed to the high impact of his research.

It was important for me to focus on a specific research area which contributed to high impact of my research later.

Thirdly, his research area was connected with issues that arose from his teaching practices. This led to mutual benefit to both his teaching and his research career.

When I was assigned to teach 'Topic A' for students, my first topic was 'Introduction to Topic A'. I realised that besides general knowledge of 'Topic A', I needed to gain an in-depth insight of 'Topic A'. As a result, I came up with a new research orientation for 'Topic A', which served my teaching of the topic.

The final issue that Professor Larry believed contributed to his success was the academic recognition he received from his research community. Such recognition motivated and supported him to sustain his research engagement.

Due to my academic recognition, for which I use the term 'face', from the research community in my field, I need to get moving in research so that I deserve that position and maintain my face.

In short, Professor Larry identified three key issues that contributed to his successful research journey. They include his passion for research, finding a specific focus for his research area, and the mutual alignment between his research and teaching. Of those three issues, passion plays a key role in his success in research. Besides that, the academic recognition from his research community provided further motivation for him to sustain his involvement in research.

5.1.2 Mr Michael-Spring University

Mr Michael is currently a PhD candidate and an academic staff member. He was recruited by the university due to the excellent outcome of his undergraduate study. In recent years, he was presented with an award by his university for excellence in

research. He has a great number of published papers in both local and international journals. His success in research gained him recognition from his academic colleagues who were participants in Phase 1 and nominated him as a successful researcher. Most recently, he became a peer-reviewer for an international Journal which he believes is evidence of his success as a researcher.

I think because I already built up my academic reputation with them in my research field. If you build up good strategies and good publication, you will be acknowledged by the global research community.

Mr Michael claimed that his success was basically due to actively engaging in his academic reading activity. He described that his reading conducted in both English and Vietnamese has enhanced his research knowledge, including research methodology.

As a researcher, you have to spend time on reading research books. You read more research documents and research papers from other researchers around the globe. Reading helps you to learn research methodology from them.

When asked what strategies he depends on to be a productive researcher, Mr Michael related three stories to illustrate his answer, namely balancing the time spent on research and teaching, achieving a productive work-life balance, and identifying a focus for his specified research area.

Regarding the time spent on research and teaching, his focus was more on research than teaching. He noted that he was prepared to accept complaints from his colleagues that he did not focus more on teaching. He said that he did not agree to undertake more than eight classes per semester, which means one class per month on average. By doing this, he can manage his time effectively for research. It is important to note that an academic's current income still relies primarily on teaching tasks.

His second story described how he achieved balance between his work and social life, which also motivates him to sustain his involvement in research.

Don't think that once you complete your research paper that it's done, because research is lifelong learning. We need to use our time in a rational way so that you have your motivation to sustain your research engagement. Besides that, you need to balance the other things. I usually have time for myself, like coffee with friends or playing sports.

His final story related to orienting and focusing on a specific research area.

The third thing is you have to have a specific research field. I built up for myself one specific research orientation and research area. This means that I do research deeply in one field. Later it's better if you can expand it more. In Vietnam, it's likely that people want to know everything, that's why they are likely to write everything. This also explains why their papers are not of high enough quality to be accepted by any journals.

Mr Michael, however, reported that his strategies could be successfully applied because of the great support he received both from his senior researchers and from his university. Such support motivated him to sustain his research engagement.

The primary support is from my university which has a current strategy to become a research university. Other support is either from my senior researchers or from my current supervisor who is also acting as my mentor.

Regarding research support from his university, Mr Michael described that there has recently been great research support and focus in his university. Research funding is considerably higher there than in other universities. For example, with the completion of one university-level research project, he can earn as much as teaching seven classes. In addition, if he has his papers published in peer-reviewed journals, he will receive financial rewards.

There are some research training programs, which are free of charge, for academics who want to improve. If our academics want to study specialised programs outside the university, they will be supported with finance by my university. One more thing, we also have programs for research skills such as academic writing, proposal writing, and writing for international journals.

Finally, he reported that his university has recently purchased a database account. This has provided him with full access to research resources. Google Scholar, which he used to access, was not an adequate source for his research.

In previous years, I read either from my university's journal or from Google Scholar, but I found that they were insufficient, especially Google Scholar. Recently, my university has bought a database account, so I now access resources from there.

Mr Michael's narrative identified four key strategies for his success in research. They include (1) engaging in effective reading practice, (2) balancing the time spent on research and teaching, (3) work-life balance, and (4) focusing on a specific research area. Working in research-conducive organisations where researchers receive

sufficient research support is important because this would support, inspire, and motivate researchers to sustain their involvement in research.

5.1.3 Ms Anna-Summer University

Ms Anna is currently a PhD candidate and a member of academic staff. She was one of only two women nominated in Phase 1 as successful researchers. The other academics nominated her because of her established publishing record and passion for research. Due to her impressive research profile, she has received scholarship offers for PhD study from overseas universities.

When I applied for a PhD scholarship, I got acceptance from three universities; one in New Zealand and two from Australia.

Her first strategy, Ms Anna described, was regarding sustaining her personal passion. She described that it was important for all academics to sustain passion because research activities are really time-consuming and do not generate instant income. Albeit passionate about research, she believed that her research engagement was frequently interrupted by such personal factors as family responsibilities.

Her alternative strategy related to engaging in academic reading activity. She described that her strategy was to read in both Vietnamese and English because this would help her to understand new terms better. Reading also developed her critical thinking and enhanced her knowledge.

By reading, the first (advantage is that) I can write my proposal. The second is I can use that knowledge to write other papers.

Her third strategy was in regard to learning from her research network which she found collaborative and supportive. She described that having a meaningful relationship with senior academics in her network enhanced her confidence in research.

I have a relationship with some teachers who taught me in Australia and some friends in the Australia Alumni Association. We share information and sometimes organise workshops together. There are two approachable professors in my university. I usually contact and discuss with those two professors when I am stuck with my research. After having a discussion with them, I feel better and more confident.

She also reported that being a co-author with her senior professors in her research network enhanced her productivity in publication.

Her next strategy was in relation to the way she balanced the time spent on research and teaching.

My strategy is that I teach less- just enough income to cover my daily living when I do research and reading. Of course, there are a few months I do a lot of teaching so that I can save money for my time in research. Everyone focuses more on teaching to earn money. I think if we are a little bit smarter, we will reserve a little time for research activity so that we will have more balance later.

Her final strategy was linked with setting her personal research plan and goals.

The most effective strategy is to set a goal. For example, my goal for this year is two papers. Or I will try to complete my proposal this year. The immediate output is my proposal, but when I complete it, I'll have a lot new ideas to start writing the other things.

In brief, the five strategies which emerged from Ms Anna's narrative of her success in research are (1) sustaining her personal passion, (2) engaging in an academic reading activity both in Vietnamese and English, (3) learning from her collaborative research network, (4) balancing the time spent on research and teaching, and (5) setting her personal research plan and goals. Of those strategies, her personal passion for research plays a crucial role in her success.

5.1.4 Dr John-Summer University

This researcher is currently a dean of a department and also an academic staff member. He is also one of the editors for Summer University's journal. The academics interviewed from Summer University nominated him as a successful researcher, partly because of his international publication and his meaningful research support for other colleagues.

The first strategy Dr John described was regarding his passion for research. He described that everyone has their own passion and that one of the most effective ways for creating passion for research was to generate a research culture within the organisation.

The people who studied overseas have great passion because they lived in a research culture environment where everyone does research. However, when those people come back home, their passion is reduced. This is because they don't have their own office, and the issue of 'food, clothing, rice, and money'. I think each academic has to build up his/her

own passion. The influence of each such person is all-pervasive and creates a culture (an environment) for everyone to do research.

Dr John also described two factors that could help junior academics to grow their passion.

You should specify your research area. A mentor can help you to identify your research area and develop it. These two factors will create your passion.

Another strategy he raised was taking part in research projects, seminars and conferences both locally and internationally because such participation offers chances to create a research network.

Dr John claimed that his second strategy was building up a research network in which he received support and collaboration in his research.

I think such participation in conferences would bring you chances to meet and interact with senior or junior experts who have a lot of good ideas so that we can learn from them. And then you can create a network with those participants. Currently, I myself have lots of networks with experts (from Asia to Europe) who share and send information about conferences with me so that I can send papers to them. I think a network is very good.

Beside his personal passion for research, the research support Dr John received from his university supported and motivated him to sustain his research engagement.

He reported that one of those research policies required all master's qualified academics to produce a research paper, published or at least presented at a seminar, each year. In reality, they could do research projects with their students, which he thought could maintain their passion. For Professors, he said that they were required to have their papers published in both local and international journals.

Another support measure in Dr John's university related to funding for research.

My university provides funding support for academics' projects. My university is one of the universities which receive 5 billion annually for research (approximately 400,000 AUD). My university allocates 50 million (approximately 3,000 AUD) for university-level research projects.

The final support measure detailed by Dr John relates to the availability of research support programs, including the development of research knowledge and skills. For example, he reported that annually his university invited foreign experts to share knowledge about research methodological issues or writing skills for journals papers.

His university also listed all journals with an ISSN in which academics would get recognition for their publications.

In short, Dr John's narrative delineates three key strategies, namely building passion for research, participating in research activities, and learning from a meaningful research network. Once again, the availability of practical research support strategies from his institution is a significant factor contributing to his success.

5.1.4 Summary

Throughout the four narratives above, the researchers all claimed that passion served as a crucial factor in the pursuit of their successful research journey. They also identified some common key strategies that have made a significant contribution to their success in research. They were synthesized as follows:

- Determining and focusing on one specific research area, rather than engaging in diverse generalised research topics. Such focus, they commonly argued, develops their capacity for in-depth analysis and enhances the potential for engaging in high-impact research. This greatly increases potential for productivity in their research. In particular, some noted that achieving alignment between their teaching and their research was particularly helpful.
- Building a collaborative research network is an important strategy to support, inspire, and motivate them in research. They also argued that a meaningful research network provides them with considerable opportunities to foster international collaboration with key researchers in their field.
- Formulating a plan and setting goals for their research bring about practical productivity in their research
- Achieving a balance between work and life helped them to achieve success in their academic work, engage in their social life, and have time for their family. They noted that such a balance motivated and supported them to sustain their ongoing involvement in research.
- Balancing the time spent on research and teaching enabled them to focus more on research than teaching. They argued that their time management for research depended largely on this balance.

- Engaging in effective academic reading and writing activity, which are two of the most basic academic skills, enables them to increase their research knowledge, knowledge of their field, and critical thinking skills. Such active engagement, they argued, increased the quality of their papers so that those papers would likely be accepted for publication in journals.
- Participating in research activities with experienced researchers increases opportunities for junior researchers to meet, as well as interact with, key researchers in their field and thereby establish a research network with them.
- Finding some mutual alignment between their research and teaching fields enabled better support for their teaching topics as well as practical contribution to their research.

The factors identified in the four narratives, as outlined above, can once again be characterised as falling into two categories that support and motivate the successful participating researchers to sustain their research engagement. One is the researchers' personal characteristics enabling themselves to sustain their involvement in research as well as to maximise opportunities for their research capacity building. The other category is the availability of research support programs in their institutions, such as funding for research, research knowledge, and research skills, to stimulate and nurture their research engagement. In addition to this, the institutions should initiate appropriate rewards for research activities.

5.2 Section 2: Phase 2

This section now synthesizes the nine interviews, explores them in greater depth, and addresses the three remaining sub-research questions one, two, and three, as mentioned previously in the beginning of this chapter. As sufficiently identified in Chapter 3, a coding technique of grounded theory was utilised for the data analysis of Phase 2. The findings are reported as follows:

- Strategies employed to be successful in research
- Motivation and support for sustainable research engagement

5.2.1 Strategies Employed to Be Successful in Research

Overall, the interview data identified nine key strategies that the nine successful

participating researchers either employed or believed to be important to success in research. Of the nine strategies, having passion for research is one of the frequently significant strategies that the nine participating researchers delineated as their most important foundation. The eight remaining strategies are reported in order from the most frequently indicated to the least, but not assuming that this is the order of importance.

Having Passion for Research

Except for Mr Michael and Ms Jenny, the seven remaining researchers all claimed that passion for research served as the most crucial foundation factor in their successful research journey. Such passion, Professor Larry, Dr Eric, and Mr Terry described, enabled them to overcome challenges they faced in their journey, generated success in research, and led them to other successes. Dr John and Ms Anna indicated that it was extremely important for them to keep their passion alive. This is difficult because passion is always impacted by internal and external factors, namely the time-consuming nature of research, family responsibilities, or the unavailability of instant income.

In addition, Dr Henry reported that passion was considered to be the core strategy he depended on to be a successful researcher. He firmly stated:

That is my passion which I think is a core and fundamental factor because you must like it so you can do it.

Dr David, who identified his two primary strategies- having passion and focusing on a specific research area- described that they were a mutually supportive relationship. He said:

If you can determine your specific research area which is a necessity for society, you will have passion for research.

However, their passion, as all nine successful researchers observed, did not naturally come to them but was created and influenced by causal conditions in either direct or indirect ways.

Factors contributing to passion

Overall, the participating researchers agreed that the six factors contributing to their passion for research are (1) ongoing as well as early involvement in research, (2) their

particular personalities, (3) their self-awareness of research as an important element in professional advancement, (4) an existing research culture environment, (5) academic recognition from their research community, and (6) the support they received from senior researchers.

Professor Larry's narrative clearly described that his ongoing involvement in research contributed to generating and sustaining his passion. These researchers reported that early involvement in research since their undergraduate studies also helped them to develop research skills as well as initial research experiences, which gradually generated their passion. Dr Henry's quote below demonstrates this:

That is from when I was a student; I participated in research activities from my second year. Those projects were just small essays or papers for seminars, which were my starting points and built up my experience in research activities. Such experiences became the scaffold for me to do more research projects with my faculty as well as the university later.

In regard to their particular personalities, those participating researchers perceived that they were driven by their unique personalities that partly shaped their passion for research. Those personalities were characterised by being self-motivated, self-determined, consistent, and patient. Ms Anna's narrative identified how important it was for her to keep her passion alive. Her statement below clearly describes her self-motivated, self-determined, and persistent qualities in sustaining passion:

Research activity itself is a really hard task and does not instantly bring productivity, benefits or monthly income. When understanding this issue, we should try to keep our passion. And then, we have to work really hard, even though no one tells you to.

Dr Henry described how his patient and persistent qualities helped him to develop his research skills:

When you write papers for journals, you might be initially rejected a hundred times. However, if you keep doing it, you will experience some improvements and gain skills. In other words, there are the factors of persistence and patience.

Ms Anna's quote below clearly indicates that her passion originated from her self-awareness of research for professional advancement. This is because research not only provides her with updated knowledge as required for her teaching career, but also creates and impressive research profile as required for her PhD advancement.

It comes from the vision for my professional advancement. I want to define myself as a university lecturer who is good at teaching as well as theory in my field. I believe that I will still be a lecturer in more than 20 years, so if you only have master's qualification and are very bored with your outdated knowledge, you will be overcome by next generation. I must redefine myself as I will have to do teaching and research, and only by doing that will I be able to keep myself in the career.

Regarding the fourth factor, Dr John's narrative fully illustrates that being surrounded by a research culture was the cause of his passion. Furthermore, Mr Terry reported that the second source that nurtured his passion was academic recognition from his research community, especially from his students. He described such academic recognition as something money cannot buy. Mr Terry said:

The second source (of my passion) is that my colleagues and my students recognise my academic achievements; even money cannot buy such recognition.

Mr Michael attributed the support he received from his senior researchers as the final factor contributing to his passion. Mr Michael stated:

Another factor which supports and sustains my passion comes from senior researchers. To be honest, I sometimes lose my passion. When that happens, I come and see them or my supervisor who has a chat with me and motivates me to move on.

Determining and focusing on one specific research area

All seven male participating researchers delineated this as a strategy they have employed in the course of their research journey. Research has found that female academics tend to diversify their research areas more than their male counterparts which consequently impacts on their research productivity (Leahey, 2006). Focusing on a specific research area, these male researchers reported, helped them to explore it in-depth and, as a result, enhance their knowledge. Accordingly, their papers had a high acceptance rate from journals. Mr Michael stated in the quote below:

The third thing is your specific research field. I built up for myself one specific research orientation and research area. This means that I do research deeply in one field. Later it is better if you can expand it more. In Vietnam, it is likely that people want to know everything, that's why they are likely to write everything. This also explains why their papers are not valuable.

Dr Henry further indicated that in selecting a specific research area, all academics need to take some factors into account. He stated:

One of the foundation strategies is that you have to select your research area...You have to identify it as compatible with your capacity, major, passion, or other factors.

Forming and learning from a research network

Utilising research networks is a strategy demonstrated by seven participating researchers, with the exception of Mr Terry and Mr Michael. These seven researchers all reported that they have gained a considerable number of benefits from their collaborative research network. Those benefits include sharing research resources, enhancing their research knowledge, increasing in-depth knowledge of their research area, and receiving support, consultation, and motivation for research.

Dr John's and Ms Anna's narrative affirmed the benefits they had gained from their research networks and how they had developed them.

Ms. Jenny detailed the strategies she used in establishing her network. She stated:

I establish and maintain my relationships with senior researchers who have very good expertise and especially with those who graduated from overseas universities because I think they have specific research skills that I can learn from.

However, Mr Michael, Mr Terry, Ms Jenny and Dr David all indicated that their network was mainly formed among internal colleagues of their universities as Dr David's quote below indicates:

When I was a student, I asked my schoolmates for feedback on my papers. Now I usually ask my junior academics for comments because this would enhance research knowledge for them. With their comments, I can recognise some very basic mistakes. I, myself, like this kind of network.

Formulating a plan and setting goals for research

Ms. Anna, Mr. Michael, Mr. Terry, and Dr. David all reported that they had set a specific plan or goal for their research activities. Such plans consisted of short-term and long-term goals. In addition, they stated that this strategy more or less had a mutually supportive relationship with time management. Once a specific plan for research is established, they always set and adhere to the deadline for the completion.

Dr David described his goals and plans for research:

I set my goal for myself- at least three papers for journals per year. Once deciding to attend conferences, I attempt to finish abstracts by the deadline and then spend between five and ten days on those papers.

Mr. Terry stated that his second strategy to be successful in research was the combination of time management and goal setting for research. He said:

We need to formulate a plan. There are five year long-term plans, one year plans, and short-term plans over a few months...Five years for a research project, how many papers per year we plan to produce.

Achieving a balance between work and life

Ms Anna, Mr Michael, Mr Terry, and Dr Eric all stated that they had managed their time effectively so that they achieved a good balance between their work and their personal and social life. Mr Michael's narrative described how such a balance motivated him to sustain his involvement in research.

Dr Eric's quote below clearly indicates how he effectively balanced his work, social and family life.

I spend my spare time for research after sharing my time for my family. For me, I usually spend my morning on research after my morning workout.

However, as single junior researchers Mr Michael, Mr Terry, and Ms Anna reported, their time management was not largely influenced by factors relating to family responsibilities. Mr Terry stated:

I'm in luck because I'm still single so I don't commit time to taking care of my family.

Balancing time spent on research and teaching

This strategy was employed by Mr Michael, Mr Terry, and Ms Anna as junior researchers. They commonly argued that unless they balanced time spent on research and teaching, they would not be such productive researchers. Ms Anna and Mr Michael's narratives strongly affirmed that they consciously focused more on research, and less on teaching.

Mr Terry described the challenges for balancing time spent on research and teaching:

In reality, teaching earns more money and needs less grey matter, whereas research needs more grey matter, consumes more time, and

earns less money. Teaching wins over research. Therefore, we need to have a plan to balance both.

Engaging in academic reading and writing activity

All nine participating researchers commonly reported that this strategy was considered one of the most basic academic skills required for their research journey, and was explicitly described by Dr. Eric, Mr. Michael, and Ms. Anna. This is because reading developed their critical thinking skills, increased their research skills, expanded their knowledge of their fields, and informed them of the latest emerging research theories in their fields. The participating researchers also observed that both Vietnamese and English language sources, where possible, should be combined in this academic activity. More importantly, the end result of this strategy, if appropriately applied, produced a research paper.

Both Mr Michael's and Ms Anna's narrative illustrated how this strategy contributed to their success in research. Professor Larry reported that it was important for him to engage in and gain knowledge from reading activity because it enabled him to apply that knowledge to his research paper:

I read about my research field with the purpose of understanding it in-depth. However, you need to apply that knowledge into practice, so I write a paper for each research field. You need to expand knowledge in your research field through reading.

Ms Jenny said that one of her strategies was improving her English language capacity to read international research reports. She stated:

I am currently learning more English to read international articles.

Participating in diverse research activities

Both Dr John and Ms Jenny reported that participating in diverse research activities was a strategy they employed. They said that they attempted to participate in both local and international research activities. Such participation offers them opportunities to learn from senior researchers in terms of research skills and research knowledge. This strategy, thus, is a thread for a research network building between them and key researchers in their field. Dr John stated in his narrative how he built up his international network from this kind of participation.

Ms Jenny further reported that this is the most valuable strategy that she depends on in pursuing her research journey. She said:

I think participating in international conferences is very important because this broadens my mind and provides me a chance to meet researchers who inspire me further with my research journey.

Finding some mutual alignment between research and teaching

This strategy was explicitly explained by Professor Larry and Dr David. Professor Larry explained that his research was mutually aligned with issues that arose from his teaching practice.

Dr David also personally observed some mutual alignment between research and teaching, as indicated in his quote below.

...teaching practices must incorporate research. I do not speak on behalf of MOET's view, but this is what I draw from my personal experiences.

However, all nine successful participating researchers perceived that in the course of being researchers, there have been typical factors motivating and supporting them to sustain their research engagement. Those typical factors are reported in this coming section.

5.2.2 Motivation and Support for Sustainable Research Engagement

The nine successful participating researchers were asked to describe what motivated and supported them to sustain their research engagement. Overall, the interview data indicates two categories of factors that motivated and supported the nine participating researchers to sustain their involvement in research. One related to the participating researchers' personal factors and the second category was regarding the contextual factors for the nine participating researchers. The two categories of factors are summarised in table 5-1 below.

Table 5-2: Motivation for the Nine Successful Researchers to Engage in Research.

Categories	Frequency
Personal factors	
<ul style="list-style-type: none"> • Research as an academic responsibility and professional advancement • Having personal passion and self-motivated personality • Balancing and managing time effectively • Receiving support from senior researchers or colleagues 	5 4 3 2
Contextual factors	
<ul style="list-style-type: none"> • Research resource availability • Academic recognition from a research community • Compulsory research policy from institutions 	6 3 2

Personal factors

Overall, the nine participating researchers indicated that their sustainable research engagement was motivated and supported by four personal factors, namely (1) research as an academic responsibility and professional development, (2) having personal passion and self-motivated personality, (3) balancing and managing time effectively, and (4) receiving support from senior researchers.

The first personal factor was illustrated by five participating researchers, namely Professor Larry, Dr David, Mr Terry, Ms Anna, and Ms Jenny. They reported that they viewed research as an academic responsibility and a prerequisite for professional advancement. Such consciousness actually motivated them to sustain their research engagement. Ms Anna's narrative earlier described how she realised research was very necessary for her professional advancement when applying for PhD study.

Dr David above further reported:

That is already your responsibility and requirement. And, the income you receive includes both salary for teaching and for research.

Ms Jenny perceived that as an academic she needed to have research capacities. She stated:

As a university academic, I needed to have research capacities. This distinguishes a university academic from a secondary school teacher.

With regards to having personal passion and a self-motivated personality, Mr Terry, Ms Anna, Dr Henry, and Dr David all confirmed that their passion was still a core factor that motivated them to sustain their research engagement, and was effective in conjunction with their self-motivated personalities. Dr Henry sufficiently delineated passion as his core motivating factor:

I think it is also the factor 'passion' because you like it you can do it. If you do not feel passion, you will be affected by the other distractions...Therefore, the bottom line which motivates you to sustain your research engagement is your passion.

Ms Anna reported she was self-motivated to sustain her research engagement.

I am self-motivated because I feel I would waste my time by not doing research after my graduation. I would regret the period I had my good health, spare time, and sharp mind and I didn't engage in research.

Regarding the third personal factor, Dr Eric, Mr Terry, and Mr Michael described that managing their time effectively was very important for their sustainable research engagement. As reported earlier in their strategies employed to be successful in research, their involvement in research was further motivated if they effectively balanced their time spent on research, teaching, and social life. The second category related to contextual factors from their institutions.

Finally, both Mr Michael and Ms Anna reported that they were motivated by support received from their senior researchers. Such support included motivation, research activities, and information sharing. Mr Michael clearly described how important it was for him to be motivated by his senior researchers, especially his supervisor when he lost motivation.

Contextual factors

There are three contextual factors that motivate and support the nine participating researchers. These factors include (1) research resource availability, (2) research policy from institutions that outlined compulsory research output expectations, and (3) academic recognition from a research community.

Surprisingly, all six participating successful researchers from both Summer University and Spring University reported that their universities have recently been developed into research-conducive institutions and thus research has become the primary focus.

Such transformation gradually generated research resource availability in their universities. These research resources, the six participating researchers reported, included (1) provision of funding for research projects, albeit still limited, (2) recognition of research engagement through financial support or rewards, (3) the availability of research support programs, and (4) provision of database access. Mr Michael's and Dr John's narratives fully described how they were motivated and supported by Spring University and Summer University in terms of research funding, research support programs, and available database access. Mr Terry describes Spring University:

It is lucky and pleasant if academics work in a university where leaders create or provide all conditions for research activities. My university is one of those having such a strategy.

In the statement below Ms Jenny discusses financial support for research, which somewhat motivates and supports her to sustain her research engagement.

My university established financial support for academics who engage in research. For example, there is a financial reward for a paper published in international journal, or the school fee is refunded for any academic achieving high scores with International English Language Testing System (IELTS).

Regarding the second contextual factor, Dr John and Dr David attributed their institutions' research policy to partly motivating and supporting their sustainable research engagement. This is because research output expectations outlined by their universities were considered as their personal obligation for research engagement.

Dr David from Autumn University, where research has recently become a focus, stated:

In my case research policies and research focus of my institutions motivated me to sustain my research. Once an institution has its policy or requirement, you need to follow.

For the final contextual factor, Professor Larry, Mr Terry, and Dr Henry all reported that academic recognition from a research community were what motivated them to sustain their research engagement. Professor Larry's narrative affirms that he was engaged in research to maintain what he defined as 'his face'.

Mr Terry also reported that he sustained his research engagement due to the

academic recognition from his research community, his colleagues, and his students:

My motivation is the academic recognition of my students, colleagues, and the broader community.

Dr Henry described his second motivation for his research engagement was his prestige amongst other colleagues. He stated:

You can earn more with your teaching instead of doing research. However, I think research demonstrates your reputation or prestige among your colleagues.

5.2.3 The Features of Sustainable Research Support Programs

This section addresses the last sub-research question, “What are the features of a sustainable research support program that Vietnamese universities might provide to build research capacity and skills?” The nine participating successful researchers were asked what research support programs they found useful and what types of support they expected to seek for from their universities to build their research capacity. Thematic analysis, once again, was used to analyse the interview data in this section. Three themes have been identified as follows:

- Strategic planning
- Funding and financial support
- Support with administration processes

Strategic planning

The nine participating successful researchers commonly argued that sustainable research support programs should include such features as continuous long-term strategies, more appropriate content, international integration, and the role of senior researchers as consultants or mentors.

First of all, Mr Michael in describing how he found research support programs of his Spring University useful, stated:

The first thing which is of very high value is the long-term strategy from my chancellor. The strategy focuses mainly on research.

Professor Larry reported that the reasons for unsustainable research support programs in his Autumn University were short term strategies, lack of cohesion, and inappropriate content. Professor Larry notes:

Annually, each faculty usually holds research support programs, such as conferences or seminars. However, they still seem to be short-term and cursory...I see that all faculties have difficulties in designing the content of those programs so that it can be matched to academics' research orientation.

Dr John specifically described that research support programs need to focus on the specific needs of academics, namely using research software programs. He states:

Many academics still conduct research manually (without use of technological tools). They have difficulties in using software programs like SPSS, N-vivo, or End-note. Sometimes they have to ask experts for help. Therefore, I think we are still not good at using software programs for research.

Regarding international integration, Mr Michael also wishes that his university's support programs would develop and support international integration because this would increase both his university's academic prestige and provide more opportunities for his university's papers to be accepted in international journals. His quote below clearly indicates this.

I want my university to call for more international conferences because our academics will have more chances to publish their papers. I think those international conferences will raise the reputation of my university. If that happens, our academics' papers will have more chances to be accepted when applying to international journals, partly because of our established reputation.

Finally, most participating researchers argued that senior researchers played an important role in their development. As such, they indicated that research support programs need to employ those senior researchers as consultants or mentors. Dr John reported there has been a mentoring program in his university, but has been short-lived due to lack of mentors' commitment:

Here we also have mentoring. For new academics, they will have a mentor in their first year, but it usually concludes just after the first year. I think mentoring is a very good approach but it needs continuity. Mentoring needs to include benefits for mentors. That's why after one year senior researchers no longer want to act as a mentor.

Dr David argued that a mentor is an indispensable part of the development of ECAs' research capacities. He states:

I think research support programs need a senior researcher to mentor future potential researchers.

Funding and financial support

The participating researchers commonly argued that their universities need to have a better funding allocation mechanism for research, and increase financial support for research activities.

Dr Eric wishes that his university would provide specific research funding and increase financial support for research activities. He provides the following example:

For example, I had many papers published, but the financial support I received from my university only equalled the payment for two teaching hours though it took me at least 20 hours to complete one paper.

In addition, Ms Anna wishes that her university could have more appropriate funding allocation among faculties. Ms Anna states:

I think research projects in Humanities and Social Sciences do not produce any commercial products like nature sciences do. That is why we seldom have research projects approved for funding by my university. My university usually prioritizes research projects for the other departments.

With regards to financial support, Ms Anna describes what she desires from her university:

If my abstracts are accepted for conferences, the university should provide finance to attend those conferences such as accommodation, transportation, or conference fee. We had financial support last time, but now I do not see it anymore; probably because of our university's reduced budget.

Administrative Formalities

Most of the participating researchers clearly indicated that the administrative formalities for research need to be improved. This is because the current administrative processes are still so complicated and this takes time away from actual research activity. Dr Henry comments:

We need to have better support for the administrative formalities because those processes are still so complicated. That is the factor of the administrative formalities, which need to be modified more effectively for researchers because those formalities are much more complicated than the process of research. Therefore, they need to be changed so that they will not cause any trouble for researchers. In reality, researchers are really worried about handling those issues.

In addition, Ms Anna in Summer University, who described the administrative formalities of her Summer University, stated bluntly:

If you complain about administrative formalities, I think you had better do research with your self-funding.

Dr Eric described the support he is seeking for the administrative formalities in his Autumn University and stated:

The second support is that the administrative formalities need to be flexible for research activities.

5.3 Summary of Chapter

This chapter has reported the findings from the analysis of Phase 2 in two sections. Section 1 described the four selected narratives of Professor Larry, Mr Michael, Ms Anna, and Dr John about their research journeys. These narratives indicate nine key strategies that have significantly contributed to their success in research. In addition, two categories that motivate and support the four researchers to sustain their research engagement are their personal characteristics and the availability of research support programs in their institutions.

Sections 2 synthesised all interview data from the nine participating researchers who were recruited based on the nominations of the participating academics in Phase 1. The interview data was explored in depth to describe and explain key strategies the nine participating researchers either employed or believed to be important to contribute to success in research in Vietnam. The nine key strategies are outlined as follows:

- Having passion for research
- Determining and focusing on a specific research area
- Forming and learning from a research network
- Formulating plans and goals for research
- Achieving a balance between work and life
- Balancing time spent on research and teaching
- Engaging in academic reading and writing activity
- Participating in diverse research activities
- Finding some mutual alignment between research and teaching

Moreover, the interview data indicated that both personal and contextual factors impacted on the successful researchers' motivation to sustain their involvement in

research.

These findings raise the following questions:

- What lessons can be learnt from the nine successful researchers by ECAs and Vietnamese universities?
- What are the remaining challenges?
- What are potential solutions that ECAs, Vietnamese universities, and Vietnamese government should deliberate?

These questions are explored in the next chapter.

CHAPTER 6: DISCUSSION

This chapter seeks to consider the findings reported in Chapters 4 and 5, in light of assisting ECAs and Vietnamese universities in research productivity and quality. The actual findings of this study relate to both what are considered to be attributes and descriptions of the practices of actual successful researchers by ECAs, and what successful researchers attribute to their success. In this chapter, the lessons learnt from successful researchers in this study are featured. The next section examines challenging issues related to engagement and success in research that have been found in this study. The final section of this chapter features potential solutions that ECAs, Vietnamese universities and the Vietnamese Government should consider taking action on.

The findings discussed align with the research purpose of this study which is to generate a body of knowledge and understanding of what strategies successful Vietnamese researchers most depend on to be successful in research. The goal is to answer the research question “What can be learnt from successful researchers in Humanities and Social Sciences within Vietnamese universities that can assist the ECAs learn to become active and productive in research?”

6.1 The Lessons Learnt from Experienced Successful Researchers in this Study

The interviews with successful, Vietnamese researchers in this study indicate that research requires the following attributes and practices to attain success, namely (1) passion and commitment, (2) skills and knowledge, (3) time, (4) resources and support, and (5) a focus.

6.1.1 Research Requires Passion and Commitment

Successful researchers in this study confirm that research requires passion, rather than merely complying with policy. They attribute passion as a crucial factor to their success in research, because passion itself enables them to overcome the challenges they face in their research journey (see Chapter 5). Further, successful researchers also indicate that early involvement is one of the six factors contributing to generating their passion. While this factor is discussed here, the remaining factors will be raised in this

following section. The literature review shows that personal motivation and early scholarly habits are two of the personal attributes of a successful researcher (Bland & Ruffin, 1992). Vaccaro (2009), for example, found that there is a positive correlation between personal passion and research-self efficacy. In addition, past studies have found that productive researchers publish early in their career (Clemente, 1973; Cole & Cole, 1967; Creswell, 1985; Reskin, 1977). Chen and Anderson (2008) posited that ECRs are expected to self-manage their own motivation and engagement. Therefore, ECAs need to be encouraged and supported to engage in research as early as possible in their careers. Early efforts that are positively responded to by senior staff and recognised by their institutions should contribute to both their passion and research productivity.

Successful researchers participating in this study also indicated that they actively commit themselves to research because research is an academic responsibility and contributes to their own professional advancement. The requirement of research hours, reported in table 4-1, classifies research as an academic responsibility. Along with the three participating universities, such a requirement is widely applied within many other Vietnamese HE contexts. University 'A', for example, refuses to pay its academics for research hours if they do not successfully complete the prescribed requirements (Nguyen & Anh, 2012a). In another case, University 'B' does not allow its academics to replace research hours with extra teaching hours (Phan, 2015).

The findings in this study thus confirm that all individual academics are required to produce at least one research paper annually, regardless of their educational level. This pressure raises questions regarding the quality of such research publication output. Number of publications is widely used as evidence to measure an academic's work quality. In agreement, everyday academics confirm that one of a successful researcher's attributes is an established publishing record (see Chapter 4). Publication is widely accepted as (1) the most pivotal indicator to measure research productivity of individual academics and institutions, (2) a considered factor in recruitment, (3) a requirement for academic promotion, and (4) a critical condition for obtaining research funds (Ramsden, 1994; Ito & Brotheridge, 2007). Moreover, a good research publication record is a solid foundation for advancing PhD studies, as described in Ms. Anna's narrative. Thus, such a record is one of the critical selection criteria for

acceptance for overseas PhD studies, including the receipt of scholarship funds. The question is how ECAs can build an extensive publication record that does not compromise quality.

6.1.2 Research Requires Skills and Knowledge

Successful researchers in this study confirm that they employ three specific strategies to enhance their research skills and knowledge, namely engaging in extensive reading, participating in research activities, and joining research networks and MS. Bland and Schmitz (1986) found that research skills and knowledge are prerequisites for success in research. Regarding an effective academic reading engagement, successful researcher participants reported that such an engagement develops their critical thinking skills, expands their research knowledge, and informs them of new research theories in their fields. As a result, it contributes to the quality of their papers which are more likely to be accepted by journals including international journals.

Brocato and Mavis (2005) found that research training participation is one of individual academic's three characteristics that strongly correlate with their research productivity. Bland and Schmitz (1986) recommended implications for researcher development programs, which ECAs and Vietnamese universities should consider. They stated that an academic should participate in an extensive period of research training, and the time spent in research training should be systematically structured. It should be congruent with the different backgrounds of academics in terms of skills, methodology, and experience. As a result, such engagement would gradually build up academics' research capacity, thereby establishing a culture of research quality. Similarly, Mallinckrodt and Gelso (2002) found that a research training program considered as successful must produce an interest in research and positive attitudes toward scholarly activity. Based on the evaluation of the programme developed to build research capacity for early career researchers in an Australian university, Browning, Thompson, and Dawson (2014) argued that strategies for building a strong research track record should be included within the programme and that the success of the programme relies upon regular face-to-face workshops.

Previous studies found that productive researchers establish collaborative networks with their internal as well as external colleagues (Bland & Ruffin, 1992; Corcoran &

Clark, 1984; Creswell, 1985; Grbich, 1998). Bland and Schmitz (1986) indicated that a collaborative network assists productive researchers in building a body of knowledge. As described in Dr John's and Ms. Anna's narrative, joining research networks enables them to both enhance their research knowledge and build their body of knowledge via constructive feedback on their work from other colleagues.

It has been found that MS significantly contributes to academics' research capacity and productivity, particularly for female ECAs (Gardiner et al., 2007). Van der Weijden et al (2014) also found that MS enhances young tenured professors' research skills. In Phase 1 of this study, everyday academic participants indicated that they lacked support and specific guidance from senior researchers to engage in research. This is in line with Nguyen (2013b) who posited that ECAs in Vietnam are currently lacking mentoring from senior experienced researchers for research capacity building. Further issues related to research networks and MS will be discussed in-detail in the following sections.

Therefore, it is advisable for ECAs to deliberately adopt strategies that successful researcher participants in this study most depend on to develop their research knowledge. It is recommended for all Vietnamese universities that wish to perform well in research to establish research education, MSs, and research networks that would enable ECAs to join research teams with expert researchers.

6.1.3 Research Requires Time

Successful researcher participants indicate that they focus more time on research, and less on teaching. They balance their time spent on research and teaching as well as effectively manage their time. By contrast, everyday academics in Phase 1 of this study indicated that they spent much more time on teaching than research (see Figure 4-1). In relation to time devoted for research, Finkelstein (1984) found that productivity peaks when about one-third of an academic's time is spent on research. Geertsema and van Niekerk's case study (2009) found that a South African non-research-intensive University adopts the ratio of 40-40-20% for teaching, research and other services, respectively. The university simplifies its timetable by eliminating dormant teaching modules and restructures the academic year in such a way that actual time for teaching remains unchanged. This results in longer uninterrupted time frames for

academics' research. Similarly, International University 'C' mentioned above specifies the ratio of 45-35-25% for an academic's teaching, research, and other services (Nguyen & Anh, 2012a). Such strategies are seemingly practical for Vietnamese universities, especially for female academics who seem to struggle most with time management for teaching, research and family responsibilities. Therefore, Vietnamese universities need to seek a feasible strategy for reduction of teaching load so that all academics, including female academics, have more time to focus on research.

6.1.4 Research Requires Resources and Support

Successful researcher participants in this study confirm that they receive research resources and support from their universities, namely research funding, research support programs, and access to databases. In Vietnam, such support is available in such public universities as Summer and Spring, but not to the same extent in non-public universities such as Autumn University. This is because these two public universities were developed into research-conducive universities with considerable government support and, thus, research is the primary focus (see Section 1, Chapter 4 for details). The findings of this study also confirm that the Vietnamese government does not allocate research funds to non-public universities. Consequently, such funding allocation mechanisms based on a centrally planned economy perpetuate the disadvantages for some academics to achieve success, particularly those employed in non-public universities.

Furthermore, the findings of this study indicate that the two public participating universities initially recognise and reward research achievements, namely publication productivity. Bui (2013) posited that the lack of incentive schemes is one of the barriers for international publication in Vietnam. Recently, some Vietnam universities have initiated reward schemes with increased financial incentives for both local and international publication of their academics work. Such schemes positively impact on either academics' research productivity or income. For example, since 2012, University 'A' increased financial reward for academics from 5 million dongs (equivalent to 250 AUD) to 20 million (1200 AUD) for a published paper in an international journal. Similarly, University 'B' rewards 10 million (600 AUD) and International University 'C' rewards 1900 AUD for a paper published in an international journal and 900 AUD for

local journals (Nguyen & Anh, 2012a). A previous study showed that financial rewards affect academics' publishing in refereed journals (Hemmings et al., 2007). Mullen et al. (2008) found that academics rank financial and material resources as critical factors for supporting their research efforts.

The findings in this study indicate that successful researcher participants have access to research databases. Database access is currently available in two public participating universities, as described in Dr John's and Mr. Michael's narrative. Past studies found that access to research resources plays a key role in research productivity (Bland & Ruffin, 1992; Metcalfe et al., 2009; Rebne, 1995). However, everyday academic participants indicated that limited materials and database access to Humanities and Social Sciences resources remain barriers in most Vietnamese universities.

Successful researcher participants confirm that they receive support from senior researchers as their mentors. The literature review shows that MSs are widely used in most Western universities because of their positive impacts on ECAs' research productivity and quality (see Gardiner, 1999; Mihkelson, 1997; Mullen, 2009; Nundulall & Reddy, 2011; Weiland, 2008). Gardiner (1999) found that MS has a positive impact on female academics' productivity and quality at Flinders University. However, everyday academic participants in this study indicated that formal long-term MSs are unavailable in their institutions, nor do these academics receive any support from their institutions in establishing MS. Fowler et al. (2009) concluded that research capacity will be built most effectively when academics are provided with interpersonal and institutional support (p.173).

6.1.5 Research Requires Access to Networks

Successful researcher participants confirmed that being a member of both local and international research networks enables them to be more productive and confident in research. In agreement, Brocato and Mavis (2005) found that being a member of a research network is one of three integral characteristics of a productive researcher. The two remaining characteristics are motivation and research training, as mentioned in this discussion. It is strongly recommended that where an institution fails to provide such support, ECAs need to exercise their own initiative to locate and join international

research networks. Being a member of these networks might assist ECAs in improving academic English capacity via email, online, or face-to-face interactions with overseas members. Being a member would also enable ECAs to access to research sources, conferences, or seminars via information sharing amongst members. As previously noted, English capacity and limited research sources are problematic for academics' research productivity and research quality. In addition, such collaborative networks would be beneficial for ECAs to get to know key researchers in their field and undertake research collaboration with them. Such research collaboration, as Pham (2010b) posited, helps early career researchers in developing countries to train themselves, accumulate research experiences, and enhance their research skills.

The findings in this study indicate that successful researcher participants used a number of strategies to establish research networks. For example, Dr John reported in his narrative that taking part in research projects, seminars, workshops and conferences, in both local and international contexts, increases his chances to meet, exchange personal contact details, and initiate research collaboration with other researchers. Information Technology (IT), such as email, Dropbox, Skype, and video-conference, play a key role in establishing an international research network and maximizing the benefits of networking. Akerlind (2009, p. 144) noted that conferences provide a key opportunity for networking and provided some suggestions for overcoming psycho-social barriers. These suggestions include (1) attending smaller rather than larger conferences because they tend to be friendlier; (2) selecting one particular conference for regular attendance because it helps to establish contacts over time with other regular attendees; and (3) taking part in organised sightseeing side trips that provide a smaller, more informal setting for building contacts.

Successful researcher participants indicated that they also form internal networks within their universities because of academic benefits to either themselves or other colleagues. Bland and Ruffin (1992) argued that informal or formal interaction with experienced researchers may motivate less experienced researchers to become more productive. Therefore, it is recommended that such interactive activities should be initiated to foster the value of undertaking research among academics (Jenks, 2009 cited in Lodhi, 2012, p. 475).

6.1.6 Research Requires a Specific Focus

Successful researcher participants also indicated that focusing on a specific research area contributes positively to the quality of their research. It seems that such a specific focus would not only help the participants to investigate their research field in depth, but also elect to address issues that are of importance to Vietnamese education and society. As a result, such research would definitely contribute a high impact and value to both improve quality and increase acceptance in journals. As previously noted, research quality is a barrier to publication as the focus of many of the research problems that academics investigate are neither transformative nor do they contribute any new value to knowledge of humanity (Nguyen, 2013a; Tran, 2014d; Vu, 2012).

It is advisable for ECAs that choosing a specific area of research focus needs to be congruent with their passion, capacity, and specialisation, as the participants suggested that focusing on a specific research area also generates passion in research. When choosing a research area, ECAs should take into account some tips that Eley, Wellington, Pitts, and Biggs (2012, p. 14) recommended: (1) not being too ambitious, (2) considering previous experience at undergraduate or postgraduate study, and (3) considering emerging research areas, particularly current topics relevant to their society and nation.

6.2 Challenging Issues

This section features challenging issues related to both ECAs and Vietnamese universities, namely major inhibition, gender issues, dominance of English, and the ‘publish or perish’ agenda in Vietnam.

6.2.1 Major Inhibition

Borg’s study (2007, p. 732) found three reasons why academics do not sustain their engagement in research: (1) the lack of external pressure to do so; (2) lack of time; and (3) personal disposition and the belief that research is an activity done by outside experts.

The findings in this study confirm that major inhibitions for Vietnamese university research include the primary teaching focus; lack of research skills and knowledge;

lack of research resources including access to databases; and lack of access to international networks.

As reviewed in Chapter 2, the Vietnamese government is more inclined to allocate research activities to RIs, resulting in the primary focus of Vietnamese universities on teaching-oriented activities. Such an over emphasis on teaching has a negative impact on the commitment of Vietnamese universities to research as well as academics' attitude towards research. Also, teaching has a very high work load and is still an academics prime source of income in most Vietnamese universities. The consequence, as identified in Chapter 1, is that the demands of a heavy teaching load leave no time for many individual academics to actively engage in research (Nguyen, 2010).

It seems that a strong research culture, a culture of research quality in particular, has yet to be established in most Vietnamese universities. The consequence seems to be in concord with Harman et al. (2010), who stated, "The absence of a well-developed research culture across the nation's universities is a significant challenge for the attainment of HERA's reform ambitions, as well as for Vietnam's aspiration to achieve industrialised country status by 2020" (p. 7). The literature review has also shown that without the emphasis of institutions on research, there is a negative impact both on academics' research engagement and subsequent research productivity (Bland et al., 2005; Borg, 2007; Creswell, 1985; Drew & Raymond, 1985; Kapel & Wexler, 1970). Everyday academics, particularly the group of participants from Autumn University, confirmed that their engagement in research is mainly due to their obligations to their university. While research is not the primary focus of Autumn University, this university wants its academics to engage in research so that the University can meet the research expectation required by MOET.

Tran (2014c) posited that academics' lack of research capacity, including research skills and knowledge, has a negative impact on research productivity and quality. Everyday academic participants in this study reported that they need to enhance their research capacities in order to actively engage in research (see table 4-4). MOET (2011 cited in Tran, 2014a) also affirms that lack of research capacity has a negative impact on most academics' research quality, especially research in Education Sciences. Harman & Le

(2010, p.100) also suggest that research education at the master's level needs to have substantial investment for the future development of university research.

The findings in this study indicate that the lack of research resources is the most challenging factor for ECAs' research engagement. In agreement, the literature review has demonstrated that investment in research resources is crucial for the future development of Vietnam (Tran et al., 2014). The effective provision of research funds is currently problematic because it is based on a centrally planned economy, which allocates most research funds to RIs and public universities (Harman & Le, 2010; Nguyen, 2014a; Nguyen, 2014b). Hayden (2012 cited in Nguyen & Anh, 2012a) argued that the current funding allocation mechanism needs to be shifted to competitive research grants and allocated to all Vietnamese universities, rather than only to RIs. Moreover, as discussed in the previous section, there are some rewards for academics' research achievements in a few Vietnamese universities, though financial incentives remain low in most Vietnamese universities (Harman & Le, 2010).

It is also strongly recommended that adequate database access should be available to Humanities and Social Sciences academics. It is worth quoting what a senior PhD academic in Summer University stated regarding database access: "I feel that there are limited materials for Humanities and Social Sciences compared with Nature Sciences." A lack of research resources including database access has demotivated academics to engage in research (Do & Do, 2014).

Everyday academic participants confirm that they face challenges in both local and international research network participation. It is clear that these academics perceive the benefits a research network contributes to their research productivity. However, it seems they neither know how, nor have specific guidance in establishing or joining networks. Records and Emerson (2003) found that postgraduate study may not provide academics with adequate research capacity to be productive researchers, so they need specific guidance in developing research capacity, creating networks, and preparing publications. Accordingly, providing specific support for networks is an institutional responsibility.

6.2.2 Dominance of English Language

The literature review has indicated that lack of English capacity and lack of research training at the master's level are problematic for academics' research capacity (Tran, 2013; 2014a). English proficiency enables academics to access new research knowledge as well as international publication. The global linguistic hegemony of English has had a significant impact on global educational systems, the learning of individual students, and academics and scholars. English is a key language widely used in international journals and international conferences (Altbach, 2006). Above 90 per cent of international journals currently use English, even those from Asian countries (Nguyen, 2013b). Tran (2014b) posited that English proficiency enables Vietnamese researchers to undertake global research collaborations. MOET has issued a great number of policies regarding the dominance of English language. All individual academics, for example, have to prove their level of English proficiency with TOEIC (Test of English for International Communication), TOEFL (Test of English as Foreign Language) and IELTS (International English Language Testing System) accepted as standardised tests.

Everyday academic participants in this study confirm that lack of English capacity is problematic for them in achieving success in research, namely international publication. Tran (2013; 2014b) identifies that lack of English language capacity is currently problematic for Vietnamese academics wishing to join international research networks. Nguyen (2010) indicated that even experienced senior researchers still lack the English capacity for international publication. In agreement, Nguyen (2013b) confirms that for a majority of Vietnamese academics, their academic writing skills in English are not sufficient to write a paper for international publication. Even those PhDs who graduated from western universities still need specific language guidance in academic writing for international journals. The literature review has also indicated that English capacity is one of the three reasons for the low international publication rate of Vietnamese university research (Bui, 2013; Nguyen, 2013b; Tran, 2013). Due to poor English language skills, individual academics are unable to gain new research knowledge for international publication. Thus, Tran (2014b) suggests ECAs themselves need to improve their English capacity, which contributes to enhancing research

quality and international publication. Generally lacking in English language capacity, Vietnamese university research finds itself isolated from the global research forums.

6.2.4 Publish or Perish Agenda in Vietnam

It is evident that the 'publish or perish' agenda in Vietnam merely aims to boost publication quantity at all costs. This agenda is seemingly problematic for Vietnamese education and society. The findings in this study confirm that academics' research engagement aims primarily to meet the publication requirements, but they fail to contribute to new knowledge, educational quality, and national social-economic development. As reported in Chapter 4, everyday academic participants were likely to recycle their master's essays to submit them to faculty level or publish them in their internal university yearbooks which certainly do not have a peer-review process. Phan (2015) raised the issue that such limited strategies have been adapted and accepted in universities, especially in some non-public universities. Clearly, this agenda contributes to poor quality publication and does not produce what Vietnam really needs. It is important that the publication agenda needs to be refocused to produce quality rather than quantity. Research publication outputs should be expected to be published in locally qualified and international journals, contributing to research quality of both ECAs and Vietnamese universities.

6.3 Potential Solutions

This section proposes some potential solutions on which ECAs, Vietnamese universities, and Vietnamese government should deliberate.

6.3.1 For ECAs

ECAs need to actively commit themselves to research, rather than merely complying with policy. As discussed above, this commitment is a predictor for motivated engagement and research productivity. When committing themselves to research, ECAs' research focus should be on issues that are important to Vietnamese society and education, rather than engaging in generalised, diverse topics. The tips of Eley et al. (2012) recommended that ECRs' research focus should be deliberate. Furthermore, for active engagement, ECAs should consider time management. This study has found that research, aside from time commitment, requires a balance of time spent on

research and teaching, as the amount of time committed significantly correlates with research productivity (Ito & Brotheridge, 2007). It is crucial for ECAs to reduce high teaching loads in such a way that more time is spent on research. However, deliberate time management should be based on consultation with successful experienced researchers as well as institutional managers.

ECAs also need to seek mentors who can support, motivate and provide specific guidance for their research capacity building. The literature review has confirmed that the lack of mentors for ECAs is one of the three barriers to success in research (Nguyen, 2013b). Successful researcher participants also confirmed the support they receive from senior researchers as their mentors. Hemmings, Rushbrook, & Smith (2007) also discussed the importance of mentor influence on new ECAs' research productivity. ECAs should seek either advice from reliable senior researchers or support from their institutions in seeking appropriate mentors, as past studies have demonstrated that a mismatch between a mentor and mentee can result in a breakdown of the relationship and loss of momentum (Gardiner, 1999; Mihkelson, 1997; Nundulall & Reddy, 2011).

Initial engagement with successful researchers can benefit ECAs' research capacities. Such engagement can take the form of either informal mentoring or professional learning. Rees, Baron, Boyask, and Taylor (2007) found that research capacity building is shaped by the ways that different forms of professional learning are incorporated into the daily work of researchers. This engagement helps ECAs to participate in research activities, and, if possible, research projects, with successful researchers. As discussed above, such participation, including research training, enhances both research knowledge and research productivity. In addition, this kind of engagement creates opportunities to build either internal or external research networks with successful researchers who are willing to support ECAs in research.

6.3.2 For Institutions

The literature review has found that institutional factors are more powerful predictors of research productivity than personal factors (Grbich, 1998; Madden, 2009; Pratt et al., 1999; Rebne, 1995). Therefore, a number of the following potential solutions are proposed.

It is both an institution's and the Vietnamese Government's responsibility to provide research resources, namely access to databases, research support programs, and financial rewards for research achievements including research funds. Access to databases should be fully provided to all ECAs, particularly to those in the Humanities and Social Sciences. The access is a basic requisite for ECAs' effective research engagement. This provision seems to be feasible as all Vietnam Universities have sound information technology (IT) infrastructures and the two public participating universities (Spring and Summer) have already succeeded in providing access.

Research support programs, such as writing skills for international journals, research methodology, and data analysis, should be provided. Successful research participants in this study indicate that there are three major features of a sustainable support program, namely strategic planning, financial support, and effective administration (see section 2, Chapter 5). The success of these programs relies on regular face-to-face workshops and should guide ECAs in building a research track record (Browning et al., 2014). These programs need to invite international scholars, contributing to enhancing ECAs' English capacity and informing individual academics about new research knowledge.

Moreover, Vietnamese universities should seek collaboration and support from RIs and their research experts in conducting these workshops. Recently, the reciprocal partnership between RIs and universities has been of great concern within Vietnamese education (Harman & Le, 2010, p. 87; Bui, 2013; Tran & Marginson, 2014, p. 17), yet the challenge of how the partnership between these two separate bodies will work has not yet been investigated. This failure to establish a productive engagement between RIs and universities is largely because it still lacks policy support from the Vietnamese Government.

Furthermore, financial rewards including research funds should be provided. Such financial support would recognise ECAs' achievements in their research efforts. As discussed above, this issue has to some extent been recognised in some Vietnamese universities with their provision of reward schemes. The literature review has confirmed that financial rewards significantly impact on research productivity (Hemmings et al, 2007; Bland & Ruffin, 1992; Hazelcorn, 2005, Connell, 2004).

Vietnamese universities should increase funds for university- level projects by seeking support in the form of external private funding.

As reviewed in Chapter 2, the First World Bank Higher Education Project has been another source of research funding to Vietnamese universities in the past decade (Harman & Le, 2010). The purpose of the funding is to enhance university teaching quality and research capacity. The National Foundation for Science and Technology Development (NAFOSTED) established in 2009 is an additional funding body administered by the Vietnamese Government and based on the international competitive system (Nguyen, 2014b). This fund is available to all individual researchers as well as institutions. It was reported that the international publication rate has increased twofold in the last five years compared to the period 2006-2010 and this fund is attributed as one of the contributors to this growth (Pham, 2015). It seems that this funding source can be a feasible solution for research projects undertaken by non-public universities.

The findings in this study are a call for Vietnamese universities to establish research Mentoring Schemes. The literature review has already provided support for this initiative based on findings that formal MSs have a significant impact on both male and female academics' research productivity and quality (Gardiner, 1999; Mihkelson, 1997; Nundulall & Reddy, 2011). In addition, MSs assist ECAs to build strong professional networks (Abreu et al., 1998; van der Weijden et al., 2014). Schulze (2009) described a mentoring model informed by a Community of Practice (CoPs) to enhance research capacity for groups of both male and female ECRs (groups of less than five ECRs) at a South African University. It is concluded that this mentoring model contributed significantly to development of research skills, positive attitudes towards research, and research productivity for ECRs. Mullen (2009) asserted that a sustainable mentoring program can play a significant role in the building of a sustainable research culture in universities. CoPs, since it emerged as a concept, has been widely accepted as a social structure that promotes organizational learning and knowledge sharing in organisations (Davenport & Prusak, 1998; Pandey & Dutta, 2013). A CoP is a conceptual framework that can be utilised to support research learning groups for ECAs.

Despite this established knowledge, in many Asian countries formal mentoring is still a gap in institutional research support provision. Lodhi (2012) found that one of the main reasons that Pakistan academics cannot engage in research is their lack of formal mentoring. As reviewed in Chapter 2, formal MS programs are not available in Vietnamese universities. Furthermore, Communities of Practice cannot be successfully implemented in Vietnam by following the established model due to the cultural differences in western and eastern societies and organisations (Wenger, McDermott, & Snyder, 2002). Therefore, an empirical study is needed to explore how a formal MS including a CoP can be successfully adapted in the Vietnamese HE cultural context so that it may provide optimum benefit to academics' research productivity.

It is also a call for all Vietnamese universities to create a better research culture where institutional mission and vision are aligned with its research practice and needs. Only when research is front and centre in an institution, can all academics actively engage in research. The literature review has found that infrastructure is not enough, and a strong research culture or mindset is essential as it can be a key factor in the development of research capacity and research productivity (Conn, Porter, McDaniel, Rantz, & Maas, 2005; Dill, 1986; Pratt et al., 1999). Development of research culture takes time, careful strategic planning, resources, and the right environment.

Moreover, strong and collaborative leadership at the faculty level is seen as a critical factor in research culture building (Almonte-Acosta, 2007; Lodhi, 2012). Pratt et al. (1999), through a successful case study of the University of Waikato in New Zealand, found that among other factors, "strong leadership" is a prerequisite of research culture. In agreement, the literature review has demonstrated that a collaborative leadership style is the most critical institutional factor and a leader must be a highly skilled researcher who in turn influences research productivity (Andrews, 1979; Bland & Ruffin, 1992; Dill, 1986; Drew & Raymond, 1985).

A number of Vietnamese educators posited that one of the feasible solutions regarding university research quality is to enhance the quality of Vietnamese universities' current journals (Bui, 2013; Nguyen, 2013b; Pham, 2012). These educators recommended that the journals need to be internationalised with the approval of Thomson Reuters Web of Science as English will be a key language and a

peer-review process will be need to be introduced. Such quality-enhanced journals can contribute to enhancing the quality of ECAs' papers including research knowledge and academic English capacity. Successful researcher participants in this study demonstrated their research quality with a track record of publication in international journals. Thus, such international standard approved Vietnamese journals would be a feasible entry level publication solution as they counteract the unfortunate outcomes of the 'publish or perish' agenda and the dominance of English in publication.

6.3.3 For Government

Given the national need and aspiration for enhanced research in Vietnamese universities, it's time to call for the Vietnamese Government to establish a more equitable funding mechanism for research. The provision of funding should effectively refocus on research projects, rather than spending on administration of RIs. The research funding mechanism based on a centrally planned economy should be reformed entirely as it may be the root of the problem of low research productivity and research quality in Vietnam. Hayden (2012 cited in Nguyen & Anh, 2012a) indicates that the current funding allocation mechanism needs to be reformed to incorporate a competitive grant system and these grants need to be open to all Vietnam universities. More funding sources, as suggested by NAFOSTED, should be available as this funding source has been proven to increase the growth rate of international publication (Pham, 2015).

The Vietnamese government should have specific policies to support and advocate for collaborative multifaceted partnerships between RIs and universities. As discussed, the lack of such partnerships has recently been of great concern to Vietnamese educators. These policies should promote research collaboration between these two bodies, creating opportunities for all individual academics to be involved in research projects. Such research collaboration would also enable universities, particularly non-public universities, to access research resources, including research funding for RIs. More importantly, such partnerships would provide momentum to gradually transfer research activities to research-conducive universities, including postgraduate doctorate training. As reviewed in Chapter 2, China, where the same former Soviet HE model is followed, made a dynamic change by transferring research from RIs into their

universities. As a result, China currently has more scientific publications than any other country, except for the U.S (Postiglione, 2015).

Above all, these potential solutions can be considered as a necessary requisite for the attainment of HERA's objectives for the period 2006-2020; without such support, the objectives are impractical and unattainable.

6.4 Summary of Chapter

This chapter has discussed the findings regarding assisting ECAs and Vietnamese universities in research productivity and research quality. The lessons learnt from successful researchers in this study have revealed that research requires a number of attributes and practices to be successful, namely passion and commitment; skills and knowledge; time, resources and support; and a specific focus. However, this study has found that there are still challenging issues faced by both ECAs and Vietnamese universities, such as gender issues, dominance of English, and the current 'publish or perish' agenda in Vietnam. Major inhibitors includes the primary teaching focus in universities; academics' lack of research skills and knowledge; institutional failure to provide research resources including access to databases; and lack of access to international networks. Gender issues are another problem that should be considered due to the high number of female academics in Vietnamese universities. The female academics are less integrated in professional networks and also tend to diversify their research focus more than their male counterparts, resulting in women being less productive than men. Furthermore, the dominance of English language in research publication is a great barrier for both individual academics' international publication and international research collaboration. Finally, it is important to recognise that the current 'publish or perish' agenda in Vietnam is contributing to poor quality research output. Potential solutions for ECAs, Vietnam universities, and the Vietnam government have been proposed and will be addressed further in the final chapter.

CHAPTER 7: CONCLUSION

This study aims to generate a body of knowledge and understanding of what strategies successful Vietnamese researchers in Humanities and Social Sciences most depend on to succeed in research. With this purpose, this study has been undertaken to explore what can be learned from successful researchers in Humanities and Social Sciences within Vietnamese universities that can assist ECAs in learning to become active and productive in research. The understandings derived from this investigation will be of value for both ECAs and Vietnamese universities to enhance research productivity and research quality.

This chapter concludes the thesis by providing an overview of the key findings that explains the attributes and descriptions of the practices of successful researchers, what the challenges for ECAs' success in research are, and what actions need to be taken by Vietnamese universities. It then makes recommendations to both ECAs and Vietnamese universities about increasing research productivity and research quality. The limitation of this study is considered and further research is suggested.

7.1 Overview of the Key Findings

This study has found that successful researchers are passionate about their research and highly motivated to engage and to enhance their own research capabilities. They are dependent on informal mentoring, membership of international research networks and take personal responsibility for their own professional learning. This is undertaken through a personal program of intentional learning, through the reading of international, Vietnamese and English language research journals and by seeking opportunities to engage in the research of others. By contrast, it was found that many young, often female, less successful ECAs merely complied with the 'publish or perish' agenda currently influencing research in Vietnam universities. Their focus is on the quantity of publications, often borrowing from their previous master's studies, resulting in poor quality publications that lack focused, expert engagement in research that contributes towards national development. Successful researchers identified that English proficiency, which is difficult to achieve, plays a key role in productive research engagement. Its lack can be a considerable barrier for individual academics' research

productivity and research quality, and particularly for international publication. This research also found that the many challenges for ECAs to engage in research are compounded for female academics, as they still are expected to shoulder the greater burden for family responsibilities.

Vietnamese universities must evaluate their own practices in order to transform into high performing research universities where a strong research culture is established across all institutional levels. The solution is multifaceted and should not rely solely on changing the behaviour of young academics. Rather, a systematic approach is needed, aimed at mutual benefit for academics, institutions, government and society in general, and so that the research focuses on what is most important for the advancement of Vietnam.

7.2 Recommendations

This study makes recommendations to ECAs, Vietnamese universities, and Vietnamese government on research productivity and research quality.

7.2.1 For ECAs

All ECAs need to respect their academic responsibility to engage in research as an integral part of an academic career. It should be an active commitment to research, rather than mere compliance with the 'publish or perish' agenda. The research should focus on their personal capabilities and on development of research practices to meet needs of the national interest. ECAs should initiate engagement with successful researchers in informal mentoring, professional learning, and networking. Time management should be also considered and time should be spent more on research and less on teaching. Last but not least, there should be a long-term strategic plan for English capacity improvement, resulting in increased potential for international publication and international research collaboration.

7.2.2 For Vietnam Universities

Research must be front and centre in an institution where a strong research culture is built across all institutional levels. Research resources need to be provided and well supported. Access to databases should be fully provided and monetary incentives for research achievements should be reasonably increased. Research funds for university-

level projects also need to be boosted by seeking support from external funding sources, such as The First World Bank Higher Education project or NAFOSTED.

Research support programs should be available and practical. The programs should be face-to-face workshops and address strategic planning, financial support, and simpler, more effective administrative processes. Academic support should be sought from research experts in RIs. This will provide momentum for partnership between these two separate bodies. International scholars should be also invited to join the programs.

Given that formal MSs have not yet been investigated in the Vietnamese HE context to see how this scheme can be effectively adapted for research productivity, universities should initially develop their own strategies to establish or support a formal MS because of its significant impact on both male and female academics' research productivity and quality. A mentoring model informed by a CoP should be deliberately integrated into institutional practices.

Vietnamese universities need to pursue a system-wide approach to reduce high teaching workloads for individual academics. This means that all academics should be paid above a living wage so that they do not need to seek additional employment to make ends meet, which results in them having even less time to focus on research (Marginson et al., 2014).

Establishing internationally recognised peer-reviewed journals should be a high priority for Vietnamese universities. Such internationally qualified journals where research outputs are expected to be published would potentially contribute to assisting ECAs to establish a publishing track record for themselves and enhance their research quality and English language capacity.

Research education in postgraduate studies should be enhanced in scope and quality. Tran (2014a) raised a question about the quality of research education in postgraduate studies, causing academics' lack of research skills and research knowledge. Thus, research skills and research capacity building should be the primary focus of postgraduate studies in both quantity and quality. English should be the primary teaching language in postgraduate training, rather than Vietnamese local languages.

7.2.3 For Vietnam Government

It is the Vietnamese Government's responsibility to provide resources for research activities in all universities. The current funding allocation mechanism needs to be reformed to incorporate competitive research grants such as NAFOSTED, and these grants need to be accessible to all Vietnamese universities. Such funding sources as NAFOSTED should be more accessible. For a short-term solution, the Vietnamese Government needs to advocate for multifaceted partnerships between RIs and Vietnamese universities through well-supported policies. A long-term solution is that research including postgraduate doctorate training needs to be transferred from RIs into research universities as successfully demonstrated in China.

7.3 Limitations

This study has a certain number of limitations. The findings from Phase 1 do not intend to define the whole concept of a successful researcher in the Vietnamese HE context, but are important in their own right since they provide some insight into the views of Vietnamese ECAs regarding what constitutes a successful researcher. It does not attempt to construct a theory that explains the development process of a successful researcher in Vietnam; rather it seeks to provide a detailed narrative of a selected group of successful researchers from Humanities and Social Sciences disciplines to provide some insight into the strategies those researchers most depend on to be productive and produce high-quality research.

7.4 Further Research

This study has indicated that there is a significant impact of formal MSs on both male and female academics' research productivity and research quality. All participants in this study also suggest that their success in research would be limited without specific guidance or mentoring from senior researchers. Formal MS programs are widely used in most western universities because of proven and significant benefits for research productivity. There is evidence that a formal MS for research is non-existent in most Vietnamese universities. As such, it would be very beneficial for both academics and Vietnamese universities if further studies are conducted to explore how a formal MS can be adapted in the Vietnamese HE context.

In the era of a knowledge economy, it is evident that research and teaching should be integrated. Such integration is currently applicable and available in western universities. Yet, it is imperative to investigate further how academics and Vietnamese universities integrate research into teaching. This is because research has recently been strengthened in universities and no empirical studies have been conducted on this issue to date.

7.5 Final Reflection

A national research capacity is an asset to Vietnam's future development as it helps the nation to escape from its current position of dependence. Such development can occur when individual academics and HE institutions engage in reform to become active agents of their success. It is both the Vietnam Government's and all institutions' responsibility to create a research culture and provide infrastructure that can make such development possible.

BIBLIOGRAPHY

- Abreu, B. C., Peloquin, S. M., & Ottenbacher, K. (1998). Competence in scientific inquiry and research. *American Journal of Occupational Therapy, 52*(9), 751-759.
- Akerlind, G. (2009). Making your doctorate work in an academic career. In C. Denholm & T. Evans (Eds.), *Beyond Doctorates Downunder: Maximising the impact of your doctorate from Australia and New Zealand* (pp. 138-145). Camberwell, Vic ACER Press.
- Almonte-Acosta, S. A. (2007). Developing Research Culture in Philippine Higher Education Institutions: Perspectives of University Faculty Rose Marie Salazar-Clemeña, PhD Dean, College of Education De La Salle University–Manila.
- Altbach, P. G. (2004). The costs and benefits of world-class universities. *Academe, 90*(1), 20-23.
- Altbach, P. G. (2006). *International higher education-reflection on policy and practice*. Boston College.
- Altbach, P. G. (2009). Peripheries and centers: research universities in developing countries. *Asia Pacific Education Review, 10*(1), 15-27.
- Andrews, F. M. (1979). *Scientific productivity: The effectiveness of research groups in six countries*. Cambridge, England: Cambridge University Press.
- ARWU. (2015). Academic Ranking of World Universities 2015 Retrieved from <http://www.shanghairanking.com/ARWU2015.html>
- Astin, H. S. (1969). *The woman doctorate in America: Origins, career, and family*: Russell Sage Foundation.
- Astin, H. S. (1984). Academic scholarship and its rewards. *Advances in motivation and achievement, 1*, 259-279.
- Auerbach, C. F., & Silverstein, L. B. (2003). *Qualitative data: An introduction to coding and analysis*. New York: New York University Press.
- Baldwin, G. (2005). The Teaching-Research Nexus. How research informs and enhances learning and teaching in the University of Melbourne. *Centre for the study of higher education, The University of Melbourne*.
- Barratt-Pugh, L. (2012). Mentoring the next researcher generation: Reflections on three years of building VET research capacity and infrastructure. *International Journal of Training Research, 10*(1), 6-22. doi:10.3102/0013189x019009017
- Björneborn, L., & Ingwersen, P. (2004). Toward a basic framework for webometrics. *Journal of the American Society for Information Science and Technology, 55*(14), 1216-1227.
- Bland, C. J., Center, B. A., Finstad, D. A., Risbey, K. R., & Staples, J. G. (2005). A theoretical, practical, predictive model of faculty and department research productivity. *Academic Medicine, 80*(3), 225-237.
- Bland, C. J., & Ruffin, M. T. (1992). Characteristics of a Productive Research Environment: Literature Review. *Academic Medicine, 67*(6), 385-397.
- Bland, C. J., & Schmitz, C. C. (1986). Characteristics of the successful researcher and implications for faculty development. *Journal of Medical Education*.
- Borg, S. (2007). Research engagement in English language teaching. *Teaching and Teacher Education, 23*(5), 731-747.
doi:<http://dx.doi.org/10.1016/j.tate.2006.03.012>

- Boyazit, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. Thousand Oaks: Sage.
- Boyer, E. L. (1990). *Scholarship reconsidered: priorities of the professoriate*. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology, 3*(2), 77-101.
- Brew, A. (2001). *The nature of research: Inquiry in academic contexts*: Psychology Press.
- Brew, A. (2006a). Learning to develop the relationship between research and teaching at an institutional level. *New Directions for Teaching and Learning, 2006*(107), 11-22. doi:10.1002/tl.241
- Brew, A. (2006b). *Research and teaching: Beyond the divide*: Palgrave Macmillan.
- Brocato, J. J., & Mavis, B. (2005). The research productivity of faculty in family medicine departments at US medical schools: a national study. *Academic Medicine, 80*(3), 244-252.
- Browning, L., Thompson, K., & Dawson, D. (2014). Developing future research leaders. *International Journal for Researcher Development, 5*(2), 123-134. doi:doi:10.1108/IJRD-08-2014-0019
- Budge, S. (2006). Peer Mentoring in Post-Secondary Education: Implications for Research and Practice. *Journal of College reading and learning, 37*(1), 73-87.
- Bui, D. (2013). Việt Nam tụt hậu 50 năm so với Thái Lan về công bố khoa học. Retrieved from <http://vnexpress.net/tin-tuc/khoa-hoc/viet-nam-tut-hau-50-nam-so-voi-thai-lan-ve-cong-bo-khoa-hoc-2411502.html>
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative research*. London: Sage.
- Chau, L. D. (2009). *Academic staff recruitment and development in private universities in Vietnam: in comparison with public universities*. University of Nottingham.
- Chen, X., & Anderson, R. C. (2008). Reflections on becoming a successful researcher. *Educational Psychology Review, 20*(1), 65-70.
- Chính Phủ. (2005). *Nghị quyết về đổi mới cơ bản và toàn diện giáo dục Việt Nam giai đoạn 2006-2020* (Resolution 14/2005/NQ-CP).
- Clemente, F. (1973). Early career determinants of research productivity. *American Journal of Sociology, 409-419*.
- Coate, K., Barnett, R., & Williams, G. (2001). Relationships between teaching and research in higher education in England. *Higher Education Quarterly, 55*(2), 158-174.
- Cohen, J. G., Sherman, A. E., Kiet, T. K., Kapp, D. S., Osann, K., Chen, L.-m., . . . Chan, J. K. (2012). Characteristics of success in mentoring and research productivity—a case–control study of academic centers. *Gynecologic oncology, 125*(1), 8-13.
- Cole, J. R., & Zuckerman, H. (1984). The productivity puzzle: Persistence and change in patterns of publication of men and women scientists. *Advances in motivation and achievement, 2*(2), 1.
- Cole, S., & Cole, J. R. (1967). Scientific output and recognition: A study in the operation of the reward system in science. *American Sociological Review, 377-390*.

- Conn, V. S., Porter, R. T., McDaniel, R. W., Rantz, M. J., & Maas, M. L. (2005). Building research productivity in an academic setting. *Nursing Outlook*, 53(5), 224-231.
- Corcoran, M., & Clark, S. M. (1984). Professional socialization and contemporary career attitudes of three faculty generations. *Research in Higher Education*, 20(2), 131-153.
- Creswell, J. W. (1985). *Faculty Research Performance: Lessons from the Sciences and the Social Sciences*. Washington DC: Association for the Study of Higher Education.
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*: Sage Publications, Inc.
- Creswell, J. W. (2012). *Educational Research : Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. Boston: Pearson.
- Creswell, J. W., & Miller, D. L. (2000). Determining Validity in Qualitative Inquiry. *Theory Into Practice*, 39(3), 124-130. doi:10.1207/s15430421tip3903_2
- Crotty. (1998). *The foundation of social research: Meaning and perspectives in the research*. London: Sage.
- Dao, V. K. (2014). Key challenges in the reform of governance, quality assurance, and finance in Vietnamese higher education—a case study. *Studies in Higher Education*, 1-16.
- Davenport, T. H., & Prusak, L. (1998). *Working knowledge: How organizations manage what they know*: Harvard Business Press.
- Dill, D. D. (1986). Research as a scholarly activity: Context and culture. *New Directions for Institutional Research*, 1986(50), 7-23.
- Do, M. H., & Do, T. N. Q. (2014). Higher and Tertiary Education in Vietnam *Higher education in Vietnam: Flexibility, mobility and practicality in the global knowledge economy* (pp. 29-53): Palgrave Macmillan.
- Drew, D. E., & Raymond, P. (1985). *Strengthening academic science*: Praeger New York.
- Dundar, H., & Lewis, D. R. (1998). Determinants of research productivity in higher education. *Research in Higher Education*, 39(6), 607-631.
- Durning, B., & Jenkins, A. (2005). Teaching/research relations in departments: the perspectives of built environment academics. *Studies in Higher Education*, 30(4), 407-426. doi:10.1080/03075070500160046
- Dyna, R. (2012). Indonesia Makes Research Publication a Graduation Requirement for All Students. *Asian Scientist*. Retrieved from <http://www.asianscientist.com/2012/03/academia/indonesia-dikti-aptisi-publication-a-graduation-requirement-for-all-students-2012/>
- Eley, A., Wellington, J., Pitts, S., & Biggs, C. (2012). *Becoming a successful early career researcher*: Routledge.
- Elliott, R., & Timulak, L. (2005). Descriptive and interpretive approaches to qualitative research. *A handbook of research methods for clinical and health psychology*, 147-159.
- Erickson, F. (1986). Qualitative methods in research on teaching. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (Third ed., pp. 119-161). New York: Macmillan Publishing Company.
- Fan, K. W. (2005). The Role of University Libraries in Supporting Research in Hong Kong: Facing a New Challenge. *Campus-Wide Information Systems*, 22(1), 43-50.

- Fereday, J., & Muir-Cochrane, E. (2008). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International journal of qualitative methods*, 5(1), 80-92.
- Ferguson, D. L. (1993). Something a little out of the ordinary: Reflections on becoming an interpretivist researcher in special education. *Remedial and Special Education*, 14(4), 35-43.
- Finkelstein, M. J. (1984). *The American Academic Profession*. Columbus, Ohio: Ohio State University Press.
- Floersch, J., Longhofer, J. L., Kranke, D., & Townsend, L. (2010). Integrating thematic, grounded theory and narrative analysis: A case study of adolescent psychotropic treatment. *Qualitative Social Work*.
- Foddy, W. (1993). *Constructing questions for interviews and questionnaires. Theory and practice in social research*. Cambridge, UK: Cambridge University Press.
- Fowler, Z., Baird, A., Baron, S., M.B.Davies, S., Procter, R., & Salisbury, J. (2009). Building research capacity in Education: evidence from recent initiatives in England, Scotland and Wales. *International Journal for Researcher Development*, 1(2), 173-189. doi:doi:10.1108/1759751X201100011
- Gardiner, M. (1999). *Making a difference: Flinders University mentoring scheme for early career women researchers*: Flinders University Staff Development and Training Unit.
- Gardiner, M., Tiggemann, M., Kearns, H., & Marshall, K. (2007). Show me the money! An empirical analysis of mentoring outcomes for women in academia. *Higher Education Research & Development*, 26(4), 425-442.
- Goulding, C. (1998). Grounded theory: the missing methodology on the interpretivist agenda. *Qualitative Market Research: An International Journal*, 1(1), 50-57.
- Grbich, C. (1998). The academic researcher: Socialisation in settings previously dominated by teaching. *Higher Education*, 36(1), 67-85.
- Harman, G., Hayden, M., & Pham, T. N. (2010). Higher education in Vietnam: Reform, challenges and priorities. In G. Harman, M. Hayden, & T. N. Pham (Eds.), *Reforming higher education in Vietnam: Challenges and priorities* (pp. 1-14). New York: Springer.
- Harman, G., & Le, T. B. N. (2010). The Research Role of Vietnam's Universities *Reforming higher education in Vietnam* (pp. 87-102): Springer.
- Harman, K. (2005). Strengthening the links between teaching, learning and research in higher education. *Washington, DC: The World Bank*.
- Harman, K., & Nguyen, T. N. B. (2010). Reforming teaching and learning in Vietnam's higher education system *Reforming higher education in Vietnam* (pp. 65-86): Springer.
- Harrington, M. S. (1987). Organizational Characteristics of Dental Schools Associated with Research Productivity. *Journal of Dental Education*, 51(10), 583-588.
- Hattie, J., & Marsh, H. W. (1996). The Relationship Between Research and Teaching: A Meta-Analysis. *Review of educational research*, 66(4), 507-542. doi:10.3102/00346543066004507
- Hayden, M., & Lam, Q. T. (2006). A 2020 vision for Vietnam. *International Higher Education*, 44(Summer), 11-13.
- Hayden, M., & Lam, Q. T. (2010). Vietnam's higher education system *Reforming higher education in Vietnam* (pp. 14-29): Springer.

- Healey, M. (2005). Linking Research and Teaching to Benefit Student Learning. *Journal of Geography in Higher Education*, 29(2), 183-201. doi:10.1080/03098260500130387
- Hemmings, B., Rushbrook, P., & Smith, E. (2007). Academics' views on publishing refereed works: A content analysis. *Higher Education*, 54(2), 307-332. doi:10.1007/s10734-005-8608-x
- Hoang, T. (2007). Năm mới, chuyện cũ: Cần một tầm nhìn chiến lược nếu muốn vực giáo dục và khoa học đi lên. Retrieved from <http://tiasang.com.vn/Default.aspx?tabid=76&News=181&CategoryID=3>
- Hollingsworth, M. A., & Fassinger, R. E. (2002). The role of faculty mentors in the research training of counseling psychology doctoral students. *Journal of Counseling Psychology*, 49(3), 324.
- Homewood, J., Rigby, B., Brew, A., & Rowe, A. (2011). RESEARCH ENHANCED TEACHING AND LEARNING: LEARNING THROUGH SCHOLARSHIP. In G. Mather (Ed.): Macquarie University. Retrieved from <https://staff.mq.edu.au/public/download.jsp?id=50005>. Retrieved from <https://staff.mq.edu.au/public/download.jsp?id=50005>
- Ito, J. K., & Brotheridge, C. M. (2007). Predicting individual research productivity: More than a question of time. *Canadian Journal of Higher Education*, 37(1), 1-25.
- Jenkins, A., Blackman, T., Lindsay, R., & Paton-Saltzberg, R. (1998). Teaching and research: Student perspectives and policy implications. *Studies in Higher Education*, 23(2), 127-141. doi:10.1080/03075079812331380344
- Jenkins, A., Healey, M., & Zetter, R. (2007). *Linking teaching and research in disciplines and departments*: Higher Education Academy York.
- Joffe, H. (2011). Thematic analysis. In D. Harper & A. R. Thompson (Eds.), *Qualitative research methods in mental health and psychotherapy: A guide for students and practitioners* (pp. 209-223): John Wiley & Son Ltd.
- Johnson-Bailey, J., & Cervero, R. M. (2004). Mentoring in black and white: the intricacies of cross-cultural mentoring. *Mentoring & Tutoring: Partnership in Learning*, 12(1), 7-21.
- Jung, J. (2012). Faculty Research Productivity in Hong Kong across Academic Discipline. *Higher Education Studies*, 2(4), 1-13.
- Kapel, D. E., & Wexler, N. (1970). Faculty attitude toward research in an emergent college. *The Journal of Experimental Education*, 38(3), 44-47.
- Kearney, M.-L. (2009). Higher education, research and innovation: charting the course of the changing dynamics of the knowledge society. *Higher education, research and innovation: Changing dynamics*, 7.
- Keyser, D. J., Lakoski, J. M., Lara-Cinisomo, S., Schultz, D. J., Williams, V. L., Zellers, D. F., & Pincus, H. A. (2008). Advancing institutional efforts to support research mentorship: A conceptual framework and self-assessment tool. *Academic Medicine*, 83(3), 217-225.
- Kim, K.-S. (2007). A Great Leap Forward to Excellence in Research at Seoul National University, 1994-2006. *Asia Pacific Education Review*, 8(1), 1-11. Retrieved from <http://search.proquest.com/docview/62023395?accountid=10910>
- Kyvik, S., & Teigen, M. (1996). Child care, research collaboration, and gender differences in scientific productivity. *Science, Technology & Human Values*, 21(1), 54-71.

- Leahey, E. (2006). Gender differences in productivity research specialization as a missing link. *Gender & Society, 20*(6), 754-780.
- Lee, A., & Boud, D. (2003). Writing groups, change and academic identity: Research development as local practice. *Studies in Higher Education, 28*(2), 187-200.
- Leitz, P. (2010). Research into questionnaire design: A summary of the literature. *International Journal of Market Research, 52*(2), 249-272.
- Lewis, T., & Simmons, L. (2010). Creating Research Culture in Caribbean Universities. *International Journal of Educational Development, 30*(4), 337-344.
- Lindsay, R., Breen, R., & Jenkins, A. (2002). Academic Research and Teaching Quality: The views of undergraduate and postgraduate students. *Studies in Higher Education, 27*(3), 309-327. doi:10.1080/03075070220000699
- Lodhi, A. S. (2012). A pilot study of researching the research culture in Pakistani public universities: the academics' perspective. *Procedia - Social and Behavioral Sciences, 31*(0), 473-479.
doi:<http://dx.doi.org/10.1016/j.sbspro.2011.12.089>
- Long, J. (1997). The dark side of mentoring. *The Australian Educational Researcher, 24*(2), 115-133.
- Long, J. S., & McGinnis, R. (1981). Organizational context and scientific productivity. *American Sociological Review, 422-442*.
- Madden, A. D. (2009). Managing for the Ideal Research Environment. *Journal of Higher Education Policy and Management, 31*(3), 271-282.
- Mallinckrodt, B., & Gelso, C. J. (2002). Impact of Research Training Environment and Holland Personality Type: A 15-Year Follow-Up of Research Productivity. *Journal of Counseling Psychology, 49*(1), 60-70.
- Marginson, S. (2007). Global university rankings: Implications in general and for Australia. *Journal of Higher Education Policy and Management, 29*(2), 131-142.
- Marginson, S. (2010). Higher education in East Asia and Singapore: rise of the Confucian Model. *Higher Education, 61*(5), 587-611. doi:10.1007/s10734-010-9384-9
- Marginson, S., Tran, L. T., & Do, M. H. (2014). Modernization with Vietnamese Characteristics *Higher education in Vietnam: Flexibility, mobility and practicality in the global knowledge economy* (pp. 229-237).
: Palgrave Macmillan.
- Marginson, S., & Van der Wende, M. (2007). To rank or to be ranked: The impact of global rankings in higher education. *Journal of Studies in International Education, 11*(3-4), 306-329.
- Marvasti, B. A. (2004). *Qualitative research in sociology*. London: Sage.
- Mayrath, M. C. (2008). Attributions of productive authors in educational psychology journals. *Educational Psychology Review, 20*(1), 41-56.
- McCormick, C. B., & Barnes, B. J. (2008). Getting started in academia: A guide for educational psychologists. *Educational Psychology Review, 20*(1), 5-18.
- Metcalfe, A. S., Esseh, S., & Willinsky, J. (2009). International Development and Research Capacities: Increasing Access to African Scholarly Publishing. *Canadian Journal of Higher Education, 39*(3), 89-109.
- Mihkelson, A. (1997). A Model of Research Mentoring for Higher Education--An Overview.
- MOET. (2005). *Higher education reform in Vietnam: Project*. Ha Noi.

- MOET. (2013). *Higher education statistics 2012*. Ha Noi: MOET.
- MOET. (2014). Thông tư quy định chế độ làm việc đối với giảng viên. Retrieved from <http://www.moet.gov.vn/?page=6.10&view=595>
- Mullen, C. A., Murthy, U., & Teague, G. (2008). Listening to Those We Serve: Assessing the Research Needs of University Faculty. *Journal of Research Administration, 39*(1), 10-31.
- Mullen, C. A. P. (2009). Re-Imagining the Human Dimension of Mentoring: A Framework for Research Administration and the Academy. *Journal of Research Administration, 40*(1), 10-31,16.
- Nakhaie, M. R. (2002). Gender Differences in Publication among University Professors in Canada*. *Canadian Review of Sociology/Revue canadienne de sociologie, 39*(2), 151-179.
- Namey, E., Guest, G., Thairu, L., & Johnson, L. (2008). Data reduction techniques for large qualitative data sets. In G. Guest & K. M. MacQueen (Eds.), *Handbook for team-based qualitative research* (pp. 137-162): Lanham,MD: AltaMira Press.
- Nguyen, D., & Anh, H. (2012a). Vật vờ nghiên cứu khoa học - Kỳ 5: Thay đổi tư duy tận gốc. Retrieved from <http://www.thanhvien.com.vn/giao-duc/vat-vo-nghien-cuu-khoa-hoc-ky-5-thay-doi-tu-duy-tan-goc-46802.html>
- Nguyen, H. M. (2011). Challenges to Viet Nam higher education reform: A university management perspective. In J. D. London (Ed.), *Education in Vietnam* (pp. 237-258). Singapore . ISEAS Publishing.
- Nguyen, M. D. (2013). NÂNG CAO NĂNG LỰC NGHIÊN CỨU CỦA GIẢNG VIÊN ĐỂ THỰC HIỆN VAI TRÒ SÁNG TẠO TRI THỨC CỦA CÁC TRƯỜNG ĐẠI HỌC. Retrieved from <http://www2.hcmuaf.edu.vn/contents.php?ids=7742&ur=nmduc>
- Nguyen, M. P. (2014a). Sử dụng kinh phí nghiên cứu khoa học đúng mục đích. *Nhan Dan Online*. Retrieved from http://www.nhandan.com.vn/mobile/mobile_chinhtri/mobile_cungsuyngham/item/22050302.html
- Nguyen, T. L. H. (2014b). Research in Universities *Higher education in Vietnam: Flexibility, mobility and practicality in the global knowledge economy* (pp. 187-207): Palgrave Macmillan.
- Nguyen, V. C. (2010). NÂNG CAO CHẤT LƯỢNG HOẠT ĐỘNG NGHIÊN CỨU KHOA HỌC TRONG CÁC TRƯỜNG ĐẠI HỌC, CAO ĐẲNG TRÊN ĐỊA BÀN THỦ ĐÔ. *tạp chí văn hoa, 6*.
- Nguyen, V. T. (2013a). Nhìn lại hoạt động khoa học Việt Nam 1970-2012. Retrieved from <http://tuanvannguyen.blogspot.com.au/2013/03/nhin-lai-hoat-ong-khoa-hoc-viet-nam.html>
- Nguyen, V. T. (2013b). 'Đi tắt đón đầu làm hại khoa học'. Retrieved from <http://vnexpress.net/tin-tuc/khoa-hoc/di-tat-don-dau-lam-hai-khoa-hoc-2420388.html>
- Nguyen, V. T. (2014c). Thống kê về giáo sư, tiến sĩ ở Việt Nam. Retrieved from <http://tuanvannguyen.blogspot.com.au/2014/07/thong-ke-ve-giao-su-tien-si-o-viet-nam.html>
- Nguyen, V. T. (2015). *Đi Vào Nghiên Cứu Khoa Học* Ho Chi Minh: Nhà Xuất Bản Tổng Hợp Thành Phố Hồ Chí Minh

- Nundulall, R., & Reddy, K. (2011). Mentorship as a strategy to improve research output at tertiary institutions: a case study of University of Johannesburg. *South African Journal of Higher Education*, 25(6), 1155-1177.
- Pandey, S. C., & Dutta, A. (2013). Communities of practice and organizational learning: case study of a global IT solutions company. *Strategic HR Review*, 12(5), 255-261.
- Paul, S., Stein, F., Ottenbacher, K. J., & Liu, Y. (2002). The role of mentoring on research productivity among occupational therapy faculty. *Occupational Therapy International*, 9(1), 24-40.
- Peters, S. P. (2014). How to become a successful researcher: tips for early career researchers. *Scandinavian Journal of Work, Environment & Health*, 40(4), 432-434.
- Pham, D. H. (2010a). A comparative study of research capabilities of East Asian countries and implications for Vietnam. *Higher Education*, 60(6), 615-625.
- Pham, D. H. (2010b). So sánh năng lực nghiên cứu khoa học của 11 nước Đông Á dựa trên các công bố quốc tế và bài học rút ra cho Việt Nam. Retrieved from <http://tiasang.com.vn/Default.aspx?tabid=110&News=3229&CategoryID=36>
- Pham, D. H. (2012). Khoa Hoc Vietnam Mac Ket Trong Phi Chuan Muc Hanh Chinh Hoa va Tu Duy An Xoi. Retrieved from <https://anhbasam.wordpress.com/2012/11/19/1398-khoa-hoc-viet-nam-mac-ket-trong-phi-chuan-muc-hanh-chinh-hoa-va-tu-duy-an-xoi/>
- Pham, H. (2015). Công bố khoa học của Việt Nam tăng gấp 2 lần. *vnExpress*. Retrieved from <http://vnexpress.net/tin-tuc/khoa-hoc/trong-nuoc/cong-bo-khoa-hoc-cua-viet-nam-tang-gap-2-lan-3332389.html>
- Pham, L. H., & Fry, G. W. (2002). The emergence of private higher education in Vietnam: Challenges and Opportunities. *Educational Research for Policy and Practice*, 1(1), 127-141.
- Pham, T. N. (2010c). The higher education reform agenda: A vision for 2020 *Reforming Higher Education in Vietnam* (pp. 51-64): Springer.
- Phan, Q. T. (2015). Nghiên cứu khoa học: Mất xích yếu nhất của giáo dục đại học. Retrieved from <http://dantri.com.vn/giao-duc-khuyen-hoc/nghien-cuu-khoa-hoc-mat-xich-yeu-nhat-cua-giao-duc-dai-hoc-1064224.htm>
- Phillips, J. C., & Russell, R. K. (1994). Research self-efficacy, the research training environment, and research productivity among graduate students in counseling psychology. *The Counseling Psychologist*, 22(4), 628-641.
- Postiglione, G. (2015). Research universities for national rejuvenation and global influence: China's search for a balanced model. *Higher Education*, 70(2), 235-250. doi:10.1007/s10734-014-9838-6
- Pratt, M., Margaritis, D., & Coy, D. (1999). Developing a research culture in a university faculty. *Journal of Higher Education Policy and Management*, 21(1), 43.
- Ramsden, P. (1994). Describing and explaining research productivity. *Higher Education*, 28(2), 207-226.
- Ramsden, P., & Moses, I. (1992). Associations between research and teaching in Australian higher education. *Higher Education*, 23(3), 273-295. doi:10.1007/BF00145017
- Rebne, D. (1995). *Determinants of individual productivity: A study of academic researchers*: University of California: Institute of Industrial Relations.

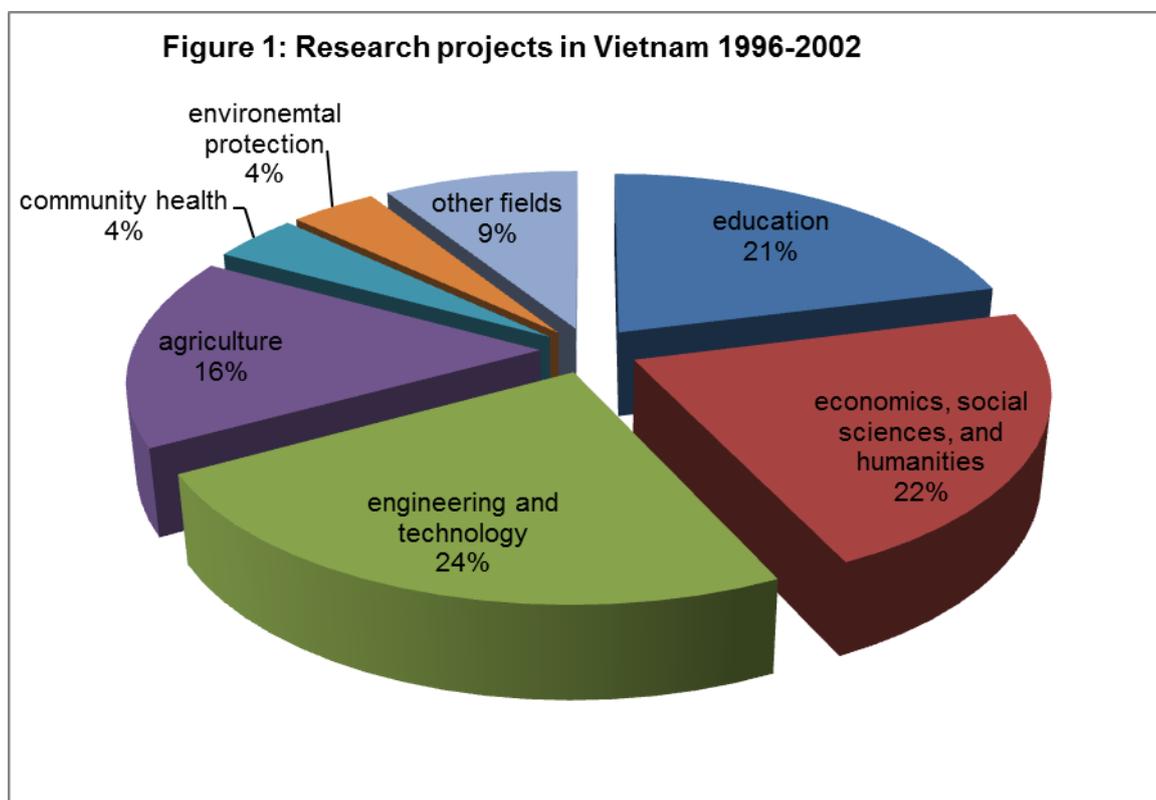
- Records, K., & Emerson, R. J. (2003). Mentoring for Research Skill Development. *Journal of Nursing Education, 42*(12), 553-557.
- Rees, G., Baron, S., Boyask, R., & Taylor, C. (2007). Research-capacity building, professional learning and the social practices of educational research. *British Educational Research Journal, 33*(5), 761-779.
- Reskin, B. F. (1977). Scientific Productivity and the Reward Structure of Science. *American Sociological Review, 42*(3), 491-504. doi:10.2307/2094753
- Ried, K., Farmer, E. A., & Weston, K. M. (2007). Bursaries, writing grants and fellowships: a strategy to develop research capacity in primary health care. *BMC Family Practice, 8*(1), 19.
- Robertson, J., & Blackler, G. (2006). Students' experiences of learning in a research environment. *Higher Education Research & Development, 25*(3), 215-229. doi:10.1080/07294360600792889
- Rowland, S. (1996). Relationships Between Teaching and Research. *Teaching in Higher Education, 1*(1), 7-20. doi:10.1080/1356251960010102
- Rowlands, B. H. (2005). Grounded in practice: Using interpretive research to build theory. *The Electronic Journal of Business Research Methodology, 3*(1), 81-92.
- Russell, G. (n.d). Research-led learning: the heart of russell group university experience. Retrieved from www.russellgroup.ac.uk/.../Learning-in-a-research-intensive-environmen
- Saldana, J. (2009). *The Coding manual for qualitative researchers*. London: Sage.
- Sax, L. J., Hagedorn, L. S., Arredondo, M., & Dicrisi III, F. A. (2002). Faculty research productivity: Exploring the role of gender and family-related factors. *Research in Higher Education, 43*(4), 423-446.
- Schulze, S. (2009). Mentoring novice researchers in higher education: a "communities of practice" perspective. *Koers: Bulletin for Christian Scholarship= Koers: Bulletin vir Christelike Wetenskap, 74*(1 & 2), 117-137.
- Scott, P. (2004). *Knowledge work in a knowledge society: Rethinking the links between university teaching and research*. Paper presented at the Higher Education Academy Learning and Teaching Conference, Delivering Excellence, University of Hertfordshire.
- Seidman, I. (2012). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*: Teachers college press.
- Shulamn, L. (1986). Paradigms and research programs in the study of teaching. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (Third ed., pp. 3-36). New York: Macmillan Publishing Company.
- Sosik, J. J., & Godshalk, V. M. (2000). The role of gender in mentoring: Implications for diversified and homogenous mentoring relationships. *Journal of Vocational Behavior, 57*(1), 102-122.
- Tennant, M., McMullen, C., & Kaczynski, D. (2009). *Teaching, learning and research in higher education: A critical approach*: Routledge.
- Tower, G., Plummer, J., & Ridgewell, B. (2011). A multidisciplinary study of gender-based research productivity in the world's best journals. *Journal of Diversity Management (JDM), 2*(4), 23-32.
- Tran, C. N., & Nguyen, H. V. (2008). The evolving role of academic institutions in the knowledge economy: The case of Vietnam. *Research Policy Institute, Lund, Sweden*. Retrieved from <http://developinguniversities.blogspot.com>.

- Tran, L., Marginson, S., Do, H., Do, Q., Le, T., Nguyen, N., . . . Nguyen, H. (2014). *Higher education in Vietnam: Flexibility, mobility and practicality in the global knowledge economy*: Palgrave Macmillan.
- Tran, L. T., & Marginson, S. (2014). Education for Flexibility, Practicality and Mobility *Higher education in Vietnam: Flexibility, mobility and practicality in the global knowledge economy* (pp. 3-28): Palgrave Macmillan.
- Tran, T. A. (2013). TINH KHOA HOC VA NGHIEN CUU KHOA HOC XA HOI - NHAN VAN. *Journal of Science, Can Tho University, 26C*, 30-45.
- Tran, T. A. (2014a). Yeu kem cua nghien cuu khoa hoc giao duc Vietnam: Nguyen nhan va giai phap. *Journal of Science, Can Tho University, 33C*, 128-137.
- Tran, T. A. (2014b). Can Lam Gi Để Phát Triển Năng Lực Nghiên Cứu Khoa Học. *Day va Hoc NGAY NAY, 01*, 21-24. Retrieved from http://www.researchgate.net/publication/260455794_Cn_lm_g_pht_trin_nng_lc_nghin_cu_khoa_hc_gio_dc
- Tran, T. A. (2014c). LÀM THẾ NÀO ĐỂ BẢO ĐẢM NGHIÊN CỨU KHOA HỌC GIÁO DỤC? *Day va Hoc NGAY NAY, 4*, 5-7.
- Tran, T. A. (2014d). XÁC ĐỊNH VẤN ĐỀ NGHIÊN CỨU CHO CÔNG TRÌNH KHOA HỌC NHƯ THẾ NÀO? *Journal of Saigon University, 21*, 6-14.
- Tran, T. T. (2014). Governance in higher education in Vietnam—a move towards decentralization and its practical problems. *Journal of Asian Public Policy, 7*(1), 71-82.
- Urquhart, C. (2013). *Grounded theory for qualitative research: A practical guide*. London: Sage.
- Vaccaro, N. (2009). *The relationship between research self-efficacy, perceptions of the research training environment and interest in research in counselor education doctoral students: An ex-post-facto, cross-sectional correlational investigation*. (3357884 Ph.D.), University of Central Florida, Ann Arbor. ProQuest Central; ProQuest Social Sciences Premium Collection database.
- Van Balen, B., van Arensbergen, P., van der Weijden, I., & van den Besselaar, P. (2012). Determinants of success in academic careers. *Higher Education Policy, 25*(3), 313-334.
- van der Weijden, I., Belder, R., van Arensbergen, P., & van den Besselaar, P. (2014). How do young tenured professors benefit from a mentor? Effects on management, motivation and performance. *Higher Education, 1*-13.
- Vu, T. (2012). Vật vờ nghiên cứu khoa học - Kỳ 2: Nhiều tiến sĩ, ít phát minh. Retrieved from <http://www.domi.org.vn/tin-tuc-su-kien/tin-nghien-cuu/vat-vo-nghien-cuu-khoa-hoc-ky-2-nhieu-tien-si-it-phat-minh.2838.html>
- Vu, T., Anh, H., & Nguyen, D. (2012). Vật vờ nghiên cứu khoa học- Kỳ 3: Quá nhiều trói buộc. Retrieved from <http://www.thanhvien.com.vn/giao-duc/vat-vo-nghien-cuu-khoa-hoc-ky-3-qua-nhieu-troi-buoc-47026.html>
- Walsham, G. (1995). The emergence of interpretivism in IS research. *Information systems research, 6*(4), 376-394.
- Wang, H., & Zhou, Y. (2011). China: Challenges for higher education in higher growth economy. In B. B. Goransson, Claes (Ed.), *Universities in transition: The changing role and challenges for academic institutions* (pp. 143-170). Singapore: Springer.
- Waterman, S., & He, Y. (2011). Effects of Mentoring Programs on New Teacher Retention: A Literature Review. *Mentoring & Tutoring: Partnership in Learning, 19*(2), 139-156. doi:10.1080/13611267.2011.564348

- Weiland, S. (2008). Research Apprenticeship at Michigan State University's College of Education: The Collegial and the Confidential. *Teachers College Record*, 110(7), 1458-1476.
- Wenger, E., McDermott, R. A., & Snyder, W. (2002). *Cultivating communities of practice: A guide to managing knowledge*: Harvard Business Press.
- Wignall, R. (1998). Challenges for Interpretivist Inquiry. *Alberta journal of educational research*, 44(3), 302-319.
- Wilson, P. P., Valentine, D., & Pereira, A. (2002). Perceptions of new social work faculty about mentoring experiences. *Journal of social work education*, 38(2), 317-332.
- Xu, S. (2005). Impacts of Globalisation on Higher Education Reform in China: A Trend of Decentralisation and Autonomy. *Educational Research for Policy and Practice*, 4(2-3), 83-95. doi:<http://dx.doi.org/10.1007/s10671-005-3363-4>
- Xuan, T. (2015). Phân tầng, xếp hạng đại học cần phải rõ tiêu chí cụ thể. Retrieved from <http://giaoduc.net.vn/Giao-duc-24h/Phan-tang-xep-hang-dai-hoc-can-phai-ro-tieu-chi-cu-the-post162074.gd>
- Zamorski, B. (2002). Research-led Teaching and Learning in Higher Education: A case. *Teaching in Higher Education*, 7(4), 411-427. doi:10.1080/135625102760553919
- Zea, M. C., & Belgrave, F. Z. (2009). Mentoring and research capacity-building experiences: acculturating to research from the perspective of the trainee. *American journal of public health*, 99(Suppl 1), S16-19.

APPENDICES

Appendix 1: Research projects in Vietnam 1996-2002



Source: MOET (2005)

Appendix 2: Interview question for phase 1

Dear Participants

Thank you for being willing to do this interview. Your participation will remain confidential and I will not record your name or institutions. At any point in time you can indicate that you do not wish to participate. Your responses will be audio-taped for the purpose of this study only.

1. For how long have you been an academic?
2. In a year, what proportion of your work time is spent in teaching and what proportion is spent in research?

Teaching	%
Research	%
Service	%
3. In what ways, if any, do you engage in research?
4. Would you say that you have had some success in research?

Yes

No
5. (If yes) Can you please tell me what that was? (If no, questions 6 a, b will be asked)
6. (a) (If no) can you tell me what barriers and challenges you experience in becoming successful in research?

(b) Can you tell me what support from your departments or university you need or what you need to do to achieve some success in research?
7. Can you tell me how you approach fulfilling the requirement to produce 2 research papers annually as required for academics?
8. Can you describe someone you would consider to be a successful researcher? What are the indicators of success and what do they do?

9. Please rate from 1 to 5 the extent to which you think the following are important as indicators of a successful researcher?

Indicators or a successful researcher	1 Not Important	2	3	4	5 important
Has success in finding funds to support their research					
Has good research knowledge					
Has good Research skills					
Has in-depth knowledge in area					
Has an established publishing record					
Has high motivation and is enthusiastic about their research					
Makes a time commitment to research					
Acts as a mentor to other academics					
Supports colleagues in research activities					
Exhibits effective time management					
Displays socialisation to the values and attitudes of research					
Adopts a leadership role in research					
Is involved in research training					
Has access to research resources					
Has a network of professional colleagues					
Has meaningful relationship with colleagues					
Has a certain autonomy in his or her career					
Maximizes support from organisational environments					
Other					

10. Can you name 3 successful researchers who meet your criteria?

Thank you for your response

Appendix 3: Interview questions for phase 2

1. What are the challenges for you to be productive researcher?
2. What strategies/practices do you employ to be productive researchers?
3. What do you most depend on to be successful in research?
4. How do you motivate and support yourself to sustain your research engagement?
5. What research support programs do/did you find useful from your universities to build your research capacity?
6. What types of support do you expect to seek from the university?
7. What advice would you give to early career staff whose research engagement is a must?

Appendix 4: Open-ended interviews protocol for Phase 2

Pre- Interview protocol project: How to be a productive researcher?

Time of interview:

Date:

Place:

Interviewer:

Interviewee:

Position of interviewee:

(briefly describe the project)

Questions

1. What are the challenges for you to be productive researcher?
2. What strategies/practices do you employ to be productive researchers?
3. What do you most depend on to be successful in research?
4. How do you motivate and support yourself to sustain your research engagement?
5. What research support programs do you find useful from your universities to build your research capacity?
6. What types of support do you expect to seek for from the university?
7. What advice would you give to early career staff whose research engagement is a must?

(Thanks the individual for participating in this interview. Assure him/her of confidentiality of responses and potential future interviews)

