Critiquing the contested nature of aggregation in qualitative evidence synthesis: an examination of dominant views on Interpretivism

DOCTOR OF PHILOSOPHY

Craig Lockwood
The Joanna Briggs Institute
Faculty of Health Sciences
The University of Adelaide
Declaration of authenticity and acknowledgement of authorship

This work contains no material that has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief contains no material previously published or written by another person, except where due reference has been acknowledged in the text.

I give consent to copy of this thesis, when deposited in the University of Adelaide Library, being available for loan and photocopying subject to the provisions of the copyright act, 1968. I also give permission for the digital version of my thesis to be made available on the web, by the University of Adelaide’s digital research repository, the Library catalogue, the Australasian Digital Thesis Program (ADTP) and also through web search engines.

Craig Lockwood

Date
# Table of Contents

 DECLARATION OF AUTHENTICITY AND ACKNOWLEDGEMENT OF AUTHORSHIP ........................................ II

 TABLE OF CONTENTS .................................................................................................................................... III
 LIST OF TABLES ........................................................................................................................................ VI
 LIST OF FIGURES ...................................................................................................................................... VII
 ACKNOWLEDGEMENTS ........................................................................................................................... VIII
 ABSTRACT ................................................................................................................................................ IX

 CHAPTER 1: INTRODUCTION .......................................................................................................................... 1
 THE STUDY IN CONTEXT .............................................................................................................................. 1
   Specific question/statement of the research .......................................................................................... 2
   Extended examination of the question and identification of significance of the topic ........... 2
 THE SYSTEMATIC REVIEW ........................................................................................................................ 2
 STATISTICAL SYNTHESIS ....................................................................................................................... 3
 QUALITATIVE OR TEXTUAL SYNTHESIS .............................................................................................. 5
 SUMMARY OF METHODS ........................................................................................................................ 11
 ASSUMPTIONS, LIMITATIONS AND SIGNIFICANCE ........................................................................... 12

 CHAPTER 2: BACKGROUND & REVIEW OF RELATED LITERATURE ............................................................ 14
 PROTOCOL CONSTRUCTION .................................................................................................................... 19
 QUESTION DEVELOPMENT .................................................................................................................... 20
 SEARCHING .............................................................................................................................................. 22
 STUDY SELECTION .................................................................................................................................. 25
 APPRAISAL ............................................................................................................................................... 29
   Study Inclusion .................................................................................................................................. 34
 DATA EXTRACTION .................................................................................................................................... 37
 SYNTHESIS ............................................................................................................................................... 41

 CHAPTER 3: METHODS ................................................................................................................................... 44
 INTRODUCTION ........................................................................................................................................... 44
 TECHNICAL OVERVIEW OF META-AGGREGATION ........................................................................... 45
   Review team composition and topic identification ........................................................................ 46
   Planning the review ................................................................................................................................. 46
   Protocol design for aggregative reviews of qualitative evidence ..................................................... 47
     Title of Systematic Review Protocol ................................................................................................. 47
     Background ....................................................................................................................................... 48
     Question ............................................................................................................................................ 48
     Criteria for considering studies for this review ................................................................................. 49
     Types of studies ................................................................................................................................. 50
     Search strategy .................................................................................................................................. 50
     Assessment criteria ............................................................................................................................ 51
     Data extraction ................................................................................................................................... 54
     Data synthesis ..................................................................................................................................... 56
   Developing recommendations .............................................................................................................. 57
 TECHNICAL OVERVIEW OF META ETHNOGRAPHY ............................................................................. 58
 PHASE ONE METHODS ............................................................................................................................. 63
   Meta Ethnographic Methods .................................................................................................................. 66
     Getting started, identifying the interest (Aim / Review Title) ............................................................. 66
     Deciding what is relevant to the interest (Inclusion Criteria, Searching and Appraisal) .................... 66
     Reading the studies ............................................................................................................................. 69
     Determining how the studies relate ..................................................................................................... 69
     Translating the studies in to each other ............................................................................................... 70
     Synthesising the translations ............................................................................................................. 70
     Expressing the synthesis ...................................................................................................................... 70
CHAPTER 4: RESULTS

CH 4
INTRODUCTION.................................................................................................................. 81
PHASE ONE RESULTS...................................................................................................... 81
Meta ethnography results................................................................................................. 81
Meta aggregation results.................................................................................................. 85
PHASE TWO RESULTS...................................................................................................... 93
Approach.......................................................................................................................... 95
Purpose.............................................................................................................................. 98
Protocol.............................................................................................................................. 100
Question/aim..................................................................................................................... 102
Searching.......................................................................................................................... 103
Appraisal........................................................................................................................... 104
Extraction.......................................................................................................................... 105
Synthesis............................................................................................................................ 107
Presentation....................................................................................................................... 109
Platform............................................................................................................................. 109

CHAPTER 5: DISCUSSION

PHILOSOPHY..................................................................................................................... 111
Symbolic interactionism...................................................................................................... 111
Hermeneutics...................................................................................................................... 113
Husserlian Phenomenological Philosophy......................................................................... 114
Heideggerian Phenomenological Philosophy................................................................. 118
Approach to synthesis...................................................................................................... 121
Purpose of the synthesis................................................................................................... 122
The Protocol....................................................................................................................... 123
The Review Question........................................................................................................ 125
Searching............................................................................................................................ 125
Appraisal............................................................................................................................. 127
Extraction........................................................................................................................... 129
Synthesis............................................................................................................................. 131
Presentation and Platform............................................................................................... 133
CONCLUSIONS................................................................................................................ 134

REFERENCES................................................................................................................... 138

APPENDIX I: META ETHNOGRAPHY INCLUDED STUDIES.................................................. 143
APPENDIX II: META AGGREGATION INCLUDED STUDIES................................................ 148
APPENDIX III: META AGGREGATION, EXCLUDED STUDIES............................................ 150
APPENDIX IV: QARI APPRAISAL CRITERIA........................................................................ 152
APPENDIX V: CASP APPRAISAL CRITERIA........................................................................ 153
APPENDIX VI: QARI EXTRACTION INSTRUMENT............................................................. 156
APPENDIX VII: META AGGREGATION FINDINGS SORTED BY CATEGORY

CATEGORY: THE GOOD PATIENT

CATEGORY: CONSTRAINED BY ROUTINES

CATEGORY: ITS NOT OUR RESPONSIBILITY

CATEGORY: OVERWHELMED BY IT ALL

CATEGORY: ON BEING UNDER PREPARED

CATEGORY: INCENTIVES AND MOTIVATORS

CATEGORY: THE POSITIVE INFLUENCE OF SOCIAL NETWORKS

CATEGORY: FEAR OF RISKS TO SELF OR FAMILY FROM THE COMMUNITY

CATEGORY: PROCESS AND POLICY RESPONSIVENESS

CATEGORY: LACK OF COORDINATION BETWEEN AND ACROSS SERVICE LEVELS.

CATEGORY: TB SELF EFFICACY AND LOSS

CATEGORY: PSYCHOSOCIAL, PHYSICAL AND ECONOMIC NEEDS CAN OVERWHELM.

CATEGORY: NEGATIVE INFLUENCE OF SOCIAL STIGMA AND FEAR

CATEGORY: ‘ADHERENCE’ OCCURS WITHIN A ‘LIFE NEEDS FRAMEWORK’

CATEGORY: CHANGING TENSIONS BETWEEN BELIEFS AND KNOWLEDGE IN DECISION-MAKING.
**List of tables**

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABLE 1</td>
<td>THE JBI GRADES OF RECOMMENDATIONS</td>
<td>58</td>
</tr>
<tr>
<td>TABLE 2</td>
<td>DATES SEARCHES, AND REFERENCES PER DATABASE</td>
<td>73</td>
</tr>
<tr>
<td>TABLE 2</td>
<td>CATEGORIES AND ILLUSTRATIONS</td>
<td>92</td>
</tr>
<tr>
<td>TABLE 4</td>
<td>SUMMARY OF COMPARATIVE FRAMEWORK.</td>
<td>95</td>
</tr>
<tr>
<td>TABLE 5</td>
<td>COMPARISON OF “HITS” IN DATABASE SEARCHES. META ETHNOGRAPHIC REVIEW TIMEFRAME CONCLUDED IN FEB 2005, AGGREGATIVE REVIEW IN DEC2010.</td>
<td>104</td>
</tr>
</tbody>
</table>
List of Figures

FIGURE 1: JBI CONCEPTUAL MODEL OF EVIDENCE BASED HEALTH CARE. ---------------------------------------- 9
FIGURE 2: CONCEPTUAL MODEL OF PARADIGMS AND PHILOSOPHIC PERSPECTIVES WITHIN INTERPRETIVISM ------------------------------------------ 15
FIGURE 4: QARI VIEW GRAPH OF SYNTHESISED FINDING 1--------------------------------------------------------- 86
FIGURE 5: QARI VIEW GRAPH OF SYNTHESISED FINDING 2----------------------------------------------------------- 87
FIGURE 6: QARI VIEW GRAPH OF SYNTHESISED FINDING 3----------------------------------------------------------- 88
FIGURE 7: QARI VIEW GRAPH OF SYNTHESISED FINDING 4----------------------------------------------------------- 89
FIGURE 8: CONCEPTUAL MODEL ILLUSTRATING THE OVERARCHING PARADIGM OF INTERPRETIVISM AND THE SPECIFIC SCHOOLS OF PHILOSOPHY THAT BOTH EMERGE FROM IT, AND CONSTITUTE THE PARTS OF THE WHOLE. ------------------------------------------ 113
FIGURE 9: VISUAL WEIGHTING OF REVIEW ELEMENTS IMPACT ON THE OVERALL METHODS. ------------------------------------------ 134
FIGURE 10: CORE PURPOSIVE STRUCTURES FOR QUALITATIVE SYNTHESIS. ------------------------------------------- 135
Acknowledgements

My sincere thanks, and deepest appreciation:

To Professor Alan Pearson AM, my Supervisor, who was first to show me what nursing could be and who latterly showed me the primacy of scholarship. I hope this work reflects something of those lessons; if it falls short, the fault is mine entirely.

To Professor Marianne Lamb, RN PhD, Queens University, Ontario, Canada for her willing support, encouragement and timely advice.

To my colleagues in the Institute and the wider collaboration who have been the friends, advocates, encouragers and inspirers always at exactly the right moments.

For editorial assistance, Dr Zoe Jordan. I am grateful for the assistance in clarification of the nuances of grammar although the structure of this acknowledgement probably breaks several of them.
Abstract

This dissertation examines and explores the assumptions and debates associated with qualitative synthesis within the health sciences. My particular area of interest is the complexities arising from various techniques of qualitative synthesis currently emerging in the field of qualitative systematic review. More specifically, in this study I sought to assess the impact of the choice of theoretical constructs, methodological frameworks or methods on the nature of the findings when undertaking a qualitative synthesis. My intention was to examine the debates and conjecture surrounding claims made in relation to meta ethnography and meta aggregation as underpinning approaches to the systematic review of qualitative evidence, as these have attracted interest and polarised the opinions made of their proponents.

In order to achieve this a multi phase study was undertaken, where phase one included the identification of a high quality, published meta ethnographic review and the conduct of a comparator meta aggregative review. Phase two consisted of a comparison between the two reviews, with each phase necessarily consisting of sections that worked to clarify the steps and stages taken in the conduct and reporting of the research that formed the basis of this thesis.

The primary results of interest from this process were not the findings of the meta ethnographic review compared with the meta aggregative review, but the subsequent analysis of where and how differences originated. Interpretivism is the catch phrase of meta ethnography, yet it is by no means clear what is meant either by the originators; or by subsequent reviewers who have used the methodology but not explicated its philosophic foundations. Interpretivism is not a unified theory, it is instead a broad church; inclusive of many philosophical perspectives, specifically hermeneutics, phenomenology and symbolic interactionism.

The particular claims to interpretivism for ethnographic reviews was examined and found to be a superficial and inadequate representation of the methodology. Specifically, hermeneutic phenomenology has been found to be ontologically and epistemologically congruent with the methodology and methods of meta ethnography.

It also became evident that the methods-centric focus of meta aggregation has limited wider understanding of the methodology, leading to an incorrect association with integration. This
study maintains that the interpretive foundations of aggregative synthesis are found in Husserlian Transcendental Phenomenology.

This study suggests that the approach and purpose are the first two key points of decision-making. Therefore, reviewers interested in undertaking qualitative synthesis should first consider what approach is a good fit with their purposes before deciding upon a methodology. Within the ‘interpretive philosophic’ perspective, the two core philosophies [of hermeneutic phenomenology (with fusion of horizons), and transcendental phenomenology] are where we must look to understand both the differences between meta aggregation and meta ethnography and the strengths and weaknesses of each approach.