# EVALUATING COMPLEX COMMUNITY-BASED HEALTH PROMOTION: ADDRESSING THE CHALLENGES

## **GWYNETH JOLLEY**

South Australian Community Health Research Unit, Southgate Institute for Health, Society and Equity School of Medicine Faculty of Health Sciences Flinders University

Submitted in fulfilment of the requirements for the degree of Doctor of Philosophy

May 2013

#### Contents

Summary	vii
Declaration	X
Acknowledgements	xi
Abbreviations	xiii
Chapter One: Introduction	1
1.1 Introduction	1
1.2 Context and significance	2
1.3 Aim and research questions	5
1.4 Scope	6
1.5 Publications contributing to the thesis	8
1.6 Background and approach	9
1.7 Structure of thesis	13
Chapter Two: Literature Review	15
2.1 Introduction	15
2.2 Literature search strategy	16
2.3 Health promotion	17
2.3.1 Developmental history of health promotion	17
2.3.2 Health promotion theories	24
2.3.3 Principles and practice of health promotion	
2.3.4 Community-based health promotion initiatives and the settings ap	proach
2.3.5 Health promotion evaluation	
2.4 Developmental history of evaluation	41
2.4.1 The early years: the positivist paradigm	43
2.4.2 Fourth Generation evaluation	45
2.4.3 Theory-based evaluation	50
2.4.4 Realistic evaluation	67
2.5 Addressing the challenges to evaluating community-based health pror initiatives	
2.5.1 Complexity	72
2.5.2 Research approaches	73
2.5.3 Attribution and causality	74
2.6 Chapter summary	75

Chapter Three: Published Papers	78
3.1 Introduction	78
3.2 Eat Well SA Evaluation	80
3.2.1 Description and context	80
3.2.2 Theoretical, methodological and practical challenges	81
3.3 What makes for sustainable Healthy Cities initiatives?	86
3.3.1 Description and context	86
3.3.2 Theoretical, methodological and practical challenges	87
3.4 Building an evidence base for community health	90
3.4.1 Description and context	90
3.4.2 Theoretical, methodological and practical challenges	91
3.5 Framework and tools for planning and evaluating community participation collaborative partnerships and equity in health promotion	,
3.5.1 Description and context	97
3.5.2 Theoretical, methodological and practical challenges	99
3.6 Evaluation of an action research project in workforce development and organisational change: Healthy Ageing – Nutrition	101
3.6.1 Description and context	102
3.6.2 Theoretical, methodological and practical challenges	103
3.7 Key lessons and implications for evaluation	106
3.7.1 Theoretical and methodological issues	107
3.7.2 Practical and resource issues	115
3.8 Role of the evaluator	118
3.9 Summary and conclusions	123
Chapter Four: The Emerging Area of Complexity Theory and Developmental Evaluation	
4.1 Introduction	
4.2 Complex social problems and interventions	
4.3 Complexity theory and health promotion evaluation	
4.3.1 Complexity theory	
4.3.2 Complexity theory and implications for health promotion evaluation	
4.4 Using complexity theory to address evaluation challenges	
4.5 Complexity theory and developmental evaluation	
4.5 Use of complexity theory in health promotion evaluation	
4.5 Ose of complexity meory in leanin promotion evaluation	
4.6.2 How complexity theory could have contributed to my published studie	
4.0.2 How complexity incory could have contributed to my published study	

4.6.3 Lessons from complexity theory for Healthy Ageing – Nutrition evaluation
4.7 A conceptual model of community-based health promotion evaluation158
4.8 Chapter summary and conclusions 169
Chapter Five: Discussion and Conclusions
5.1 Introduction
5.2 Health promotion and evaluation developments
5.3 Strengths and limitations of the thesis
5.4 Addressing the research questions
5.4.1 Health promotion and evaluation context and influence my evaluation work
5.4.2 Evaluation developments including the changing role of the evaluator .177
5.4.3 Theoretical, methodological and practical challenges in conducting community-based health promotion evaluations
5.4.4 Overall lessons from my published evaluations and how they inform new approaches to evaluation of community-based health promotion initiatives181
5.5 Conclusion
References
Appendix: Publications forming part of the thesis

## Tables

Table 2.1 Health promotion theories and implications for evaluation	26
Table 2.2 Community-based health promotion characteristics	39
Table 2.3 Timeline of development of evaluation approaches	42
Table 2.4 Program logic models and program theory	59
Table 3.1 Publication timeline and major evaluation approaches	79
Table 3.2 Healthy Ageing Nutrition Action Plan Proforma	103
Table 3.3 Theories and models for health promotion programs	107
Table 3.4 Evaluation of community participation	111
Table 3.5 Evaluation of partnerships	113
Table 3.6 Evaluation of equity concerns	115
Table 3.7 Dimensions of capacity building	117
Table 3.8 Evaluator roles	119
Table 3.9 Characteristics of complexity for three program	126
evaluations	
Table 4.1 Simple, complicated and complex problems	132
Table 4.2 Characteristics of complex health promotion initiatives and	142
implications for evaluation	
Table 4.3 Classification of studies into the Cynefin framework	154
Table 4.4 How complexity theory and developmental evaluation	155
could have benefitted my evaluation research	

## Figures

Figure 2.1 Empowerment model of health promotion	30
Figure 2.2 Continuum of health promotion strategies	32
Figure 2.3 Stages of the Precede-Proceed model	52
Figure 2.4 Planning and evaluation cycle	55
Figure 2.5 Conceptual framework for theory-driven evaluation	61
Figure 2.6 Generative causation	68
Figure 2.7 The realist evaluation cycle	69
Figure 3.1 Capacity building approach for Eat Well SA evaluation	83
Figure 4.1 Simple, complex and chaotic knowledge framework	130
Figure 4.2 Simple, complicated, complex and chaotic zones	131
Figure 4.3 Cynefin framework	137
Figure 4.4 Cynefin framework and health promotion evaluation	141
Figure 4.5 Developmental evaluation and the middle ground	150
Figure 4.6 Planning, implementation and evaluation conceptual model	160
Figure 4.7 Applying the model to Healthy Ageing – Nutrition	164

#### SUMMARY

This thesis by published work investigates evaluation of community-based health promotion initiatives which use structural or policy approaches rather than focussing on individuals. Empirical research providing evidence of the effectiveness of community-based health promotion is limited.

The thesis consists of a literature review, five papers from my research, and lessons drawn from reflection on my experience as an evaluator of community-based programs. Three of the five papers report on evaluations, including a meta-evaluation of sustainability in a Healthy Cities project. One paper is a review of (mostly) practitioner-actioned evaluations of community health services programs and the other paper reports on arising research leading to the development of evaluation resources.

The research questions are: i) What was the health promotion and evaluation context for my publications and how did this influence my evaluation work? ii) How do my publications reflect evaluation developments prior to 2008, including the role of the evaluator in relation to community-based health promotion initiatives? iii) What are the contemporary challenges in conducting community-based health promotion evaluations? iv) What are the overall lessons from the evaluation practice presented in my publications and how do they inform new approaches to evaluation of community-based health promotion initiatives?

The thesis argues that contested understandings of health promotion and the dominance of a positivist research paradigm present challenges to effective evaluation of community-based health promotion initiatives. Although evaluation theory has evolved to include interpretive approaches, mainstream evaluation practice still has to contend with demands for a linear, objective scientific approach that does not sit well with community-based health promotion. My evaluation work and the arising publications illustrate the tensions and compromises in taking a more interpretive approach. This thesis contends that, as evaluation has come to be accepted as a more values-based enterprise, health promotion evaluation should reflect principles of participation, empowerment and equity.

Community-based health promotion initiatives are often complex interventions in complex settings and this presents evaluation challenges. These include flexible goals, diverse settings and participants, interaction between stakeholders and dynamic, non-linear programs. The developmental nature of many health promotion programs means that evaluations are context-contingent and this limits transferability of findings.

The thesis concludes that mainstream approaches to evaluation are not able to cope well with the complexity of community-based health promotion and that complexity theory shows promise in addressing evaluation challenges. I classify my studies into complicated or complex domains by examining the extent and diversity of components, stakeholders and interactions and consider how the evaluations might have benefited from use of complexity theory.

Building on insights from my publications, complexity and developmental evaluation, I present a conceptual model of my thinking about planning and evaluation processes. This model brings together program theory and developmental evaluation and may assist evaluation of complex interventions by supporting reflexive practice that can accommodate the adaptive and interactive nature of community interventions. The thesis argues that ideas from complexity can help to build cumulative evidence in order to identify the foundation principles of effectiveness that can be transferred to a new situation.

#### 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 material previously published or written by another person except where due reference is made in the text.

Signed ...... Stelley . Date ...... 21<sup>st</sup> May 2013

#### ACKNOWLEDGEMENTS

Firstly, I would like to thank the many participants in the studies contributing to this thesis, including health promotion program managers, practitioners and program recipients. You have taught me much over the years and shown such dedication to the task of improving population health and wellbeing.

I sincerely thank the co-authors of my publications: Fran Baum, Patricia Carter, John Coveney, Denise Fry, Richard Hicks, Catherine Hurley, Paul Laris, Steve Parker, Kate Saint and Alison Smith for their contributions to the papers and for allowing me to use this work as part of my PhD thesis. It has been a pleasure to work with you and to share experiences.

I offer my deepest gratitude to my principal supervisor, Professor Fran Baum, cosupervisors Professor Lynn Kemp and Dr Angela Lawless, for their time, support and academic guidance. In particular, Fran has been a source of inspiration since I started working at the SA Community Health Research Unit in 1994, with her wealth of knowledge and experience in public health research combined with a strong sense of social justice. She has provided invaluable guidance on the content and structure of the thesis and particularly on the health promotion aspects. Lynn has been supportive and encouraging throughout, particularly for the evaluative components, and helped to structure the thesis. I have worked closely with Angela for many years and she has always been willing to share ideas and resources, and to act as soundingboard for developing thoughts.

I also owe thanks to all my colleagues at the SA Community Health Research Unit for their interest and support during my period of study, in particular, Dr. Toby Freeman for invaluable assistance with Endnote, and Carly Gowers and Michael Cox

xi

for help in formatting and layout of diagrams. I would also like to thank Patricia Lamb and Helen Scherer for administrative support.

Lastly, thanks to my family, particularly my daughters, Heather and Helen, for their faith in me. I hope that, in a small way, I have helped to inspire their love of learning and that this will pass on to my wonderful grandchildren Bridie, Jamie and Phoebe. Finally, to my parents, Harry (also known as Jack!) and Edna, thank you for teaching and supporting me, through good times and bad.

And to friends and colleagues everywhere who have taken an interest and wished me well, thank you.

# ABBREVIATIONS

SACHRU ...... South Australian Community Health Research Unit

WHO ...... World Health Organization