'LANDSCAPE OF FULFILMENT': A MODEL FOR UNDERSTANDING RURAL MEDICAL RECRUITMENT AND RETENTION

Helen Mary Tolhurst MB, BS (Hons)

Submitted for Doctorate of Philosophy (General Practice) in March 2008

STATEMENT OF ORIGINALITY

This work contains no material which 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 made in the text. I give consent to this copy of my Thesis when deposited in the University Library, being made available for loan and photocopying subject to the provisions of the Copyright Act 1968.

ACKNOWLEDGEMENT OF AUTHORSHIP/ COLLABORATION

I hereby certify that the work embodied in this Thesis, is the result of original research, the greater part of which was completed subsequent to admission for candidature for the degree.

The data for the two Female Rural General Practice Studies were collected as part of collaborative projects and I undertook a descriptive analysis of this data in collaboration with other academics while I was employed at the University of Newcastle, prior to admission for candidature. However all of the analysis of the Female Rural GP data reported in this Thesis was undertaken subsequent to admission for candidature of the degree.

During the initial stages of the Student project I worked collaboratively with Dr Mark Stewart, a general practice academic registrar under my supervision. I was responsible for the conceptualisation of the project, the project development, most of the data collection, and most of the data analysis. Dr Stewart worked under my supervision on analysing data thematically in relation to issues not reported in this Thesis.

I hereby certify that the work embodied in this Thesis contains published papers of which I am a joint author. I have included as part of the Thesis a written statement from each co-author attesting to my contribution to joint publications

Signature

Date

ACKNOWLEDGEMENTS TO

Katie and Jennie McGill and Jenny Stewart-Williams for their wonderful and caring support

Associate Professor Jon Adams my principal supervisor for introducing me to many of the joys of qualitative research and co-supervisor Professor John Fraser who provided wise insights and advice and the academic support I needed to complete this Thesis

Jane McDonald and Lee-Anne Wilson-Smith for their patience in providing technical support

The medical students and rural GP participants who generously gave their time and candidly told of their experiences and without whom this Thesis would not have been possible

CONTENTS

Statement of originality	
Acknowledgement of authorship/collaboration	
Abstract	
Executive summary	
Background	
Aims of thesis	
Research questions	
Brief outline of the thesis	
Chapter 1 Introduction	
1.1 Background	
1.2 Aims of thesis	
1.3 Research questions	
1.4 How this thesis will bring a new approach to rural medical workforce research	ı 15
Chapter 2 Literature review And Development of Thesis Aims	
2.1 Rural Medical Workforce Shortages	17
2.2 Defining rurality, recruitment and retention	21
2.3 Rural general practitioners in Australia	25
2.4 Quantitative research on the recruitment of rural doctors	27
2.5 Quantitative research on the retention of rural doctors	37
2.6 Female rural doctors	43
2.7 Women in medicine	58
2.8 Relationship between research literature on rural doctors, female rural doctors	
and women in medicine	69
2.9 Models and decision making frameworks for understanding rural recruitment an	
retention	
2.10 Qualititative research on rural recruitment and retention	77
2.11 What gaps are there in the literature? Where to from here?	
Chapter 3 Methods	
3.1 Why a qualitative methodology	94
3.2 Theoretical approach	
3.3 Case series design and overall methodological approach of the three studies	
presented and analysed in this thesis	96
3.4 Detailed description of methods used in student study	104
3.5 Detailed description of methods used in initial female rural GP study	
3.6 Detailed description of methods used in second female rural GP study	
3.7 Summary of methods	
Chapter 4 Rural Recruitment: Attitudes and Intentions of Medical Students to Rural	
Practice	127
Background	
Research Questions	
Results	
4.1 Descriptive analysis	
4.2 Thematic analysis	
4.3 Summary of results	
Chapter 5 Variations in model for particular groups of students	
5.1 Analysis relating to groups of students: Rationale and methods	
5.2 Female students	
5.3 Male students	
5.4 Rural background students	
5.5 Urban background students	
5.6 Young students	
5.7 Mature-aged students	
5.8 Summary	
Chapter 6 Women in Rural General Practice	
Background	
Ducissionin	41/

Research Questions		218
Results		218
6.1 Descriptive analysis of focu	s groups and in-depth interviews	218
	n relation to domains of 'Landscape of fulfilment'	
	d relationships between domains	220
	and interrelationships within 'the landscape of	
fulfilment' model for the medical	students and female rural GPs	279
Conclusion		283
Chapter 7 Discussion of 'Landscap	e of fulfilment' model in relation to the relevant	
literature		287
7.1 Aims of this chapter		287
7.2 Model in relation to range of	f issues identified in rural medical recruitment and	
retention literature		288
7.3 Model in relation to other m	nedical recruitment and retention frameworks	292
7.4 Model in relation to the lite	rature on place identity, professional identity and	
gender identity		295
7.5 Summary of fit of 'landscape	e of fulfilment' model with the related literature	300
Chapter 8 Conclusion: Implication	ns of this thesis for Strategies to recruit and retain	
rural GPs	-	301
8.1 Landscape of fulfilment: A r	new basis for understanding rural medical recruitment	t
	-	301
	e met	
8.3 Limitations of a qualitative	e approach	306
8.4 Implications of thesis		306
References		323
Appendix I: Information and cons	ent forms	361
Appendix II: Focus group and inter	rview questions	375
Appendix III: Published journal p	apers on student research	387
Appendix IV: Glossary of Terms	_	411

TABLE OF FIGURES

Figure 4-1 Domains with factors grouped into domains identified from student focus	
	132
Figure 4-2 Interrelationships between domains identified from student focus group data	133
Figure 4-3 Aspects of place and relationship between self and place	134
Figure 4-4 Aspects of work and relationship between self and work	146
Figure 4-5 Aspects of significant others and relationships between self and significant	
others	157
Figure 4-6 Revised model showing relationships between domains of Self, Place, Work,	
Significant others, and Significant others' work	162
Figure 4-7 Overlap between the domains of Self, Place, Work, Significant others and	
Significant others' work	163
Figure 4-8 Aspects of recreation and relationship between self and recreation	
Figure 4-9 Revised model including all the domains identified, and relationships	
between the domains	169
Figure 4-10 Revised model with all domains and strength of interrelationships between	
the domains	175
Figure 4-11 'Landscape of fulfilment' Model for understanding recruitment of rural	
doctors,	189
Figure 4-12 Landscape of fulfilment model, showing overlap and interactions between	
domains	191
Figure 5-1 Landscape of fulfilment for female family-oriented primary family carer	194
Figure 5-2 Landscape of fulfilment for family oriented female shared carer	
Figure 5-3 Landscape of fulfilment for female care delegators	195
Figure 5-4 Male family oriented students- family providers	200
Figure 5-5 Landscape of fulfilment for rural oriented rural background students	203
Figure 5-6 Landscape of fulfilment for urban-oriented rural background students	203
Figure 5-7 Landscape of fulfilment for rural oriented urban background students	207
Figure 5-8 Landscape of fulfilment for urban-oriented urban background students	207
Figure 5-9 Landscape of fulfilment for younger students	211
Figure 5-10 Landscape of fulfilment for mature aged students	214
Figure 6-1 Aspects of place and relationship between self and placeplace	221
Figure 6-2 Aspects of the community with whom female rural doctors had relationships	222
Figure 6-3 Aspects of work and relationship between self and work	231
Figure 6-4 Interrelationships between aspects of the domain of work for female rural GPs	240
Figure 6-5 Aspects of significant others and relationships between self and significant	
others	259
Figure 6-6 Aspects of recreation and relationship between self and recreation	
Figure 6-7 Aspects of identity for female rural GPs	278
Figure 6-8 The 'Landscape of fulfilment' model for female rural doctors	284

TABLE OF TABLES

Table 2:1 Factors identified as important in attracting subgroups of doctors and medical	
students to rural areas	29
Table 2:2 Results of literature review: Summary of positive and negative aspects of rural	
life and practice identified by rural doctors	38
Table 2:3 Difference in demographic characteristics of female and male rural GPs	45
Table 2:4 Summary of literature review: Personal and professional issues identified by	
female rural doctors	51
Table 2:5 Demographic and professional differences between male and female doctors	
identified in the literature review	59
Table 2:6 Comparison of issues identified as problems by female doctors, all rural doctors	
and female rural doctors	70
Table 3:1 Numbers of participants in focus groups and interviews	106
Table 3:2 Focus group composition: one focus group was held in each category shown	107
Table 3:3 Number of focus group participants in female rural doctor study	116
Table 4:1 Summary of factors influencing medical student location choice	129
Table 6:1 Issues identified by focus group and interview participants	219
Table 8:1 Current and new recruitment strategies in relationship to the 'Landscape of	
fulfilment' model	309
Table 8:2 Current and new retention strategies in relation to the 'Landscape of	
fulfilment' model	311
Table 8:3 Recruitment strategies suitable for subgroups of doctors	314

ABSTRACT

Background

Due to an ongoing shortage of rural medical professionals both in Australia and internationally, the recruitment and retention of rural doctors has been extensively researched. Mostly the research used quantitative methods to focus on factors associated with rural medical workforce recruitment and retention issues, and until now, limited work has investigated inter-relationships between these factors. Although a few qualitative studies have used thematic analysis to develop models to better understand these issues, none have specifically considered the attitudes of medical students, and female rural doctors. This Thesis responds to this need by using qualitative research methods to develop a model that incorporates feminisation of the medical workforce and generational change in the 21st century. Data were collected from Australian medical students and female rural general practitioners (GPs) as study participants.

Aims

The broad aims were to develop a model for understanding recruitment and retention of rural doctors in Australia, incorporating concepts of place, gender, and professional identity.

Research Questions

How are Australian medical students' and female general practitioners' perceptions of entering and remaining in a rural health career influenced by the constructs of place, gender and professional identity?

Does this perception change as doctors' progress through their careers from students to practising general practitioners?

Methods

A case series of three qualitative studies were used to develop a model for understanding rural GP recruitment and retention. Data, collected using focus groups and interviews, were analysed thematically by domains describing participants' lives, and the interaction between the domains was explored to better understand influences on location choice.

Results

The 'Landscape of fulfilment' model which is integral to this research, incorporates the domains of self, place, work, significant others, recreation, and significant others' work as the domains of life which influence location choice. Most participants sought balance within their lives, and maximum fulfilment in all domains, but at times they faced conflict between domains. Individuals' gender, professional, and place identities were related to how they viewed the domains and how the domains interacted.

Conclusion

This model provides a way of understanding the complex interaction between aspects of life that affect a doctor's location choice. There is important potential to use the model to inform the development of rural medical recruitment and retention strategies, and as a basis for further rural health workforce research. The model has already been used by General Practice Education and Training (GPET) in developing post graduate general practice training research, and also by the Sustainable Practice Working Group of the Rural Faculty of the Royal Australian College of General Practitioners (RACGP) in developing strategies for sustainable rural general practice.

EXECUTIVE SUMMARY

BACKGROUND

For many years the shortage of doctors, and in particular general practitioners (GPs) in rural and remote areas, has been recognized as a serious medical workforce policy issue, in Australia and also internationally[1-7]. Both the recruitment of new doctors and the retention of doctors already there, contribute to the supply of doctors available to serve particular rural and remote areas. However recruitment and retention are recognised as distinct processes operating within the medical workforce[8]

The difficulty of recruiting and retaining doctors to work in rural areas has been discussed in the medical literature since the 1970s[2, 4, 9-11], with rural health researchers more recently expressing concerns about the possibility of existing shortages worsening in future due to the aging of the rural medical workforce[12] feminisation of the medical workforce[7, 13, 14], and generational change in attitudes of doctors to work[15, 16].

To date, the considerable body of rural medical workforce research[3, 11, 17-77] has mostly been quantitative. While previous research has analysed numerous factors associated with the recruitment and retention of rural doctors, it has been limited in its capacity to provide understanding of how these factors are linked, and in the analysis of complex inter-relationships between these factors. Although rural workforce writers have reviewed, summarized or aggregated data from the literature[11, 22, 46, 65, 78, 79] focusing on factors effecting rural GP recruitment and/or retention, only a few researchers have attempted to develop frameworks for understanding the recruitment and retention of GPs to rural areas[8, 25, 39, 47, 80, 81]. Most of these frameworks have been based on quantitative data and have taken a psychologically based deterministic approach. While some qualitative studies have been undertaken[7, 15, 25, 32-34, 42, 47, 66, 75, 81-89], the majority of analyses are descriptive, with limited analysis undertaken at deeper thematic levels. However a few researchers have analysed their results thematically [8, 25, 32, 33, 47, 75, 80, 82, 90, 91] and developed frameworks from their qualitative findings. Cutchin for example, focused mainly on aspects of self which relate to work and place. However, the

general application of Cutchin's work is limited in the context of feminisation of the medical workforce[7, 92] and generational change in the 21st Century[7, 92, 93], because his sample comprised males aged over 35 years.

The current literature on rural medical recruitment and retention lacks a body of qualitative research that analyses data at a thematic level in order to understand the complex influences on the location choice of potential rural doctors and doctors currently in rural practice, and how these influences interrelate. In particular, there is a lack of this kind of qualitative research focusing on the perspective of medical students, recent medical graduates and female rural doctors, all of whose views need to be taken into account when developing rural medical recruitment and retention strategies[7, 92, 94]. Such an approach to health workforce research is currently advocated by the World Health Organization (WHO) where 'both a worker perspective as well as a systems approach' are included in developing medical workforce strategies[95].

AIMS OF THESIS

The aims of this Thesis are to:

- investigate qualitatively and in depth the experiences and viewpoints of medical students and recent medical graduates in Australia between the years of 2002 and 2005 relating to rural medical recruitment
- investigate qualitatively and in depth the experiences and viewpoints of female rural general practitioners (GPs) in Australia between 1997 and 2001 relating to rural general practice retention
- use this rich qualitative data to understand how place, professional and gender identity interact and influence recent medical graduates' and female rural GPs' location choice in Australia
- develop a model for understanding the recruitment and retention of rural doctors in Australia, which incorporates concepts of place, gender, and professional identity and which could be used to develop strategies to address rural medical workforce shortages

RESEARCH QUESTIONS

The research questions investigated in this Thesis were:

- What are the experiences and viewpoints of medical students and recent medical graduates in Australia between the years of 2002 and 2005 relating to their possible future entry into rural medical practice?
- What are the experiences and viewpoints of female rural general practitioners (GPs) in Australia between 1997 and 2001 relating to rural general practice and their intentions to stay in rural practice in the future?
- How are Australian medical students' and female general practitioners'
 perceptions of entering and remaining in a rural health career influenced by
 the constructs of place, gender and professional identity? Does this
 perception change as doctors progress through their careers from students
 to practising general practitioners?
- Can a model for understanding the recruitment and retention of rural doctors in Australia, which incorporates concepts of place, gender, and professional identity and which could be used to develop strategies to address rural medical workforce shortages, be developed?

BRIEF OUTLINE OF THE THESIS

Methods

This Thesis uses a case series of three research studies, which were part of a research program conducted over a nine-year period, to develop a model for understanding the recruitment of male and female doctors to rural practice and the retention of female rural GPs.

The research, which was undertaken using the theoretical approach of a social constructionist paradigm, mostly used an inductive approach, seeking to understand the experience of participants, rather than a deductive approach that would test theories or prove or disprove hypotheses. Understanding the experience of the participants formed the basis for a model, which could be used to develop rural medical workforce strategies. This approach is consistent

with the WHO's systems approach, incorporating the views of workers within medical workforce research[95].

The studies from which the data for the Thesis were collected are:

- a two stage study on the perceptions and attitudes of medical students to rural medical practice, utilizing focus groups initially and then interviews with medical students and recent medical graduates over a three-year period from 2002 to 2005
- an exploratory study on female rural GPs in NSW and Western Australia,
 utilizing focus groups in 1997
- a second study on female rural GPs in NSW, utilizing in-depth interviews in 2001

The data were analysed initially using descriptive coding of emergent themes and issues. The model was developed by grouping themes from the student study into domains of the participants' lives and exploring how these domains interacted. The data from the female rural doctor studies were then re-analysed to explore whether the domains that emerged from the student study were appropriate for female rural doctors, and also to explore similarities and differences between the students and female rural doctors. The model was then reviewed in the context of the literature to check for fit with current knowledge relating to rural medical recruitment and retention.

Results

In Chapter 4, the results for the descriptive analysis of the student study are outlined briefly and the thematic analysis and the development of the model is given in more detail. The domains that were identified were self, place, work, significant others, recreation, and significant others work. The model developed represented the domains of life for each individual and varies for each individual with their gender, professional, and place identities being key aspects of how they viewed the domains. A small number were place oriented with a strong attachment to a particular place. An important aspect of the relationship between the students and the domain of place was the concept of 'comfort zone', which was the type of geographical area in which the students would feel 'comfortable'. A few students were strongly work oriented, being either career

oriented (focused on success at work) or vocation oriented (focused on altruism). However the majority were family oriented, seeing their relationships with significant others (particularly partner and children) as their highest priority. There were gender differences in how students saw the domains, in particular how they saw their responsibilities for children. While family oriented male students all shared similar attitudes to their families, there were three groups of family oriented female students, including primary family carers, shared family carers, and family care delegators. Most students sought to find balance within their lives, and maximise fulfilment in all of the domains of the model. However, they generally recognised that there would be a need for compromise with less fulfilment in some domains compared with others. The model was named 'The Landscape of fulfilment' because it represented the aspects of life in which the student sought fulfilment.

Chapter 5: Case studies of students applying 'The landscape of fulfilment'

In Chapter 5, the 'Landscape of fulfilment' model is applied to a series of student case studies. These case studies include:

- a family oriented male student
- three family oriented female students, including a primary family carer, a shared carer, and a care delegator
- a rural background rural oriented student and a rural background urban oriented student
- an urban background rural oriented student and an urban background urban oriented student
- a young student (under the age of 20) and a mature aged student (over the age of 30)

The model was applied to each of these case studies and provided a means for understanding their location choice.

Chapter 6: Women in rural general practice

Chapter 6 briefly outlines the results of previous descriptive analyses of the data collected in the two female rural doctor studies. The data from these

studies are then explored to see if the domains identified in the student study and forming the 'Landscape of fulfilment' encompass the experiences and perceptions of the female rural doctors, and whether this model provides a way of understanding the retention of female GPs in rural practice. This analysis showed that the data from the female rural GPs' studies fitted well into the model developed from the student study, with the major aspects of life that influenced location choice and career choice encompassing the same domains for both groups. However, some of the ways in which the female doctors saw the domains and the relationships between the domains differed from the students.

Rural medical culture was not mentioned by students but was an important aspect of the domain of work for most female rural doctor participants. They experienced rural medical culture as being masculine and at odds with their gender identity, and therefore many lacked a sense of belonging in rural general practice. Many perceived their own practice content and style as feminine, but felt that it was not valued or financially rewarded in rural general practice. They saw practice structures as an important aspect of the domain of work, which either allowed or did not allow them the flexibility to combine their commitments to the domains of work and significant others. Most students were not aware of the possible practice structures available, although many female students expressed a desire to work within flexible structures. An important similarity between female medical students and female doctors was their concerns about the conflict between the domains of work and significant others, especially in relation to children.

The analysis undertaken in Chapter 5 showed that the female rural GP data fitted the 'Landscape of fulfilment' model well with some new aspects added to the domains, and with different emphases in the relationships between the domains. This analysis also showed that the relationships between the domains within the landscape reflected the conflicts or congruence between various aspects of the female GP's lives, which would influence their retention in rural general practice.

Chapter 6: 'Landscape of fulfilment' model in the context of rural medical workforce and other relevant literature

Chapter 6 discusses how the robustness of the 'Landscape of fulfilment' model was tested by examining the fit of the model with the current rural medical recruitment and retention literature. The model not only encompassed the issues identified in rural medical recruitment and retention literature but also provided a basis for understanding some of the associations between factors identified as influences on rural medical recruitment and retention. The model also provided a means to understand some of the complexities of the processes of medical recruitment and retention and some of the apparent anomalies in the literature. The model developed concepts relating to place identity explored by Cutchin[25, 82] and expanded the concept of the doctor's identity further to incorporate professional, place and gender identity. While each aspect of the doctor's identity was consistent with previous research[25, 82, 96, 97, 98, 99], this model is unique by incorporating and exploring all three aspects.

Chapter 7: Discussion of model in the context of the literature

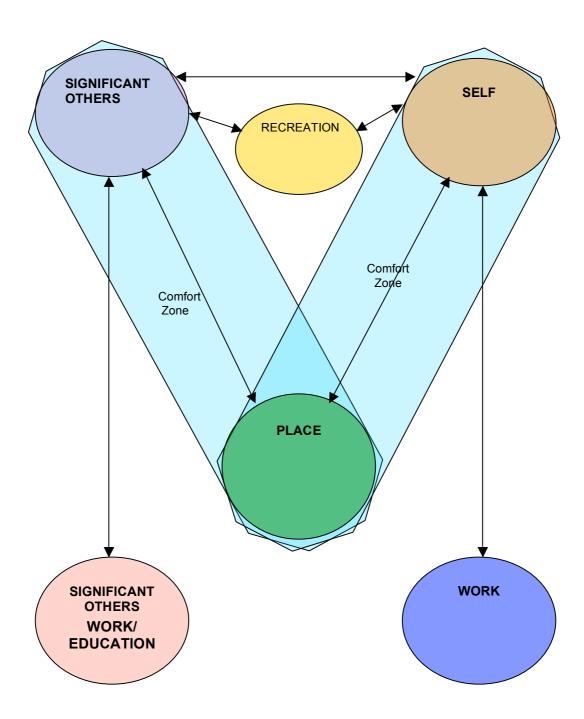
The discussion in this chapter shows that the 'Landscape of fulfilment' model not only fits well with the currently available literature on factors affecting rural medical recruitment and retention, but also adds to this literature by providing a means to understand some of the associations between factors identified as influencing rural recruitment and retention. This model incorporates concepts of place, professional and gender identity, which fit well with the current literature on the identity of rural doctors and female doctors. At the same time the sociocultural approach of this research adds to the current understanding of rural medical recruitment and retention

Chapter 8: Conclusions

This Thesis has developed a model for understanding rural recruitment and retention, which importantly integrates within the currently disparate body of rural medical workforce research. This work takes a broad approach to understanding rural medical recruitment and retention, consistent with the systems approach advocated by the WHO[95].

The model developed here can be used to inform the development of rural medical recruitment and retention strategies. A main finding is that potential rural doctors are not a homogeneous group, and that strategies must be tailored to particular groups to enable them to find balance within their 'Landscape of fulfilment'. Some of this research has been used by the Sustainable Practice Working Group of the Rural Faculty of the Royal Australian College of General Practitioners (RACGP) in developing strategies for sustainable rural general practice, and also by General Practice Education and Training (GPET) in developing postgraduate general practice training research. This Thesis can be used as a basis for the development of further rural workforce research. In particular, the domains provide a way of grouping factors for quantitative research. The body of work presented here also suggests new questions for future research, for example the fit of the model for male rural GPs, for rural specialists, and for general practice registrars.

Landscape of Fulfilment Model for Understanding Rural Medical Recruitment The 'Landscape of fulfilment' model for understanding female rural GP retention



CHAPTER 1 INTRODUCTION

1.1 BACKGROUND

For many years, shortages of doctors, and in particular general practitioners (GPs), have been recognized in Australia and internationally in rural and remote areas[1-7]. Both recruitment of new doctors to rural practice and retention of doctors already in rural practice contribute to the medical workforce available in particular rural areas, but recruitment and retention have been recognised as distinct processes[8].

Difficulties in recruiting and retaining doctors to work in rural areas have been discussed in the medical literature since the 1970s[2, 4, 9-11, 13, 100], with rural health researchers more recently expressing concerns about the possibility of these shortages worsening in the future because of aging of the rural medical workforce[12], feminisation of the medical workforce[7, 13, 14], and generational change in attitudes of doctors to work[15, 16].

The considerable body of rural medical workforce research[3, 11, 17-77, 100] has mostly been quantitative, analysing numerous factors associated with recruitment and retention of rural doctors, but has been limited in its capacity to provide an understanding of how these factors are linked and in analysing the complex interrelationships between these factors. While rural workforce writers have reviewed, summarized or aggregated data from the literature[11, 22, 46, 65, 78, 79], focusing on factors effecting rural GP recruitment and/or retention, only a few researchers have attempted to develop frameworks in which to understand the recruitment and retention of GPs to rural areas[8, 25, 39, 47, 80, 81]. Most of these frameworks have been based on quantitative data and have taken a psychologically based and deterministic approach. While some qualitative studies have been undertaken[7, 15, 25, 32-34, 42, 47, 66, 75, 81-89], most analyses undertaken in these studies have been at a descriptive level with limited analysis at a deeper thematic level. A few researchers have analysed their results thematically [8, 25, 32, 33, 47, 75, 80, 82, 90, 91] and developed frameworks from their qualitative results including Cutchin, who focused mainly on aspects of self that relate to work and place. However, the general application of his work is limited in the context of feminisation of the

medical workforce[7, 92] and generational change in the 21st century[7, 92, 93], because his sample was all aged over 35 and male.

Thus the current literature on rural medical recruitment and retention lacks a body of qualitative research that analyses data at a thematic level and develops models for understanding the complex influences on the location choice of potential rural doctors and doctors currently in rural practice, and how these influences interrelate. In particular there is a lack of this kind of qualitative research focusing on the perspective of medical students, recent medical graduates and female rural doctors, whose views need to be taken into account when developing rural medical recruitment and retention strategies[7, 92, 94].

This type of approach to health workforce research is currently advocated by the World Health Organization where 'both a worker perspective as well as a systems approach' are included in developing medical workforce strategies[95].

1.2 AIMS OF THESIS

The aims of this Thesis are to:

- investigate qualitatively and in depth the experiences and viewpoints of medical students and recent medical graduates in Australia between the years of 2002 and 2005 relating to rural medical recruitment;
- investigate qualitatively and in depth the experiences and viewpoints of female rural general practitioners (GPs) in Australia between 1997 and 2001 relating to rural general practice retention;
- use this rich qualitative data to understand how place, professional and gender identity interact and influence medical students' and female rural GPs' location choice in Australia;
- and develop a model for understanding recruitment and retention of rural doctors in Australia, which incorporates concepts of place, gender, and professional identity and which could be used to develop strategies to address rural medical workforce shortages.

1.3 RESEARCH QUESTIONS

The research questions investigated in this Thesis were:

- What are the experiences and viewpoints of medical students and recent medical graduates in Australia between the years of 2002 and 2005 relating to their possible future entry into rural medical practice?
- What are the experiences and viewpoints of female rural general practitioners (GPs) in Australia between 1997 and 2001 relating to rural general practice and their intentions to stay in rural practice in the future?
- How are Australian medical students' and female general practitioners'
 perceptions of entering and remaining in a rural health career influenced by
 the constructs of place, gender and professional identity? Does this
 perception change as doctors progress through their careers from students
 to practising general practitioners?
- Can a model for understanding the recruitment and retention of rural doctors in Australia, which incorporates concepts of place, gender, and professional identity and which could be used to develop strategies to address rural medical workforce shortages, be developed?

1.4 How this thesis will bring a new approach to rural medical workforce research

This Thesis uses a case series of three research studies, which were part of a research program conducted over a nine-year period, to develop a model for understanding the recruitment of male and female doctors to rural practice and the retention of female rural GPs.

This research was undertaken using the theoretical approach of a social constructionist paradigm and mostly used an inductive approach, seeking to understand the experience of participants, rather than using a deductive approach that would test theories or prove or disprove hypotheses. This understanding of the experience of the participants forms the basis for a new model, which could be used to develop rural medical workforce strategies, and opens up new areas for future research. This approach is consistent with the

WHO's systems approach, both because it approaches rural medical workforce from a broad social perspective and also incorporates the views of workers into medical workforce research[95].

The studies from which the data for the Thesis were collected are:

- a two stage study on the perceptions and attitudes of medical students to rural medical practice, utilizing focus groups initially and then interviews with medical students and recent medical graduates over a three-year period from 2002 to 2005
- an exploratory study on female rural GPs in NSW and Western Australia, utilizing focus groups in 1997
- a second study on female rural GPs in NSW, utilizing in-depth interviews in 2001

By analysing the data from these studies at a deep thematic level a model, which incorporates the views of female rural GPs and medical students, will be developed in this Thesis. This model will be reviewed in the context of the literature to check for fit with current knowledge relating to rural medical recruitment and retention.

This Thesis will thus bring a new broader sociocultural approach to understanding rural medical workforce recruitment and retention, similar to the approach of Cutchin[25, 82], but because the research data was collected from women and medical students, it will be able to focus on the perspectives of groups of doctors who will comprise a large proportion of the Australian medical workforce in the future.

CHAPTER 2 LITERATURE REVIEW AND DEVELOPMENT OF THESIS AIMS

This Thesis shall cover a number of bodies of literature because this Thesis deals with several interrelated but separate social issues. These bodies of literature will provide the justification for the aims of the Thesis. Firstly, rural medical workforce shortages and the associated need to recruit and retain more doctors in rural areas shall be discussed. The three distinct bodies of literature on the quantitative research on rural medical recruitment and retention, the research on female rural GPs, and research on women in medicine shall then be explored. Then decision-making frameworks and models and the qualitative research on rural medical recruitment and retention shall be discussed. Finally, concepts of place, professional and gender identity shall be discussed in line with a more sociocultural approach to understanding rural medical workforce.

2.1 RURAL MEDICAL WORKFORCE SHORTAGES

For many years shortages of doctors and in particular general practitioners (GPs) in rural and remote areas have been recognized in Australia and internationally[2, 75, 101]. In a 2002 briefing paper for the World Health Organization (WHO), Zurn, Pos, Stilwell and Adams reported that 'in both industrialized and developing countries, urban areas almost invariably have a substantially higher concentration of physicians than rural areas'[102] (Page 29). This paper notes that although most doctors prefer to settle in urban areas, 'it is in rural and remote areas, especially in the developing countries that the most severe public health problems are found.'

In relation to rural general practice the World Organization of Family Doctors (WONCA) Working Party on Rural Practice noted in their Policy on Rural Practice and Rural Health in 1999 that 'there continues to be a worldwide shortage of general practitioners in rural and remote areas, and in particular doctors with the necessary skills and knowledge to work effectively in those areas. All countries have significant shortages of rural

doctors even those developed countries which have an overall oversupply of doctors.'[103](Page 1)

In Australia, rural medical workforce shortages have been reported for several decades[1, 2, 75, 104-107]. Johnson and Wilkinson investigated the distribution of GPs in Australia between 1986 and 1996 using a number of general practice workforce indicators and found that although the number of GPs per capita had increased between 1986 and 1996 their distribution became increasingly unequal and inequitable so that rural and remote areas became increasingly poorly served[2]. Similarly in the 2005 report 'The general practice workforce in Australia: supply and requirements to 2013', the Australian Medical Workforce Advisory Committee (AMWAC) reported that although there had been an overall increase in the numbers of GPs in Australia there was a continuing shortage of GPs in rural Australia on the basis of a number of indicators, including number of GPs per capita of population, hours worked by GPs, and the extent of Medicare services supplied by GPs per capita population[108]. In the 2005 report on General Practice, AMWAC reported that there were 4074 registered GPs practicing in rural and remote locations in Australia[108] This report showed that 29.6% of GPs in Australia work outside major cities, compared to 19.7% of specialists working outside major cities. Of the GPs working outside major cities, 17.3% worked in inner regional areas, 7.4% in outer regional areas, 1.4% in remote areas, and 0.8% in very remote areas. In 2002 the number of GPs per population was greater in major cities (125/100,000) than in rural areas (from 85 in outer regional areas to 102 in very remote areas), although there had been an increase in the proportion of GPs working in rural and remote areas from 22.7% in 1996 to 26.6% in 2002[108]. Looking at the geographical distribution of GPs in another way, the Australian Institute of Health and Welfare (AIHW) reported in 2005 that the supply of GPs in regional areas was 0.7 to 0.8 times the Major City rate, and the supply of GPs in remote areas was 0.65 to 0.75 times the Major city rate[109]. This report also suggested that the disparity between geographical areas may be even greater than suggested by these comparisons, as factors such as higher need of the population were not taken into account.

As in other countries, the shortage of rural GPs occurs in a context of poorer health status of rural populations than urban populations. In Australia, 34% of the population lives in rural and remote areas[110]. AMWAC noted in 2005: 'Australia's rural populations have poorer health outcomes than their metropolitan counterparts with respect to several health outcomes including mortality rates'[108]. Rural populations in Australia also have higher death rates due to cardiovascular disease, chronic obstructive pulmonary diseases, motor vehicle accidents, diabetes, other injuries and cancer[110] than urban populations.

It is of concern that rural populations continue to have poorer health outcomes than urban populations[111-113] while having poorer access to health care, and in particular general practice services, because of a relative shortage of GPs in rural areas[111, 114-116]. The medical workforce available in a particular area is determined partly by new doctors taking up practice in the area and by those already there staying or leaving. So for many years governments and health authorities have used strategies to recruit new doctors to rural areas and to retain those already there in order to improve access of rural populations to general practice services[1, 92, 117]. A broad range of strategies at all levels, including secondary school, medical undergraduate education, medical postgraduate education, communities, state and federal governments, have been developed to increase rural and remote medical workforce.

There is an extensive literature relating to the recruitment and retention of rural doctors both internationally and in Australia, with research on these issues having been undertaken for more than 30 years[3, 8, 17, 32, 33, 38, 43-46, 118-121]. With the feminisation of the medical workforce at the end of the 20th Century, some researchers have recently focused on rural recruitment and retention of female doctors[1, 122-126]. With generational change in attitudes towards work/life balance, some researchers have focused on medical students and recent medical graduates[16, 127-129].

Much of this literature looks at specific factors quantitatively. However quantitative research is by its very nature reductionist that is it needs to reduce issues to analysable factors. So when using only quantitative methods, it is difficult to encompass and effectively examine the

interacting complexities of rural recruitment and retention, including rural work and life, gender issues and professional issues relating to specific disciplines, and place issues. An approach using systems thinking which would be able to encompass these complexities and, which would allow mapping of rural recruitment and retention, is advocated by the WHO. The WHO report on 'Preparing a health care workforce for the 21st Century' states 'system-related analysis takes into account large numbers of interactions. This sometimes results in strikingly different conclusions than those generated by traditional forms of analysis, especially when what is being studied is dynamic, or complex'[130](Page 46). Some researchers have taken such an approach, for example Humphreys, Jones et al[8], developed a conceptual framework for understanding rural medical retention based on a review of the literature[8] and there is a need to build on their work further.

In addition to the literature on rural recruitment and retention there is an extensive literature on women in medicine. While more recent research has investigated female rural doctors, there are three distinct bodies of research—that on rural doctors, female rural doctors, and women in medicine—and even though there must inevitably be areas of overlap it is difficult to connect them because of the differing methodologies used and the different populations on which they have been undertaken.

In order to cover this complex literature, this chapter of the Thesis will briefly discuss: the quantitative rural recruitment and retention literature on both male and female doctors, issues relating specifically to female rural GPs, and issues relating to women in medicine more broadly. Although this may seem repetitive, it is appropriate that the initial discussion reflects the separate nature of each body of literature. I will then discuss the areas of overlap between these three bodies of work.

Following on from this discussion, I will discuss the qualitative research that has been done on rural medical recruitment and retention: conceptual frameworks relating to rural recruitment and retention; concepts of professional place and gender identity and, finally, the current gaps in the rural medical recruitment and retention literature.

2.2 DEFINING RURALITY, RECRUITMENT AND RETENTION

2.2.1 Rurality

In order to discuss the literature relating to rural medical workforce and to undertake my research, it was important to understand how researchers define rurality and whether their definitions are consistent. However, the diversity of rural areas, both in Australia and internationally, has created some difficulties in the development of a consistent definition of rurality in relation to health care[131, 132]. Health researchers and administrators have defined rurality in terms of sizes of towns[10, 29, 132], distances from various facilities[133], and/or population density[133].

In Australia, the Federal Government has developed three indices of rurality for use in resource allocation, health service delivery, as an indicator of health service need and for use in measuring health outcomes and health service utilization[133]. RRMA is the oldest classification and is based on population density and distance indices within Statistical Local Areas (SLAs). It classifies SLAs as metropolitan (M1 for 'capital cities', and M2 for 'other metropolitan areas'); rural (R1 for 'large rural centres'; R2 for 'small rural centres' and R3 for 'other rural centres'); and remote (Rem1 for remote centres, and Rem2 for other remote centres[133]. In contrast, the ARIA classification, which was developed in 1997, is a continuous index of remoteness with each location being assigned an index score between 0 and 12, based on the road distance from the closest services. ASGC remoteness classification was released in 2001 and is based on an enhanced measure for remoteness similar to ARIA, and categorising areas as 'major cities', 'inner regional', 'outer regional', 'remote' and 'very remote'. Health administrators and researchers have recognized that each of these indices have both strengths and weaknesses. For example, while the RRMA groupings of metropolitan, rural and remotes are fairly logical for areas of Australia, and RRMA is a relatively simple tool for administrators and researchers because all areas within an SLA are in the same category, it can at times be a blunt instrument. One difficulty is that areas within an SLA are sometimes heterogeneous and, as

such dissimilar communities are classified as the same [133]. Similar problems are encountered with ARIA, which differentiates between areas in terms of accessibility/remoteness and, while this is effective in distinguishing more remote areas from less remote areas, non remote areas that are classified as highly accessible include many very dissimilar areas (such as capital cities, metropolitan fringe areas, and regional rural centres all being in the highly accessible classification)[134]. The ASGC classification defines the least remote areas more tightly than ARIA but some of the problems that ARIA had in distinguishing between nonremote areas remain[133]. Humphreys noted in his review of current definitions of rurality that 'any classification of rural must ensure that people experiencing characteristics and problems of location and environment fall into similar categories'[131](Page 215). None of the currently available Australian indices of rurality are completely successful in relation to this issue. Most rural health researchers in Australia have used RRMA for defining rurality and degree of remoteness while recognizing its limitations, probably because it is the best of the current indices in terms of the similarities between the areas that fall into each category.

For the purposes of this Thesis, it was necessary to adopt a consistent definition of rurality in discussions with student participants about their location intentions, in defining student participants' background as rural or urban, in identifying female doctor participants as rural or remote GPs, and in discussing rural practice with the female GP participants. Recognizing the limitations of the currently available definitions of rurality, it was decided to use the RRMA index and definitions. In the case of the student research using RRMA it was relatively easy to describe how various areas were defined as rural to students. With the female rural doctor research the RRMA definitions of rural and remote correlated most consistently with the sort of medical practice undertaken in towns of various sizes. However it was decided to discuss any anomalies in relation to this index should they be identified in the analysis of the results, and to enhance this definition with discussion of health services at each location as appropriate.

2.2.2 Rural recruitment

While there is much discussion in the literature of strategies to recruit a GP to a rural area[11, 37, 46, 74, 135-138], details of what actually constitutes recruitment are rarely discussed. For example if a GP without procedural skills is recruited to a situation where a GP with procedural skills is really what is needed should a recruitment strategy be regarded as having been successful? Is a GP only truly recruited to work in a rural area if he/she buys a share in a private practice? So, there are issues such as community expectations, GP availability, and ownership of practice infrastructure that are relevant to GP recruitment and are appropriately discussed here.

Most communities would regard the recruitment of a doctor to their town, as entailing a new doctor working and living in the community and being available and able to meet the community's medical needs. For example, Humphreys discusses rural GP recruitment as the rural community having access to 'a GP with the appropriate skills, and an adequate understanding of health needs expectations of rural communities'[39](Page 942). It is now often necessary for communities to accept GPs who meet their health needs in a much more limited way than they have in the past, because of the difficulties in attracting GPs to particular situations, for example to solo practices. Dunbabin recently noted that 'the historical view of a male GP working tirelessly for his community is going out of focus'[139](Page 10). In this respect, the meaning of successful recruitment of a GP to a rural community could be seen as changing.

Another issue in rural GP recruitment that has become more important in recent years relates to the ownership of practices. NSW RDN reports that in Australia 'the most common way to recruit a GP is to identify an individual, provide them with incentives to set up a private business and to retain them for as long as possible.'[139] (Page 10). However, to some younger doctors and female doctors, the time and financial costs and commitment involved in practice ownership are a barrier to their recruitment to rural practice[139] and this had led to some organizations developing new general practice ownership entities[139, 140]. In the past, many doctors and rural community members considered the concept of

recruitment of a doctor to a rural community involved the doctor accepting practice ownership but, while the meaning of recruitment now still involves the GP taking up practice in a rural community, the way in which this happens currently appears to be undergoing a process of change in many cases.

2.2.3 Rural retention

Humphreys et al note in their review of rural medical workforce retention that there is no consistent definition of retention[38]. In this paper, the authors note that researchers differ in their approach to defining retention in relation to the area in which they are being retained. For example some researchers consider doctors who move from their original location but stay within a certain geographical area to be retained in rural practice[52]. However, Humphreys, et al state that 'most recognize that retention does not imply indefinite practice in one location. Rather retention refers to some minimum length of stay within a particular rural community,' (Page 93) Humphreys et al also note that retention can be seen as a measure of length of service and measured as survival rate.

Thus, most researchers define retention in terms of a minimum length of stay within a particular rural community. For example, Hays et al defined retention as the intention to stay in rural practice for two or more years[32], and Alexander as intention to stay in rural practice for five or more years[141]. In contrast, Kamien defined retention as staying for as long or longer than the doctor had intended[142].

Some researchers prefer to focus on medical workforce turnover, using separation rates of doctors as measure of turnover of doctors[141]. For example, Alexander discusses turnover rates of GPs in a rural region of Australia, contrasting them with turnover rates in rural areas of Australia as a whole[141].

Humphreys et al note that, 'recognising the diversity of rural and remote regions, the optimal length of service within communities may vary'[8]. In a payment system that provides funding to rural doctors in the form of incentives payments, the Australian government has recognized this diversity by providing differential loadings for differing remoteness in calculating retention payments[143]. Nevertheless, because administrators

and researchers in rural medical workforce research have not reached an agreed definition of optimal length of service in rural and remote communities, at times it can be difficult to compare various studies on rural medical workforce retention.

2.3 RURAL GENERAL PRACTITIONERS IN AUSTRALIA

In order to understand how to best recruit and retain GPs in rural areas, it is important to understand the demographic profile of those currently working in rural general practice, and trends that are affecting this demographic profile.

It is important to consider the sex of current rural GPs and trends that may affect the proportions of male and female rural GPs in the future because an increasing proportion of Australian medical graduates are female[144], and because of the preference of some people for a female GP[145]. While the number of female GPs has increased in recent years[144] the proportion of GPs who are female is mostly still smaller in rural and remote areas than in metropolitan areas in Australia[144].

The Australian GP workforce is also aging with 18.6% of rural and remote GPs being aged 55 and over[144]. Concern has been expressed by some health workforce researchers, based on Medicare data, about the effect that the impending retirement of older GPs will have on the provision of GP services[92].

In recent years, Australian health authorities and rural communities have depended heavily on international medical graduates (IMGs) to take up general practice positions in areas of medical workforce shortage. AMWAC reported in 2005 that reliable data on the numbers of IMGs in Australia was difficult to obtain, but that about 20% of the Australian medical workforce were thought to be IMGs with a large proportion of these doctors working in rural areas in areas of medical workforce shortages. This data indicates that IMGs currently play a vital role in providing health services to rural and remote communities in Australia.

The access of communities to health services depends not only on the number of GPs available but also on the GPs' patterns of work, for

example hours worked and types of services provided. The working conditions of rural GPs, in particular hours worked and time off from work, are likely to be increasingly important in the future recruitment of rural GPs with a changing gender balance of the medical workforce[92] and generational change in attitudes to hours of work[92].

Rural GPs work longer hours than urban GPs and are more likely to provide hospital services and procedural services than urban GPs[75, 106, 146]. Moreover female GPs in all geographical areas work less hours than male GPs[1, 92]. So it is likely that more doctors will be needed to provide the same level of service to communities in the future, because the future rural general practice workforce is likely to include more female doctors[92].

As well as rural doctors working longer hours than urban doctors, there is evidence from a number of studies that rural GPs both in Australia[5, 147-149] and overseas[1, 150] provide a wider range of services than their urban counterparts[1, 148] and that they manage a number of problems to a more complex level than urban GPs because of the lack of specialist availability[148, 149]. Humphreys et al found that 'the proportion of GPs providing complex services increases with increasing rurality or remoteness'[148](416) For example Humphreys et al noted that 'isolated rural and remote GPs manage myocardial infarctions to a higher level than GPs in larger rural and regional centres, are more likely to administer cytotoxic drugs, perform forensic examinations, stabilise injured patients pending retrieval, and coordinate discharge planning more often'[148](416). The fact that rural GP's take on a broader clinical role often managing problems, likely to be the responsibility of specialists in an urban area, also has implications for the numbers of GPs needed in rural areas to successfully respond to the health needs of rural Australians.

2.4 QUANTITATIVE RESEARCH ON THE RECRUITMENT OF RURAL DOCTORS

There is a large body of research on the recruitment of rural doctors that has been undertaken over a period of more than 30 years[21, 66, 75, 120, 151-154]. This research has mainly been considered in relation to rural workforce predictors, that is factors that are associated with doctors

taking up rural practice. Some researchers have also considered recruitment in relation to factors that potential rural medical recruits or doctors in rural practice indicate attract them to rural practice. The sheer number of factors which have been considered in relation to rural recruitment is an indication of the complexity of the issues involved[21, 66, 75, 120, 151-154]. In addition, the results of some studies appear contrasting (in some cases contradictory) – this is probably partly due to the difficulty inherent in conducting research on such a complex sociological problem. For example, the findings in relation to the effect of rural experience after childhood on entry into rural practice are inconsistent and at times conflicting [29, 43, 55, 61, 62, 74, 106, 155-158]. Part of the reason for this may be that it is difficult to take into account multiplicity of confounders when using quantitative methods such as case control studies. Adding to the complexity and difficulty of this research is the occurrence of social change in the medical profession and wider community over time, which is likely to affect the attitudes and intentions of medical graduates to rural practice.

2.4.1 Factors effecting rural recruitment

The factors examined in relation to rural recruitment in the medical workforce literature include characteristics of doctors or medical students and their families, work factors, and location factors.

For the purposes of this literature review I have grouped these factors as follows:

- rural background of doctors/students
- rural experience of doctors/students after childhood
- gender and age of doctors/students
- family and partner factors
- work factors
- location factors, such as lifestyle and social environment

The first four factors relate to the doctor and often have been regarded as rural workforce predictors.

The factors that have been identified as being important in attracting various subgroups of doctors and medical students to rural areas are summarised in Table 2:1.

Table 2:1 Factors identified as important in attracting subgroups of doctors and medical students to rural areas

Doctor or student characteristics	Positive aspects of rural practice	Negative aspects of rural practice
All doctors	Hospital access and varied practice[15, 69, 159]	Professional isolation[15, 160, 161]
		Long hrs of work[15, 160]
		Lack of locum availability[162]
Male doctors	Professional autonomy[15] Financial gain[15]	
Female doctors	Family and domestic needs able to be met[15, 163] Familiarity with community[69]	Family and domestic needs not able to be met[69] Ability to limit hours of work[69]
	Availability of facilities and support[69]	Lack of availability of facilities and support[69]
Younger agegroup doctors	Work conditions relating to quality of life[164] Family and social environment[164]	Lack of work conditions relating to quality of life[165]
All students	Country environment and relaxed lifestyle[166] Appreciation from patients[167] Less stress[166]	Lower income[167] After hours workload[166, 167] Lack of facilities[166, 167] Lack of professional support[166, 167]
Rural intent students	Supportive community[167] Sense of community[167] Opportunity for leadership in community[167]	
Urban intent students		Lower income,[167]
		Lack of community facilities/shopping,[167]
		Limited access to theatre/concerts[167]

2.4.1.1 Rural background

There is strong evidence from a large number of studies that have used a variety of different methodologies, both in Australia and internationally, that the rural background of a doctor is a predictor of rural practice(1-17)There is evidence that rural background medical students are more

likely to express rural intent than students with no rural background[56, 68, 168, 169]. There is also evidence from case control studies that rural doctors are between 2 and 4 times more likely to have a rural background than urban doctors[29, 61, 107, 168, 170] and, from retrospective longitudinal studies, that rural origin students are more likely to enter rural practice[58, 62, 171]. A number of cross sectional studies of rural doctors have also found that a high proportion of rural doctors have a rural background (ranging from 33% to 66%)[45, 122, 124].

Laven and Wilkinson[46] undertook a systematic review of the literature relating to rural practice and rural background in 2004 identifying that 'rural background was associated with rural practice in 10 of the 12 studies in which it was reported, with most odds ratios (OR) approximately 2-2.5′[46]. While it is clear that rural background is a strong predictor of a doctor entering rural practice, the research also shows that a number of doctors without a rural background enter rural practice[172],[171]. Thus, while rural background is clearly a key factor in the recruitment of rural doctors, there is a need to consider why urban background doctors also take up rural practice and research evidence relating to this is not as clear as the research evidence relating to rural background.

In one of the few qualitative studies undertaken in this case, Hays et al[34] found that rural background doctors had 'an emotional connection with, understanding of and commitment to the welfare of the rural community' (Page 174). However they do not provide detail on the nature of this relationship with rural community in their paper. Further qualitative research would assist in expanding on Hay's findings about the relationship between rural background doctors and rural communities.

2.4.1.2 Rural experience after childhood

The evidence relating to rural experience after childhood being a predictor of rural practice is not as convincing as the evidence relating to rural background, although it has been used as the basis for the development of a number of rural undergraduate programs[137, 173].

Most research shows that rural placements both at undergraduate level and at early post-graduate level have a short-term positive effect on the students' intention to take up rural practice. Some studies have shown that the majority of students who had undertaken a rural placement indicated an increased interest in rural practice at the completion of the placement[56, 76, 174], while some show no change in medical students' intentions in relation to rural practice after rural experience[175]. The researchers did not investigate the sustainability of the positive effect of the placements, because none of these studies included a longer-term evaluation.

Some longer-term studies on the influence of rural experience after childhood on rural intent have been undertaken but results are inconsistent, with some showing a positive influence of a rural attachment on intention to enter rural practice[106], and others showing no association[158]. These studies include research linking rural recruitment to various types of undergraduate training, and retrospective case control studies[74, 176, 177].

For example, a large study undertaken in 1991 in the USA showed variation in the percentage of graduates from different medical schools entering rural practice from 2.3% to 46% [62]. While this study showed a number of medical school factors were associated with a tendency to produce rural graduates and included location in a rural state, public ownership, production of family physicians, and smaller amounts of funding from the National Institutes of Health, there are difficulties in drawing any conclusions from these results in relation to the influence of undergraduate experience because students with an interest in rural practice prior to medical school entry may have chosen medical schools with particular characteristics.

A number of longer-term evaluations of rurally oriented undergraduate medical training programs have been undertaken[40, 50, 63, 178, 179]. These studies show that the majority of graduates of programs, which select students from a rural background, provide training in a rural environment and/or include significant rural placement in the training undertaken, enter rural practice. However, the positive outcomes of these programs could result from student factors (such as rural background of students or a pre-existing interest in rural practice), or aspects of the rural

orientation of the medical school (such as rural location or rural medical experience), or a combination of both.

A number of retrospective case control studies have also investigated whether rural GPs were more likely to have undertaken rural undergraduate placements or rural postgraduate training than urban doctors[29, 61, 74, 75]. The results of these studies have been variable. Some studies found differences between doctors with rural experience after childhood and those without, which were not statistically significant[29, 75], and others found no difference. Other studies have found an association between doctors undertaking rural placements, either during undergraduate or postgraduate years, and eventual rural practice but have not collected data on whether the interest in rural practice predated the rural placement[61]. In a recent Australian study Wilkinson found that rural GPs were more likely to report having had rural undergraduate training than were urban GPs, and much more likely to report having had rural postgraduate training [74]. He also found that 'as the duration of rural postgraduate training increased so did the likelihood of working as a rural GP' (Page 813). Nevertheless it is unclear whether the association between rural practice and rural experience in either undergraduate or postgraduate years is a cause-effect relationship, because this work does not report on whether these rural placements were compulsory or elective, and again there may have been self selection into these placements by students and doctors already interested in rural practice.

A study undertaken in the US in 1989 showed that 40% of doctors had moved less than 75 miles[28], with the location of postgraduate experience being related to the site of longer-term practice for these doctors. Again the sequence of events is unclear. Did the doctors undertake postgraduate training in an area where they intended to practice or were they influenced to practice in a particular area by undertaking postgraduate training?

In a qualitative project, Hays et al found[34] that while early post graduate work in a non metropolitan area was rated as an important influence on

the decision to enter rural practice, the study participants did not appear to see undergraduate rural exposure as important.

Thus, in relation to the influence of rural undergraduate exposure on rural career choice the research evidence remains far from clear. There is evidence that rural placements have a positive short term effect on interest in a rural career[56, 106, 174, 180], but little research has been undertaken to establish how long this interest is sustained. Similarly while there is a demonstrated association between rural undergraduate and/or postgraduate experience and rural practice, it is unclear whether rural interest existed before the rural placement and whether the rural placement initiated and/or reinforced the intention to enter rural practice.

Qualitative research would be valuable in relation to this issue because qualitative data would provide a way to explore with students/doctors the sequence of events in relation to their developing an interest in rural practice; what, if any, aspects of rural experience influenced their interest in rural practice; and the processes involved in their coming to the decision to enter rural practice.

2.4.1.3 Sex and age

Various approaches have been employed to investigate the relationship between sex and uptake of rural practice. For example, some studies have investigated sex differences in medical students' interest in rural practice. A recent cross-sectional survey of first-year medical students did not identify any sex differences in the students' perceptions of barriers to their entering rural practice or expected benefits from working in rural practice[168]. Longitudinal research into consistency and changes in students' attitudes over a period of time would be needed to determine the significance of this finding in relation to rural recruitment.

Other studies have retrospectively investigated differences in the factors that influenced male and female doctors to enter rural practice[7, 107]. In 1997-98 AMWAC[7, 122] investigated the career paths of both male and female doctors, collecting qualitative and quantitative data relating to their career progression. This study showed that for women working in rural areas, the most common reason for doing so was their partner's job, while for men the most common reason for doing so was having grown

up in a rural area. Studies by Wise et al[75] and McEwin[122], also showed the importance of the partner's employment in influencing the practice location of female doctors. Some studies have considered sex differences in the social and professional priorities of rural doctors; for example, Shanley's study on RACGP general practice registrars[15] showed that more men than women indicated that a desire for autonomy and financial gain had influenced their career decisions while more women rated family and domestic circumstances more highly.

The age of the doctor at the time of the decision to enter rural practice may also be important and, with the increased number of graduate medical courses in Australia, this factor needs to be considered in relation to rural recruitment. For example, studies comparing the attitudes of younger and older doctors to work, and the working hours of younger and older doctors show evidence of generational change [181]. The National Rural General Practice Study[182] showed that younger doctors had higher ratings for the importance of work conditions in relation to quality of life issues than older doctors, and younger doctors had more emphasis on family and social environment in satisfaction profiles. There is also evidence that the working patterns of some young male doctors are changing[15, 122, 183], with less working full time throughout their careers than in the past[183]. It is possible that the relative absence of gender differences in the students attitudes, compared to the gender differences detected in studies on rural doctors, reflects generational change, and that the attitudes of a younger generation of men to a range of social and professional issues are now more closely approaching the attitudes of women in both their own generation and the previous generation.

Qualitative research exploring these issues would provide a greater understanding of the attitudes of younger doctors, both male and female, to working conditions, and how these attitudes influence the location choices of these doctors.

2.4.1.4 Partner/spouse and family factors

As discussed already, a number of studies have identified the importance of the doctor's spouse in influencing his/her location choice, particularly

female medical practitioners[75, 122]. For example, in McEwin's study 38% of female rural doctors indicated that they had chosen rural practice because it was their spouse's choice, compared to 2% of male rural doctors[122]. Studies analysing the rural background of rural doctors' partners[124, 182, 184] have found that this factor is a significant predictor of rural practice.

Several studies have asked medical students or recent medical graduates about the importance of family in relation to their choice of location, and have found spouse's/partner's views to be important in relation to location choice[15, 66, 168, 185], and in some cases a barrier to rural practice[66, 185].

While there is evidence of the importance of family in relation to doctors' location decisions, there has been little research investigating the processes involved in doctors assessing the relative importance of family issues and work issues in their decisions- again qualitative research methods and investigation would be suitable and valuable to exploring such issues.

2.4.1.5 Work factors

A number of studies have identified factors relating to the nature of work in rural areas and the rural work environment as being important in rural medical recruitment. Work factors which attract doctors to rural practice include variety and interest of the work, and positive relationships with patients[15, 69], while excessive demands of work and lack of professional support have been identified as deterrents[15, 16, 69, 83].

Studies investigating medical students' attitudes to rural practice have found students were concerned about lower income [68], lack of facilities, after hours workload [68, 168], and a lack of professional support [68, 168] associated with rural practice and were attracted to rural practice by greater patient appreciation and less work pressure and stress.

Other studies retrospectively investigating factors which rural doctors had found attractive about rural practice, and which had influenced their decision to choose rural practice, identified hospital access/care of acutely ill patients and varied practice as important in attracting GPs[107, 168], and

professional autonomy and available medical infrastructure as important in attracting specialists[186]. Professional isolation, long working hours, lack of locum relief and inadequate remuneration were identified as deterrents to rural practice for specialists.[186]

Some research has shown there are sex differences in the aspects of work regarded as important to rural doctors, and the relative importance of work and family issues to rural doctors. In a Canadian study in 2001 Szafran et al found that male rural doctors ranked type of practice as having the most influence on practice location in contrast to female doctors, who ranked spousal influence as being most important in this regard[69]. They also found that 'more female than male physicians identified working hours, familiarity with the medical community or resources, and availability of support facilities and personnel as having a moderate or major influence on their decisions.'[69]. Research investigating doctors' perceptions of incentives schemes and their influence on doctors' choice of practice location has identified financial incentives[187, 188], limiting hours of work[83], and consideration of options for partners and children[83] as rural practice incentives.

2.4.1.6 Location factors such as available lifestyle and social environment

Some studies investigating the future location preferences of medical students or recent medical graduates have found that location factors such as belonging to a rural community and accessibility to certain facilities were a high priority for respondents[68].

In Somers' study[68] students with rural intent scored various factors differently from students with urban intent; for example, a supportive community, a sense of community, and having a lead role in the community were scored highly by those with rural intent, whereas income, community facilities/shopping, and access to theatre/concerts were scored highly by students with urban intent. This study would seem to indicate that the priorities and values of students with rural intent differ from those of students with urban intent.

Other studies have investigated the importance of factors such as available lifestyle and social environment to currently practising rural doctors in relation to their career choices. Several studies have identified the country environment/relaxed lifestyle as an important factor in their choice of rural practice[120, 122],[15, 73].

2.5 QUANTITATIVE RESEARCH ON THE RETENTION OF RURAL DOCTORS

The literature on retention of doctors in rural areas has mainly considered retention in terms of incentives and disincentives for doctors to remain in rural practice, with some researchers investigating the characteristics of doctors who remain in rural practice for lengthy periods. A few studies have investigated doctors who decide to stay in rural practice or leave rural practice asking them the reasons for their decisions[32, 33, 47, 141, 142].

2.5.1 Incentives and disincentives for GPs to stay in rural practice

As with rural recruitment, the number of factors identified as effecting rural retention provides an indication of the complexity of the issues involved in the doctor's decision to stay in rural practice or leave rural practice. A number of incentives and disincentives to stay in rural practice have been reported in the literature over a long period of time. These incentives and disincentives relate to: professional factors such as workload and after hours work[8, 33, 38, 52, 64, 84, 85, 142, 153, 154], nature of the work[33, 38, 85, 142, 189], relationships with the local community[33, 52, 66, 85, 87, 152], income,[85, 189] professional support[38, 52, 64, 142], professional autonomy[189, 190], and relationships with health services[47, 142]; and personal factors such as lifestyle available at a rural/urban location[38, 120, 154], availability of work or educational opportunities for families[33, 48, 87, 154], and relationships with the local community[33, 85, 87, 152]. Humphreys et al noted in reporting a study on rural medical retention conducted in 2001 that 'retention factors varied according to geographical location and GPs'

age, sex, family status, length of time in the practice, and hospital duties'[38].

Taking an approach similar to that of other researchers for the purposes of this literature review I shall discuss these factors as positive and negative aspects of rural practice and positive and negative aspects of rural life. The factors that have been identified are summarized in Table 2:2.

Table 2:2 Results of literature review: Summary of positive and negative aspects of rural life and practice identified by rural doctors

	Positive aspects of rural practice	Negative aspects of rural practice
Professional issues	Variety of work[142, 191- 193]	Excessive work load and on call work[85, 192, 193]
	Relationships with patients[85, 191]	Difficulty accessing locums[17, 192, 193]
	Professional autonomy[17]	Remuneration[159, 194]
	Financial issues[17]	Professional isolation[192, 193, 195]
		Community expectations relating to availability as a doctor[193]
		Lack of easily accessible CPD[17, 192, 193]
Personal issues	Rural lifestyle[142, 159, 191, 195]	Limited career opportunities for spouses/partners[142, 159]
	Rural community relationships[191, 195]	Limited educational opportunities for children[193, 195]
	Opportunities for family[142, 195]	Lack of anonymity[195]
		Social isolation[193]

2.5.2 Positive aspects of rural practice

2.5.2.1 Professional aspects

Variety of work and ability to provide hospital care and practice procedural medicine

The professional incentives to stay in rural practice reported in various studies include: interesting varied work[33, 38, 52, 142, 190]; the

opportunity to practice a broad range of general practice including emergency medicine and procedural medicine[38, 196]; the opportunity to use a wide range of skills[182]; the ability to provide inpatient care and access to hospital facilities[182].

Relationships with patients

A number of studies also found that rural GPs valued the strong relationships they had with their patients and communities[33, 66, 85], and that some valued the ability to provide a degree of continuity of care for their patients[33, 182]. Scammon noted that 'the key rewards from rural practice are the ability to become integrated into the local community and the provider/patient relationships that develop in such settings'[66].

Professional autonomy

Professional autonomy and a sense of professional independence have also been identified as factors affecting rural retention in Australia[17, 182].

2.5.2.2 Personal aspects

Rural lifestyle

Some studies have found that rural doctors enjoyed the rural lifestyle[32, 33, 120, 142]. Physical attractiveness of the area, and the availability of suitable housing can also be important in rural medical workforce retention[182]}.

Rural community relationships

A number of studies also found that rural doctors spoke about valuing their close relationship with the local community[32, 33, 152].

Opportunities for family

While some rural doctors had concerns about the availability of secondary and tertiary educational opportunities for children, some studies have found that rural doctors felt that the lifestyle and primary schooling was better for younger children in a rural environment compared to an urban environment[32]. Kamien also found that some of the doctors who stayed

in rural areas felt their family was settled there or that their spouse did not want to move away[142].

2.5.3 Negative aspects of rural practice

2.5.3.1 Professional problems

Excessive workload and after hours work

Excessive workload related to both hours on call and excessive patient numbers[1, 38, 64, 153, 190, 197, 198]. A number of studies showed that rural GPs had a higher patient contact rate per week than urban GPs[1], as well as working more hours on call after hours[1, 199].

Many studies on rural GPs have identified excessive working hours (including after hours work, long hours of work and lack of holidays) as a disadvantage of rural practice[38, 106, 107, 153, 190, 197-199],[75, 200]. The number of hours worked each week was amongst the factors identified as most important to their quality of life by respondents to the 1997 National Rural General Practice Study[182]. Humphrey's recent national study found that rural doctors consistently ranked after hours work and on call arrangements as being the most important factor effecting their retention in rural practice[38]. Researchers have made similar findings in New Zealand[127] and Canada[64] in relation to the importance of hours of work for retention of GPs in rural practice.

Difficulty accessing suitable locums

Poor availability of locums affected the rural doctors' ability to take time away from work for CME, personal reasons and leisure[17, 172, 201, 202], and was seen by rural doctors to be a major disadvantage of rural practice. Humphrey's study found professional support including locum support to be one of the top three factors effecting retention[38].

Remuneration

Rural doctors in some Australian research have not identified remuneration as being of great importance, but some rural doctors have indicated that it could be used as an incentive for retention. For example, while respondents to the National Rural General Practice study did not indicate remuneration was a problem for them, they included increased financial reward for isolated rural practice as a suggestion for improving recruitment to rural practice[182]. More recently, the Rural Doctors' Association of Australia conducted a large national study on the economic viability of rural general practice and concluded that 'based on the evidence of greater complexity (and associated increased costs) within rural and remote practice, appropriate differential fee for service arrangements should be implemented'[194].

Professional isolation

A number of researchers have identified professional isolation as a problem for rural doctors in particularly those working in remote communities and in solo practice[32, 75, 200]. For example, Humphreys et al found that professional support including support from colleagues and specialists was a highly ranked factor effecting rural GP retention[38].

Community expectations relating to availability as a doctor

In his 1987 study, Kamien found that some doctors had difficulties with demands for informal consultations in social situations and their community's expectations that they would always be available to provide medical advice[106]. Similarly Hays found that some doctors had problems with lack of anonymity 'contributing to a feeling that it is difficult to be not at work'[32].

2.5.3.2 Social support and social relationships

Limited career opportunities for spouses

Some studies found that spouse employment was a problem for some rural doctors[66, 107, 154]. However, this varied with the area in which the study was done and when the study was done. While earlier studies found this was less of a problem for the mainly male respondents[106], more recent studies have found that the increasing numbers of female respondents and younger male doctors have regarded this problem as being quite important[15, 16, 69]. For example, in the National Rural General Practice Study in 1997, Strasser et al found that there was a

significant difference in the intended length of stay between doctors who felt there were good opportunities for their partners and those who felt there were not[182].

Limited educational opportunities for children

A number of studies identified limited educational opportunities for children as a disadvantage of rural practice[1, 152, 154, 200, 203], Researchers have found that in smaller rural towns children often needed to leave home for education[106, 107], but that some parents sent their children to boarding school reluctantly[33].

Lack of anonymity

Lack of anonymity and privacy issues were also identified as being important issues for rural GPs in a few studies. Strasser found that doctors in smaller towns identified being a 'big fish in a small pond' as a problem[107], and Kamien and Hays et al found lack of privacy was a problem for both doctors and their wives[32, 106].

Social isolation

While Kamien found that a few respondents to his study had difficulty finding other professional people with whom to have social relationships in their communities[106], this was not identified as a problem in most studies on rural doctors[75, 107, 120].

Lack of easily accessible CPD

A number of studies undertaken in the 1980s and early 1990s found that difficulty accessing CPD or Continuing Medical Education(CME) was a problem for many rural doctors[1, 5, 17, 66, 200, 204, 205]. Wise, Hays et al found that the majority of rural doctors did not think they spent sufficient time on CME to satisfy either their intellectual or practice needs[75]. The barriers to accessing CME were lack of time, lack of availability of locums to attend CME activities, and lack of suitable locally accessible CME[75]. However, in the 1997 National Rural General Practice Study there was a high degree of satisfaction with availability of CME, while in the period 1987-1991 poor access to appropriate CME had been identified as a

negative aspect of rural practice[182]. This probably indicates that strategies to provide rural doctors with better access to CME were proving effective.

This section of the literature review shows that there are a myriad of factors which influence rural recruitment and that there is a need for qualitative research to tease out how these factors interact in relation to rural retention and the processes which occur as doctors work out their priorities in relation to various aspects of their lives and work.

2.6 FEMALE RURAL DOCTORS

This section of the Thesis will discuss research concerning female rural doctors. Although there is some overlap with the research on rural doctors as a whole group, there is a body of research that has been undertaken over the last 10 years that focuses specifically on female rural doctors, and which is distinct from the general research on rural doctors. This research on female rural GPs is important as background to this Thesis, as a significant part of the Thesis focuses on the perceptions of female rural GPs

Much of the research on rural doctors prior to the late 1990s did not include an analysis of sex differences, usually because the numbers of female rural doctors were small and differences would not have been statistically significant. Male doctors had always outnumbered female doctors in the past, but by the 1990s about 50% of medical students in Australia were women and concern was being expressed about their future participation in the medical workforce[7, 14], The reason for this concern was that female doctors' patterns of work differed from male doctors patterns of work with periods out of the workforce for childbearing and a tendency to work less hours overall than males. There was also concern about possible affects on rural medical workforce because of a tendency for female doctors to remain in urban areas after graduation.

Wise, Hays et al[75] undertook a sex analysis in their 1992 study and found that female rural GPs were statistically significantly more likely to have lower professional status and less training and confidence in a range of procedures than male rural GPs, and that they had problems in relation

to partner employment, access to continuing medical education and work satisfaction. In 1996 Rourke et al reviewed the international literature on rural doctors and female doctors and discussed the implications of the combination of a doctor being both rural and female, but this was not based on research specifically on female rural doctors[206]. Thus until 1996 the data in most studies were reported as aggregate data, and studies investigating the needs of female rural GPs, specifically, had not been undertaken.

From the qualitative study on female rural GPs[126], which I undertook in 1996, a number of new issues, which had not previously been identified in the research done on rural doctors, arose. After this time, most of the research undertaken on rural general practice included an analysis of sex differences and a number of new research projects investigated the needs of female rural doctors specifically. Specific studies on female rural doctors included a NSW study undertaken by McEwin at NSW Rural Doctors Network (NSW RDN)[122], a Victorian study by Wainer et al at Rural Workforce Agency of Victoria (RWAV)[123], a national study by Doyle at Australian Rural and Remote Workforce Agencies Group (ARRWAG)[125], a national study by Wainer et al at Monash University[207], and a national qualitative study by Tolhurst and Lippert at the University of Newcastle[124]. McEwin's study and Wainer's Victorian study were undertaken using the same questionnaire in NSW and Victoria, and their results were reported separately. Doyle's study includes McEwin's and Wainer's data, but also includes data collected from the Rural Workforce Agencies in Queensland, WA, Tasmania, SA and the NT, so there is some overlap between the data reported in McEwin's, Wainer's and Doyle's studies.

Thus the findings of the first study on female rural doctors, which I undertook in 1996[126], influenced the development of a number of new studies that specifically focused on the perspective of female rural doctors. This initial study was analysed descriptively only at the time it was undertaken, but in this Thesis this study is analysed at a deeper thematic level with subsequent research on female rural GPs. The importance of this study is indicated by the number of publications in which it is cited[7, 14, 122, 125, 207-210] which include research on the retention of female

rural doctors[7, 14, 89, 122, 125], female GP registrars[208, 209], and the psychological well being of rural doctors[210], and research undertaken by various medical organisations including AMWAC[7, 14], NSW RDN, RWAV and ARRWAG[122, 123, 125].

These differences shall be discussed in detail in sections 2.6.1 and 2.6.2

2.6.1 Distribution and demographics of female rural doctors

As discussed already, the role of female doctors in the rural medical workforce is becoming increasingly important with feminisation of the medical workforce as a whole. Therefore, the current distribution and demographics of female rural doctors will be discussed here as part of the background to the research undertaken for this Thesis.

The differences between the demographics, family responsibilities and work patterns of male and female rural GPs are summarised in Table 2:3.

Table 2:3 Difference in demographic characteristics of female and male rural GPs

	Female rural GPs	Male rural GPs
Married/have long term partners	83-88% [123, 125, 163]	91% [163]
Dependent children	62% [125, 211]	64% [211]
Responsible for all or most of child care	58% [211]	8% [211]
Responsible for care of extended family eg parents	17% [211]	13% [211]
Work part-time	52-63% [123, 163]	11% [163]
Provide after hours services	62-71% [123, 125, 163]	85-94% [123]
Salaried	27-29 % [123]	Data not available
Practice principals	Approximately 50% [123]	Data not available
Provide emergency services	33% [211]	65% [211]
Provide obstetric services	13% [211]	30% [211]
Provide anaesthetic services	5% [211]	13% [211]
Proportion of their time which doctor estimates he/she spends on women's health, mental health and counselling	Two-thirds [211]	Half [211]

There is evidence both in Australia and overseas that female doctors are less likely than male doctors to work in rural areas[7, 14, 20, 106, 146, 198, Rowe, #184, 212, 213]. However, AMWAC research now shows evidence of an increasing proportion of female GPs in the rural medical workforce[1]. Recent research has shown that that on average female doctors in rural and remote areas are younger than male doctors[123, 214], with ARRWAG finding in 2002 that 65% of female rural doctors were under the age of 45 compared to 43% of male rural doctors[214]. The majority of female rural GPs in Australia are married or have long term partners, with figures varying in different studies from 83% to 88%[122, 123, 125]. A significant proportion of female rural GPs are married to other doctors (25-42%) and about 10% are married to farmers, with the majority of the remainder being married to other professional men[122, 123, 125].

The majority of female rural GPs have children, with 75% of the female rural GP respondents to the ARRWAG survey having between one and

four children[125]. Similarly, 62% of female GP respondents and 64% of male respondents to Wainer's national study had dependent children living with them who required daily support[207]. While 58% of the women in this study had all or most of the responsibility for the care of children, only 8% of men had all or most of the responsibility for the care of children. However, 75% of men and 40% of women said they shared the responsibility for children. Wainer commented that this shows 'a substantial difference in world-view about who is doing the work'.

Wainer et al found that 17% of women and 13% of men said they were caring for parents, with some also caring for siblings or other family members[207]. Unlike the care of children, where women reported having most of the responsibility, care for other family members was mostly shared rather than the doctors reporting having all or most of the responsibility for them[207].

2.6.2 Work patterns of female rural doctors

As already discussed, the work patterns of female rural doctors differ from those of male rural doctors. It is important to understand the differences in relation to matching medical service needs of rural communities with GP workforce availability, and also in relation to recruitment and retention strategies for female doctors whose preferences for various types of employment and practice structures may differ from those of male doctors.

2.6.2.1 Workforce participation and hours of work

Full time and part-time work

Although the definition of part-time work in medicine is not consistent (varying from less than 35 hours to less than 50 hours per week), all research shows that, like female doctors in urban areas, female rural doctors are more likely than male doctors to work part-time[1, 7, 14, 122, 123], with percentages of female rural doctors working part-time varying from 52 to 63% in various studies (compared to 11% of male GPs in McEwin's study)[122]. In their national study, Wainer et al recognized that the working hours of doctors is a complex issue, with scheduled hours of work often not equating with actual hours worked and with total hours of

work actually including both clinical and non clinical work and work in the practice and in the community[207]. After calculating time spent in all aspects of work and caring for family, they concluded that 'caring for family members leads to a reduction in clinical working hours of 20% for women, but makes no apparent difference for men'.

On call work

A number of studies have asked rural doctors about hours spent on call. The proportion of female rural doctors providing after hours services varied from 62% to 71% in different studies, compared to 85 to 94% of male rural GPs[122, 123, 125, 215]. Some of this difference relates to the responsibility for children as shown by the finding in Wainer's Victorian study that 78% of women without responsibility for children provided on call services, compared to 45% of those with responsibility for children[123].

2.6.2.2 Practice characteristics

Type of employment

Some of the research findings relating to the type of employment of female rural doctors are difficult to compare because of the variety of ways of defining practice associates, principals, and contractors. However, a significant proportion (27-29%) are salaried[123, 125], with some being practice contractors and assistants earning a percentage of their practice income[125]}. Wainer found in the Victorian study that more than half of the female GP respondents were practice principals[123]. This compares to 70% of GPs in the Rural Doctors Association of Australia Viable Models Project, in which the researchers also reported that female rural GPs were more likely to be salaried or contracted, and less likely to be practice principals.

Work content and practice style

Hospital work

In the national study, Wainer et al found that women were less likely than men to provide emergency services (33% and 65%), obstetric services

(13% and 30%), and anaesthetics (5% and 23%)[89, 215]. Exploring the reasons why rural doctors did or did not provide hospital services, Wainer et al found that 61% of women and 35% of men did not want to provide hospital services, while the hospital was too far away for 20% of women and 32% of men[207].

Domains of practice

In the past researchers have found differences between the work content and 'domains of practice' of male and female GPs, with female GPs managing more female-specific, endocrine, general, and psychosocial problems even after multivariate adjustment[216]. However, research had not been done on whether these differences are consistent in different geographical areas until Wainer et al investigated them in their national study in 2004 by asking about the proportion of their time spent on each domain[207]. They found that female rural GPs estimated that they spent two thirds of their time providing women's health, mental health and counselling services, while male doctors estimated that they spent half their time on these areas.

2.6.2.3 In summary

In summary, female rural doctors are less likely than male rural doctors to be practice principals, more likely to be salaried or working on contract, more likely to work part-time, less likely to provide emergency services, obstetric, anaesthetic or surgical services, and likely to provide more women's health, mental health and counselling services than male rural doctors.

2.6.3 Female rural doctors' perceptions of advantages and disadvantages of rural practice

A review of recent literature found that, while there are a number of issues relating to the advantages and disadvantages which both male and female rural GPs regard as important, the level of importance of some issues differs for male and female[122, 125, 182, 207, 215]. For example, both male and female rural GPs see long hours of work and limited educational opportunities for their children as negative aspects of rural practice. However, women were much more likely to be concerned about

work opportunities for their partners and social isolation than men. They were more likely to be attracted to rural practice by opportunities to practice preventive medicine and public health than men[182], and were more likely than men to be attracted to rural practice by the rural lifestyle rather than the work opportunities[122]. Issues women identified and men did not refer to included the availability of flexible work opportunities[122, 125, 215], role conflict[125], personal safety[122, 125], discrimination against them by male colleagues[125], and community expectations of them as women[122].

These issues are summarised in Table 2:4.

Table 2:4 Summary of literature review: Personal and professional issues identified by female rural doctors.

	Positive aspects of rural practice	Negative aspects of rural practice
Professional aspects	Variety of work[123, 125, 163]	Excessive work load and on call work[125, 163]
	Relationships with patients[125]	Balancing work and family: role conflict[123, 125, 163]
		Lack of flexible work opportunities[125, 163]
		Difficulty accessing locums[125, 163]
		Remuneration[125]
		Professional isolation[125, 163]
		Discrimination from male colleagues[125, 163]
		Personal safety[217]
Personal aspects	Rural lifestyle[125, 163]	Limited career opportunities for spouses/partners[123, 125, 163]
	Opportunities for family[123, 125]	Limited educational opportunities for children[163]
		Availability of childcare[125, 163]
		Lack of anonymity[125]
		Social isolation[125, 163]
		Community expectations of them as women[163]

2.6.3.1 Advantages

Positive aspects of rural work

Variety of work

Like male GPs many female GPs are attracted to rural practice by the variety of work available[122, 123, 125, 182]. For example, Doyle found that 37% of female GPs had chosen rural practice because it offered variety, continuity of care, autonomy, and the opportunity to practice procedural medicine[125]. However, McEwin found that less female GPs (38%) chose rural practice because of attraction to more interesting and challenging work than male GPs (53%)[122]. Similarly, in the 1997 National rural general practice study[182]; Strasser et al found that more female than male doctors rated using a wide range of skills and inpatient care and access to hospital facilities as not very important to their quality of life, and that more females than males rated practicing public health and preventative medicine as very important. In the satisfaction profiles, they found an emphasis on non-clinical work in the female doctor profile that was not present in the male doctor profile. Wainer et al [207] found that providing emergency care to their community was negatively but not significantly associated with satisfaction with rural practice for women, and positively and nearly significantly associated with satisfaction for men. This suggests that, while female GPs are attracted to rural practice by the variety of work available, some have interests in terms of the content and nature of the work that attracts them, which differ from those of male GPs.

Patient relationships

'Closer patient relationships' were reported by Doyle as the reason for choosing rural practice by one respondent, her report does not mention its relative importance for her other respondents[125]; Strasser et al concluded in the National Rural General Practice study report that 'women seem to have a preference for holistic, preventive and community based medicine'

Positive aspects of rural life

Rural lifestyle

Lifestyle was the main reason cited by female doctors for choosing rural practice[125]. While McEwin found that 47% of male and 47% of female rural GPs cited lifestyle as their reason for entering rural practice, more male GPs said attraction to rural work (53%) was their reason for entering rural practice than lifestyle (47%)[122].

Rural community relationships

Rural community relationships were not identified as a positive aspect of rural life in Doyle's, Wainer's or McEwin's studies[122]. Wainer et al[207] investigated various strategies rural doctors use to make rural practice work for them and found that men, who were able to 'make the community your own', were 15% more likely to be content with life as a rural doctor than men who were not. However, for women this had a non significant negative effect on contentment.[207]

Opportunities for family

Partner's choice was identified as a major reason for choosing rural practice[122, 125] for 29-38% of female GPs and was the second most common reason for choosing rural practice. This compared to 2% of male rural GPs citing partner's choice as their main reason for choosing rural practice in McEwin's study[122].

2.6.3.2 Disadvantages

Negative aspects of rural work

Excessive workload and after hours work

Female rural GPs appear to be more likely to be satisfied with their hours of work than male rural GPs (56% satisfied compared to 36% of males)[122]. However, a significant proportion of them feel pressured to work more hours than would be their preference (41% of females indicating they would prefer fewer hours compared to 62% of males)[122] because of patient demand, workforce shortages, and financial

considerations[125]. It is possible that women are more satisfied with their hours of work because they more often work part-time and are not subject to the same demands on their time as a full time doctor.

Balancing work and family: role conflict

Role conflict was a major issue for female rural doctors and was reported in all studies[122, 125, 215] by up to 36% of respondents. In contrast, McEwin reports that 18% of men spoke of pressure on family life but did not mention role conflict. There may be a real difference between the way men and women spoke about the conflict between work and family life. However, it is possible that the difference was related to differences in the methods used because there could be some overlap in the meaning of 'pressure on family life' and 'role conflict', but details of how these categories were determined were not provided in this report[122]. Both family life and working conditions contribute to role conflict. Wainer et al explored this issue, finding that being in a marriage-like relationship contributed positively to women's contentment with rural life but negatively to their satisfaction with rural practice[207]. They suggested that 'having a life partner makes professional practice more difficult for women but improves the general quality of life, probably related to role strain and domestic work'[207].

Lack of flexible work opportunities

Lack of flexible work opportunities was reported as a major issue for 31% of McEwin's female GP respondents and 25% of Doyle's[122, 125]. In the national study conducted by Wainer et al[207], GPs were asked about strategies they had used to make rural practice work for them. Seventynine percent of females and 68% of males said they had been able to do this, with the majority of both men and women giving flexible work the number one ranking of the specific strategy that had worked best for them. Thus it appears that many females were able to structure their practice to provide flexible working hours and this makes rural practice more sustainable for them, but for those who do not have the opportunity to work flexible hours this is a major issue.

Difficulty accessing suitable locums

In an analysis of data from open-ended questions McEwin found that 14% of female GPs and 19% of males mentioned locum availability as a major issue facing rural GPs. In Doyle's study locum services received the lowest ranking relative to other major issues[122, 125].

Remuneration

McEwin found that female GPs did not identify remuneration as a major issue, while 29% of male GPs identified remuneration as a major issue[122]. However, some female GPs in Doyle's study[125] identified remuneration for rural practice, negotiation for equitable conditions, equitable salary as a private practitioner, and inadequate remuneration for long consultations for female health and counselling as important issues.

Professional isolation

Forty-two percent of female GPs and 19% of male GPs in McEwin's study mentioned professional isolation as a major issue[122] and, similarly, 38% of female GPs mentioned this in Doyle's study[125]. This is consistent with the findings of the National Rural General Practice study, which found that there was an emphasis on peer support in female doctor priority profiles compared to male doctor profiles where there was no such emphasis[182]}.

Discrimination from male colleagues

The issue of discrimination from male colleagues was identified as a major issue by 18% of McEwin's respondents[122]. Similarly, Doyle reports 15% of respondents referring to 'attitudes to female GPs' as a major issue[125], and Wainer reports lack of support from male colleagues being a major issue for some of her respondents[123].

Personal safety

Personal safety was identified as an important issue by 10% of Doyle's respondents but was not identified by McEwin's[122] and Wainer's respondents. In a 1998 survey of rural GPs about their experience of work

related violence in three geographical areas of Australia, Tolhurst et al found significant gender differences in relation to apprehension about violence, with women being more often apprehensive than men and more likely to withdraw after hours services[218]. This study showed that women were less likely than men to provide after hours consultations and home visits because of apprehension about violence, but were not less likely to provide hospital visits because of apprehension about violence. While this study showed a trend for more male GPs to report verbal abuse and physical abuse than female GPs, the only statistically significant difference in the prevalence of violence was that more women reported sexual harassment during their rural medical career than men[219].

Lack of easily accessible continuing Professional Development (CPD)

While the 1998 female rural doctor study had identified CPD as an issue for female rural doctors, this was not identified as a problem in the more recent studies on female rural doctors by McEwin, Doyle and Wainer[122]. This is consistent with more recent research on rural doctors as a whole [182].

Negative aspects of rural life

Partner employment

As already discussed, research confirms the importance of partner employment for female rural doctors, many of them having entered rural practice because they had gone to a rural area because of their partner's choice[122, 125, 215]. Thus, a lack of employment for their partners in rural areas was a negative aspect of rural life for some female GPs, deterring them from entering rural practice or remaining in rural practice.

Limited educational opportunities for children

As with all GPs, female rural GPs identified lack of educational opportunities for children as a negative aspect of rural life[122, 182].

Childcare

Lack of suitable childcare was identified as a major issue by female GP respondents to Doyle's study (32%) and McEwin's study (39%)[122], but it was not identified by male GP respondents to McEwin's survey.

Doyle[125] found that on call commitment was a particular difficulty for female rural GPs because of their child care responsibilities. She also found their lack of availability to participate equally in after hours work often caused deterioration in relationships with colleagues who regarded the situation as unfair.

Lack of anonymity

Lack of anonymity was not identified specifically as an issue for female rural GPs in the recent studies, but in Doyle's report it has been included as one aspect of personal isolation[125].

Social isolation

Both Doyle's and McEwin's studies showed that female rural GPs saw personal isolation as a major issue. In Doyle's study, they mentioned loneliness and a lack of personal and emotional support. Thirty-eight percent of Doyle's respondents reported professional and social isolation[122, 125], and 42% of McEwin's female GP respondents saw social isolation as a problem, compared to 19% of the male respondents who reported 'lack of peer support' as a problem. However, there is some uncertainty in interpreting these results because professional and social isolation are combined into one category in both studies.

Community expectations of them as women

Community expectations of them as women was brought up by 17% of McEwin's female GP respondents, with no equivalent issue being identified by the male GPs in McEwin's study. This issue had not been identified in previous studies that investigated rural GPs generally.

2.6.3.3 In Summary

This literature review shows that, while there were many common professional and personal issues relating to rural life and work for male and female rural GPs, there were also a number of differences between male and female GPs. Female rural GPs were more likely to have moved to a rural area because of their partners' work or because of an attraction to rural lifestyle, while male rural GPs were more likely to have been

attracted by rural work. They often enjoyed aspects of rural practice different from those enjoyed by male rural GPs, and were less likely to mention remuneration as a problem. They were more likely to be satisfied with their working hours than male rural GPs, but were more likely to identify lack of flexible work opportunities and professional isolation as problems. In these studies, the female rural doctor respondents identified several problems not previously identified in research on rural doctors as a whole, and these were role conflict, personal safety, discrimination from male colleagues, and community expectations of them as women.

Some of these problems relate to sex differences between doctors within the broader medical profession and are not specific to rural doctors; thus, in order to develop some understanding of degree to which rurality and gender contribute to the problems identified by female rural GPs, the broader literature about women in medicine, and particularly female GPs, will now be reviewed.

2.7 WOMEN IN MEDICINE

This section of the literature review explores current knowledge about the roles of women in the medical profession, their work patterns, their family lives, and health; the work content and patterns of female GPs; and the professional and personal issues female doctors perceive as problems. This part of the literature review has been included because there could be overlap between the issues identified by female rural doctors and the issues other female doctors identify as important, and because it is important to place the concerns of female rural doctors within the context of the wider medical profession.

Table 2:5 summarises demographic and professional differences between male and female doctors. These differences shall be discussed in detail in sections 2.7.1-2.7.5 of the literature review

Table 2:5 Demographic and professional differences between male and female doctors identified in the literature review

	Female	Male
Married	76% [220]	86% [220]
Married to a professional	75% [220]	40% [220]
Hours of work	Mean of 13.6 less than male doctors in Australia [220]	Work longer hours [220]
Factors associated with shorter working hours of doctor	Living with partner or family with children [221, 222]	Living alone [221, 222]
Level of income	Average 14-17% less than male doctors when adjusted for hours worked[223, 224]	Higher income [224-226]
Doctor is family's main source of income	55% [220]	90% [220]
Nature of work undertaken by GPs	More female patients More women's and mental health [227, 228]	More institutional care [220] More emergencies [220] More after hours work [220] More technical and procedural work [220, 229]
Position in practice	More likely to salaried [229]	M ore likely to be self employed [229] More likely to practice principals [229]

2.7.1 Distribution of women in medicine: Areas of medicine

International literature shows that from the late 1980s onwards the number of female doctors has been increasing; however, women are still in the minority in all areas of medicine, with the proportion of female doctors being lower in specialties than in general practice[122, 213, 230, 231].

In 2002, McMurray et al reported on data on the medical workforce collected from Australia, Canada, England, and the United States[221]. This study showed that nearly half of all medical students in all of these four countries were women, with 20 to 30% of practicing doctors in each of these countries being women. In 1999, in Australia 28% of the medical workforce were women, with most practising in the disciplines of general practice (33%), psychiatry (27%), and paediatrics (24%). Only 3% of Australian general surgeons, 1% of orthopaedic surgeons, and 9% of

specialist physicians were women at this time[221]. The Australian distribution of women in medicine was similar to the distribution in New Zealand[232], Canada and the USA (apart from a greater proportion of female doctors working as obstetricians and gynaecologists in Canada and the USA[221]. In 1996, AMWAC reported on not only the proportion of women in specialty practice, but also on the proportion of female specialist trainees. They found that females made up 36.3% of internal medicine trainees, 30.3% of dermatology trainees, 40.2% of psychiatry trainees and 33.3% of obstetric and gynaecology trainees, but only 8.9% of surgical trainees. This indicates that while more Australian female doctors are entering specialist practice, few are entering surgical specialties[14].

Some researchers have investigated or speculated on reasons for the distribution of women in the specialties within medicine. In her Australian study in 1994, Redman, Saltman et al found that the opportunity for parttime training, flexible working hours and part-time practice were important to female medical students and interns in choosing their careers, and concluded that a desire for flexibility was a major reason for many women choosing general practice in preference to specialties[233]. Similarly, international and Australian research investigating the underrepresentation of women in some specialties has found that barriers to career advancement include domestic responsibilities and family considerations balanced against rigidity in career structures; the availability of flexible and part-time training; long working hours within the discipline; and the length and structure of specialist training [234]. The disciplines that were seen as particularly demanding in terms of hours of work were surgery and obstetrics/gynaecology[7]. Recent AMWAC research on doctors undertaking vocational training confirmed the influence family circumstances have on the career choices of female doctors, but also indicated that there are gender differences in relation to preferences for various kinds of work, with some men having a preference for higher income and higher status careers[7].

2.7.2 Work patterns of female doctors

As discussed in the previous section of this literature review the work patterns of female rural doctors differ from those of male rural doctors,

and so it is important to consider this difference in the context of the wider medical workforce.

A number of studies have shown that female doctors work less hours per week on average and are more likely to work part-time than male doctors[150, 212, 221, 222, 231, 233, 235-240], both overseas and in Australia. McMurray et al found consistent sex differences in hours of work in all four countries in their study, with men working an average of 7 to 13 hours per week more than women[221]. They found that the greatest difference of 12.6 hours per week occurred in Australia. The difference in the average hours of work related mainly to more female doctors working part-time than male doctors. Similarly, in their 2002 study on doctors in vocational training, AMWAC found that on average male registrars worked 6.7 hours per week more than female registrars. While AMWAC reported a trend for younger male GPs to decrease their working hours compared to older male GPs in 2005, female GPs were still working on average 13.6 hours per week less than male GPs[1]. Like female rural GPs, female GPs in all areas were less likely to provide on call services or after hours services[212, 239] than male GPs. Nevertheless, this does not mean that all female doctors worked part-time, with some studies showing a significant proportion of female doctors worked more than 40 hours per week[212, 222, 241].

Some studies have investigated why some female doctors work shorter hours than others and whether female doctors' hours of work vary at different times of their lives[7]. These researchers have found that female doctors living alone usually worked the longest hours compared to their female colleagues, and female doctors living with a partner or with a family with children worked the shortest hours. In contrast, male doctors living alone worked the shortest hours compared to their male colleagues, and male doctors living with families with children worked the longest hours[221, 222]

This appeared to relate to female doctors accepting the role in the family as primary carer of children.

As well as being more likely to work part-time than men, women are more likely to have periods of time out of the workforce mostly, for child bearing and child rearing[221, 222, 242, 243]. Several studies have shown that the length of time taken for maternity leave by female doctors was generally relatively brief, with many women taking only 12 weeks away from work after the birth of a child and some taking less than 6 weeks[242-245]. As might be expected, the AMWAC study on vocational trainees found that 28.8% of female trainees and 10.3% of male trainees indicated that they were planning to take some time out in the next three years, with more of the women than men indicating that they planned to have time off to have a baby or to be with their children, and more of the men indicating that they planned to travel.

The work patterns of female rural GPs are similar to the work patterns of female doctors in general, indicating that their sex is a significant factor in determining their work patterns.

2.7.3 Practice structures and incomes of female doctors

It would be expected that if women work less hours than men they would earn less income than men, and research confirms that on average female doctors have lower incomes than men[212, 222, 230, 246]. However, some studies showed that these income differences persisted even when adjustments were made for hours worked[212, 226, 246-248], and that after adjusting for hours worked female doctors earned 14-17% less than male doctors undertaking similar work.[248, 249]. The AMWAC study done in 1996 found that 55% of female doctors surveyed, indicated that they were the family's main source of income compared to 90% of male doctors, with 30% of females and 8% of males saying they made an equal contribution.

One factor contributing to the lower incomes of female doctors could be their roles in the practices in which they work. Several international studies have found that women are less likely to be practice principals than men[1, 250, 251] and more likely to work in salaried positions[1, 251]; even when working in the private sector, they are more likely to be salaried rather than self employed[1, 251], and less likely than male doctors to work in solo practice[14, 252]. In Australia, the 1996 AMWAC study found that 44.1% of females in a sample of GPs and specialists were self-employed in private practice compared to 63.2% of males.

While many female doctors choose to work part-time and as employees in order to meet their family responsibilities, researchers have found that some feel disadvantaged by this choice, for example feeling excluded from decision making about continuity of patient care and practice policy[253, 254], and that they were financially penalized[253, 254]. In a 1999 survey, Mazza and Northfield also found that male GPs over 55 years and full-timers were more likely than others to hold negative views toward part-time general practice, questioning the competence of part-time GPs[255].

Female rural doctors are similar to other female doctors in that they are less likely to be practice principals and more likely to work in salaried positions. However, there is currently limited information on how their positions in the general practices in which they work relate to their income.

2.7.4 Family issues for women in medicine

2.7.4.1 Marriage

Consistent with the differing work patterns of female doctors, research shows that their family lives differ from those of male doctors[212, 230, 238, 241]. Australian and international research shows that female doctors are less likely to marry than male doctors[7, 222, 230], with the 1996 AMWAC study showing that 76% of the female doctors and 86% of the male doctors were married[14]. Several Australian and overseas studies have also shown that female doctors were more likely to be married to other doctors than male doctors[7, 212, 222]. In the 1996 AMWAC study, the numbers married to other doctors are not given but 40% of male doctors were married to professionals, such as doctors or lawyers, compared to 75% of females. This AMWAC report notes that this may mean that 'almost 8 out of 10 female doctors are required to develop their careers in conjunction with partners who have equally demanding career development requirements'[7].

2.7.4.2 Children

A number of studies in the past have shown that married female doctors have less children than married male doctors[212, 222, 230, 238], and

female doctors have less children than the general population. As might be expected from the research findings relating to the participation of female doctors in the medical workforce, a number of studies have shown that female doctors in the past spent more time on household work and child care than male doctors, even when working the same hours as male doctors[212, 238]. The qualitative part of the 1996 AMWAC study[7] found that the majority of female doctors interviewed indicated that they had assumed the main responsibility for child rearing, and 'the child rearing responsibilities appeared not to be influenced by the context of the relationship between the doctor and her spouse/partner'[7]. Even where the female doctor had a much greater income earning capacity than her partner, generally, she still expected and her partner expected her to take the major responsibility for the care of children[212, 222, 238]. In contrast, Warde et al found in their 1996 Californian study that, while female doctors from two age cohorts were more likely than their male peers to have made career changes for their children (85% vs 35%), younger male physicians were twice as likely as their older peers to have made a career change for marriage (49% vs 28%) or children (51% vs 25%), most commonly a decrease in hours of work[129]. It is possible that this finding indicates generational change with younger male doctors now being willing to decrease their hours of work in order to contribute more to the care of children.

Again female rural doctors appear to behave similarly to other female doctors both in Australia and overseas in that they usually take the main responsibility for the running of the household and care of the family, and this impacts on their participation in the medical workforce.

2.7.5 General Practice: Practice content and style of female general practitioners

The practice content and style of female rural GPs appears to be similar to the practice content and style of all female GPs. Sex differences found in Australian general practice content are that female GPs were likely to have more female patients than male doctors[252, 256-258], and to manage more women's health problems and mental health problems than male GPs[1, 252, 256-258]. In contrast, male GPs provide more

services in total and spend more time on institutional care, emergency services, after hours care, technical and procedural services[1, 108]. Similar findings have been reported internationally in the US, Norway and Canada[259-261].

The reasons for female doctors providing more women's health services probably relates to both patient preference and possibly doctor interest[262-266]. Several studies have also found that female GPs are more likely to provide counselling for patients with depression and anxiety, and manage patients with complex psychosocial problems than male GPs[227, 228]. In contrast, male GPs are more likely to be involved in other aspects of the practice than female GPs: for example, a British study showed that male GPs were more likely to take lead responsibility for practice computers, minor surgery, meeting external visitors and finance[239].

As well as the practice content of female GPs differing from that of male GPs there is evidence that their style of practice differs. Both Australian and overseas researchers have reported that female GPs provided more longer consultations than male GPs and dealt with more problems per consultation[267, 268]. Researchers have also found differences in the communication styles of male and female doctors[269], with female doctors having more participatory consultations than male doctors[267, 269]

Thus the sex differences in practice content remain fairly constant whether the GPs are rural or urban. However, the differences in practice style were not described in the studies on female rural GPs.

2.7.6 Professional and personal issues for women in medicine

Researchers have identified a number of professional and personal issues as being important to women in medicine, including role conflict, sexual harassment and violence from patients, and sex discrimination. All of these issues have been identified as being problems for female rural doctors.

2.7.6.1 Role conflict

As shown by the literature already reviewed, female doctors who have children generally take the main responsibility for family and children and spend more time on childcare and housework than male doctors. While some manage their multiple responsibilities by reducing their hours of work, a number of studies have found that female doctors have difficulty in managing their multiple roles as doctor, mother and wife [129, 227, 239, 254, 270-277]. While some researchers have described the long hours female doctors spend on housework and childcare as well as professional activities[212, 238, 273, 274, 278], others have also found that role conflict and role strain are important issues for women in medicine and are the basis of much of the stress which female doctors experience [273-275, 279]. Role strain has been described as 'the conflict which female doctors face in meeting the demands of their careers, the needs of their families and the sometimes conflicting demands of their partners' careers' [240]. Some female doctors report this strain in terms of feeling overwhelmed by their work commitments[280], with Ducker finding in her 1992 US study that the greater their commitment to family life, the greater the role strain reported[274]. A 1995 Canadian study found female GP obstetricians felt conflicting demands, with pressure from their husbands to curtail their work, demands from teenage children, societal expectations of them as wives and mothers, and pressure to perform the same work as male colleagues[279].

Role conflict is discussed much more often in the literature on women in medicine than in the broader literature on the problems of doctors in general, and this may indicate that it is a more common problem for women. Role conflict is reported similarly in the research on female rural doctors, while it is not reported in the more general research on rural doctors.

2.7.6.2 Health problems amongst female doctors

In view of the problems with role conflict, it is relevant to consider the health of female doctors, in particular mental health, and whether it differs from that of male doctors and the general population. A number of studies have investigated the health of doctors, and have shown that

doctors have lower mortality for most causes compared to the general population, but depression and suicide are more common with female doctors[281, 282]. A systematic review of the literature found that while suicide rates for male doctors are 2-3 times that of the general population they are 5-6 times that of the general population for females[276]. Some research findings on the mental health of female doctors appear to be conflicting in that some studies report higher levels of depression and stress amongst female GPs than the general population and others do not. This is most probably related to the differing definitions of stress, anxiety and depression used in the studies and the differing methodologies used[273, 275, 283].

In relation to other aspects of health, a 1989 US study found that doctors are at increased risk for an adverse pregnancy outcome compared to the general population and concluded that female doctors should be considered and treated as a high-risk obstetric group[284]. Other Scandinavian researchers have shown that female doctors access preventive health care less than the general population[282, 285].

The research on female rural doctors has not specifically investigated the prevalence of depression or suicide rates, but the participants of the 1998 female rural doctor study indicated that they had difficulty accessing health services for themselves, particularly gynaecological and mental health services.

2.7.6.3 Work related violence and apprehension about violence

One source of stress, which has been reported in the literature as being of concern to female doctors, is work related violence. A number of studies have shown that while the prevalence of work related violence does not differ greatly for male and female doctors, female doctors are more likely to be apprehensive about work related violence[286, 287]. This is consistent with research findings relating to female rural doctors feeling apprehensive about violence[218].

2.7.6.4 Sexual harassment

As well as work related violence, female doctors have reported experiences of work related sexual harassment from patients[219, 288], with an Australian study on rural doctors finding that 23.2% of female GPs and 14.6% of male GPs had been sexually harassed by patients during their career as a rural doctor[219].

2.7.6.5 Gender discrimination

As well as sexual harassment being reported as a problem for female doctors, problems with gender discrimination, either from colleagues, nurses or patients, have also been reported in research on female medical students and doctors[233, 289]. For example, a 1994 Australian study of first and final year medical students and interns found high rates of discrimination or harassment reported by women medical students and interns[233]. Similarly, in three Australian studies, female rural doctors identified discrimination from male colleagues as being a problem for them[122, 123, 125].

2.7.7 In summary

In summary, the demographics, work patterns, and work content of female rural doctors are similar to those of women more broadly in the medical profession and this suggests that gender is a more important influence on these aspects of their work, rather than rurality. Similarly, issues identified as problems for both female doctors in the wider medical profession and for female rural doctors include role conflict, apprehension about work related violence, sexual harassment, and sex discrimination, and these issues are probably also related more to gender than rurality.

2.8 RELATIONSHIP BETWEEN RESEARCH LITERATURE ON RURAL DOCTORS, FEMALE RURAL DOCTORS AND WOMEN IN MEDICINE

In order to further clarify areas of overlap between the professional problems female doctors, rural doctors and female rural doctors experience, these problems have been summarized in Table 2:6.

Table 2:6 Comparison of issues identified as problems by female doctors, all rural doctors and female rural doctors

Issues identified in literature	Female doctors	All rural doctors	Female rural doctors
Role conflict: guilt	Yes	No	Yes
Role conflict: fatigue	Yes	No	Yes
Lack of flexible child care	Yes	No	Yes
Social isolation	No	Yes	Yes
Lack of anonymity	No	Yes	Yes
Community expectations as wife and mother	Yes	No	Yes
Content of work time consuming and poorly paid	Yes	No	Yes
Style of practice time consuming and poorly paid	Yes	No	Yes
Community demand for female doctors	No	No	Yes
Undervaluing of work	Yes	No	Yes
Poor remuneration	Yes	Yes	Yes
Lack of other health professionals	No	Yes	Yes
On call work	No	Yes	Yes
Lack of locums	No	Yes	Yes
Community expectations re availability	No	Yes	Yes
Access to CME because of child care	Yes	No	Yes
Appropriate CME (eg for women's health and mental health)	No	No	Yes
Personal safety	Yes	No	Yes
Access to health services for themselves	No	No	Yes

This analysis shows that female rural doctors share most of these issues with either other female doctors or other rural doctors, with the exception of community demand for female doctors, availability of appropriate CME (on women's health and mental health), and access to health services for themselves. While most of these issues are shared, it is possible that some problems identified by both rural and urban female doctors as being of concern, could be aggravated by a rural location. For example, role conflict is likely to be exacerbated in situations where there is a shortage of doctors and the needs of the community are greater, and concerns about personal safety may be greater in situations where the doctor is more likely to be involved in after hours work because of a lack of other available doctors. Similarly, some issues related to rurality might be exacerbated by being female; for example, the demands of on call and after hours work may be more stressful for a doctor who is the primary child carer in a family. Thus several researchers have identified sex differences in the problems about which rural doctors are concerned, but research exploring how gender effects rural recruitment and retention at a deeper thematic level is currently lacking.

2.9 MODELS AND DECISION MAKING FRAMEWORKS FOR UNDERSTANDING RURAL RECRUITMENT AND RETENTION

Some rural workforce writers have reviewed, summarized[22, 46, 78, 135] or aggregated data from the literature, focusing on factors effecting rural recruitment and retention, with a few developing frameworks with which to understand the processes involved[8, 66, 290].

2.9.1 Frameworks and models for understanding rural recruitment

2.9.1.1 Groupings of factors

In considering remote recruitment, Bilodeau[78] undertook a literature review and grouped factors affecting rural recruitment into personal, occupational and environmental factors. He considered recruitment to constitute three distinct phases of attraction, installation and retention, but

that the research done to date did not provide an understanding of how the groups of factors interacted at each stage to affect the decision making of the doctor. Other researchers have taken this approach further by developing frameworks and models for understanding rural medical recruitment

2.9.1.2 Decision making frameworks

In 1994, Scammon et al[66] developed a decision-making model on the basis of data collected in one focus group with rural doctors. The authors reported that 'themes related to values- personal values, personal love of the land and of nature, spousal and familial influences on lifestyle choices-appear to play a very important role in the decision to choose rural practice' (Page 97). The researchers described personal values as motivators for choosing rural practice, and lack of opportunities for family as obstacles for recruitment of rural doctors. While this simple decision making framework based on only one focus group requires development based on further research, it does identify the importance of personal values in doctors' location decisions.

Humphreys et al[8] used a systematic review of the literature to develop a rural workforce decision-making conceptual framework, which mainly refers to retention but also considers recruitment. The authors developed the notion of 'balance', where a doctor deciding about taking up rural work (recruitment) seeks a match between internal aspirations and the external environment. Internal factors include 'background, marital status, the aspirations and needs of the doctor's spouse or partner, the household's stage of life-cycle, perceived variety of practices, particular attraction to rural place or lifestyle, independence and access to hospitals'. External environment includes 'the community's size and geographical location, the social and physical environment of the community, the nature of existing health services and infrastructure, the nature of practice the doctor can actually undertake within the community, the nature and extent of professional support, and continuing medical education, the availability of locum relief and the extent to which a career path is perceived to be limited by location outside of metropolitan areas'. Thus, this framework considers the many factors that affect rural recruitment,

as either internal or external, with the doctor seeking the environment where his internal aspirations can be matched as closely as possible.

Some researchers have drawn on behavioural science theory, particularly Fishbein and Azjen's Theory of Reasoned Action[80], to explain doctors' decisions to enter or stay in rural practice. This model of behaviour incorporates three broad processes of beliefs, intention and action[290]. A key component of this theory is the concept that intention, defined as 'an internal declaration to act', will result in the action being performed [291]. Intention, in turn, is determined by two components: a person's attitude to a particular behaviour, which is determined by his/her beliefs about the behaviour and how these beliefs are evaluated; and a person's subjective norms, which are determined by what the individual perceives to be the beliefs of significant others about the behaviour. This model was later modified by Azjen to the Theory of Planned Behaviour, which includes a component relating to volition, with Azjen arguing that perceived behavioural control can act on either behavioural intention or on the behaviour directly[291]. These psychological models have been used algebraically to calculate scores to predict particular behaviours mainly in health research[292]. Somers used both the theory of Fishbein and Azjen and the theory of Triandis, which had been developed with a conceptualisation of intention similar to that of Fishbein and Azjen[167], as a basis for his rural recruitment research on medical students. In the Triandis model, intention is determined by three components: the person's perceived consequences of undertaking a particular action; the sum of emotions evoked by undertaking the behaviour; and social factors[167]. Triandis expanded Subjective Norm to include a 'Role belief' component, measuring the perceived appropriateness of the act for others within the respondent's role group; a personal normative belief or a moral obligation; and a component measuring the presence of an interpersonal contract. In his application of this theory, Somers developed a questionnaire to evaluate medical students' intentions to practice in rural areas[167] using the components of the students' perceptions of the consequences of their location decision, their effect and social factors. Somers was primarily seeking to develop a means to calculate a predictive score of rural intention that could be used for evaluating rural recruitment strategies [293]. His questionnaire included items relating to negative or

positive effect, professional and personal perceived consequences, and social drivers consisting of social preparedness and social norms. He reported in a conference paper presentation in 2006 that his Rural Intent Questionnaire explains up to 72% of variance and measures and explains belief changes underpinning career decision-making by medical students[293].

2.9.1.3 Models of strategies for recruitment

In contrast to frameworks relating to the decision making process of individuals, in 1990 Crandall described models of strategies that can be used to recruit doctors to rural practice[11]. These models are:

- Affinity models, which are based on the affinity some doctors have for rural communities (for example recruitment of rural background students into medicine);
- Economic incentives models, which are based on increased economic rewards for rural work;
- Practice characteristics models, which address 'technical, collegial, referral and other structural barriers to rural practice';
- Indenture models, in which a doctor meets certain obligations of rural service in return for some reward such as a scholarship.

However, in assessing the models, Crandall's paper only considers the nature of the models themselves and does not consider the underlying processes within the doctor in his/her taking up rural practice.

2.9.2 Models and decision making frameworks for understanding rural retention

As with rural recruitment, the number of factors identified relating to rural retention gives an indication of the complex range of social and professional issues that influence doctors' decisions to stay in or leave rural practice. Similarly, much research that describes and discusses factors affecting rural retention does not discuss the processes involved in the doctor's remaining in the rural area or deciding to leave rural practice. However, some rural workforce researchers have reviewed, summarized

or aggregated data from the literature, focusing on factors effecting rural retention, such as Hays[32, 33,],MacIsaac[47], Humphreys et al[8], Cutchin[25] and Feely[80], and some have published frameworks with which to understand the retention of GPs to rural areas.

2.9.2.1 Groupings of factors

In reporting a literature review into rural medical workforce retention, Humphreys et al noted that factors effecting retention and turnover can be grouped into three broad categories: professional issues, social factors relating to personal characteristics and family, and external factors relating to the community and its geographical location[8, 38]. Similarly, in undertaking the National Rural General Practice Study, Strasser et al grouped factors as practice items or personal and social items[182], and in the analysis of their results they grouped the importance of factors such as physical location, peer support, services provided, work conditions, and family and social environment.

2.9.2.2 Decision making frameworks

A number of researchers have provided insight into conscious decision-making related to 'staying' or 'leaving' rural practice and have attempted to deal with broader sociocultural factors that can impact on an individuals' behaviour, but at the unconscious level[8, 32, 47, 80]. For example, Hays et al conducted a qualitative study investigating doctors' decisions to leave rural practice, and developed a decision-making framework reflecting the dynamic balance of influences to stay or leave[32]. These balances could be tipped by triggers influencing a decision to leave rural practice. Hays et al used semi-structured interviews to explore reasons why Queensland rural doctors left their communities during 1995, and from an analysis of their data developed a decision-making model that will be discussed in the next section of the literature review. MacIsaac's (2000) research findings[47] fitted Hays' (1997) model, indicating its applicability beyond the initial setting.

More recent rural workforce decision-making conceptual frameworks, including models derived from literature reviews such as Humphrey's et al[8], reflect the notion of 'balance'. In Humphreys et al's paper, the decision to stay in or leave rural practice relates to a match or mismatch

between influences to stay and influences to leave, with the balance between these influences being effected by 'triggers'. Dissonance between the doctor's needs and aspirations can either be resolved by modifying influences to leave or, if unresolved, can result in the doctor leaving the situation.

Feely[80], draws upon Fishbein and Azjen's Theory of Reasoned Action (TRA) to explain doctors' decisions to stay in rural practice, proposing that a doctor's attitudes to rural practice and the perceptions of salient others (such as his/her spouse) will predict his/her intention to stay or leave rural practice and his/her ensuing action. In this model, the doctor's subjective norms (similar to Humphrey's internal factors) are an important influence in determining action. In this context, Feely considered the rural doctor's attitudes to rural practice to be determined by his/her beliefs about rural living, beliefs about rural practice, and beliefs about social networks. Similarly, the doctor's beliefs about social networks and perceived beliefs of salient others contributed to his/her subjective norms about rural practice. The doctor's attitudes toward rural practice and subjective norms about rural practice determined his/her intention to stay or leave rural practice, in turn determining retention. In discussion of this model, Feely acknowledges that 'while the current TRA model provides a useful structure to organize the literature on rural physician retention, it oversimplifies and compartmentalizes factors that lead to the turnover/retention decision' and he suggests that 'future research should consider qualitative research methods to fully flush out and understand retention.'(Page 250)

2.10 QUALITITATIVE RESEARCH ON RURAL RECRUITMENT AND RETENTION

2.10.1 Research using descriptive analysis

As already discussed, the research on the factors that may effect the recruitment and retention of doctors to rural practice indicates that there are a range of personal and professional influences, and that the priorities given to these influences differ between rural and urban doctors, and

between male and female doctors. While these factors have been identified, the relative importance of each of these factors has not been established and there has been little research on the ways in which these factors interact in the decision-making process. Some research questions would be best answered using qualitative methodologies to either explore the issues initially or to gain a deeper insight into the issues. For example, questions about the predictors of entry into rural practice and the numbers of students influenced by rural placement require quantitative methods, while questions about identifying the factors that influence the doctor's career and location choice, and the processes the doctor uses to make the decision, and why some factors are more important than others, require qualitative methods. Thus both qualitative and quantitative methodologies are needed to answer the many questions about recruitment and retention of doctors into rural practice. However, most of rural medical workforce research has used quantitative methodologies, with only a limited number of qualitative studies being published[15, 34, 66, 75, 83, 85, 88, 121].

The qualitative studies on rural recruitment and retention have mostly been descriptive, rather than using deeper thematic analysis, thus making it more difficult to apply the results generally. For example, Spenny and Ellsbury used a questionnaire with a number of open-ended questions about positive and negative aspects of rural practice in their study of rural doctors in the USA in 1999. These researchers did a content analysis, coding the issues raised and calculating percentages of male and female respondents who raised these issues. This study was purely descriptive with no deeper thematic analysis. Similarly, Elley used interviews to conduct a qualitative study on New Zealand female rural doctors, and Kotzee used a semi-structured questionnaire to conduct a study on South African rural doctors[81]. Both of these studies were exploratory and used descriptive analysis only. In a 2005-2006 study, Eley et al, investigating both recruitment and retention, interviewed medical students, and doctors who had been in rural practice for more than 10 years about the attractions of rural medicine and the current and future state of rural medicine. Elley et al also undertook a content analysis, which included counting the number of times various issues were mentioned, and found that the emergent themes could be grouped as lack of professional

support at a systems level, including infrastructure support, problems with practice work, peer inequities, and litigation, and that the students and doctors expressed similar concerns.

Taking another approach, Veitch and Crossland explored the social support needs of the spouses of rural doctors by interviewing both the doctors' spouses and representatives of agencies involved in providing rural doctor support[121]. The authors undertook a descriptive analysis and found that issues identified by these families included integrating into a community, childcare and schooling, being seen as the 'doctors spouse' (and consequently experiencing a loss of his/her own identity), and housing and housing maintenance.

Wise et al used semi-structured in depth interviews to investigate the work of Queensland rural doctors, and why they had entered rural practice as part of their large 1991 study[75]. This data was also analysed using content analysis and explored in greater depth issues that had emerged earlier during the questionnaire stage of the study. Hays et al reported this descriptive analysis in a paper in 1995[34]. This qualitative study provides some clues as to how and when the 23 doctors involved had decided to enter rural practice. Almost all participants identified rural experience, either in childhood or in adulthood, as being important in their decision to work in rural practice. This experience was gained by moving to rural areas because of frustration with aspects of city work or because of scholarships. In this paper, the authors conclude that 'a larger and more formal study should be conducted to investigate pathways to a rural career'[34].

Undertaking another level of analysis, Hays et al and MacIsaac et al used the qualitative data they collected using interviews to consider the processes involved in rural retention and to develop the decision-making framework, discussed in Section 2.9.2.

However, some researchers[25, 80] consider rural recruitment and retention as a more 'dynamic and complex phenomenon' than can be captured by decision-making frameworks[80], and take a more socio-cultural approach analysing qualitative research data in relation to concepts of self and place[25, 82, 90, 91].

2.10.2 A different approach: understanding rural recruitment and retention in terms of self and place

2.10.2.1 Concepts of identity: Place and Self; Professional and Gender identity

Taking a different approach from those already discussed, some researchers consider the concept of 'place' and the relationship between self and place, and discuss place identity as an important component of self[25, 82, 90, 91, 294].

Meaning of place

During the 1970s, the concept of place was developed by geographers who perceived place as having a key social meaning in human identity. For example, Relph took a phenomenological viewpoint[25], seeing 'home' as 'the foundation of our identity as individuals and as members of a community, the dwelling place of being'[295]. Relph stated that 'a deep relationship with places is as necessary and perhaps as unavoidable as close relationships with people—without such relationships, human existence while it is possible is bereft of much of its significance'[295](Page 39). He saw place as comprising three components: the static physical setting, activities, and meanings[295]. Relph discussed 'sense of place' as being the 'identity' of place[295], which is socially structured and varies with individuals or groups forming a 'consensus image of that place'[295]. More recently, Kearns discussed 'sense of place' as being 'consciousness of place'[296].

In more recent work, Cutchin refers to another view of place taken by Massey, in which place is 'formed out of the particular set of social relations which interact at a particular location' [25]. However, Cutchin notes that when using this concept 'place becomes difficult to identify or define because of the extension of social relations beyond the locale.' (Page 27) In order to develop a more workable concept of place, Cutchin extends these views of place using several ideas of pragmatism. He sees place as being where several levels of action occur—from large-scale events to interpersonal interactions, and self action—and that human action is 'completely embedded (institutions, norms and persons) in the

ebb and flow of place based events.'(Page 27) Similarly, Kearns discusses place as involving 'the context of experienced place', stating that 'the firmer the links between people and place, the more places satisfy the basic human need for roots'[296](Page 142).

Place in the rural medical workforce literature

The concepts of place and relationship between self and place have been considered infrequently in most of the rural medical recruitment literature, although some researchers have touched on these concepts[34, 290], and a few have considered them in more depth.[82, 90, 91]

In a qualitative study on rural doctors, Hays et al[34] found that doctors with a rural background had 'an emotional connection with, understanding of and commitment to the welfare of the rural community' (Page 173). While Hays did not discuss the relationship between the individual and the rural community in the context of a broader concept of place, this finding may be seen to imply that a relationship with 'place', of which 'the rural community' could be considered to be a component, is a key factor in rural retention.

More recently, Somers et al discussed the importance of a 'sense of rural background' as an important influence on medical students' rural career choice. Using a questionnaire, they assessed the students' sense of rural background using the question: 'Do you feel you have a rural background?' They investigated the relationship between 'sense of rural background'(RB), rural intent (RI) and years spent in a rural area (YR), and found 'that students with RB were likely to develop a strong RI several years earlier than similar students who had failed to make this connection with a rural community.' In this quantitative study, Somers et al identified a relationship with place as being an important influence on the intention of medical students to take up a rural career in the future. However, the authors did not investigate the meaning of place in terms of how students understood their relationship to rural or urban locations, and how this relationship influenced their location decisions.

In their 2005 study on international medical graduates (IMGs), Han and Humphreys explored how the integration of IMGs into the rural

community influenced their intention to stay there[90]. The authors found that not only professional issues but also family and community issues were important in their integration and in their developing 'strong relationships and a clear sense of belonging within their community'. Similarly in 2006, Kearns et al investigated both recruitment and retention of GPs in rural New Zealand using interviews with OTDs[91]. While they considered recruitment in terms of push and pull factors, these researchers discussed retention as involving integration into place, stating that 'experience of place is comprised of both locational characteristics and identity-based dimensions of a person's "place-in-the-world" [91] (Page 533).

The relationship between self, place and gender identity was considered in relationship to recruitment of young rural background men into health professions by Durey, McNamara and Coffin in a 2000 study on recruitment of rural health professionals[297]. These authors found that in making career choices many rural young men had a strong relationship with place and that their gender identity was closely related to traditional male identity in rural communities of being 'tough and rugged'. For this reason, many young rural men would not consider health careers that were seen as 'not a boy thing'. While this study did not directly relate to the recruitment of doctors into rural practice, it did consider the relationship between self, place and gender identity in a way that had rarely been discussed in previous rural health workforce research.

Cutchin undertook a qualitative study using 14 in-depth case studies of rural doctors in Kentucky in 1996 and, in reporting this research, he discussed the rural doctor's identity in relation to the medical community and the community-at-large, and argued that place integration is central to retention of doctors in rural communities[25]. Cutchin argued that place is central to human life and 'deeply woven into human experience', discussing place identity as an important component of self[25, 82](Page 27), and developing the concept of 'experiential place integration' as the process whereby doctors are retained in rural communities.

This linking of the professional identity of rural doctors to place appears to be supported by the movement in recent years by rural doctor organizations, mainly in Australia, to have rural medicine recognized as a distinct discipline. Some medical academics have discussed rural medicine, rural practice or rural health as being a distinct discipline since the mid 1990s[31, 298-300]. These academics maintain that the content and context of rural general practice differs from urban general practice to such an extent that rural medicine should be recognized by the medical profession as a discipline distinct from urban medicine[31, 299, 300]. In 1996 the Rural Doctors Association of Australia conducted a plebiscite of its rural doctor members to investigate whether the doctors felt that a separate college of rural medicine would best meet their professional and academic needs, and this proposal was supported by 67% of respondents, leading to the formation of the Australian College of Rural and Remote Medicine[301]. Although research on how rural doctors perceive their professional identity has been limited mainly to Cutchin's work[25, 82], this would seem to suggest that many do see themselves to be professionally distinct from their urban colleagues.

The concept of self and the concept of identity

In order to understand the relationship between place and self, it is necessary to consider the concepts of self and identity. Cutchin considered the concept of self as being central to an understanding of rural medical workforce retention, noting that the concept of self 'is ignored in health services research'. Placing 'self' as a key domain in his conceptual framework, Cutchin defined 'self' as 'our personal (inward) and social (outward) consciousness bound into a coherent identity or personality'[82](Page 1165). A key part of Cutchin's framework is a recognition that self is constantly changing as the individual interacts with various aspects of life and with other people, with the rural doctor's self being shaped by professionalisation during medical training, cultural background, family relationships, and community relationships. He notes that 'rural physician selves, as with other types of selves, are constantly being constructed and reconstructed through experience' (Page 1165). He also notes that physician selves will vary not only in the one individual over time, but also between individuals, so that 'we cannot take a particular self as an archetype for physicians in different places and with different histories' (Page 1165). This dynamic remolding self has been identified elsewhere, such as by Giddens[302], who writes about

modernity and its impact on identity, discussing the 'reflexive project of the self', where individuals 'reflect on their own identity and constantly rework it'[303].

Cutchin proposed that the rural physician self includes the categories of the 'historical' self, the 'social self' and the 'emergent' self[82]. In his framework, 'historical' self includes the dimensions of socio-economic background, previous rural experience, role models and mentors, family background and support, graduate medical education experience, and past cultural matrix; 'social self' includes social group affiliations, immediate family, roles to fulfil, institutional membership, community setting, and present cultural mix; and 'emergent self' includes values, aspirations, strength of identity, and creativity. While placing each dimension in a category, Cutchin recognized that some dimensions extend across more than one category, and discussed the emergence of new self, in which 'the medical self is a new and often dominating addition to the other components parts of the physician as person self' during medical education (Page 1163). Similarly, Cutchin discussed the importance of social interactions with family, community and local culture as part of the social self's integrating with the rural community; and the importance of the doctor's values and aspirations and the strength of identity in achieving integration.

The concept of place identity

As already discussed in reporting his work on rural medical workforce retention, Cutchin argued that place is central to human life and 'deeply woven into human experience' [25, 82] (Page 27). He further develops the concept of self to include place as a key component of identity, focusing on the connection and interaction of doctors with their local settings, and describing a process of place integration by which this connection develops [25].

'Place identity' has been defined as 'the contribution of place attributes to one's self identity' [304]. Cutchin's work focused on place identity, in particular the process of 'experiential place integration' of doctors into the medical community and the community at large in rural Kentucky [25, 82]. He suggested that over a period of time doctors interact with the

problems developing in a particular place and become integrated into that place. As this happens, they 'build bonds' with place. In discussing the process of place integration, Cutchin delineated three domains: the physician self, the medical community, and the community-at-large, arguing that place integration is central to retention of doctors in rural communities[25].

The process of integration occurs as a result of integration between place and self, so that it 'will be shaped by local manifestations of culture, economics and politics, but they will be carried out by individuals who belong to ethnic, class and gender groups.'[25](Page 37). In his framework, the place integration process is achieved by three primary principles: security, freedom and identity. These principles denote 'both the types of ongoing problems faced and the solutions derived by rural practitioners during integration'.

Cutchin's analysis of rural physician retention and his theoretical explanations highlight the benefit of socio-cultural explanations that go beyond dichotomous models[25, 82]. Cutchin's development and application of 'place' based theory, "experiential place integration", reveals how complex domains related to medical and non-medical communities interplay and are characterized by the principles of security, freedom and identity. However, he discusses gender as a component of self only very briefly, probably because the data he used included only male doctors, mostly with wives in fairly traditional roles supporting the doctors' careers. In a similar way to Cutchin, Kearns et al argue that place 'involves a recursive relationship between literal location and a more metaphorical "place-in-the-world", a notion that involves dimensions of status and identity'[91].

In contrast to Cutchin's work, Harrison's research related to influences on the work of female doctors in metropolitan Mexico city[294]. She found that the locations where the doctors worked were influenced by them and for them by awareness of place, social structures, opportunities and familial support. Harrison considered that the relationship to place included a relationship with physical, working, and social environment[294]. In this study, she found that her study subjects'

relationship to place was characterized by spatial fixity (their location being influenced by family relationships and availability of family support) security, flexibility, and job satisfaction. While her study related to urban rather than rural doctors, and she did not develop the theoretical explanations in as much detail as Cutchin did, Harrison did consider gender issues as influencing the doctors' relationship with place.

Thus, recently, some qualitative researchers have taken a more sociocultural approach to rural medical workforce recruitment and retention than in the past, but there is the need to build on their work to encompass gender issues and generational change that have become increasingly important in recent years.

Gender and professional identity in the medical profession

In order to explore the links between place, professional and gender identities amongst rural doctors, it is important at this point to discuss some of the literature on gender and professional identities in the medical profession.

Since the 1970s and 1980s many sociologists have discussed 'sex' and 'gender' as being two different concepts, regarding the sex of a person to be biologically determined but gender to be culturally and socially constructed, so that in this context 'sex' is 'male' or 'female' and 'gender' is 'masculine' and 'feminine' [305]. There are a range of views from those of biological determinists (who see male and female traits as being based in chromosomal differences, hormonal differences or other biological characteristics that distinguish male from female) to those of social constructionists (who argue that gender differences derive from social and cultural processes, which 'create systems of ideas and practices about gender that vary across time and space')[306]. For example, from a social constructionist perspective, Connell argued that each society has a 'gender order', which generates a variety of masculinities and femininities, and which acts as a framework within which gender differences emerge or are reproduced or challenged[307]. In modern Western societies, it is generally considered 'masculine' to be aggressive, independent and active[305], and autonomous and competitive[308], while it is generally

considered 'feminine' to be caring, warm, sexually attractive, more passive, weak and dependent[309].

Some sociologists have discussed gender in the medical profession in relation to this viewpoint of gender in modern Western societies[99, 310, 311]. As discussed already in this literature review, the medical profession in Western society has been traditionally a male dominated profession, with men outnumbering women in most disciplines [7, 212], and has generally been considered as embodying mainly masculine values and aspects[99, 310, 311]. Davies refers to this masculine domination of some professions in the late 19th and early 20th centuries as being 'not just a matter of doors and minds being closed to women, but also the values that were embedded in the notion of the practice of a profession reflecting a masculine project and repressing or denying those qualities culturally assigned to femininity'[310](Page 667). Davies discusses masculine aspects of professionalism, for example the employment of knowledge in an 'impersonal way' so that the 'the proper bedside manner of the doctor keeps emotion at a distance' [310] (Page 670), and she refers to the importance of autonomy in the cultural concepts of both masculinity and the professions.

With the increasing entry of women into the medical profession, some researchers have focused on gender differences in doctors' approach to their work. For example, a qualitative study undertaken by Williams et al[312] in Canada in 1993 found that female doctors spoke of taking a different approach to their work from that of their male colleagues. Most considered themselves to be better listeners and communicators, feeling they were more 'patient centred', and placed greater emphasis on the 'art' of medicine than male doctors. Williams et al considered that this emphasis on relationships with patients and human contact also related to women's choice of specialty, with Williams et al's participants seeing female doctors as being attracted to more 'caring', less 'lucrative' areas with a focus more on nurturing relationships rather than 'technological cures'. Drawing on the work of Gilligan, Williams et al interpret their research results as reflecting gender-based conceptions of the moral domain, suggesting that 'while male thinking is characterized by impersonal logic and law, women are more attuned to the web of social

relationships that surrounds them and is sustained by interpersonal communication and mutual responsibilities.'[312](Page 119).

Brooks investigated the role female doctors play in the provision of general practice services to women in the UK, using interviews with 45 female GPs[313]. Focusing on the role of her GP participants in their practices, Brooks found that the GPs had been motivated to work in general practice not only because of the opportunity it offered to combine a family with career, but also because many felt it offered opportunities to employ caring skills and develop a degree of personal involvement with patients that was not available in a hospital career. These female GPs liked the opportunity for a generalist role, which provided an opportunity to 'practice a broad range of skills and combine nurturing and caring skills with the more medical aspects of "doctoring". Some female GPs also assumed responsibility for the 'emotion work' of managing a practice, including caring for staff. Brooks noted that the 'role of a woman GP is in part constructed through the cultural expectation that women will provide love and tenderness and are skilful providers of affective support'(Page 189). However, she did not find that all female GPs responded in the same way to pressures to provide women's health services and to provide emotional support. She identified two main groups 'the women's GP' group, who welcomed the role of a specialist in women's health, and 'the general GP', who sought to adopt a generalist role encompassing the notion of a traditional family GP. Within the group of 'the women's GP' she identified two sub-groups: the 'committed women's GP', who had a political commitment to women's health issues based on a feminist perspective; and the 'natural women's GP', who appeared to accept a demarcation of within their practices based on gendered roles, believing that there were certain tasks for which they, as women, were more suited than male doctors. The work of both Williams and Brooks suggests that many female doctors see themselves not just as 'doctors who happen to be women'[313], but also as 'women doctors'[313] with their professional and gender identities being linked.

Pringle[99] has taken a more theoretical approach to the professional identity of female doctors, discussing the roles of women in the medical profession based on her research with female doctors in both England and Australia in the 1990s. Drawing on the work of Bourdieu relating to

'habitus', Pringle described Bourdieu's theory as proposing that there are a range of 'fields' in which social relations are conducted[99]. These fields are thought of as 'market-like structures' in which a game is played with accumulation of economic, cultural and social capital as the prize. Players have or develop 'habitus', which is 'a feel for the game', and which is 'embodied' and involves 'the basic beliefs, values, norms and ways of being in the world which are taken into the body at a very deep level'[99](Page 23). Pringle argued that 'the possession of a male body was for a long time taken for granted as part of the medical habitus' and that 'women have rarely been at ease in the medical field'[99](Page 23).

Pringle referred to some women doctors as being exploited financially and excluded from decision-making processes in their practices because of domestic commitments. While she found that women had chosen general practice because of the opportunity to combine family and work she proposed that 'their understandings of "success" do not necessarily require that priority be given to maximizing cultural capital within medicine' [99] (Page 166). She concluded that while this understanding of success 'confirms women in a subordinate position in medicine they also have the potential to challenge both medical organization and domestic hierarchy' [99] (Page 167). She saw female doctors to be differently positioned on 'the medical field' and to have different speaking positions available to them and so they are able to bring about change in the field itself.

Pringle discussed the role of women in a number of specialties and general practice in detail[99]. She considered GPs to be the 'subalterns of medicine, who partake of its authority but at a place from the side', with women as 'the subalterns of general practice', because of their lower status and income when compared to the rest of the medical profession(Page 162). Pringle describes the emergence of two distinctly different schools of thought within general practice: one focusing on a social orientation including health promotion, and the other reclaiming 'a more traditional clinical approach including the right to do minor surgery'[99]. She saw this as being in some ways a gender divide, with female GPs more likely to place themselves on the social and psychological 'side' and males on the clinical 'side'[99]. However, she did

not distinguish between urban and rural GPs and it is possible that, because of their greater involvement in procedural medicine and hospital care of patients, many male rural GPs would focus on the more traditional clinical approach, with the divide in rural general practice between procedural and non procedural being even greater in rural practice than for Pringle's participants.

Sinclair also drew on Bordieu's theory of 'habitus' when he investigated the development of professional identity in medical students as they progressed through their medical training[311]. Sinclair identified a number of professional dispositions medical students acquire as they train to become doctors. These dispositions include Knowledge, Experience, Responsibility, Cooperation and Competition. Sinclair saw personal Idealism as giving way to professional Idealism and Economy and Status as the students progressed through their training[96]. Like Pringle, Sinclair regarded 'all the professional medical dispositions' as historically male, stating that 'the emotional attitudes connected to them (the scientific objectivity of Knowledge, the emotional detachment of Experience, the mature judgement of Responsibility and the harsh cohesion of Cooperation) are also culturally masculine and opposed to stereotyped female emotion'[97](Page 286). In discussing a study that found high levels of depression in female resident medical officers, Sinclair suggested that female medical students appeared to have coped with the predominantly masculine cultural environment throughout medical school, perhaps, by forming mutually supportive groups. However, this strategy was more difficult in a hospital setting, because many hospital RMOs were working as RMOs in professional segments where most health professionals (including senior members of the medical profession and some nurses and patients) saw Surgery and Medicine in hospital 'as a man's job'[98].

Thus, the relationship between the professional identity of doctors and gender identity is discussed by several researchers, most considering the cultural environment of medicine to be predominantly masculine, but some discussing the way female doctors perceive their professional identity. However, even where researchers such as Pringle consider professional and gender identity in general practice, they do not distinguish between rural and urban general practice, even though some

general practitioners now see rural general medicine as a distinct discipline[31, 299, 300].

2.11 WHAT GAPS ARE THERE IN THE LITERATURE? WHERE TO FROM HERE?

This literature review has shown that there is very large body of literature on the recruitment and retention of rural doctors, as well as literature specifically on female rural doctors and women in medicine. However, most of this research has been quantitative and has focused on associations between various factors and the recruitment or retention of rural doctors. Some researchers have considered rural recruitment and retention more broadly from a social viewpoint, for example Cutchin considered the relationship between place and self and discussed the role of place identity in the retention of rural doctors[25, 82], and Han and Humphreys[90] and Kearns et al[91] considered the concept of place integration in relation to rural recruitment and retention of IMGs.

With an increasing proportion of women in the medical workforce, there is also now a need to consider sex differences and gender issues in relation to rural medical workforce and a number of researchers have begun to focus on these issues. Additionally, the attitudes of younger doctors to working hours and work/life balance appear to be changing, and there is a need to consider generational change in rural medical workforce research.

While some researchers and sociologists have focused on gender and professional identity, none have considered the gender, place and professional identity together. Cutchin implies age and gender might have important influences on retention, but he was unable to consider various aspects of gender or age in his discussion of self because the participants in his study were fairly homogenous (all being male and mostly middle aged)[25]. Thus, there is the need for research that considers rural medical recruitment and retention from a social viewpoint and incorporates concepts of place, gender and identity.

CHAPTER 3 METHODS

In the literature review recruitment and retention of rural doctors were discussed as two distinct processes. For logistical reasons most medical workforce research focused only on either retention or recruitment. The methods used for this Thesis have the advantage of analysing data collected from a number of studies over a 9-year period and of considering both rural recruitment and retention broadly from a social viewpoint.

A case study design[314], which integrates findings from a series of qualitative studies on female rural doctors and medical students, is used in this Thesis. This is a particularly strong design with extensive methodological triangulation being possible because of the data being collected using different data collection methods and from different populations. In addition the Thesis is able to incorporate a longitudinal component because the medical students were followed over a three-year period and changes in their location intentions were able to be observed and explored qualitatively. Neither a case study design such as this nor longitudinal methods have been used previously in qualitative research investigating rural medical recruitment and retention.

Another strength of this Thesis is that the samples for the research were drawn from two broad groups, medical students and female rural GPs, so that I have been able to develop a model for understanding both rural recruitment and retention using qualitative research methods—something that has not been undertaken in previous rural medical workforce research. In addition the perceptions of these two groups have particular importance for the future medical workforce, because of generational change and feminisation of the medical workforce.

By using qualitative methods for this Thesis, and by analysing the data at a thematic level, I was able to adopt a new approach to understanding rural medical workforce recruitment and retention, and incorporate concepts of professional, place and gender identity, all of which are significant in understanding rural medical workforce in the 21st century.

3.1 WHY A QUALITATIVE METHODOLOGY

Multiple factors affecting rural recruitment and retention were identified in the literature review. The need for qualitative research analysed at a thematic level to provide an understanding of the complex interrelationships between these factors was also identified. It was also clear that to address future rural medical workforce problems it would be important to explore the experience and views of medical students/recent medical graduates and female rural doctors. While place identity, professional identity, and gender identity had been considered separately in the past, they had not been considered together. So there is a need to consider how place, professional and gender identity interact in the doctor's location choice. These issues could only be considered using qualitative methods.

Qualitative methods provide a way to understand people's experience of their social worlds and the way in which they understand these worlds. Qualitative researchers take the approach that they are investigating people 'who think and feel and react accordingly', rather than 'objects which react to external forces in a passive and predictable manner'[315](Page 62). The philosophical approach I adopted in relation to my research was that, in seeking to understand the reasons for doctors' location choices, we are investigating the complex processes which influence individuals' decisions about the directions which their lives will take.

As discussed in the literature review, the vast majority of rural medical workforce research has been quantitative in design. Most previous studies have identified variables that might relate to rural location choice and sought to establish a cause and effect association between these variables and rural location choice[8, 78, 170, 184, 316, 317]. While such studies have provided many valuable insights into factors effecting rural medical workforce recruitment and retention, a disadvantage of quantitative approaches and methods in social research is their need to reduce whatever is being investigated to a limited number of factors to be analysable. This reductionist nature of quantitative research eliminates some of the complexity of human social behaviour. In using qualitative methods I sought to capture some of the complexities of human social behaviour that may have been lost in previous quantitative studies.

In undertaking this research, I also sought to understand the experience and perceptions of the study participants and how this had shaped their view of the world. In particular, I was seeking to understand the perspective of a new generation of potential rural doctors, and of female rural GPs. As such, I was investigating groups with whom limited research had previously been undertaken and, I did not want new emerging issues to be limited by the use of a quantitative methodology, which would require predetermined hypotheses to be proven or disproven, because I was seeking new perspectives on rural medical workforce. In this sense the approach I used was inductive as I was not attempting to deduce conclusions by proving hypotheses but I was seeking to induce new concepts from the data.

3.2 THEORETICAL APPROACH

This research has been undertaken using a social constructionist paradigm. A social constructionist view holds that people interpret their lives on the basis of a view of the world that has been built up from their interactions with others[315]. Meanings are shared through the use of language and non verbal communication and can never form a neutral view of the world[315]. Within this paradigm, the researcher is investigating the 'socially constructed meanings that form the participants' realities, and the behaviours that flow from these meanings.' Using this approach, the researcher is seeking to understand how the participants being studied 'understand and act within their worlds'[318].

when you say you are inductive, I agree can you add one sentence to define inductive to say something like similar to other inductive approaches such as grounded theory I did what...

The research undertaken for this Thesis mostly used an inductive approach, seeking to understand the experience of participants[319] rather than using a deductive approach, which would test theories or prove or disprove hypotheses[320]. This understanding of the experience of the participants formed the basis for a model, which emerged from the data, and which could be used to understand many issues relating to rural medical recruitment and retention.

The analysis of the data was undertaken using an approach that focused on interactions between individual people in particular settings rather than

interactions between institutional structures and people, which is the approach of ethnography. The reason for this approach was that I felt that a more 'interactive interpretive approach, which examined active individuals' understandings and meanings within small scale contexts' would better capture the processes and influences in the location choice of individuals, than other approaches[320](Page 158).

3.3 CASE SERIES DESIGN AND OVERALL METHODOLOGICAL APPROACH OF THE THREE STUDIES PRESENTED AND ANALYSED IN THIS THESIS

This Thesis uses a case study design with the cases being the categories of people: medical students and female rural doctors. Yin defines case studies as 'research situations where the numbers of variables of interest far outstrips the number of data points' [321] (page 1210) stating that 'the result is a definition that considers case studies from the standpoint of study design and does not automatically associate them with any data collection method' [321] (Page 1210). A social science case study has been described as 'an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when boundaries between phenomenon and context are not clearly evident' [322] (Page 325). Using a case study design the researcher is able to draw on any methods that are useful in illuminating the research problem [314]. Case study designs are useful to researchers investigating complex problems because 'multiple methods and perspectives may be integrated in the quest to gain an understanding of often complex empirical phenomena' [314] (Page 325).

This Thesis draws data from three studies, using a variety of methods of data collection and investigating several populations and, as such, has a case study design. The strength of this overall design is that it allows extensive methodological triangulation: the viewpoints of the different populations and the use of different data collection methods allowing comparative analysis and interpretive processes to be undertaken[323].

The three studies from which the data is drawn were performed as a body of related research over a period of 9 years. The studies were:

- a study on medical students using focus groups initially, and then interviewing selected students longitudinally over a period of three years from to 2002-2005;
- a pilot study on female rural GPs using focus groups conducted in 1996-97[126];
- a second study done on female rural GPs using in depth interviews undertaken in 2000[124].

While each of the three studies had stood alone as complete studies, the overall Thesis was strengthened by analysing the data together because similar themes emerged from each study. Using this analysis, the data have been methodologically triangulated by comparing emergent themes from three studies which investigated different groups of participants at different times[323].

In this chapter I shall describe the methods used in the research overall, and then go on to describe in detail the methods used in each study.

3.3.1 Aims of individual studies and Thesis aims

As already discussed the aims of this Thesis are to:

- Investigate qualitatively and in depth the experiences and viewpoints of medical students and recent medical graduates in Australia between the years of 2002 and 2005 relating to rural medical recruitment;
- Investigate qualitatively and in depth the experiences and viewpoints of female rural general practitioners (GPs) in Australia between 1997 and 2001 relating to rural general practice retention;
- Use this rich qualitative data to understand how place, professional and gender identity interact and influence medical students' and female rural GPs' location choice in Australia.

 And develop a model for understanding recruitment and retention of rural doctors in Australia, which incorporates concepts of place, gender, and professional identity and which could be used to develop strategies to address rural medical workforce shortages.

Each of the three studies, which contributed to the Thesis, was performed separately at different times and their initial aims differed, but were related. The student study focused on recruitment of rural doctors having broad aims to explore the influences on the career and location intentions and choices of medical students, with a focus on social and cultural issues including gender issues. The initial aim of the student study was similar to the first aim of the Thesis.

The two female rural GP studies focused on the retention of female GPs in rural areas. The first study was exploratory, aiming to identify the professional and social support needs of female rural GPs and strategies they thought were appropriate to address these needs. The second study aimed to explore these problems in greater depth, identifying both existing and possible support structures and practice structures that would assist in the recruitment and retention of female rural GPs. The second aim of the Thesis was similar to the initial aims of the female rural doctor studies.

However, the Thesis aimed to build on the work done in the student study and female rural doctor studies, for which only descriptive analyses had been done. So that the aims of the individual studies were drawn together by the overall aims of the Thesis, which were to:

- Use the rich qualitative data collected for the three studies to understand how place, professional and gender identity interact and influence medical students' and female rural GPs' location choices in Australia;
- Develop a model for understanding recruitment and retention of rural doctors in Australia, which incorporates concepts of place, gender, and professional identity, and which could be used to develop strategies to address rural medical workforce shortages.

3.3.2 Research questions

The research questions investigated in this Thesis were:

- What are the experiences and viewpoints of medical students and recent medical graduates in Australia between the years of 2002 and 2005 relating to their possible future entry into rural medical practice?
- What are the experiences and viewpoints of female rural general practitioners (GPs) in Australia between 1997 and 2001 relating to rural general practice and their intentions to stay in rural practice in the future?
- How are Australian medical students' and female general practitioners'
 perceptions of entering and remaining in a rural health career influenced by
 the constructs of place, gender and professional identity? Does this
 perception change as doctors progress through their careers from students
 to practising general practitioners?
- Can a model for understanding the recruitment and retention of rural doctors in Australia, which incorporates concepts of place, gender, and professional identity and which could be used to develop strategies to address rural medical workforce shortages, be developed?

3.3.3 Sampling

The sampling strategy used in the three studies reported in this Thesis was purposive sampling, which was aimed at including information rich cases that would provide an understanding of rural location choice by doctors, and in particular by female GPs[324, 325].

The sampling strategy in both the studies on students and female rural doctors included sampling within geographical strata because of the possible influence of variations in geography in relation to the research questions[326]. In the student study, the strata were universities at different locations, while in the female rural doctor studies the strata were divisions of general practice. The strata shall be described in detail in the subsequent sections on the methods for each study.

Within these strata, efforts were made to maximize the variability of participants in order to include a wide range of perspectives. In sampling for the three studies reported in this Thesis, I wanted to include a variety of different perspectives, which would ensure rich data and comprehensive results. For this reason, wherever possible within the practical limits of the research (including ethical considerations such as privacy, and time frames relating to research funding), I sampled from as diverse a group of participants as was possible. While maximum variation sampling allowed common themes and experiences to emerge across the very diverse samples, the samples also included some extreme cases and some negative cases[327].

3.3.4 Methods used for data collection

Two methods of data collection, focus groups and in-depth interviews, were used in collecting data for this Thesis. The use of two methods of data collection and collection of data over a period of time allowed the use of methodological triangulation[323].

3.3.4.1 Focus groups

Focus groups were used initially in the student study and were used in the first female rural GP study to collect data about the broad issues being investigated.

The focus groups were all homogeneous for a few particular participant characteristics, to allow for effective data gathering[328]. All focus groups were conducted as semi-structured discussions. However, while a theme list was used to structure the focus groups, the studies used an informant led approach and the fieldwork data collection was sensitive to the concerns of and issues raised by the participants in the focus groups. The focus groups were facilitated by an experienced qualitative researcher, with some of the student focus groups having two facilitators (a male and female facilitator).

All of the focus groups were audiotaped and transcribed verbatim. The focus group participants were asked to complete a brief questionnaire providing some demographic details so that during analysis, where possible, their comments could be related to their social context.

3.3.4.2 Interviews

In depth interviews were used later in the student study and in the second female rural GP study to gain a deeper understanding of the issues raised initially from the focus groups and/or clarification of issues raised in the focus groups. Interviews were guided by theme lists (Appendix II) However, in both the student and female rural doctor research studies, analysis started early in collection of data and issues were explored with new participants as indicated on the basis of the analysis already undertaken[329]. Participants in the student study were interviewed two or three times over a three-year period, so that the longitudinal design of this study provided the opportunity to explore various aspects of the model that was developed from the data as it was being developed[329].

All of the interviews were audiotaped and transcribed verbatim. The interview participants were asked to provide some demographic details as part of the interview, so that during analysis where possible their comments could be related to their social context.

3.3.5 Analysis

3.3.5.1 Overall approach to analysis

Initial analysis of the data from all three studies involved mainly descriptive coding, with the main themes and issues being identified and data relating to any emergent themes being coded. At this stage, the main aim of the analysis was to identify any issues that were important to the participants[330]. A second stage of deeper thematic analysis was then undertaken, during which themes were grouped and links between the groups of themes were identified. For the student study, this was undertaken during the interview fieldwork with the model being developed and modified as the data was still being collected[329]. For the two female rural GP studies, this was undertaken as a new analysis some time after the data collection, and this analysis was focused mainly on exploring whether the female rural GP data fitted the model developed from the student data. Although the two female rural GP studies were initially based on slightly different research foci, these studies acted to

provide excellent combined data allowing an overview of interpretation that highlighted common themes.

3.3.5.2 Coding

Initially, 'open coding' of all the data collected was undertaken[331]. The coding undertaken at this stage could be described as 'topic coding', which Morse refers to be as being 'used to identify all material on a topic for later retrieval and description, categorization and reflection'[332](Page 118). This coding process was used initially prior to more interpretive coding, which was undertaken in the second stage of deeper analysis[332]. This coded data was grouped to form a descriptive summary of the data.

During the second stage of analysis by a process of memoing and diagramming[333], coded data were regrouped and new categories formed for a deeper thematic analysis.

Thematic coding was considered at both the microlevel of the individual as demonstrated by the individual case studies which are presented in Chapter 5; and at the macro level of the broader community as demonstrated in the final diagram of the 'Landscape of fulfilment' model and the Venn diagrams which relate to themes within the wider population. This is similar to other multilevel modelling found in inductive approaches such as grounded theory.

The relationships between the categories were then explored and illustrated diagrammatically forming the 'Landscape of fulfilment' model and the Venn diagrams.

3.3.5.3 Organisation of data

Data from all three studies were organised using computer program N6[334]. This program, chosen to facilitate the organization of the large quantity of data from the three projects, had the capacity for a large number of codes and complex analysis and provided easy retrieval of coded data.

3.3.5.4 Memoing and diagramming

In analysis of the data for all three studies, memoing and diagramming were used to aid in developing an understanding of the themes at a conceptual level[333].

Memos were written in relation to any issues identified in the data as being of possible importance in the analysis, and recorded mostly electronically in relation to the data being analysed. Some memos, which were noted down in hard copy initially, were later added to the electronic data.

As the student data were analysed, categories were developed and diagrams were used to develop an understanding of how the categories related to each other. The initial diagrams were modified frequently until the final model was developed.

3.3.5.5 First level descriptive analysis

The first stage of analysis was a descriptive analysis of themes emerging from the data. At this stage, I undertook an iterative process of reading and rereading completed transcripts while continuing to collect new data[335]. This 'immersion' in the data allowed me to be sensitive to the participants' concerns and to explore issues as appropriate in response to the ongoing analysis[336] when I needed to gain a deeper understanding of the emerging themes.

3.3.5.6 Second level thematic analysis

At the second stage of thematic analysis, I undertook a process of 'moving up' from simple description of the themes to a more conceptual level of analysis[337]. At this stage, I reread the data and thought about the ways in which the emergent themes could be grouped and how they related to each other. I used memoing and diagramming extensively to develop new categories and come to a new understanding of how these categories related to each other[332]. I was able to test the robustness of the model developed with data collected from interviews, firstly in the later stages of the Student Study, and then later during analysis of the female rural GP data. During the final stages of the research, I referred back to the literature on rural medical recruitment and retention to check for inconsistencies in the model I had developed in relation to existing research and knowledge[338].

3.3.5.7 Constant comparison

During the analysis, data were compared with data about similar themes, with comparisons being made in relation to data from individual participants and to data from different participants[338, 339]. As new data was collected and analysed, it was compared with data that had already been coded. As the new transcripts were coded and analysed, old previously coded transcripts were revisited and, if appropriate, new codes and categories were applied to them also[338].

The use of a computer program for data coding and retrieval aided the process of constant comparison, as it was technically easy to retrieve data from different interviews and focus groups and from different participants, which had been given the same code.

As the data from the female rural GP studies were analysed, comparisons were made between these data and the student data. In the final stages of the analysis, comparisons of the findings of the study were made with the published literature.

3.4 DETAILED DESCRIPTION OF METHODS USED IN STUDENT STUDY

3.4.1 Aims

This study aimed to explore the influences on the career and location intentions and choices of medical students, with a focus on social and cultural issues including gender issues.

3.4.2 Study design

This study was undertaken in 2 stages over a period of 4 years. These stages were:

- · exploratory focus groups with Australian medical students
- in depth interviews with individual Australian medical students repeated after 12 to 18 months

The use of two forms of data collection provided the opportunity to undertake methodological triangulation within this study. The use of the second interviews provided the opportunity to follow up issues that had arisen in earlier data analysis and explore the influences on the students' career choice over time, adding a longitudinal perspective to the data collected.

3.4.3 The sample

Throughout the study, purposive sampling was used, with the researcher attempting to include students from different demographic backgrounds and to achieve maximum variation in the sample[326]. In addition, sampling was stratified in two ways: firstly, by sampling students from four universities; and secondly, by sampling students who were in the first and final years of their studies. Stratification of the sampling in this way provided the opportunity to explore differences between students at different institutions and at different geographical locations, and at different stages of their training. The universities differed from each other in relation to their geographical location (two in a capital city and two in regional areas), the state in which they were located (three in NSW and one in Queensland), and their admission criteria (two accepting mainly school leavers, one with graduate entry and one with mixed entry). The exception to this stratification was two focus groups that were conducted at a rural student conference, with the purpose of ensuring that some students with a high level of interest in future rural practice were included in the sample.

As the study progressed, theoretical sampling was used[329]. For example, during the collection of interview data, few male students had indicated their interest in participating in the study. At this stage, another recruitment notice was sent out to students requesting more male students to participate in the study. This ensured that any gaps in the data were filled and a range of views was included in the data. The total number of students who participated in the study was 133.

The sex and stage of training of all student participants in the study is shown in Table 3:1.

Table 3:1 Numbers of participants in focus groups and interviews

	Focus groups	Interviews	Total
Male	42	18	60
Female	55	38	93
First year of training	39	29	68
Final year of training	58	27	85
Graduate entry students	34	34	68

3.4.3.1 Focus group sample

During 2002, ten focus groups of 6 to 10 medical students were conducted at three Australian universities, and a national student rural health conference with 97 student participants in all. The focus groups were homogeneous[340] for stage of training (either first or final year) and at least one other factor (gender, medical school admissions process, or rural interest). These factors were chosen because it was thought that they may contribute to the students' attitudes to rural practice.

Even though the three universities were all in the state of NSW, they had different entry criteria and different course structures, and so the diversity of the sample was maximized. The University of Sydney had a four year graduate entry problem based course, so it was expected that most of these participants would be in an older age group and have different life experience from the students from the University of NSW, which accepted mainly school leavers who had achieved very high grades in the Higher School Certificate examination and had a 6 year traditional undergraduate course. In contrast, the University of Newcastle was a located in a regional city, had mixed graduate and non-graduate entrants and a five-year integrated course. The students attending the rural conference attended eight different medical schools, but mostly had a strong interest in a rural career. The Newcastle focus groups were conducted as single sex groups in order to explore the possibility that various issues might have differing levels of importance to male and female students.

First and final year students were included in the study, as the literature indicates that students' attitudes to career choice changes as they progress through medical training[341], and provided the opportunity to explore differences between first and final year students.

Table 3:2 shows the composition of the focus groups in relation to university attended and sex.

Table 3:2 Focus group composition: one focus group was held in each category shown	T 11 00F	• • •	(1	111 1 . 1	
	Lable 3.7 Hodis group	composition, one	tociis oroiin was h	eld in each category show	<i>M</i> 711
	Tuble 5.2 Tocus group	composition, one	Tocus Stoup was in	cia ili cacii category silov	ATL

	University of NSW	University of Sydney	University of Newcastle	Rural Conference
Mixed sex	Year 1	Year 1		Year 1
	Year 6	Year 4		Final year
Male			Year 1	
			Year 5	
Female			Year 1	
			Year 5	

The age range of the students was from 17 to 40 years. The participants included students with the following characteristics: single and married, and a few in same sex relationships; some who had children; graduate students; some who had had many years experience in the workforce in a variety of occupations; students who entered university immediately after completing their secondary education; and some students from Aboriginal and Non-English speaking backgrounds.

3.4.3.2 Sample for in-depth interviews

During 2003 and 2004, semi-structured interviews with first and final year medical students from four Australian universities were undertaken. Participants were included from the Universities of Newcastle, NSW and Sydney again and data was also being collected from students from James Cook University (JCU) in Townsville. JCU is located in far North Queensland in the remote major centre of Townsville. The medical course at JCU started in 1999 with a focus on rural health and general practice[342]. Almost all of the students accepted were school leavers, and many younger than most school leavers in other parts of Australia because of the Queensland educational system. Preference was given for entry to JCU medical course to students with a rural background and with an interest in rural and indigenous health. The addition of participants from JCU provided the opportunity to include students from interstate, again for greater diversity of the sample. First and final year students were interviewed as for the focus groups because this would provide the opportunity for comparison of students' attitudes to rural careers early and late in their medical training. At the time of the interviews the JCU medical

school only had students up to Year 5 of a six-year course because of its short time of operation, so Year 5 students were interviewed at JCU.

3.4.3.3 Sample for repeat interviews

At the time of the initial interview, the students were asked to consent to involvement in a long-term study and were informed that they would be contacted within one to two years for a second interview. The final year students from the NSW universities had graduated from medicine and had mostly completed their internships at the time of the second interviews. Fortynine participants of the initial cohort responded to attempts to contact them and were interviewed twice, with seven being lost to follow up.

3.4.4 Recruitment of participants

3.4.4.1 Exploratory focus groups

Students were invited to participate in the focus groups by a notice posted electronically on their medical faculty web sites, a paper notice distributed to tutorial groups, or by an announcement at the conference. The notices stated that the focus groups and interviews were part of a project investigating rural career choice, but was not only for students interested in rural practice. The information sheet and consent form is attached in Appendix I.

3.4.4.2 Semi-structured interviews

Students were invited to participate in the semi-structured interviews by a notice posted electronically on their faculty websites. They were informed at the time of recruitment that the study would be a long-term study and they would be contacted yearly for a period of three years for repeat interviews. Personal information to allow follow up was collected from them and stored on a database separate from the de-identified data collected at the first interview.

3.4.4.3 Repeat interviews

After a period of 12 to 18 months the students were followed up. Forty-nine were contacted either by phone or email and interviewed, mostly using information stored on the database at the time of the first interview. In a few cases, university and medical board information needed to be accessed to find

the students. For logistical reasons most of the repeat interviews were conducted as phone interviews.

3.4.5 Focus group and interview questions

The focus groups were semi-structured, lasting 60 to 90 minutes, with set questions posed by facilitators. Most groups were facilitated by a male and female facilitator, with some having one facilitator, for logistical reasons. The initial interviews, lasting 20 to 40 minutes, were conducted by a female researcher as face to face interviews, except for five that were conducted as telephone interviews, while the majority of the follow up interviews were conducted as telephone interviews for logistical reasons.

The same broad questions were used for the focus groups and interviews and were developed on the basis of the literature review, specifically for the purposes of this project. They asked about the students' attitudes and intentions in relation to discipline of medicine, geographical location, practice environments in which they wished to work; and influences on their career intentions, the decision-making process, and about factors that might influence them to change their intentions in the future. While a theme list was used to structure the interviews[343], the project also used an informant led approach and the field work data collection was sensitive to the concerns of and issues raised by the subjects in the interviews, with extra questions being added as necessary to answer questions that arose from data already collected. The study used a constant expansion technique with new questions being added to the interview schedule as they arose from data already analysed[343]. The theme list used initially in the study is attached in Appendix 3.

3.4.6 The researchers

I conducted all of the focus groups, myself, except for the Sydney University first year focus group, which was conducted by a general practice academic registrar. The registrar was trained by me in conducting focus groups by discussion about the theory and practical aspects of conducting focus groups prior to his involvement in the focus groups and by observing some initial focus groups before conducting a focus group alone. I conducted the focus groups with Newcastle first and final year male students, Newcastle first year

female students, and with Sydney first year students with the assistance of this registrar, and conducted the others alone without an observer present. I conducted all the interviews alone, without an observer present. Although I had worked in the past as a lecturer at the University of Newcastle, at the time the research was undertaken I was not involved in any undergraduate teaching at all. So that even though I had taught a small number of the final year Newcastle students previously, I had no involvement in any teaching at the time of the research study.

3.4.7 Analysis of data

All focus groups and interviews were tape recorded and transcribed by an administrative assistant. I then checked the transcripts in detail for accuracy. Two interviews failed to record properly due to problems with equipment as the availability of equipment was not always consistent, so the interviewer's notes only were used as data for one, and one was excluded because the notes were insufficient to be of any value. While students were given the opportunity to review the transcripts only one student took this opportunity up and returned comments on the transcripts, wanting some data removed because of the sensitivity of her comments.

The transcriptions were analysed for content and emergent themes using the N6 computer package[334] to organize the data. Data analysis commenced early in the study and a process of constant comparison between data from different participants was used in analysing the data. During the focus group stage of the study, the registrar and I both coded the data, and then discussed similarities and differences in our coding, coming to agreement on the appropriateness of how we had coded the data and the emergent themes. I coded the interview data alone.

With analysis of data commencing early in the study, new issues that arose as the study progressed were able to be pursued with new students who were interviewed subsequently or at the students' second interviews. For example, the grouping of factors into domains was completed with the focus group data, and then the various aspects of the domains and interactions of the domains were explored as the in depth interviews were undertaken.

Simultaneous data collection, coding and analysis during the student research study enabled me to encourage new participants to agree to participating in the study in order to fill in gaps in the data. For example, in the early stages of the student interviews only a few male students had been recruited, and it appeared from the data collected at that stage that there might be sex differences in students' attitudes to a range of the issues being investigated. As a result, a notice specifically seeking more male participants was posted. As the study progressed, the question arose as to whether some of the data was related to the location of the students in NSW and at medical schools with a predominance of specialist teachers; therefore, a University in Queensland, which was more general practice oriented, was included in the study.

This simultaneous collection, coding and analysis of data also provided the opportunity to test emergent concepts with subsequent participants or at later interviews with participants already interviewed. For example, during the student study the concept of 'comfort zone' in relation to location emerged from the data and I was able to develop this further and test the robustness of this concept as I interviewed further students.

The students were interviewed on at least two occasions over a three-year period during the course of the research so that it was possible to clarify issues as needed at the second and third interviews, and to explore how experiences during the time since the previous interview had affected the students' viewpoint on rural practice.

Saturation of the data was achieved by the completion of the focus groups with no new issues emerging from the data collected in the final focus groups.

3.4.8 Ethical issues

Ethics approval was gained from the Human Research Ethics Committees of the four Universities whose students were involved in the research. Ethical issues that were considered in relation to this project were informed consent and confidentiality. Although I was working as a Research Fellow at the University of Newcastle while undertaking the research, I was not involved in teaching any students at this time, so concerns about power issues in a student/teacher relationship did not arise in relation to ethical considerations.

Recruitment was undertaken with potential participants being given detailed information about the project and what their involvement would involve. They were informed that their participation would be entirely voluntary and that they would not be not be disadvantaged in any way if they decided not to participate or if they decide to withdraw from the project at any time.

Confidentiality of participants was maintained by de-identification of data, such as removal of any specific references to either places or people that would enable identification of participants.

The focus group participants were asked to maintain the confidentiality of any information discussed during the focus groups but at the same time they were reminded that while every effort was being made to ensure confidentiality, the researchers could not guarantee the confidentiality of the data if any of the participants did not keep the data confidential[344].

A database that included identifying information needed to be kept in order to follow up the interview participants over a period of two years. Each participant was assigned a code, and the tapes of the interviews and interview transcripts were identified by these codes. The database included the code and their details and was accessible only to the researcher, being stored in password protected files on the researcher's computers with hard copies being stored separately from the research data in a locked filing cabinet at the Discipline of General Practice, University of Newcastle, Newbolds Building, Mayfield.

3.4.9 Summary

This study used methods which were robust and gave the study a high level of trustworthiness and which included:

- Broad sampling from a diverse population of medical students ensuring that the sample was as representative as possible;
- The use of more than one method of data collection, which allowed the trustworthiness of the data to be tested by triangulation;
- The simultaneous collection coding and analysis of data, which provided the
 opportunity for the testing of concepts as they were developed by analysis
 already undertaken thus ensuring that the thematic analysis was robust and;

 The longitudinal collection and analysis of data over a three-year period, which allowed for changes in the students' perceptions and intentions towards rural practice to be observed, and for any changes to be discussed with participants.

3.5 DETAILED DESCRIPTION OF METHODS USED IN INITIAL FEMALE RURAL GP STUDY

This section describes the methods used in the initial exploratory study on female rural GPs undertaken in 1996-97[126]. This study used teleconference focus groups to investigate the perceptions of female rural GPs of their professional and personal problems. Initially, when this study was undertaken, descriptive analysis only was done. For the purposes of this Thesis, a further thematic analysis was undertaken in which the data was analysed together with the data from the second female rural GP study in relation to the domains and structure of the 'Landscape of fulfilment' framework. Section 3.5 will describe the methods used for this study, apart from the analysis undertaken for the Thesis. The thematic analysis of both female rural GP studies will be described in Section 3.6.5.

3.5.1 Aims

The aim of this study was to explore the experiences and viewpoints of female rural GPs in Australia in 1996-97, relating to rural general practice retention.

3.5.2 Project design

This study was one of the first studies conducted internationally on the professional and social support needs of female rural GPs, and was an exploratory study, so that a qualitative methodology provided an appropriate way of exploring a topic about which little was known at that time[345]. The study was conducted during 1996-97 and used teleconference focus groups. The use of focus groups allowed the researchers to obtain a broad range of views from a variety of participants[346].

3.5.3 Sample

3.5.3.1 Geographically stratified sampling

Purposive sampling was used for this study, with rural divisions of general practice being used for geographical stratification and the sample being drawn from three geographically different rural areas of Australia, in two NSW rural divisions and in rural Western Australia. This stratified sampling ensured that the sample included participants located in rural and remote areas, and coastal and inland areas, so that the relationship of particular themes to particular types of geographical locations could be identified. Each of these areas was divided into two parts, each of which included towns that were similar geographically, either in terms of the size of town or the location (for example coastal as opposed to inland). This division of the sample into six geographical areas was used to produce as much homogeneity as possible in relation to geographical location, and thus to make the focus groups more effective.

The individual divisions of general practice involved are not identified in this Thesis because of the small number of female doctors in the divisions involved, the detailed and confidential nature of some of the data, and the risk of some participants being identifiable if care was not taken in reporting the findings.

3.5.3.2 Description of geographical strata, from which sample was drawn

NSW rural divisions of general practice

The two NSW divisions of general practice included in their catchment areas RRMA 3, 4, 5 and 7 towns. The population from which the sample was drawn included female GPs from small inland towns with populations of less than 20,000 and GP staffed hospitals, female GPs working in larger towns with populations of 30-40,000, and specialist and resident medical officer staffed Base Hospitals. About 20% of the GPs in the divisions of general practice in the study were female. In this case, it was decided to conduct two focus groups with GPs from smaller inland towns (one in each of the two divisions): one with GPs from the coastal areas, and one with GPs from the larger regional towns.

Rural and Remote Western Australia

Rural Western Australia included RRMA 4, 5, 6 and 7 towns. The areas in which the study was undertaken included the remote northern region, which included a number of single doctor towns, towns with several GPs in private practice, and some towns where all GPs are government employed and salaried. These towns were all remote (at least 1500 kms to the nearest tertiary referral unit) and had GPs staffed hospitals. The Central Wheat Belt area and the Southern region of Western Australia included a number of small towns that were closer to Perth (200-300 kms away) and were serviced by doctors in private practice with GP staffed hospitals. In this case, it was decided to conduct one focus group with women from the remote northern region and the other with women from the Central Wheat Belt area and Southern region. The population from which the samples were drawn was the female rural GPs in Western Australia, where there were 79 female GPs out of a total of 349 rural GPs.

3.5.3.3 Recruitment of participants

Using divisions of general practice for stratified geographical sampling allowed the researchers to work with the divisions' staff in recruiting participants, using the knowledge of the division staff about their members to ensure a diverse sample of participants was recruited. The Chairs of the divisions of general practice and the Department of General Practice at the University of Western Australia provided lists of female rural GPs who could be invited to participate in the teleconferences. The participants were recruited by a letter, sent from the divisions of general practice or from the University of Western Australia, outlining the project and inviting them to participate in the teleconferences.

3.5.3.4 Participants

A total of twenty-eight doctors participated in the focus groups; the numbers in each are listed in Table 3:3. The sample included participants who worked in a variety of situations including full and part-time work, salaried positions, and in private practice. Twenty-five of the twenty-eight participants were married, and twenty-four of them had children, who varied in age from preschoolers to adults. Thirteen worked full time and fifteen worked part-time.

Table 3:3 Number of focus group participants in female rural doctor study

Geographical area	Number of participants
Coastal area in NSW Division of General Practice Number 1	4
Inland area in NSW Division of General Practice Number 1	4
Large towns in NSW Division of General Practice Number 2	5
Small towns in NSW Division of General Practice Number 2	4
Southern and Central WA	5
North West WA	6

3.5.4 Data collection using focus groups

Focus groups, rather than individual interviews, were chosen as the most appropriate method of data collection because the researchers were seeking to identify a wide range of issues, rather than to delve deeply into the experience of individuals[346].

The relatively new method of teleconference focus groups was used for this study[347] because of the barriers to attending face-to-face focus groups for participants who were large distances from each other, geographically, and had little time to spare for travel. This form of focus group had not been commonly used in health research previously so there was limited literature available on the use of teleconference focus groups. However, it was thought that this method would maximize participation of the female rural GPs, and the discussion between participants did not appear to be at all inhibited by the use of teleconferencing[347]. There may be some disadvantages in using teleconferencing for data collection in relation to the facilitator's awareness of participants' body language and level of participation, but it was thought that the advantages in terms of recruitment of participants would outweigh the disadvantages[347]. In the population being recruited many of the participants had childcare commitments, and the use of a teleconference allowed participation in the focus group while being available if needed for their children. It was also likely that some the participants would have had experience with teleconferencing because it was being used increasingly for administrative purposes by rural medical organizations in which some of them would have been involved.

The teleconferences were conducted by a female facilitator experienced in qualitative research. They were held in the evenings in order to allow doctors who worked full-time to participate, and lasted from one to two hours.

3.5.4.1 Focus group questions

A semi-structured interview with a theme list was used for the focus groups[348], with a female facilitator for all of them. While a theme list was used to structure the interviews, the project also used an informant led approach and the field work data collection was sensitive to the concerns of and issues raised by the participants in the interviews, with extra questions being added as necessary to answer questions that arose from data already collected. The theme list used initially in the study is attached in Appendix II.

3.5.5 Analysis of data

Descriptive analysis was used to identify the issues that were clustered around a number of emergent themes. Initially, the data was coded and organized manually, without the use of a computer program. The data were coded and checked independently by five researchers who discussed their results to come to a consensus on the meaning of the data, ensuring researcher triangulation. At a later date, the data were recoded using N6 computer software[334] to organize the data and reanalysed in greater depth, with a thematic analysis being undertaken at this time. Because the data from both this study and the subsequent one were pooled for the thematic analysis, how this analysis was undertaken will be discussed in section 2.6.5.2, when the second female rural GP study is described.

3.5.6 Ethical issues

Ethics approval was applied for and granted by the Human Research Ethics Committees of Charles Sturt University and the University of Newcastle.

Ethical issues that were considered in relation to this project were informed consent and confidentiality. Recruitment was undertaken with potential participants being given detailed information about the project and what their involvement would involve. They were informed that their participation would be entirely voluntary and that they would not be not be disadvantaged in any

way if they decided not to participate, or if they decided to withdraw from the project at any time.

Confidentiality of participants was maintained by de-identification of data, such as removal of any specific references to either places or people that would enable identification of participants and by not identifying the divisions of general practice involved when writing this Thesis. The focus group participants were asked to maintain the confidentiality of any information discussed during the focus groups, but at the same time they were reminded that, while every effort was being made to ensure confidentiality, the researchers could not guarantee the confidentiality of the data if any of the participants did not keep the data confidential[344].

3.5.7 Summary

This study successfully used teleconference focus groups to explore a new area of research, namely the social and professional support needs of female rural doctors. While the initial analysis of the data identified a number of new issues that had not previously been identified in rural medical workforce research[126], the data was very rich and so a later analysis at a thematic level was able to be undertaken.

3.6 DETAILED DESCRIPTION OF METHODS USED IN SECOND FEMALE RURAL GP STUDY

During 2001 and 2002, a national project investigating the perceptions of female rural GPs of their professional lives and strategies that would help to recruit and retain women in rural general practice was undertaken[124]. For this Thesis, the data from some of the interviews undertaken has been reanalysed in greater depth than was done initially, and analysed with the data from the exploratory project at a conceptual level to test its fit with the model developed from the student data.

3.6.1 Aims

This study aimed to explore the problems of female rural doctors in 2001 and 2002 in depth, and to identify existing and possible support structures and

practice structures that would assist in the recruitment and retention of female rural GPs.

3.6.2 Study design

Qualitative methods were used for this study partly because the study was exploring some areas in which knowledge was limited. Also the researchers were seeking the perspective of the participants on what they saw as their problems and the strategies that should be developed to address these problems and they did not wish to impose any preconceived notions of what the findings might be. The study was conducted in 2001 and 2002 and used face to face interviews, which provided the opportunity to explore in depth any issues that arose and to build on the knowledge from previous research[343].

3.6.3 Sample

For various reasons, including the difficulty inherent in reanalysing the very large amount of data collected for the national project, the data used for analysis for this Thesis was limited to interview data from a sub-sample of participants in a larger national project[124]. Details of how the sub-sample was chosen will be discussed in section 3.6.3.3

3.6.3.1 Sample for National Project

The national female rural GP project used a stratified geographical sampling frame. Interviews were conducted in 14 rural divisions of general practice, with varying geographical features and within all the states and territories of Australia. A total of 114 women were interviewed for this study. Within the divisions of general practice, purposive sampling was used to obtain maximum variation within the sample. The sample included GPs working in a variety of situations (including small and large practices, in salaried and private practice situations, in practices with differing gender balances amongst the doctors, and doctors who were working full and part-time), and with a wide range of personal demographics (including a wide age range, varying levels of experience, married and single GPs, and GPs with and without children).

The sampling of a range of participants in a range of situations meant that the data collected could be understood in context of individual's professional and

social situation. For example, it was possible to explore in these interviews how particular problems discussed in the focus groups, such as role conflict related to practice size and structure, and to the participant's family structure.

3.6.3.2 Recruitment of participants

Sampling being undertaken at a divisional level allowed the recruitment of participants to be undertaken with the assistance of divisions of general practice. The staff of the divisions, which were included in the sampling frame, was asked for advice about whether there were female doctors within their division working in a variety of practice structures and with a range of demographics. The doctors identified as being suitable for the study were then contacted either by letter or phone and invited to participate in the study. If the doctors indicated their willingness to be involved, a time and place suitable for them was arranged for the interview. Informed consent for participation in the study was obtained prior to the interview. The information and consent form is contained in Appendix I

3.6.3.3 Sub-sample for this thesis

I decided to use only a portion of the data collected in the national study for analysis for this Thesis, because the sample from the National project was so large (114 in-depth interviews), and because I had personally interviewed only some of the participants. I had personally interviewed 8 of the 17 participants in two areas of NSW, and co-interviewed 5 with the project officer. So I decided to reanalyse the data from these interviews for this Thesis. I had also visited these geographical areas on a number of occasions and was familiar with various aspects of the communities and the general practice structures within which the participants were working. While 21 interviews were conducted in NSW, some of the interviews did not record properly or did not record completely so that the transcripts of only 17 were complete enough for analysis. I conducted 13 of these 17 interviews either personally or with the research officer. The research officer, alone, conducted the rest of the interviews. One interview was conducted with two participants together, so that a total of 18 doctors are included in this sample. Although this sub-sample had slightly less variation than the national sample, it still included GPs working in a range of different situations in geographically different areas and in a variety of family situations.

The findings from the interview data are more likely to reflect the experiences of female rural doctors, living and working in rural areas (not remote areas) and working in private general practice because this sample did not include any female doctors working in a remote area, and few doctors employed by Area Health Services or in government funded positions (which the National study did include).

3.6.3.4 Geographical strata from which Thesis sample was drawn

The small number of female doctors in the divisions of general practice in which the interviews were undertaken, and the detailed and confidential data collected in some interviews, meant that there was a risk of some participants being identifiable if care was not taken in reporting the findings. While this ethical concern was overcome in reporting the findings of the National study by not breaking the data down even to a state level in publications, it has been dealt with in this Thesis by not identifying the divisions in which the study was undertaken. As an additional safeguard, in this Thesis the results are presented with the data from both female rural GP studies pooled, thus further minimizing any risk of participants being identifiable.

However, some of the geographical and demographic features of the divisions involved are outlined here. The sample was drawn from three NSW divisions of General Practice. These divisions included a coastal division and two inland divisions, and included RRMA 3, 4 and 5 towns. From the point of view of how the doctors worked they included some towns with large base hospitals, some with smaller GP staffed hospitals, and some with no hospitals. In most of the participants' towns there was a shortage of GPs, although some of the coastal towns had a relatively better supply of GPs than the inland towns.

3.6.3.5 The participants

This sub-sample included doctors working as principals in group practices including one all female practice, one in solo practice, some working as salaried employees in private practice, some working as contractors for private practices, and some general practice registrars, and one working part-time in a salaried positions for a Non Government organization. It included doctors who were working full-time and part-time. It also included one doctor who had left

working in medicine altogether and was retraining for another profession, and one who had left general practice and was retraining for a specialty. The age range of the participants was from late 20s to early 50s, and the sample included married, single and divorced doctors, doctors living with long-term partners, and doctors with and without children. The married participants' husbands had a variety of occupations including doctors, other professionals, and two who were not working outside the home. The sample did not include any GPs in same sex relationships.

3.6.4 Data collection using interviews

The use of interviews provided an opportunity to collect detailed data in relation to some of the issues that had been raised in the focus groups. Also, it enabled me to place the issues raised by participants in more specific social contexts, and to consider how family, work and community factors interacted. The use of carefully designed open-ended questions in a semi-structured interview allowed the participants to express their views opinions and feelings much more freely, than would be the case with the use of a survey-collecting quantitative data. The use of interviews rather than focus groups provided an opportunity to explore the issues in depth.

The interviews were conducted at times and places that were convenient to the participants, by either one or two female interviewers, and lasted from 30 to 90 minutes.

3.6.4.1 Interview questions

A semi-structured interview theme list was used to structure the interviews[343], but the project also used an informant led approach and the field work data collection was sensitive to the concerns of and issues raised by the participants in the interviews. Extra questions were added, as necessary, to answer questions that arose from data already collected. The theme list used initially in the interviews is attached in Appendix II.

3.6.5 Analysis

3.6.5.1 Descriptive analysis

Initially, at the time of the data collection, the data were coded manually and a descriptive analysis was conducted. For the purposes of this Thesis the data were recoded using the N6 computer program, so that a deeper thematic analysis could be undertaken. The coded data were then put into categories and the interrelationships between the categories were analysed.

3.6.5.2 Thematic analysis

In the thematic analysis undertaken for this Thesis, the model developed in the analysis of the student data was tested for fit with data from two female rural doctor projects. The data from the two studies were recoded in relation to the domains of the 'Landscape of Fulfilment' model. While undertaking this analysis, I kept an open mind as to whether there might be some themes and issues arising from the female rural doctor data that did not fit within the model, as developed from the student data. During this analysis the process of constant comparison was again used, comparing the interviews within each project with each other, as well as comparing the data with that collected in the female rural doctor study and with the findings from the student study [338]. In this process of constant comparison similarities and differences were noted in the form of memos[333]. Diagramming was used as it had been in the student project to modify various aspects of the model, as differences and similarities within the female rural doctor data and with the student data became apparent. As this analysis progressed, the model was modified to accommodate the female rural GP data by expanding the themes included in each domain and by including a wider range of types of interactions between the domains.

3.6.6 Ethical issues

Ethics approval was applied for and granted by the Human Research Ethics Committees of the University of Newcastle.

Ethical issues that were considered in relation to this project were informed consent and confidentiality. There were no conflicts of interest for me which might have been encountered had I been working closely with any of the

participants, because the research was undertaken outside the division of general practice and the Area Health Service in which I was working as a GP. However I had met some of the participants previously when I had been working coordinating rural medical undergraduate education for the University of Newcastle. Being already acquainted with a number of participants and familiar with the situations in which they were working provided me with background for the research and allowed me to encourage participation in the study more easily.

Recruitment was undertaken with potential participants being given detailed information about the project and what their involvement would involve. They were informed that their participation would be entirely voluntary and that they would not be not be disadvantaged in any way if they decided not to participate or if they decide to withdraw from the project at any time.

Confidentiality of participants was maintained by de-identification of data, such as removal of any specific references to either places or people that would enable identification of participants. As already discussed, because of the small numbers of female rural doctors in the rural areas where the study was conducted, extra precautions were taken to ensure that participants were not identifiable in any of the data presented in the Thesis or in any published research findings. In reporting on the findings of the original project, data were not broken down even at a state level, and in presenting the study for this Thesis the divisions of general practice involved have not been identified. In addition, the data from this project were analysed with the data from the first study to create a larger pool of data, and thus precluding identification of individual participants.

3.6.7 Summary of methods for female rural doctor interview study

This study successfully used face-to-face interviews to explore the problems of female rural doctors in 2001-2002 in depth and to identify existing and possible support structures and practice structures, which would assist in the recruitment and retention of female rural GPs. The reanalysis of the data undertaken for this Thesis developed the 'Landscape of fulfilment model'

further in a way that provides a greater understanding of the retention of female GPs in rural areas.

3.7 SUMMARY OF METHODS

Thus I used qualitative data collected in a case series of 3 studies investigating the experiences and viewpoints of Australian medical students and female rural GPs to develop this Thesis. Analysing the data collected at a thematic level I developed a model for understanding rural medical recruitment and retention which incorporates concepts of place identity, professional identity and gender identity. The model was developed initially on the basis of the student study data; next by analysing the female rural GP data to check whether the model encompasses the experience of the participants; and finally by checking the fit of the model with the existing rural medical recruitment and retention literature. The model developed and how it was developed shall be described in the following results chapters.

CHAPTER 4 RURAL RECRUITMENT: ATTITUDES AND INTENTIONS OF MEDICAL STUDENTS TO RURAL PRACTICE

BACKGROUND

As discussed in Chapter 1, a range of factors that affect the recruitment of doctors into rural practice has been identified. These factors have been grouped in various ways by researchers, but they mostly relate to either factors in the students or doctors themselves (such as age, sex and rural background and/or experience)[1, 3, 22, 29, 34, 39, 44-46, 58, 72, 75, 106, 119, 170, 198, 349], and to the perceptions of the doctors or students of the advantages and disadvantages of living in particular locations[17, 34, 43, 68, 75, 85, 106, 120, 127, 169, 182, 350-353]. However, little research focusing on the processes by which doctors decide to enter rural practice and how the various factors interact has been undertaken. With most of the research on rural recruitment being quantitative, attempts to develop models for understanding rural recruitment have been limited, and none of the research on rural recruitment, to date, has incorporated the concepts of place and self together with the relationship between professional and gender identity.

RESEARCH QUESTIONS

From the literature review, a number of questions important to understanding the recruitment of recent medical graduates into rural practice arose. The questions included:

- What influences the future location choice of medical students/recent medical graduates?
- When do they decide where they will practice in the future? How stable is their location choice? If their location choice changes over time, why does it change? Do they anticipate anything changing their future location choice?
- What are the attitudes of medical students/recent medical graduates, who are interested in rural practice, to work/family/lifestyle balance? Do

medical students who are interested in rural practice anticipate any problems in combining rural practice with family responsibilities?

- Do the attitudes of female students to rural practice differ from those of male students?
- How do they prioritise work and personal issues when deciding where they will practice?
- Can their location choice be understood in relation to concepts of self and place, and what role do professional and gender identity play in location choice?

RESULTS

The results presented in this chapter shall include a brief summary of the descriptive analysis. A more extensive discussion of the interpretative analysis, shall then be presented. This interpretive analysis shall develop domains of aspects of work and life which medical students perceive as important in their future location choices. Interrelationships between the domains will be structured in to a model which will provide a means of understanding rural recruitment in terms of place identity, gender identity, and professional identity.

4.1 DESCRIPTIVE ANALYSIS

4.1.1 Summary of factors identified as influencing location choice

In the initial descriptive analysis of the data, students identified a number of factors as being important in relation to future location choice. These included student factors, location factors, work/location factors, social attachments and external influences. These are summarised in Table 4:1 and then discussed briefly in this section of the Thesis.

Table 4:1 Summary of factors influencing medical student location choice

Student factors	Age Gender Previous experience Value system Personality Abilities ethnicity
Location factors	Lifestyle Physical attractiveness of area Adventure Community belonging Income cost of living Culture Racism Social support
Work/location factors	Work availability (including special versus generalist work, diversity, challenge, amount of work available) Making a difference Medical learning and professional support Limiting future options Burden of work
Social attachments	Partner Children Parents and extended family Friends
External influences	Role models Experience Members of medical faculty Random events Scholarships

4.1.2 Stability of location intentions and time frame

The students discussed a number of aspects of the future time frame of their career and location intentions, and their future lives. They varied in their focus in relation to their future work, with first year students often speaking of their focus being the more immediate goals of passing exams and completing their undergraduate training rather than their longer term careers.

Most first year students indicated that they 'seem to change my mind every few months' and were very aware that their career intentions at this point in time were not fixed and were, in fact, very flexible. Most indicated that they expected their career interests and the location at which they would work in the future would change over the years. Some said they wanted to 'work everywhere' and that they had 'different stages that I want to work in different stages of my life in terms of family and children and that sort of thing.'

A number of students indicated that they wanted to work overseas or in rural areas for a period of time, but that they were not sure that they would want to work at these locations in the long-term. Many spoke of long-term intentions as compared to short-term intentions, and long-term commitments to an area as compared to short-term commitments. When asked to define short-term in terms of a time period, the students' answers varied from six months to five years, but were mostly about two to three years.

4.1.2.1 Summary of students' time frame

The students' priorities in relation to work, family, and lifestyle often varied according to the time frame about which they were talking. Their 'time frame' could be summarised as:

- 'short term', which included internship and residency, early postgraduate years, and postgraduate training;
- 'long term', which included settling down;
- and 'very long term'.

The students discussed plans for these various stages: the short-term plans often involved travel and gaining experience; and the long-term plans were more likely to involve settling at a particular location and establishing a long-term career and having children.

Many female students indicated that they were concerned about their ability to fit everything they wanted to into their lives. Even first year undergraduate entry female students, who had completed their secondary schooling within the past year, had concerns about how they would combine their future medical training and careers with childbearing and child rearing.

This analysis of the students' perception of time frame indicated that the influences of the various factors on doctors' locations choices varied not only between individuals but also for the one individual over a period of time. It

indicated that the processes involved in location choice were dynamic, and any model developed to understand these processes would need to be able to accommodate changes in the individual and his/her social and work circumstances over a period of time.

4.2 THEMATIC ANALYSIS

4.2.1 Grouping of issues into domains

The descriptive analysis of the focus groups had identified thirty-five factors that could influence the medical students' location choices, and it was clear from the data that the way in which these factors interacted was complex and varied between students and for individual students at different times during their lives. While there were gender and age differences in the priority students gave to various factors, and some differences between urban background students and rural background students, these were not always consistent. It was apparent that further analysis was required in order to understand the ways in which these complex factors interacted.

The initial analysis of the data was undertaken on the focus group data prior to the in depth interviews being conducted. While it was decided to take an approach similar to that taken by Cutchin[25] and to focus on aspects of self relating to work and place, themes were grouped as they emerged from the data and domains were identified on the basis of the groupings of the themes, rather than attempting to fit the data into the domains identified in Cutchin's research.

Initially, most of the groups of themes fell into three domains, which were identified early in the analysis as being Self, Place, and Work. However, to incorporate data that was grouped as 'Social Attachments' in the descriptive analysis, another domain was required: the domain of 'significant others'. Although 'relationship to community' had been included in the grouping of social attachments in the descriptive analysis, it was more appropriately placed in the domain of 'Place'. Initially, the self was seen as considering each of these domains in deciding future location choice.

The initial domains and groupings of factors are shown diagrammatically in Figure 4-1.

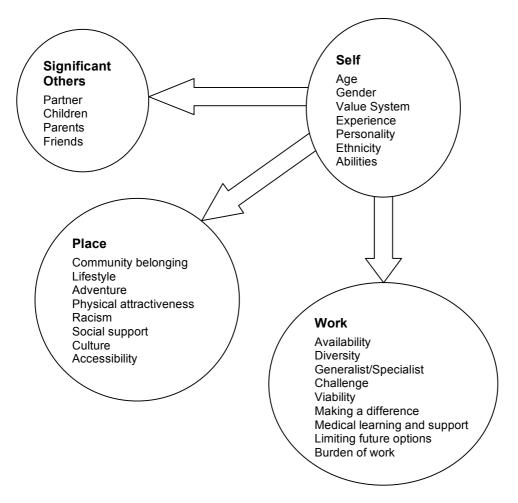


Figure 4-1 Domains with factors grouped into domains identified from student focus group data

4.2.2 Interrelationships between domains

Further consideration of the focus group data showed that the domains interrelated with each other. For example, Place and Work interrelated in that the nature of the work available (specialty/generalist, challenge, viability, diversity), the working environment (medical learning and support), and the demands of work (burden of work), depended to a large degree on the location of the work. Significant others had their own relationship with place in terms of how they, as individuals, related to the various aspects of place. Similarly, a number of students alluded to a two-way relationship between themselves and each domain: for example, the way significant others responded to their interest in future rural location would influence their final location decision. At

this point, as well as grouping the factors into domains, a model was developed that included interactions between the domains.

These interactions are depicted diagrammatically in Figure 4-2.

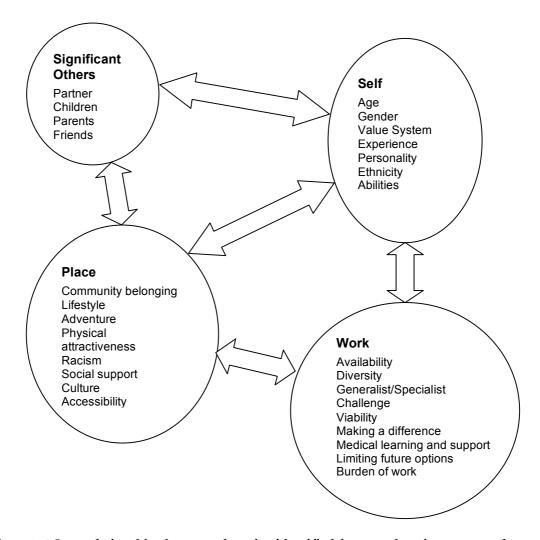


Figure 4-2 Interrelationships between domains identified from student focus group data

4.2.3 Analysis of in depth interviews with students: exploration and understanding of the domains and how they interact

As the study progressed, the data from the in depth interviews were used with a reanalysis of the focus group data to further explore and develop the domains that had been identified in the focus groups, and to develop an understanding of the ways in which the domains interact and of how this interaction of the domains relates to medical students' and recent medical graduates' career and location decisions.

4.2.4 Content of Domains and relationships between Self and Domains

4.2.4.1 Aspects of place

The participants spoke about a number of aspects of place, which were categorised as physical environment, social environment, cultural environment, and accessibility.

These aspects and the relationship between self and place are summarised in Figure 4-3.

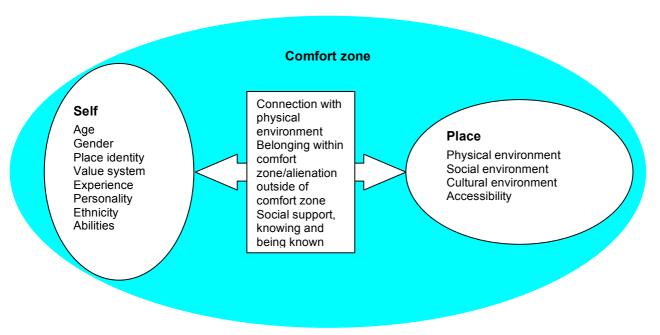


Figure 4-3 Aspects of place and relationship between self and place

Physical environment

Physical environment includes climate, landscape, urban structures, and infrastructure such as roads and buildings.

Many rural interested students indicated they desired connection to the land and natural environment. For example:

I have the strong affiliation with the beach. (Student No 2)

The sky at night; I absolutely loved the fact that you could see the stars. It sounds silly, but the air is much clearer and you can smell the earth and the air and the sounds, and that really appealed to me. (Student No 3)

Urban infrastructure was generally seen as providing ease and comfort in life, but acted as a barrier to connection with natural environment by some students. For example, one student spoke of preferring a rural environment because of 'your closeness to the environment without the traffic.' In contrast, urban interested students spoke about a preference for the busyness of the city. This NESB student who had always lived in a capital city described this preference:

I grew up in [Asian City]. Very busy, bustling city... We are so used to having the background noise and the hustle and bustle of the people in the streets. Five o'clock in [inner city Sydney suburb] we find it dead quiet, you know, we just can't stand it.(Student No 4)

Most rural interested students spoke about the 'problems with traffic' and travel in large metropolitan areas, in particular the problem that even though the distances may not be great the travelling time is often increased by heavy traffic, as described by this student: 'I travel an hour here each day here and an hour home, and that adds up to a lot of time.'

Even though living in metropolitan areas sometimes provided greater ease and comfort, some rural areas were easier to move around in and to undertake day-to-day activities. A number of students also spoke about space in measurable terms:

We both really like working in the garden, things like that. I think it would be nice to have the space to do those sort of things. (Student No 7)

Most students saw rural areas as a 'healthier place to live in terms of the environment.' Climate, for example a preference for living in a hot or cold climate was discussed by some students as being an important factor influencing where they would live in the long-term.

Many preferred to either live in rural areas or to be close to rural areas because of the access they had to outdoor activities. For example this rural background student said:

I grew up... in [semirural area] and we had horses and we had bush treks and we had wilderness walks, and it was all just so easy 'cos it was right there; whereas in Sydney, you know, you're lucky if you can get out the city in an hour to get to anything like that. (Student No 8)

Others preferred urban areas because 'you've got so many... options in Sydney, it's easy just to take them. So... you might go out for breakfast or... go see a movie ... there's not so much stuff like that in a small place.'

In summary, there appeared to be a desire for connection to the rural landscape and physical environment among many of the rural interested students. Those interested in urban practice in capital cities rarely spoke about the physical environment, except in terms of the convenience provided by the metropolitan physical infrastructure.

Social environment

Social environment included the community, as in traditional community based on space, relationships within community and between doctor/student and community.

Most of the rural interested students spoke about living in a traditional community based on space. They had a strong desire for connection with such a community and relationships that provided a sense of belonging. Many rural background students spoke of the 'closeness of the community' in rural areas and the connection they felt with the community from which they came. For example, one student said:

It's just suicide trying to do the grocery shopping because everybody's got something to talk to you about, or something. But I've really enjoyed that kind of atmosphere and you know the checkout girls. (Student No 9)

Even though the intimacy of the community made some things time consuming, this student felt the benefits of her connection with the community outweighed the disadvantages related to time constraints.

This connection involved knowing and being known by people in the community. Many rural interested students spoke positively of 'being able to walk down the street and seeing someone you know' and that 'everyone knows everyone.' Some students desired a sense of belonging, and the closeness of rural communities provided them with this.

However, some students felt there were disadvantages to this level of intimacy, seeing relationships in small rural communities as being 'all too tight and close.'

A number of students spoke of the lack of anonymity in a rural community and the constant visibility of doctors in the community for example: It's like any country town, you know you get, you're buying frozen peas and someone sort of comes up to you and... tries to have a conversation that may or may not be appropriate in that context, so you are very obvious in the community. You are never not a doctor. (Student No 11)

Some rural background students indicated that they would not return to their town of origin because of the knowledge they had of the community and which the community had of them. For example, this female student wished to return to a rural community, but not the town she had come from:

I know everybody in town. You already know all of the dirt on them, like from town gossip and everything, so knowing their medical histories on top of that would just be too much, like you know these people you've grown up with your whole life... I couldn't handle, I don't think I could handle it, or I wouldn't. (Student No 11)

Most students thought that in rural communities people not only knew each other but also would 'watch out for the other people', and that this meant the environment was safer in particular for children. For example, rural background students described their experience of living in a rural town:

I remember growing up—none of our neighbours ever locked their doors, or anything like that, and ...—all the kids run around the town and you can go anywhere and people come and watch out for the other people and they know who's kids is whose, and so I think kids at a younger age sometimes have a little bit more freedom and you don't have to worry so much about strangers and dangers. (Student No 12)

Some students also spoke about informality in relationships with people in rural communities, comparing 'the intimacy of the small town', where 'you can just pop round and that sort of thing', with the city, where 'you've almost gotta make appointments with your friends to catch up and have... coffee and stuff with them.'

A number of students described rural life as being more 'relaxed' than city life. People in capital cities were seen as:

'So caught up in what they want to do... Very stressed as they have to get to work in half an hour but there's so much traffic, so they get caught in traffic, and there's road rage and people in shops are really, really keen to get all their shopping done or whatever. (Student No 14)

Similarly other students spoke about the support people in rural communities gave to each other, for instance this student described the communal lifestyle of the people in a town in which she had spent her childhood:

We had probably three-and-a-half acres and we grew a lot of our food and...what happened... with the neighbour we built a communal back field where the neighbourhood put in a couple of cows, and then we'd help them kill them and then we get half a cow. Just you it's nicer. I mean you go help them kill their chickens; they come help you kill your chickens. (Student No 12)

Most students also thought rural communities were generally very welcoming to new arrivals, with some describing their own experiences or experiences of their families. For example, one rural background student whose parents had moved to a rural town during her childhood said she had 'so many surrogate grandparents, and we'd get so many Easter eggs.'

Some students had concerns about the limited numbers of people with whom they would have common interests and the potential for close friendships in some rural communities because of the demographics of many rural towns. They had the perception that in the city 'you don't have to be as flexible in your tastes because there'll always be somebody who'll agree with you, whereas in the country, you've got to be more open minded and accepting of people because everybody's a bit different and there's not that many people there.'

For some students the number of people available with whom to interact was important, and they thought that they would 'need a certain number of people... where there's enough life around to keep me going', feeling they would not cope well with living in 'a tiny, tiny town'. Others liked the social environment of rural communities but already had established social networks in large cities, and so would be hesitant to move away from the cities where they were living.

A few students described traditional space based communities within the city. For example, one student spoke about coming from 'real inner city Sydney' where she had experienced 'such a village community atmosphere'. She described her home suburb as 'a peninsular suburb, so its kind of on its own because its not surrounded by lots of other suburbs so everyone who comes there knows everyone,...and new people come to the community and, be involved and accepted really quickly.' Similarly another spoke of people living in a suburb of Sydney as being similar to living 'in a small country town in terms of, they don't tend to go outside of their area... They've got their friends who they grew up with, and then they've got their friends from work but it's kind of like they don't really get around the town.' Other students spoke of

having connections to ethnic communities and the gay communities in capital cities, which were communities of interest not based on space.

In summary, most students saw rural communities as being more supportive, more welcoming, safer, and more relaxed than city communities. However, some had concerns about finding friends because of rural demographics, and some had concerns about the closeness of rural communities being 'suffocating'.

Cultural environment

Cultural environment encompassed values and norms of the community and shared ways of seeing believing and behaving.

A number of students, both rural and urban background, spoke of concerns about the culture of some rural towns being 'rednecked' and 'not at all multicultural', with one student describing her home town as a 'very meat and potatoes kind of little town'. While some students from minority ethnic and racial groups had concerns that there would be very few people with backgrounds similar to their own, others described experiences of racism while visiting country towns. For example one student said:

My family and also my, I'm from a cultural and religious minority so, if I go out into the country, it's very unlikely that there will be anybody there that's my background. (Student No 15)

Another student whose wife was from an Asian background thought that there is 'an element of antagonism towards people from certain areas that, or places that are perceived as different', and described how when visiting a country town he felt 'people are treating us like we were, you know, some sort of alien or something.'

While some Aboriginal students involved in the focus groups had had negative rural experiences, none of the Aboriginal students interviewed recounted similar experiences. However, other students thought that there are 'equal amounts of racism both in the country and in the city'. In contrast another student described how an Asian doctor in her hometown had 'won just an amazing amount of respect, like... with the odds he was facing, I respect him incredibly for that because people are really used to a last name with one syllable.'

A few of the participants in the study were homosexual, and one commented that it was 'really difficult living here in [regional city] because I guess it's only a small community compared to somewhere like Melbourne.' Although he preferred many aspects of the rural lifestyle and rural work, he couldn't 'see [him] self living in a rural community as a gay man' because in the city 'people's attitudes are more accepting than here, a lot more people are friendly.' However, not all rural areas were seen as being culturally homogeneous and politically conservative, for example some students spoke of some coastal areas as being 'cosmopolitan'.

In summary, some students were concerned that in many rural communities the population was ethnically and culturally homogeneous and politically conservative. Some felt that many rural communities would not be accepting of people who were ethnically, culturally, and politically different from themselves, with some describing their own experiences of racism in rural environments.

Accessibility

The participants spoke of accessibility in relation to family and friends, ethnic groups, housing affordability, and resources including cultural activities such as music, art, food, and sport.

Distance, travelling time and cost

The participants referred to accessibility in terms of distance, travelling time, and cost. For example, a number of urban background students indicated an interest in living and working in a rural area, which was accessible to a capital city within a certain time. This was often three or four hours because the students saw this travelling time as allowing them to 'get back to the city every weekend'. They liked the rural physical environment, social environment, and rural work but wanted to be 'able to jump in a car and travel a couple hours and be in the city'. For example, an urban background student expressed a preference for 'Orange... about three hours from Sydney' because it was 'a little bit over half the distance to Tamworth'.

Some talked about accessibility to capital cities in terms of flying time and financial cost. For example, one student indicated a preference for a town where 'access to Sydney is very good, only about an hour's flying time and it's

quite cheap', while another spoke about the difficulties with living in Broken Hill because 'it was at least a grand to get home in a hurry, or two days drive as opposed to a day... and driving hours across the middle of nowhere.'

For some students, in particular Queensland students, accessibility was related to being in their home state, for example discussing the distance between Sydney as follows:

'cause Sydney to Brisbane's 1000 ks, yet, even if I was in Qld up at Townsville, which is 1500 I think, it might be like a 15 hours drive, which is a lot longer than from here to Brisbane, but just being in Qld makes it feel closer. (Student No 16)

Some students wanted easy accessibility to their home state for family reasons, and because there were flights from most country towns to the state capital they found travel within only one state was easier and more convenient. A number of students described 'almost a radius of where I'd feel comfortable, and then where I would start to feel cut off'. Mostly, they described this in terms of time rather than distance, and the usual time was up to four hours.

Accessibility to family and friends

Many students spoke about accessibility to family and friends, who were living either in urban or rural areas. In particular, they were concerned about access to extended family, for example their own parents or their partner's parents. Often their partner had a preference to be in a particular area to ensure easy contact with their family, for example one said:

My wife's sort of choices and her saying that she wants within 4 hours of Sydney and within an hour of the coast. That's quite a range but that... she doesn't mind the idea of a small town or place...Family, I think, is the main reason. (Student No 7)

Accessibility to cultural and sporting activities

A number of students spoke about accessibility to various cultural activities including music, arts, theatre, and sport. For example, an urban background student described capital cities as providing a better 'quality of life' because of 'the services that are available to you'. He enjoyed living in the inner city where he could 'walk out the front door to get the bus, which can take me into the City where I can go to the movies... go shopping to any number of shops... then another bus ride away from there to go to the Cricket Ground.' Similarly some students indicated they would find the limited range of resources in rural

towns difficult, for example 'the variety of food... in country towns that I've been to, you can get basically everything but then you've only got one of each, and your variety isn't there.' However, others preferred the greater self reliance required for entertainment in a rural area saying, 'when you've got so many, like, options in Sydney, it's easy just to take them... If there's not so much stuff, like in a small place, you're more resourceful and you do more stuff.'

A few students had a particular interest in music, having studied music and worked as professional musicians. Although they preferred living in a rural environment, they wanted to be able to easily access musical activities: for example, one student wanted 'the opportunity to hear other people play and still be involved in that music scene.' For these reasons, some students indicated a preference for living in a rural town close enough to a regional centre that they would be able to travel there and back in a day to access these activities. Others indicated a preference for living in a rural environment that was sufficiently populated to have 'restaurants and concerts and things like that, as well as the advantages of the country, like the beach and the mountains and all that sort of nice stuff.' Some urban background students were surprised to find, during rural undergraduate placements, that in larger rural towns 'there's a lot of cultural activity around the town... couple of really nice little restaurants... a gourmet deli, which was just amazing... plenty of music... people who played instruments... chamber groups and things'. Because of their experience visiting rural areas, these students 'realised that as a city person born and bred', they 'could survive quite nicely, not just survive but actually enjoy it.'

Accessibility to housing

A number of students commented on the difficulties they expected with accessibility to housing in capital cities, and in particular Sydney. They felt that 'the real estate prices... would direct me away from living in a very big city.' They recognized that they would be able to have access to much more land and bigger houses in rural areas for the same cost as an apartment in an urban area. While the lack of accessibility to a range of aspects of life was generally deterrent for students going to rural areas, for some, increased accessibility to family who lived in rural areas and to housing made rural practice attractive. As a way of incorporating all the aspects of life that they perceived as important, a

number of students considered compromises so that they could take advantage of the positive aspects of rural living, for example living within a certain radius of a city or being able to travel cheaply to a city by plane.

4.2.4.2 Relationship between self and place: Concept of 'comfort zone'

A theme, which was called 'comfort zone', emerged as the data on the interaction between self and place was further analysed. Some students talked about living in places where they would 'feel comfortable' and for which they had 'an affinity', and which was within their 'comfort zone'. This concept encompassed all dimensions of place including physical, social and cultural environment, and accessibility for some participants. Some dimensions of place were more important to some individuals than others.

Exploration of comfort zone

At this stage of the analysis, a number of questions relating to 'comfort zone' arose and these were explored with participants as further interviews were undertaken. These questions included:

- Did 'comfort zone' relate to the size of a town or city, to a particular geographical area, for example a region, or to a radius from a particular location?
- Was 'comfort zone' fixed or could it change over time for some individuals?
 If so, how does it change? Does it broaden or narrow or change altogether?
- How did 'comfort zone' develop?
- Do all students seek to stay within their 'comfort zone', or are those who
 are seeking adventure actually seeking to move outside their 'comfort
 zone'?

As further data was collected by interviewing more students and reinterviewing some students, these aspects of comfort zone were explored with the participants.

Geographical components of comfort zone

Size of town or city

Comfort zone most commonly related to the size of a town or a city, for example many students indicated that there were limits to the size of town they would choose. Some preferred small towns, for example this student said she preferred not to live in 'anything bigger than about 5000' because 'I want to become involved in the community and... you're actually going to not really be a part of the community as easily as you would be in a smaller place.' Another said:

I feel comfortable in Sydney. I don't have a problem with that. It doesn't feel too big, Newcastle. I'm really comfortable with, cause it's small enough to be not a lot of traffic problems and stuff, but I wouldn't want to go smaller. (Student No 55)

Several students indicated they 'wouldn't want to work in a really remote area' and that they were not interested in 'moving in the middle of nowhere where there's very few people, resources and that sort of stuff'.

Particular area or region

Many students, especially those who had more definite intentions about future location, also related 'comfort zone' to a particular geographical area. For example a state or a region such as a student who planned to work in Western NSW and said:

I'm pretty much a New South Welshman and most of my family are either just down in that sort of southern part of Queensland, in far north western New South Wales, and I'm going to be out there somewhere. Student No 17)

Radius from a particular location

Others described a distance or 'radius' from a particular place or from a city out of which they would 'not feel comfortable'. A number indicated that while they would be interested in a rural location, they wanted to be within 'driving distance' (three to four hours drive) from a particular location, mostly a large city, either because of the resources available in that city or because of family who lived there.

Broad and narrow comfort zone

Some students had fairly broad comfort zones, for example when one was asked if there was anywhere he would not want to work he replied:

Areas I wouldn't want to go: none in Australia, although there are differences geographically between all areas of Australia. Australia's a really well funded, reasonably friendly population everywhere. (Student No 18)

However, there were a number of others who had narrow comfort zones, for example wanting only to work and live in Sydney.

Development of comfort zone

Comfort zone had developed for most students on the basis of their experience at different stages of their lives. For some, comfort zone had developed because of time spent living in a rural area, either as a child or later in life. For example, one student described his desire to return to his hometown:

I've grown up in [semi rural city] my whole life so I'm from a semi-rural area. It's a large rural town, and I sort of, I feel drawn to the area because my family and all my close friends live there and I just feel that my roots are sort of firmly planted there, and that's basically [where] I'd sort of like to be based in the future. (Student No 19)

However, some had become comfortable with a particular area because of shorter-term visits, such as this student who described how:

As a kid we always used to go to the country places for holidays, and for me that was always something that was more attractive than living in the cities. I hated living in cities... I just like to be in the country areas with country people. (Student No 56)

Comfort zone was not fixed for all of the students, and for many comfort zone was flexible and dynamic and could be changed by new experiences. For example, an urban background student describes here how his first experience in a rural town broadened his comfort zone:

Having come from the city for how ever many years of my life, I expected them all to be wearing flannies. The main street has two Maccas, it's got Coles... it has all the amenities so there's been a definite shift, I think, in my thinking about what country is, and there's always been that that natural charm of working in the country. (Student No 20)

Nevertheless, rural experience actually narrowed the comfort zone of some students. For example, a student who had originally been interested in a remote location felt, after remote experience, that it was outside her comfort zone:

I don't think it's a place to live long-term 'cause it's quite cliquey and... very, very isolated-like, whereas [large country town] you can travel to a town, like, within an hour or so, but[remote town], the nearest place was three hours and it's constrictive... You want to get away. (Student No 21)

In summary, comfort zone could relate to various geographical aspects of an area, was usually dynamic, and could change for an individual due to new experiences.

4.2.4.3 Aspects of work

The domain of work encompassed various aspects of work including work content, the community for whom the doctor cared, other health care professionals, health care resources available, and economics. Often these aspects of work were closely related to place, but it was decided that it was preferable to consider work and place as separate domains that interacted with each other because there were aspects of place that did not relate to work, and aspects of work that did not relate to place. The ways of relating between self and work were responsibility, idealism, cooperation and belonging, financial necessity, and satisfaction.

These aspects of work and the relationship between self and work are represented diagrammatically in Figure 4-4.

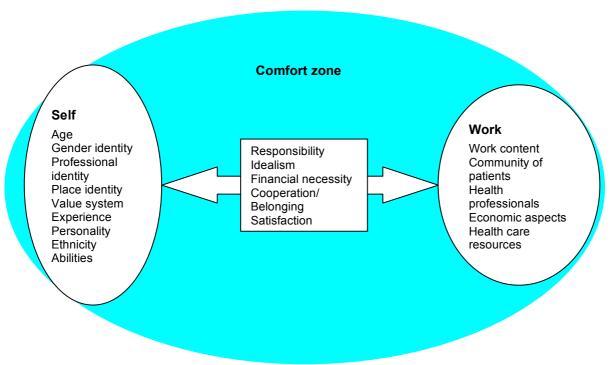


Figure 4-4 Aspects of work and relationship between self and work

Work content

The content of their work, that is what they would actually be doing as a doctor, was a central part of the domain of work. Students interested in rural general practice saw the work as being 'diverse' and as providing the opportunity to see 'a wider variety of patients'. They wanted to 'be practicing... the broadest range of medicine, and so sort of keeping all your skills and all your knowledge functioning'.

The students generally thought urban GPs 'referred a lot of things on if there are problems... and the GP in the country did a lot of the treatment himself... looked after patients a bit more.' Only a few students interviewed expressed an interest in urban general practice, with most saying they would prefer to specialize if they lived in an urban area. The students also liked the opportunity for continuity of care provided by working in rural general practice. For example, one student said she would like to be able to:

deliver a baby, and then you'll see it when it gets the shots, when it's six months and twelve months, and then see them when they're going to school. (Student No 22)

The community of patients

The rural doctor, in particular the rural GP, was seen by almost all students as 'play[ing] more of a central role in the community' than the urban doctor. For example, one student spoke of being 'the main carer of that community' and 'developing a pretty strong bond with those people', and another spoke of 'get[ting] to know people at a deeper level' in rural communities. Most students spoke of 'community involvement and your relationship with the community' being 'much... stronger in than in an urban area.' Another aspect of work which students perceived to be part of rural practice was 'a level of respect... that's accorded to doctors in more rural areas' because of their 'role in the community'. For example, one student said:

If you're a little country doctor then you have so much a larger role to play in the community than if you one of the umpteen million doctors in Sydney and just another Joe. (Student No 22)

While most students did not speak directly of seeking status as doctors, many of those interested in rural practice indicated that it was important to them to:

really believe you're doing something really good for the community, and that the community really believe you're doing something really good for it. (Student No 24)

Most rural interested students wished to take on this central role in a community, although some expressed concerns about the possibility of work intruding on other aspects of their lives. Rural doctors were seen as having greater responsibility than urban doctors, and greater demands on their time and skills. For example:

It's harder, it's more demanding; you don't get to go home and switch off, you don't have certain support services available to you, you have a higher patient load, you can't get locum support. It's just, I don't think, it's the divine prospect it's meant to be. (Student No 57)

The students perceived rural doctors as being in a 'very rewarding position, like, very important in the community', but in 'a really hard position because you wouldn't be able to just take off and you wouldn't be able to just leave.'

Some students were concerned that the close relationship between the doctor and rural community could cause difficulties when the doctor left the rural community, and the risk of becoming tied down was a deterrent to their entering rural practice. For example, one student had concerns about 'being expected to make a commitment for[more] than just a set period of time that you might want to stay[because] it's very hard to throw away the responsibility that you tend to develop.'

Health professionals

The rural work environment was generally seen as 'more intimate' than the urban work environment. Most rural interested students saw the health care team as being more supportive and welcoming, with one describing a 'family element to health care' and 'father/son' relationship with mentors, with the teacher providing support and constructive criticism. For example, one student said:

you go to[remote community] and suddenly you're part of the community, but you're also part of the health community and it's just so different to, maybe, other areas. (Student No 25)

They saw this more intimate relationship as relating to hospitals and health care structures being smaller in rural areas. For example, one student said:

the hospital in the cities didn't seem as friendly and... in[large country town] most staff had to be friendly because either the public won't appreciate it if you're not friendly, or because of the actual size of the hospital. You actually have to be friendly because ... it's a network. (Student No 27)

In contrast, some students saw city hospitals as 'too big and impersonal', with one student speaking of 'the extreme anonymity that takes place in a hospital the size of [teaching hospital]'. However, this experience was not universal, with some students interested in working in specialties in metropolitan areas describing a similar level of teamwork, support, and intimacy in specialist teams within large teaching hospitals.

In contrast to students who had had positive rural experiences, some students described experience in rural settings where their expectation of intimacy and support was not met, so that the experience was made even more negative by the disappointment they felt. For example, one student described an experience at a large rural hospital that 'was fairly negative', describing how 'we were treated a bit rudely so, personally, I don't think I'll be going back, rushing back to[large rural town] to work.'

Health care resources

Most students referred to the limited availability of health care resources, both physical and human, in rural areas. To some this was a positive factor in that it forced the doctor to be more independent and self-reliant, while to others this was seen to limit the way the doctor could practice in rural areas. For example, the lack of specialist services in rural areas provided the opportunity for rural GPs to be involved in a much wider range of work than they would in urban settings. Some rural interested students had concerns that if the town was 'really small' there would be a lack of professional support, and that 'the workload' would be very heavy. Most students, even those with a strong interest in rural practice, indicated they would not be interested in practicing in a one doctor town because of the lack of a colleague with whom to share the work. For example, one student said:

the life of a[rural] GP would be very hard, and if you're the only doctor in the community then basically you're on call 24 hours a day 7 days a week, and that doesn't really appeal to me. (Student No 58)

Economics

While economic aspects of work were discussed briefly by some students, most students did not speak about the economic necessity of work but seemed to be 'assuming that once we graduate we'll be earning a decent enough wage to eat and sleep.' One student commented:

most doctors who do come out of med school are guaranteed to get a job and are most likely to be able to practice and make a reasonable living. (Student No 59)

Some graduate students who had previously worked in other professions spoke about their future income as doctors contributing to their motivation to retrain as doctors. A student who had worked as a research scientist, and whose employment had depended on the research grants, had been influenced to retrain as a doctor because he perceived medicine to have greater job security. Another who had studied Psychology commented:

You come out on 28 K but you've got no chance of getting a job. To be qualified you got to do a four year degree, two years post-grad unpaid, and another two years post-grad unpaid, so eight years training, similar to a psychiatrist, and you haven't even got much chance of getting a job. (Student No 30)

When talking about the disciplines in which they might work in the future, most students indicated that 'money's not a big influencing factor on me', indicating that they wanted 'enough money to be comfortable' and seeing other issues, such as their satisfaction with the work they were doing, as more important. Some students felt that medicine offered great flexibility in terms of hours of work and location because of the relatively good remuneration, one saying for example:

That's the other good thing about medicine... like, you can go wherever your heart wants to go because the money isn't really important. You'll get enough for anything, like, and you can do what you want. (Student No 60)

Some students, who were interested in specialties, discussed the need to have a patient base large enough for a practice to be financially viable. This would influence their location choice, because many rural areas would not have sufficient population to support a specialist in particular in some subspecialties. For example one student said:

There's not much call for neurosurgeons in Broken Hill. (Student No 31)

When asked about practice structures, some students preferred working in private practice, with others indicating a preference for salaried work, and

many indicated that they had 'no desire to run a business'. They had concerns about their ability and lack of training to run a business, being 'tied down to a business that's so hard to pull away from' because of their ownership of a practice, and also the lack of employee benefits (such as paid sick leave, annual leave and superannuation), to which salary earners had access. However, a few students indicated their preference for private practice because they felt it would provide them with greater flexibility and autonomy.

4.2.4.4 Relationship between self and work

The students' relationship to work included a number of dimensions, which were responsibility, idealism, cooperation (or competition with colleagues), belonging, financial necessity and satisfaction, which together contributed to their professional identity.

Responsibility

Responsibility was a central part of the way in which the students related to work. When participants who were undertaking internship at the second interview, were asked if there was anything they were enjoying about their internship, most replied that they liked the responsibility of caring for patients. One student left working in medicine six weeks after starting his internship; and when asked why, he said one of the main reasons was that he could not cope with the responsibility involved in patient care.

A number of the students were ambivalent about rural practice because they wanted the challenge of the extra responsibility involved in the broad work of rural practice, including emergency medicine, but were concerned about being 'responsible pretty much from go to woe because there's not a lot of specialists out there'. A number were also concerned about the time commitment and on call work for which a rural GP would be likely to be responsible. For example one student said:

I'm attracted to working in a rural area but I think, from what I know at this stage, the life of a GP would be very hard and if you're the only doctor in the community then basically you're on call 24 hours a day 7 days a week and that doesn't really appeal to me. (Student No 59)

While some students were attracted to general practice by the ongoing relationships with patients in the community, a few did not want the

responsibility of ongoing care for patients and indicated that one of the advantages of working in a large urban medical centre was

not having a patient base... because you don't get clingy patients, who come in when there's nothing wrong with them...you don't have to worry about them, you don't have to follow up if they 're not your patient, you don't have to... chase up the baby with diarrhoea that you saw earlier today because... it's not your problem (Student No 32)

This attitude to being responsible for patient care was expressed by only a small group of students whose views were in contrast to the majority of the students, who could be regarded as being fairly idealistic in their attitudes to patient care and their commitment to medicine.

Idealism

It was common for students to indicate that their interest in medicine had developed out of wanting 'to make a difference in people's lives'; with some saying they had changed from another career to medicine because of a desire to 'help people'. Many of the students interested in rural practice, in particular urban background students, indicated that their reasons for wanting to work in a rural area were because they were 'aware of how badly it's needed' and because they thought they could make 'a fantastic impact... on someone's life'. One student commented:

I wouldn't look at the country if there wasn't such gross inequality of health care. I mean, that's why I'm so passionate about it, because it just strikes me that it's not fair that there's such a difference. So that's really the driving force. (Student No 33)

However, this student also expressed concerns that rural practice may not be 'sustainable in the sense that you know, like, reality is country life can be really difficult and idealism can only get you so far'.

A number of students indicated an interest in working in developing countries because of 'a strong social conscience' and desire 'to provide health care to people who can't afford it and in more dire need than fat westerners who eat too much and therefore get sick'.

Some spoke of the risk of being naïve about what they might be able to achieve and the need to be realistic and not 'set myself up to fail by having too high expectation because I've realised it would be difficult, just a pragmatic view of what you can do and what you can't do.'

However, while being idealistic about helping people, many were ambivalent in that they did not want 'to be worked absolutely into the ground' and wanted to balance their ideals with a desire to have time to spend with significant others. They did not want to 'be a sacrificial lamb' or 'to be slaughtered to medicine'.

Cooperation/Belonging

Most students valued the professional relationships they had with colleagues, and sought a sense of belonging to the medical profession and a health care team. Many saw being included as part of a health care team as being a positive aspect of clinical placements, and participants undertaking their internship at the second interview indicated that they enjoyed being part of the health care team as interns.

Most students were aware of the importance of cooperative relationships with medical colleagues in sustainable medical practice, for example at the most basic level of sharing the after hours workload with colleagues. None of the students indicated that they were interested in solo practice, and most specifically referred to solo practice as not being an option for them, because they 'would want to have someone for support so that there is a bit more leeway with time off'. However, they also saw support in terms of having 'other people to bounce ideas off.'

In addition, many students spoke of working in a multidisciplinary team, such as 'a whole group of health care professionals who are all trying to help this patient for whatever reason: get better, or make them comfortable, or whatever it is'. At the same time, a few students spoke about autonomy, with some preferring 'autonomy' and 'to be my own boss' rather than to work as an employee on a salary.

Financial necessity

While the students acknowledged a need to earn a living some felt uncomfortable about private practice because of 'this relationship between money and medicine', particularly the direct exchange of money between the doctor and patient. For many students there was a conflict between the economic realities and idealism, and they preferred that there was not a direct

connection between the income that they earned and the care they provided for the patients. For example, one student referred to being deterred from general practice because of the usual private practice structures, which involved collecting money directly from patients as follows:

That's the only thing that puts me off being a GP because in reception you have to give people money and manage money and that's terrible; that's why I'd rather be a salary person. (Student No 62)

Similarly almost all students indicated they were not interested in working in corporatised practices, with one student describing corporatised practice as 'a travesty' and another saying 'they're hideous creations'. The students' major concerns were that the corporatised practice was mainly directed at making a profit for the corporation, and that optimal patient care might suffer in this situation. For example, one student said:

The driving force is the dollar, and when that happens you've bosses overseeing what you're doing and how long you spend with a patient, and they would be trying to trim the fat to get the most money out... Essentially, poorer health care for the patient. (Student No 61)

Some students thought that:

Health should be something... the collective community is responsible for. (Student No 64)

However, some students felt that private practice conferred independence and autonomy on the doctor, but recognized that 'there's a fine line between managing a business effectively and compromising patient care'.

Thus, while students recognized their need for an adequate income, they did not want 'money to be my motivation', and this view was reflected in the following comment:

If money starts to become my motivation, then I would question why I was practising; and if it's because of the money, then I probably would look at changing something. (Student No 62)

Satisfaction

Most students spoke about work satisfaction as being of great importance in relation to both their career and location choices, for example seeking 'something that I can do all day everyday and still enjoy it, that keeps you busy but still enjoy it.' Some students spoke very negatively about experience working with doctors who seemed to gain little satisfaction from their work, as described by this student:

They go to work in the morning and they work all day and they are actually not very happy in their jobs. Then they go home at night and their personal life and their work is just completely separate and they are really happy to go home at night. They just are not happy in their jobs at all, and that has put me off. (Student No 65)

It was important to the students not to be 'unhappy in what they're doing'.

4.2.4.5 Work and Comfort zone

It was decided to explore whether there was a 'comfort zone' in relation to the other domains of the model, because 'comfort zone' had emerged as such an important aspect of the relationship between Self and Place. A search of the text of all of the focus group and interview transcripts using N6 software for the words 'comfort' and 'comfortable' was undertaken. For the word 'comfort', 15 references were found: seven referring to Place, and eight referring to Work. For the word 'comfortable', 53 references were found. A number of these occurred in a piece of text where the word 'comfortable' was used more than once, and so each of these pieces of text was counted as one reference to the concept of being comfortable, and when this was done there were 39 references to the concept of being comfortable. Twenty-three of these referred to Place, and 14 to Work, and two were not relevant because they referred to 'making a patient comfortable'.

These references to 'comfort' in relation to work were then reviewed in their original context and it was found that the students did appear to have a 'comfort zone' in relation to Work. This comfort zone related to the nature of the work and their enjoyment of it, to the level of responsibility required of them and whether they felt they had the skills to provide adequate patient care in a particular context, and to the level of income needed to 'be comfortable'.

Some students spoke about feeling 'comfortable' or not 'comfortable' working a particular discipline, such as this student speaking about surgery:

I just didn't feel that comfortable in a theatre setting. With the operations and also there's not a lot of patient contact, which I think is one of the enjoyable bits where you get to chat to people and listen to some of the stories that they've got to say... I thought I wouldn't be that comfortable with it, in the long term. (Student Number 66)

Others spoke of feeling comfortable in relation to the level of responsibility required of them at work. For example, this participant who was an intern at the second interview spoke about the level of responsibility she had as an intern as something with which she 'felt comfortable':

After five years of just being a student and following people around, you now have responsibilities. I feel that I'm given enough responsibility without being given too much... I'm comfortable with that level of responsibility. (Student No 28)

Others spoke about the level of responsibility they were given in rural settings, in particular during internship and residency. For example, a large rural hospital was described by a participant working as a resident there:

You have a number of staff specialists there who have been here for yonks and yonks, and so they have created this wonderful environment where you feel very secure and you can progress at your own pace. So... you know that you feel comfortable doing this. (Student No 35)

In contrast some students spoke about the level of responsibility afforded doctors in rural settings being a deterrent for some doctors considering undertaking rural internships and residencies, for example this doctor:

[It] is one of the main reasons why many junior doctors won't go, or don't want to go to those settings because they're freaked out, and if they're being honest within themselves—they probably won't be to other people—they will feel out of their comfort zone and they'll do whatever they can to avoid that. (Student No 36)

This analysis shows that the concept of 'Comfort Zone' can be applied to Work as well as Place. However, it does not appear to apply in the Domain of Significant Others.

4.2.4.6 Aspects of Significant others

As discussed earlier, the students almost all spoke of people with whom they had social attachments and to whom they had some commitment. For the purpose of the model these people are called significant others. The relationships encompassed by the domain of significant others included relationships with partners, children, parents and extended family, and friends. The relationships between self and significant others were characterized by commitment, responsibility, caring, and support.

The aspects of significant others and relationship between self and significant others is represented diagrammatically in Figure 4-5.

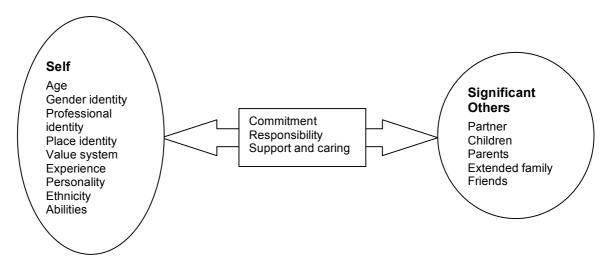


Figure 4-5 Aspects of significant others and relationships between self and significant others

Partner

The most dominant relationship within this domain was the relationship with a long-term partner. While a number of students did not have a long-term partner at the time of the study, they spoke of the expectation that they would have a long-term partner in the future and the effect of a future relationship on work and location plans, seeing the relationship with a partner as being a key part of their life. Many discussed making compromises in relation to their own work and place desires and needs so that their partners' work and place desires and needs could be met. For example, when a single student was asked if there was anything that would change her future location intentions, she replied:

Relationships, I think: say you got married and that person didn't want to live in a rural area, I'd compromise and say I'd live in the city and not the country (Student No 68).

There were a number of aspects of their partners' lives that the students felt would effect both their location and career decisions. By far the most important was their partners' work. For many students the issue was that their partner worked in an occupation for which there would be no employment outside a major metropolitan area, so that if they moved to a rural area their partner would either be unable to work or would need to change the work they had been doing to something new. For example, one student said 'it would be a big ask, to ask him not to work.' Most students in this situation would not consider rural practice. Some had partners whose work requirements could change in the future, for example a student whose wife was a GP registrar:

My partner is also medically trained and is on the GP training scheme, so it complicates the decision-making as well. (Student No 67)

Others had partners who were qualified to work in a non-metropolitan area but had committed themselves financially to working in a particular place: for example a student, whose wife was a GP, said, 'my wife, she's got a business here as well so we both want to stay in the area'.

However, some students' partners were prepared to be quite flexible about their work in order to move to a rural area because they preferred a rural lifestyle. For example, one student said her husband was:

very open minded about[it]. He's quite focused on getting away from Sydney, too, so he's kind of prepared to do other things, even though he's working in Sydney now. (Student No 69)

Another's partner had rearranged his information technology work so that he could do most of it from home, with a view to moving to a rural area in the future so that she could work as a rural GP.

As well as their partners' work students discussed their partners' preferences in relation to the location in which they would live. Their partners also had a certain geographical 'comfort zone' and this was an important factor in their location decisions. For example, one student spoke of his wife's preferences as follows:

She, being a [regional city] person, does not want to live in[capital city] for the rest of her life and we would like a rural sort of place. So the [region] meets the criteria of being close to family, and reasonably close enough to [capital city] and [large city]; nice lifestyle. (Student No 67)

As well as considering their partners' work and comfort zone in relation to their career and location choice, a number of students also considered the demands of their future work. For example, in relation to discipline choice one student said:

I simply wouldn't pick O and G, for example, because I wouldn't subject my partner and all those around me to what I see is the lifestyle required to practice well in that area (Student No 14) .

At the second interview some students had made changes in relation to their future location choice because of changes in their long-term relationships with partners. Some, who had become involved in long-term relationships during the study, had changed their location intentions because of their partners' work needs, while others had changed their location intentions because of changes in

their partners' career paths. For example one participant, who had become engaged by the second interview, said this relationship 'has had a new bearing on my thinking', so that she now had decided against rural practice in order to live in an area where her fiancé could find work. Another engaged participant's fiancé, who was also a doctor, decided on the discipline in which he wanted to work during the study, so the availability of training and work for him was the major factor determining her change in location choice from a rural area to a regional city. She said she was 'basically fitting in with him'.

Thus, students saw either their present relationships with partners, or future relationships with partners as being a key domain of their lives that related closely to their future practice location.

Children

Although only a few students had children, many discussed the expectation of having children in the future, seeing parenthood as a key component of the domain of significant others for which they would be prepared to make considerable sacrifices in relation to their own needs and desires within other domains of the model.

Many spoke of their desire to spend time with children and to meet the needs of children they already had, or hoped to have in the future, as effecting future work and location choices. For example, a mature age female student who had children said:

I'm not ruling out going to a rural area, but I'm a little older and I've got children, so my kids are going to be at High School when I finish, or one of them is, and the other one will be fairly close to finishing primary, so I'm very aware I would like to be somewhere where I've got a choice of schooling for them. (Student No 38)

Several students who did not have children felt that 'the country is a much better place to raise your children... but if you're not going to commit yourself there all the time it'll be a disadvantage dislocating your children and starting school all over again and all those kind of things.'

The students also spoke about the time commitment involved in parenthood and how this related to their work commitment. For example, one student said:

I want to be the best husband and best father I can and... if I can't do that then I feel like it's a waste of time. I might as well go back to something that I can do and manage to be who I want to be as a person. (Student No 70)

A number of female students anticipated that there may be conflict between their work and 'just physically taking the time out to have babies and... you want to spend time with them and... watch them grow up.' They were concerned about their ability 'to fit it all in'.

Thus children, whom the students already had or might have in the future, were a major part of the domain of significant others, and most students anticipated that they would play a major part in where and how they would live and practice in the future.

Extended family

The students varied in the significance they gave to relationships with extended family, such as parents and siblings. However many saw relationships with their parents as being supportive especially in relation to assistance with childcare.

Some female students anticipated that they would need the support of their parents in order to follow a busy career, and also felt that they would like their children to have the opportunity to get to know their grandparents well. For example, one student whose parents lived in Sydney said:

I think it would be really cruel on my parents to deprive them of seeing their grandchildren as a long-term thing, and I know that that would upset them greatly. (Student No 39)

One student who had a baby during her internship year had been supported by her mother who moved from interstate to stay with her for a six-month period.

Some participants also spoke of the needs of ageing parents and their responsibilities to them and a desire to provide support to their parents as influencing their choice of location. For example, one student whose family lived in a rural area said:

I'm sort of now starting to think that my parents are getting a bit old, maybe I should be moving closer to them, and so you're sort of wanting to, in the next short few years that I have left in me, to get the travel and stuff I want done out of the way so that I can be with my parents when they get a bit older. (Student No 71)

Other relationships that students spoke about were relationships with siblings and nephews and nieces. For example, one student said she did not intend to

have children but wanted the opportunity to spend time with her nephews and nieces. The strength of relationships with parents and extended family varied but relationships with parents, in particular, could be supportive to the students or could be an area where they felt a responsibility to provide support themselves.

Friends

A few students referred to friends as being important in relation to their location, saying for example 'all my friends live in[city]', but mostly this was related to family also living there: for example, 'my family and all my friends are there'. Relationships with friends did not seem to have the same significance to most participants as relationships with family.

4.2.4.7 Significant others' work/education

The analysis of the data relating to significant others showed that the data relating to the work or education of significant others did not fit into the domain of place in the way that the self's work did not fit into place, and yet it was often of real importance to the students in their career and location choices. So another domain that encompassed the work and/or education of significant others was added to the model.

At this point the revised model is demonstrated diagrammatically in Figure 4-6.

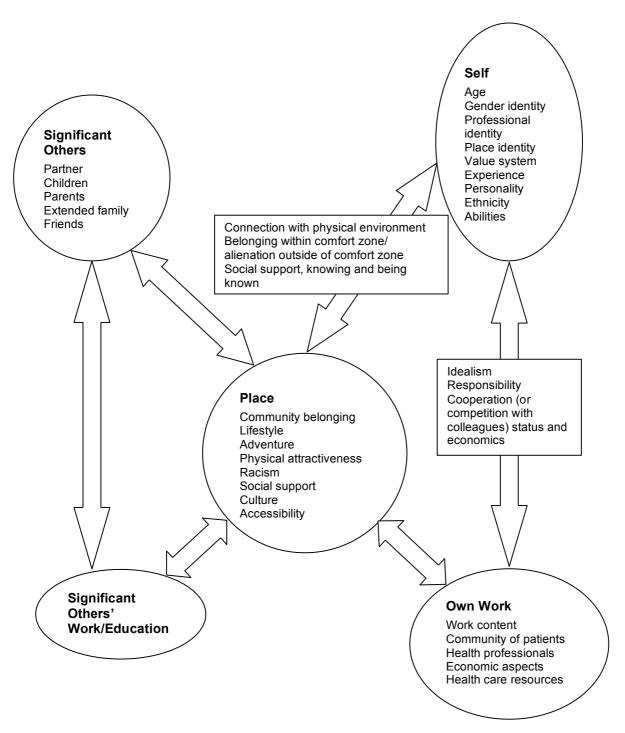


Figure 4-6 Revised model showing relationships between domains of Self, Place, Work, Significant others, and Significant others' work

The overlap between the domains is shown in Figure 4-7.

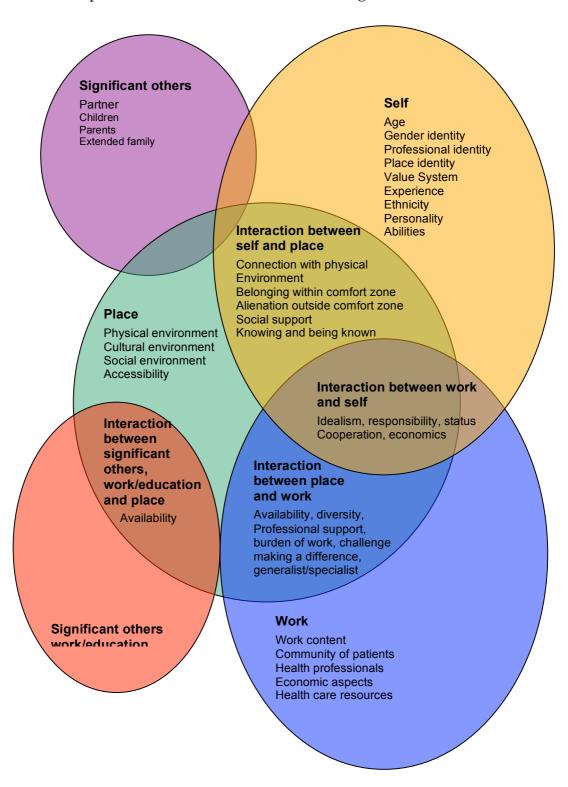


Figure 4-7 Overlap between the domains of Self, Place, Work, Significant others and Significant others' work

4.2.4.8 Relationship between self and significant others

Commitment

The students spoke about their relationship with their partners in terms of a long-term 'commitment'. Some students had boyfriends or girlfriends whom they were dating, but did not always see these relationships as 'set in concrete' and distinguished these relationships from a long term relationship with a partner with whom they would share their lives and cohabit. Many of those who did not have current partners spoke about 'a commitment to a relationship' in the future. To most students a commitment to a partner meant that they would make joint decisions with their partners about their future location and work. Some of them spoke about being 'tied down' in a particular location because of their partners' work commitments or preferences for that location. They referred to their partners' needs being a priority in a caring way, and about wanting their partner to be happy with their future decisions. For example, a student interested in rural practice spoke about her partner's need for work:

I would feel terrible going somewhere really remote where he had no work, so that's why I'm thinking somewhere that's developing but still small, cause he's a[tradesman] so he's got to have... more development happening. (Student No 40)

Responsibility

Most of the students spoke in terms of responsibility for children, either at present or in the future. Their major concern was about the care of children and how they would work out the responsibility for children's care in their partnership relationship. Some, especially female students, spoke about taking some time off from work when children were young to care for them, and then working part-time in order to be the primary carer of children. Some female students wanted to be the primary care giver for children and had concerns about working either in disciplines or locations where the demands of work would make this difficult, for example:

I don't want to be the primary care giver in a rural community that has an overload of work. That's my big concern, although I am interested in rural medicine as well. (Student No 73)

One mature-age female student with young adult children spoke about her sense of responsibility to them and her desire to continue to live geographically close to them in the near future:

They're only young yet, they're only twenty, twenty-two, and my daughter might ring up and say "Mum can we meet tonight?" you know. "We really, I want to talk this over with you or that over with you," so I would like to be within a ten-mile radius of her for a while. Because she's going through lots of changes, and so is my son. I want to be that accessible. I mean, I've been away for a couple of months at a time... But you know, when you need a hug, or they need a hug, it's really hard when you're in[country town](Student no 3).

A few students were married with children and they mostly shared the childcare with their partner, or in some cases their partner was the primary carer for the children.

Some students spoke about 'extended family responsibilities', especially for the care and support of elderly parents for example:

I've got family tying me to Sydney \dots Extended family responsibilities here. (Student No 74)

None of the students spoke about this kind of responsibility in relation to partners or friends.

Support and caring

The students spoke about being supported and providing support in relationships with significant others. Some of the female students spoke of their own careers as not being as important as their partners' careers, saying that they wanted 'to support him in whatever he does'. For them, this involved either changing the location where they originally had wanted to work, or working limited hours in order to support their partners who were working extended hours. Other students spoke about the support which their partners provided for them for example this male student spoke about the support his partner was giving him, financial and emotional, while he studied medicine. She had been 'prepared to move up here and support me while I'm at school.'

Similarly some students spoke about the emotional support their partners gave them, for example a female student spoke of the importance of having her partner's support and approval for any career plans she might make: I'd like to feel that I have a bit of a nod from my buddy by my side... sort of going 'Yeah'... That's what's important to me. It's sort of from someone who knows me. (Student No 42)

A number of students spoke about a desire to live close enough to parents and extended families to be able to be supported by them, especially with childcare. For example, a female student said she wanted:

family nearby. 'Specially, if you had a really busy job and you had kids; it would be good to have some support for a family (Student No .39)

For some students this support from friends was particularly important for example one student, who had had an episode of depression during his undergraduate years, spoke about being close enough to friends to be supported by them:

My friends are really important to me, and it's critical for me to see them relatively frequently.(Student No 42)

4.2.4.9 Recreation

As the data were analysed further, another domain was identified: the domain of recreation. This domain varied in importance to the students, not being mentioned at all by some students and being of great importance to others. In this domain any recreational activities including sport, music, art, and entertainment are included. A few students had previously been professional musicians or athletes and this domain was very important to them. However, most students saw this domain more in terms of maintaining their health and well-being.

The domain of recreation includes 'time out' from work, and what some students called 'lifestyle' activities such as sport, music, art, and entertainment. One student referred to recreation in this way:

There's another part to your life, it's not just about work, and you've got to have other things as a stress relief and to get away from being a doctor. (Student No 75)

The aspects of the domain of recreation and the relationship between recreation and self is represented diagrammatically in Figure 4-8.

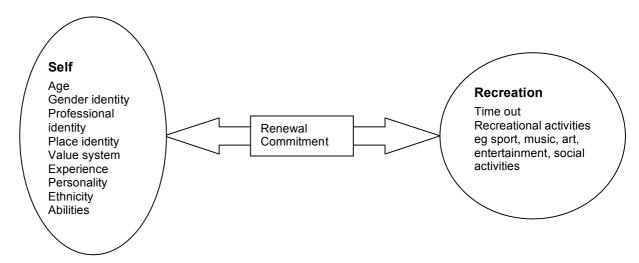


Figure 4-8 Aspects of recreation and relationship between self and recreation

Time out

Many students spoke about working in a discipline of medicine and in a geographical area that would allow them to have time off work for 'the lifestyle' they wanted. They indicated that they wanted to:

have a life outside of medicine; that's very important to me as well, like, to be able to come home and sort of say that's sort of the end of the day, kick off my shoes and relax and unwind, and be able to have holidays. (Student No 76)

Many referred to the ability to have time off from work as being essential for their health and well-being, stating that they saw their working lives only being sustainable if they were able to 'have time off to recharge', with one student saying:

It's a demanding job, and I don't think you can offer your work one hundred percent unless you can take some time out, yourself as a person. (Student No 75)

These students did not want to 'have to live for job' but wanted 'the sort of lifestyle where I have the luxury to spend time with doing hobbies and with family.' For example, one student said he did not want to be 'too humongously busy', and that:

I'd rather not have a lot of money and have a lot of time, than being run off my feet... depending on where I work, that could affect the kind of options I have to choose. So that is a priority, having time. (Student No 77)

Recreational interests

Students spoke of a variety of recreational interests outside of medicine including 'a lot of sports, camping and hiking and cycling, and the odd game of

golf', 'performing and singing and dancing, and things like that', and 'music, playing an instrument, drawing'. One student spent one day a week doing charity work, describing 'work in a soup kitchen and work with refugee women' as great fun.

4.2.4.10 Relationship between Self and Recreation

Renewal

Many students saw recreation as being an essential aspect of maintaining their health and commitment to medicine and of sustaining themselves in what they perceived to be a stressful occupation. For example, one student said:

I think lifestyle is a big one for me, I want to be able to sustain myself and not burn out and in that way I'm worried, but if I could sustain myself I'll do the best job I can at what I'm doing and that will be best for the patients, so I wanna stay enthusiastic and be "psyched" about what I'm doing and everything, if the hours have to be long, if it's too demoralising. (Student No 78)

Commitment

A few students had previously been professional musicians or athletes, and this domain was very important to them. They saw themselves as having a commitment to their recreational activities, and these students indicated that they would not live in a location where they could not pursue their particular interests.

Thus, while some students did not give the domain of recreation as great a significance in their lives as the other domains, most felt they needed recreational time and interests to sustain themselves mentally.

At this point the model was again revised to incorporate recreation. The revised model is shown diagrammatically in Figure 4-9.

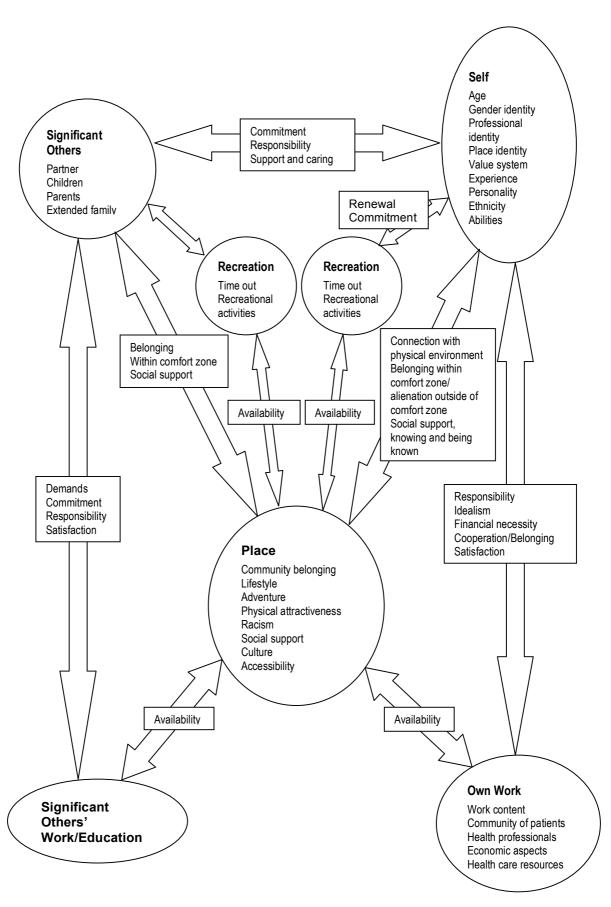


Figure 4-9 Revised model including all the domains identified, and relationships between the domains

4.2.5 Priorities in the model: 'Landscape of fulfilment'

When discussing their priorities in life overall, many students spoke about finding balance between each domain of life, and did not see their lives as being complete if only one aspect, such as work or relationships with significant others, were satisfying to them. However, while each domain had a different level of importance to each student, most of the students mentioned them all including work, place, significant others, and recreation.

The students spoke about seeking happiness in their lives, for example one wanted to:

be happy at where you are... the way you live your life. You can get up every day and do what you do all day every day and still enjoy it. (Student No 79)

They spoke of seeking personal satisfaction in their work, for example:

that's why I'm doing medicine, 'cos I know I wanted to do it... Like, my driving factor will be that it makes me happy. (Student No 62)

Most students saw happiness as being a result of a balance between the fulfilment they found in a range of aspects of their lives. For example, one student encapsulated the complexity of this theme in the following comment:

Being happy is like a pretty obscure thing: there's lots of things that would sort of make me happy in my job, which is if my wife had somewhere to work; that we had a stable place to bring up kids; and I enjoyed what I was doing, where I was working, the people I was working with; that I had enough resources to do what I wanted, both at home and in the workplace; and think about money and the ability, the amount of treatment I could provide to patients wasn't limited by how much money was in the bank. That sort of thing. So there's lot of things that would make me happy doing what I was doing, not just emotions. (Student No 67)

Some students spoke about seeking 'my perfect world' where each aspect of their lives would be fulfilling and yet fit together without tension between them, for example:

So if I could try and combine all the different elements and put together my "perfect world" but to have as much in my life that would be fulfilling and that's what I would like to achieve and that includes variety and challenging work, which you get in a regional or remote or rural setting. The ability to live on the river and have lots of space. (Student No 78)

The students mostly did not seem to be seeking just 'happiness' but to be fulfilled, particularly in relation to work, and for many of them this involved

undertaking challenging work and doing it well. For example, this student, like a number of others, spoke about needing to do his best to feel fulfilled:

I consider myself to be, not a high achiever, but someone who sort of strives to be their best all the time. (Student No 80)

One definition of the words 'to fulfil' is to 'develop... full potentialities' [354] and another definition is 'to satisfy' and 'completely develop one's abilities and interests' [354, 355]. Based on the data relating to what the students were seeking in this framework, the word 'fulfilment' is used to mean 'the reaching of full potentialities and the satisfaction associated with reaching those potentialities.'

The students spoke about finding 'fulfilment' in several domains of their lives.

Although the students had not used the word landscape I considered that the word 'landscape'—using it to mean 'an extensive mental view, an interior prospect: "They occupy the whole landscape of my thought" (James Thurber)'[356]—would capture the concept of the person's view of the world in which they seek 'fulfilment'. 'Landscape' incorporates the context in which the person (self) seeks fulfilment and the model was titled the 'Landscape of fulfilment'.

The data showed that each individual sees his/her own 'Landscape of fulfilment' slightly differently, with their orientation related to their own needs and desires, and that each individual's 'Landscape of fulfilment' is dynamic and changes over time. Many students acknowledged that they expected the importance of each domain to vary over time and at different stages of their working and social lives, with students who were young and single mostly seeing work as their predominant domain currently, but expecting that significant others would become more dominant in the future. For example, a married student said:

The commitments and responsibilities that I have already are going to structure what I am able to do, and as I get older they will probably increase rather than decrease. (Student No 67)

4.2.5.1 Degrees of attachment

The individual students' commitment to each domain varied sometimes to a large degree between students. This variation was characterised by varying

degrees of attachment to each domain and these varying levels of attachment shall be discussed for each domain in this section.

Attachment to place: 'call no place home' or embedded in community

For some students their relationship with a particular place went far beyond comfort zone, and they had a very strong attachment to place and were in a sense embedded in a particular community. An extreme case was a rural background Aboriginal student who said:

I'd like to go back just to [in my home state] somewhere, cause I know If I go back home, to [small country town] at any stage, that will have to be the last place I'm planning to move... I will never be able to sever the ties, the emotional ties, again to move away. (Student No 35)

While a young urban background student said:

I can't imagine going back to [home city], like, I think I'd die if I had to go back to [home city], and I can't imagine me staying in one place for very long, like that's one of the things that appeals to me in medicine is that you can see so much of the world as well as Australia. (Student No 81)

Commitment to work: Career or vocation or 'just a job'

While most students had a strong commitment to work, seeing it as 'a lifelong learning process... not just something that you just take on lightly', a few saw their medical work as 'just a job'. For example, one student spoke about medicine as just a job and not being 'driven to work':

And just another thing, if medicine is purely a job, just like any other job, like you're an accountant and stuff like that, and there are people who do medicine for those reasons... If you can make good money there, and you've got the flexibility to do, like I know people who work three or four days a week and get good money and then have long weekends. (Student No 77)

Some, particularly rural interested students, had a very strong commitment to work and were strongly idealistic students describing their work as a 'vocation', and a few who were mainly interested in urban based specialties had a commitment more in terms of a career, wanting to 'go down the serious career, very ambitious route', and these students emphasised the academic and financial aspects of their future work.

However, most participants sought to find a way to balance the 'the conflict between your ambitions, what you really want to achieve or whether you're really happy'. This comment is typical of the attitude of most of the students:

I think about where I'm going to work, and where my career choice will allow me to work, and is that what I want... (because there is the job aspect and there is social and the other part of your life which is equally important). I think about all that and I'll pick something that... I'll like and see myself doing in the next thirty years, and that will allow me to go to where I want to work and will allow me to have the kind of hours that I want and the kind of work that I enjoy. (Student No 81)

Significant others: Committed and responsible or 'free'

Most students saw their personal relationships with significant others as being a key component of their lives relating to career and location choice. However, a number of younger students did not have long-term partners or other strong commitments to family and were 'not tied down', with one describing himself as 'young and fancy free'. They felt this gave them greater 'freedom to travel' and choose to work extended hours if they preferred. For example, a single female student said:

One of the things that prompts me to go now to Darwin[is] because I am unattached and it is quite easy for me to move around, doing things like that. (Student No 43)

And a single male student said:

I don't have a partner at the moment so I don't have that sort of commitment as well, which would be something else to think about, but as I am at the moment I am happy to go overseas... I've got the travel bug. (Student No 44)

However, these students still anticipated that they might be committed to a partner in the future and that they might have the responsibility of children.

A female student who became engaged and then married during the course of the study described how she had changed from being 'free' to committed, as follows:

I always kind of thought, I can be flexible as long as I'm single. It's not until he came along... But I did used to say... I'd like to do that and I'd like to do that. But if I met somebody that might just restrict me with what I do. (Student No 37)

Those students who were in partner relationships and who had the responsibility of children saw these relationships as a very high priority, and they mostly saw this domain as being very important in deciding about their future work and location. For example, one male student said:

But then a lot of where I would actually practice would depend on what my wife wanted to do in her job, and if we want to have kids and she wants to be house mum then that's fine, and we could pretty much work anywhere, but if a job is going to be limiting for her then it will be for me as well. (Student No 67)

and a female student spoke of the high priority she gave to family life as follows:

I don't want to get to the end of my life and look back and think I don't even know my own kids... made work and my patients a priority in front of, like, at the expense of the people who I really should be making a priority: my family. (Student No 45)

The differences between groups of students in the nature of their family commitment will be discussed in detail in the section 4.2.7.1.

Recreation: Fitted in or another job

While many spoke of recreation, mostly, this theme was not as predominant as the themes of 'work', 'place,' and 'significant others'.

Most students referred to recreation as a source of enjoyment and a means of sustaining their motivation and interest in work, and several saw it as an essential aspect of life. For example:

I've got more to offer to medicine if I'm doing other things: more to offer as a person and more to offer as a doctor if I can take the time to do other things. So I think that's why that time factor is fairly important to me. (Student No 82)

A few students who had been heavily involved in sport or music regarded recreation as being as important as their work. However, the students who did not mention recreation seemed to see it as a low priority, which they would fit into life if their work and relationship commitments allowed it.

In Figure 4-10, the revised model is shown with the strength of the interrelationships between the domains.

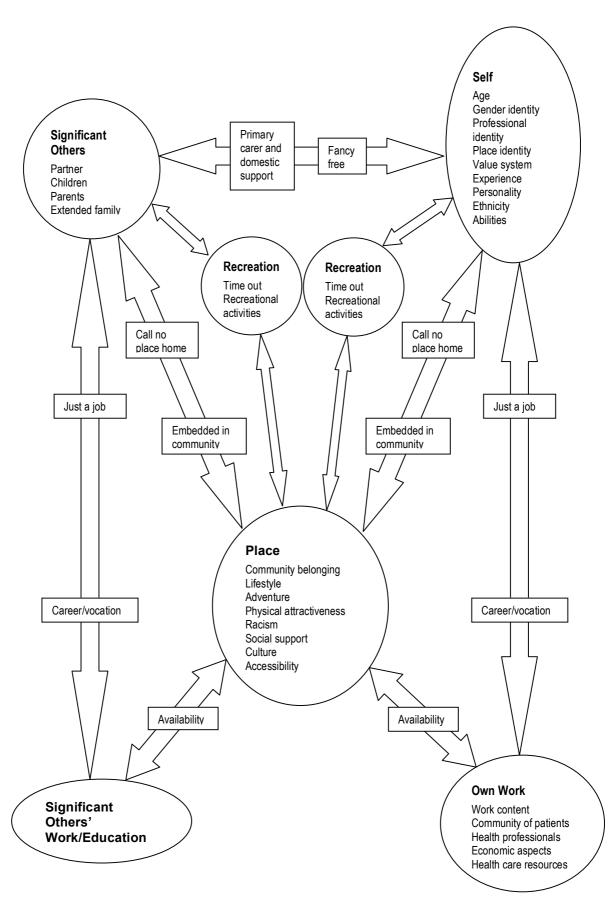


Figure 4-10 Revised model with all domains and strength of interrelationships between the domains

4.2.5.2 Finding balance in their lives

As the interviews progressed over the three-year period during which they were conducted, a number of questions arose about whether the domains in the 'Landscape of fulfilment' were always congruent or were at times in conflict, and how the participants would cope with conflict between the domains. As these issues arose in subsequent interviews, the way in which the students would balance conflicting priorities in their lives was explored. They spoke of seeking balance, as this student described:

That, it's really a balance of factors: what my financial situations is, what my family situation is, what my, whether I have a partner, whether we're serious or not, what they think of it. Where the job is, how much it pays, what sort of setting is it in? All those things would play a role. (Student No 84)

For some students, conflict between the domains occurred during the threeyear period of the study and their ways of resolving this conflict were explored; and for others, where conflict was possible in the near future, a hypothetical situation was proposed and their response to this was explored.

For some students, all areas of the domains of their lives were congruent and they were currently in a situation where there was not conflict between the demands of any of the domains of the 'Landscape of fulfilment'. However, for other students there was conflict between the domains of the model at the time that they were interviewed. For example, some students would have preferred to work in a rural area but were committed to relationship with a partner who either preferred to live in an urban area or who could not find work in a rural area. Others were interested in working in a discipline that would involve very long hours of work because they enjoyed the nature of the work, but they had family commitments, such as responsibility for young children, which would make working in such a discipline very difficult. For others their interest in working in a specialty that would only be available in larger centre, such as a regional city, precluded living in a rural area although they indicated they would enjoy living in a rural area. While some students did not have any conflict with domains within the model at the time they were interviewed, they anticipated that there might be conflict in the future and had given some thought to what their priorities would be. For example, this male student said:

I'm not prepared to not see my family grow up because I'm trying to become some guru consultant or something or other, so it's really hard to say how things will work out and I guess I'll have to make those decisions when I come to them as to whether it's possible to try and combine all these things. (Student No 70)

When faced with this situation most students sought compromise between the domains of the 'Landscape of fulfilment' so that, even though it was not possible for all of their expectations to be met completely, they were able to find some level of satisfaction in all domains of the 'Landscape'. For example, some students whose partners' work would normally necessitate living in an urban area sought a way that the partner could continue to work in a rural area, for example by working from home. In some cases the female students and their partners had decided to reverse the traditional gender roles in the home, with the female doctor working full-time and the male partner working either part-time or staying at home as a 'house husband'. An example of this situation was a female rural bonded scholarship holder whose husband had now structured his work, 'doing his computing stuff so it doesn't matter where he is to do that', which this had broadened the range of locations she saw as future options.

A number of students felt that, even though they needed to compromise in relation to some aspects of work, they would still find fulfilment in their work because of the very large range of options available to them as doctors.

Even though many students had needed to compromise in relation to some aspect of the 'Landscape of fulfilment', they mostly felt that they would reach a reasonable level of fulfilment in relation to all the domains of the 'Landscape of fulfilment' that were important to them.

Thus, most students sought compromise and there were various means by which they compromised in order to attain maximum fulfilment across the 'Landscape of fulfilment'. The means by which they sought to compromise included changing their intentions in relation to location, changing their intentions in relation to the discipline of medicine in which they would work, changing the responsibilities they and their partners took in the family, and accepting that fulfilment in one domain would not be possible in the near future but delaying seeking fulfilment in that domain until some time in the more distant future.

4.2.6 Generational issues

When discussing their priorities in relation to the 'Landscape of fulfilment', some students referred to their perception of previous generations of doctors and how they thought they would differ from them. Many students perceived older doctors as having committed themselves to work at the expense of other aspects of their lives, such as family. For example, this female student described her perception that rural doctors in the past had not been able to devote time to family life because of the demands of work:

I saw a really, really sad presentation at the WONCA conference... it was a study of the children of on call physicians and it was just heart breaking the things that the kids were saying about their parents... "I wish he could put me to bed at night", or "I wish she didn't have to rush off during my football game"... Like really, "I wish I could know my mother".(Student No 45)

They thought that the relationships and health of some older doctors had suffered because work had been their overriding priority, and indicated that they might be able 'to reverse some of the suicide statistics and... alcoholism statistics, etc, by just looking after yourself and just by taking a pretty proactive approach to looking after yourself and recognising some of the down sides of people who have practiced before us, and learning from what they are telling us now.'

They did not want to repeat the mistakes they thought the previous generation of doctors had made. For example, a female student said:

They're not sitting there at 65 saying I wish I spent that extra hour doing another operation, another surgery, or they're looking at the fact that they're divorced and that the kids don't talk to them or don't know them. It's all a bit tragic really... for the human profession. (Student No 45)

These students thought that:

The younger generation of doctors and medical students coming through, we're not going to be just doctors, we place a big importance on the rest of our life as well. And there are other things we want to do... than just be doctors all the time. (Student No 50)

Some female students also thought that gender roles in families would change in the future and that young male doctors would want more involvement with their families than male doctors did in the past, as shown by this comment:

A lot of guys are now taking care of kids and that sort of thing and you know male medical students are not going to be any different to general society. (Student No 45)

While there was evidence of generational change also among male students, with many of them speaking about wanting to spend time with their families, the data did show several differences between male and female students.

4.2.7 Gender differences and gender identity

While male and female students had similar perspectives for some themes, most female students expressed different views from male students in relation to some themes. These themes were: relationship between own work and location and partner's work and location; their responsibility for children; family support; the timing of the birth of children relating to work and training and their own biological clock; the availability of suitable female role models; and sex discrimination.

4.2.7.1 Family orientation of male and female students

Most female students placed more emphasis on the domain of significant others than male students discussing their relationship to the domain of significant others in a different way from male students. While male and female students both spoke about wishing to limit their hours of work so that they could spend time with their children, female students were more likely than male students to refer to being the primary carer of children, to working part-time in order to care for children, and to living somewhere close enough to access support with childcare from extended family. It would appear from this different way of speaking about the care of children that most female students saw themselves as primarily responsible for children, and saw providing domestic care and caring for children as a key part of their gender identity.

In contrast, some male students had a family orientation, and placed strong emphasis on the domain of Significant Others but tended to see themselves much more as 'Family providers'. This involved providing an environment for their family that would meet their needs (even if doing this meant that they would have to compromise in relation to their own work and location preferences), and being able to spend time with their families but not being directly responsible for childcare. For example, many referred to choosing a future location that would meet their partners' needs in terms of providing work opportunities. However, none spoke about their own work needs being

secondary to their partners' or about taking responsibility for a level of home and family care to which some female students referred.

While female students overall differed from male students, their perceptions of their relationships to significant others were not homogeneous, varying from some who saw their family role as overriding all other areas of life, to others who saw themselves as having a full time medical career and juggling this with family commitments. In this way, female students could be grouped into three subgroups relating to their family orientation. These were: Primary family carers, Shared carers, and Care delegators.

I shall now discuss in detail the characteristics of each of the following 4 groups of students: Male students; Female primary family carers; Shared carers; and Care delegators. This discussion shall include a description of various characteristics which contributed to their gender identity: their expectations about their own and their partners' roles in their families, particularly the care of children; their preferences and intentions in relation to discipline and hours of their own work. I shall also discuss how their gender and family orientation affected their location choices.

Male students: family supporters and providers

Family oriented male students tended to see their family responsibilities as involving supporting their partners by being willing to compromise in relation to location, and being available to spend time with their families and supporting their partners and children by limiting their working hours. Nevertheless, none of the male students saw themselves as primary carers of children and none discussed childcare as being primarily their responsibility in the way female students did. While some may have anticipated the kind of shared childcare arrangements that female students discussed, none of the male students discussed such arrangements in the context of discussions about the time they wished to spend with their families.

In a discussion about women in medicine, one male student referred to women as being 'expected to take care of the kids if they have them' and as this being a reason why it was more difficult for female doctors to progress in their careers.

Many male students spoke about concerns about working in a discipline of medicine that was very demanding and involved very long hours of work and frequent on call work. For example a male student referred to having chose psychiatry over surgery because:

We've got a baby on the way and... I want to make family a big part of my life and that really turned me off surgery 'cause I was quite interested in surgery. I don't want to be working all those hours and studying all those hours. (Student No 51)

However while a number of male students spoke about working in disciplines where they would have time to spend with their families, when questioned about working hours in detail, they mostly saw themselves as working a 35-40 hour week rather than the extended hours typical in the medical profession. This was in contrast to many female students, who referred to part-time work for two to three days per week when they discussed time to be spent with their families.

A less family oriented male student was advised by a rural specialist "before you get married make sure she's aware she's marrying the job as well". He spoke of the dilemma faced by doctors in rural areas where the demands of work were great, and said that this doctor was saying 'he wasn't spending enough time with his kids and he wasn't doing enough things with his wife', because 'the on call pressure was really taking a big chunk out of his life.' However, this student thought:

He was lucky his wife was very understanding about it. She was a midwife, herself, so they sort of had a bit of an understanding with regards to that, but I can imagine it being really difficult for someone from a non-medical perspective to have a very good idea about the pressures that you are under. (Student No 52)

In contrast to many other male students, this student appeared to accept that having a very supportive wife was one way to cope with very demanding work.

Thus, while most male students were concerned about the impact that working very long hours might have on their relationships with significant others, they still saw themselves as working what many people would regard full-time, and seemed to expect that their partners would be primarily responsible for the care of children.

Primary family carers

Female students who saw themselves as 'Primary family carers' not only accepted the primary care of children as being their responsibility but also saw

themselves as playing a major role in sustaining home life in a way that would provide care and support for their partners. They saw their own work needs as being very much secondary to partners' work needs, and their need for time to act as the family carer was a major influence on their discipline choice. Similarly they would choose their future location on the basis of their partner's career needs along with their children's needs, for example referring to 'let[ting] his[partner's] career dictate where I went'. They felt that as doctors they would be able to find work that was sufficiently fulfilling for their own needs and that their work could be fitted around the family's needs. For these female students part of their gender identity was having a key role in providing care and domestic and emotional support within the family.

These female students often brought up the issue of their role in the family and were likely to indicate willingness to change the discipline in which they would prefer to work to accommodate the demands of their partners' work. This was particularly so with women whose partners were either medical students or doctors: for example, a student whose partner was a doctor a few years ahead of her in his training said,

If he's working 60 hours a week then the chances of me working 60 hours a week as well, it just wouldn't be particularly realistic. (Student No 41)

Shared carers

Shared carers also saw themselves as having a major role in the care of children but they preferred a situation where the care of children and home was shared with their partners. Their expectation was that they would take some time off and to reduce their working hours, at least for a period of time if they had a baby, and many spoke about part-time work for some years. However, they discussed sharing the responsibility for children with their partners as this student described:

I would enjoy a situation where there was a joint role, so, with neither person working completely full-time, bit of flexibility. (Student No 24)

Some of these female students indicated that their partners were happy to spend a period of time as either a full-time househusband or to work part-time and to be the primary carer of children. However, some felt quite ambivalent about being the primary income earner and were concerned that 'even if you've got a partner that's willing to do that, there's the other issue of whether

you want to give up time with the child.' One student summarised this sentiment, saying:

My husband's always said, "Oh I'll stay home and look after the kids, you know, and that would be great." But I don't want to miss out on that either. (Student No 69)

In another example, one student's partner was staying home to care for the child that had been born during her internship, but she decided she would prefer to continue to work part-time for the next few years.

Care delegators

While many female students accepted the traditional role of women in the home as the primary child carer and domestic support, others questioned this role for themselves and did not accept this role as a key part of their feminine identity. They spoke about the way in which 'in the past that women have supported the men to be able to do the things that they've done in medicine... it's been sorted for them', and they expressed a desire for a similar level of support, although some were unsure whether their partners would have 'the availability or the willingness... to stay home and look after the kids at least for a period of time.' However, they did not see giving up their medical work in order to stay at home to care for children as an option. Care delegators expected that they would need to work part-time for brief periods of time while they had small children, but saw themselves as returning to full-time work sooner than other family oriented students, delegating the care of children often to someone outside the nuclear family.

These students had concerns that they would 'have to juggle so many things at once'. For example, a first year student expressed her concerns about 'how easy it is to do it all, and how easy it is to get a job in which you can do it all'. These concerns were based on the experiences of a female doctor friend she described as follows:

I've got a friend who's doing specialty and she finds it very hard ('cause she's got three kids) to get a full-time job because she wants to go home at three o'clock, which you can understand is difficult for an employer to accept. (Student No 91)

In this respect these students felt there would be conflict between their gendered roles in the home and their professional roles.

They accepted that their partners may not be willing or able to contribute significantly to childcare, and while they regarded themselves as being responsible for childcare, including arranging outside child carers, they wanted to continue in their medical careers. Several spoke about living close enough to extended family, particularly their parents, for childcare to be available from extended family members.

4.2.7.2 Family support

While several female students spoke of a need to have extended family support close by, none of the male students referred to this for support for themselves, with some referring to their wives wanting to be close to extended family for support. These female students indicated that their need for family support would be very important in relation to their choice of location. For example, one said:

I'm at the stage when, where I'm contemplating when am I going to have kids, and fit them in, and trying to go country in the next three or four years would actually like be really difficult to throw away all my family support if I have children. (Student No 92)

A female rural bonded scholarship holder spoke about her parents being prepared to move to a rural area to provide support to her with childcare, as follows:

'cos I know if I have kids and my husband doesn't pull his weight I'd have my mum to take care of the kids when I need her to. And they've already decided they're going to come and live in the country with me. (Student No 91)

A number of other students spoke about living close to where their parents lived so that 'they could babysit'.

4.2.7.3 Timing of the birth of children and the biological clock

As well as expressing concerns about how to manage work as well as childcare responsibilities, most female students expressed concerns about 'just physically taking the time out to have babies and spending time with them and watching them grow up.' They thought that the timing of their own childbearing was likely to be quite difficult because the time during which they would want to start having babies was likely to coincide with the time when their post-graduate training was likely to be at its most intense. For example, one said:

Just timing-wise. 'Cos the time that you're doing your training is the time that you might otherwise settle down and have the kids, whereas later on when you're a consultant and you can afford to do part-time then you go "oh my god I'll marry someone".

A female student who was in her late 20s said that her 'dilemma' was that:

If I have them after my internship, it really delays getting into a training program; even if I can work flexibly, it delays things a lot, whereas if I wait until after I specialise I'll be really late 30's you know. So it's a real bummer actually! (Student No 93)

A 36-year-old female student who did not have any children as yet explained the problem she faced in relation to the biological clock:

I want to have children. So that's something that I'd want to do at least by the time I was 40, and I guess as the nurse and midwife and medical student I'm very well aware of that your fertility goes down the older you get and—my partner's younger than me, I've had to say to him look this is a reality for me. ... And I guess that I've just sort of potentially left it too late. (Student No 37)

Both first year and final year students expressed concerns about the problem of the biological clock, and even students who had entered medical training as school leavers saw this as a problem. A final year student expressed her concerns, saying:

It is an issue for me and a lot of my fellow medical students who I've talked to who are female and around my age and in my situation... and it's one I always knew about. Four years ago it just didn't really sink in, like, you went, 'oh yeah, ok, in five years time I'll do that and then suddenly you go,' crap, when do I take a year off?'(Student No 94)

A relatively young final year student who had commenced studying medicine as a school leaver was very keen to become a surgeon and thought that the best plan for her was to:

go out hard and get my surgical training under my belt and get to where I want to be by about the age of thirty and then I can slow down and have the family then. (Student No 53)

She jokingly said she would 'just wear my chastity belt for ten years'.

Other female students did not consider disciplines such as surgery an option because of the intensity of the training at a time in their lives when they wanted to be having babies, so they were attracted by the 'flexibility of training programs' such as General Practice and Psychiatry. For example, a first year student said:

Women tend to go into dermatology and GP practice and that type of thing for that reason, because they provide part-time training as well as part time work. (Student No 91)

They thought that other training programs should be offered part-time and hoped that 'maybe with more women coming through you might see that happening.' These students sought a compromise that would accommodate their professional and gender identities. However, other students felt that the masculine structures and culture of the medical profession would need to change to accommodate the increasing numbers of female doctors.

For instance, a first year female student said:

Given that there's more than 50% females in medical training at the moment, it's really difficult to imagine a workforce that isn't providing lifestyle options for women. To me it just seems totally bizarre. I don't know whether it will change in the six years that I graduate but I imagine that a workforce has to change from a traditional patriarchal male dominated profession into one that supports women in practice if 50% of the constituents are females. (Student No 95)

So, most of the female students were very concerned about finding ways in which to 'to tie it[work] in with the rest of your life', in particular with childbearing and childcare responsibilities. Some said they could not 'really picture how family and medicine are going to all fit together', and in relation to this a number of them discussed the difficulty they had finding suitable female role models who demonstrated how this could be done.

4.2.7.4 Female role models

Many female students discussed seeking female role models who demonstrated 'managing a career like medicine as well as having a family' because 'if you've met doctors who have managed to cope... its more likely that you'll be able.' When considering particular careers many wanted to 'see females practicing and how feasible it is with a family'. They thought their career decisions would be helped if they 'could get role models that we can look to and say "that's going to be me in six year's time, it will all work out". They expressed disappointment that many female specialists whom they saw as successful did not have children. Some female students who were interested in surgery wanted to learn about how to manage family and work from female surgeons who had the experience of having children. For example, one student said:

Dr A is... an outstanding doctor and head of department. And I remember asking her... please tell me how you managed to keep it all together, and get where you did. And she said 'Oh it's easy. I just never had children.' Dr B, my surgical supervisor, didn't get married and have children. So all these women that I've been looking up to end up sort of failing me as role models because I want to have the kids and the career all in a nice package. (Student No 53)

These students perceived their potential role models as having sacrificed a key part of their gender identities in order to maintain their professional identities. However, several female students referred to 'amazing female rural GPs who have it all and work it wonderfully as well', and described how these role models had managed to work in rural practice as well as having a family. These students had seen GPs working within practice structures that could accommodate flexible working times, while these flexible working times did not seem to be as available for specialists. Some of the female students who wanted to work in specialist practice indicated that they would like to develop practice structures that would accommodate their family commitments in the future. For example, one who was interested in becoming a specialist physician said:

I had this idea to, in the very long term, maybe [we could] put together a cooperative of specialists who wanted to share rooms and only work a couple of days a week. ... a few girlfriends might be in doing that one. (Student No 94)

4.2.7.5 Sex discrimination

A few female students also referred to there being discrimination against women in some disciplines of medicine and were concerned that there was little 'change within the profession in attitudes'. In relation to surgery, one student felt things were changing but that there was still discrimination from older surgeons:

I think with the younger surgeons it's starting come but you've still got the old school there, who make really harsh comments and so on. (Student No 88)

While a few referred to sex discrimination, none of the female students discussed feeling uncomfortable in relation to their gender identity and the style in which they were expected to work as doctors.

4.2.7.6 Summary of gender differences

Thus, many female students felt that in the future they would face conflict between their roles in the home (especially as mothers), and their professional roles. Many sought to resolve this conflict by making career choices that would accommodate both roles, and most saw themselves as needing to take time off for childbearing, and to limit their working hours to meet their childcare responsibilities. Others indicated that they felt there was a need for change in the structures and culture of the medical profession. They sought role models who demonstrated how they could fit together the different domains of their lives, and flexible working structures that would accommodate their needs.

4.3 SUMMARY OF RESULTS

The final model developed from the analysis of the data from the student study in illustrated diagrammatically in Figure 4-11.

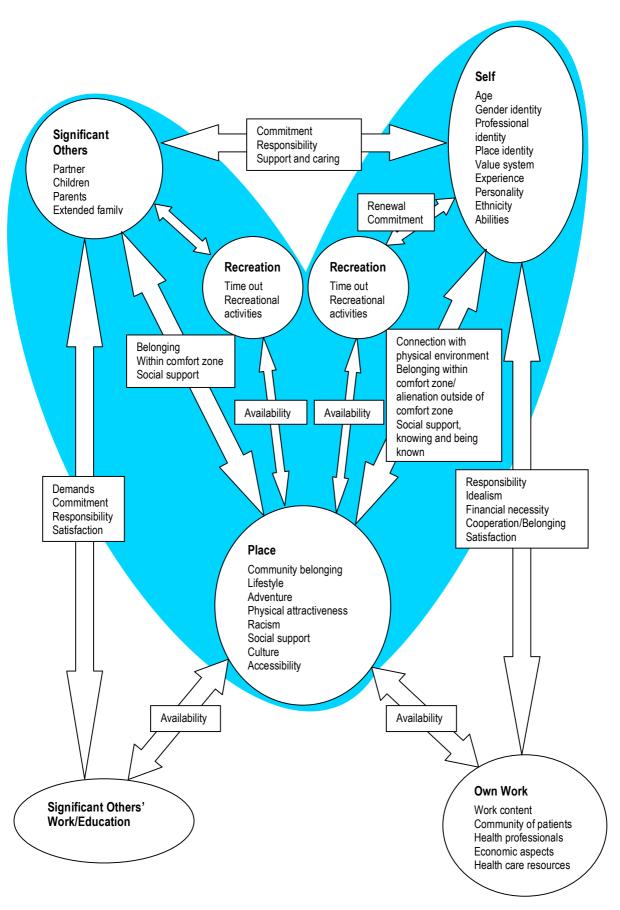


Figure 4-11 'Landscape of fulfilment' Model for understanding recruitment of rural doctors,

developed from data from student study

This model included seven domains, which are self, own work, place, own recreation, significant others, work/education of significant others, and recreation of significant others. In addition, both self and significant others had a comfort zone that encompassed place. There were two-way interactions between self and own work, self and place, self and own recreation. Similarly, there were interactions between significant others and their work, significant others and place, significant others and their recreation. In addition, place related to own work and significant others' work, and own recreation and significant others' recreation.

The students or recent medical graduates (as some had become when they were reinterviewed) varied in their relationships with each domain of the 'Landscape of fulfilment', with some having very strong relationships, for example some relating to place as 'embedded in community', and others having little attachment to place, for example 'call[ing] no place home'. These relationships were dynamic and varied from individual to individual and within individuals over time. While all areas of the 'Landscape of fulfilment' were congruent for some people, for others there was conflict between the domains and between different aspects of their identity, for example gender identity and professional identity. When this occurred, most students sought compromise trying to find as great a level of fulfilment in as many areas of the 'Landscape of fulfilment' as they could, but mostly without totally sacrificing one area of the 'Landscape of fulfilment' for another.

This model encompassed all the areas of life the students discussed in relation to their location and career choice, and had the additional advantage of being flexible enough to be able to accommodate differences between individuals and changes in individuals over time. Significant others work/education

Self

Work

Place

The overlap between the domains is shown in Figure 4-12.

Figure 4-12 Landscape of fulfilment model, showing overlap and interactions between domains

In order to illustrate its application to a number of individuals over a period of time a number of case studies shall be presented in the following chapter.

CHAPTER 5 VARIATIONS IN MODEL FOR PARTICULAR GROUPS OF STUDENTS

5.1 ANALYSIS RELATING TO GROUPS OF STUDENTS: RATIONALE AND METHODS

In the previous chapter the data from the student study was analysed thematically and a model incorporating their perceptions of the influences on their location choices was developed. This model called the 'Landscape of fulfilment' model included domains of self, work, place, significant others, significant others' work and recreation. The way in which the domains of work, place and significant others interrelated with the domain of self depended on the individuals identity, with professional, place and gender identity all being important components in these interrelationships.

From the analysis already undertaken it was clear some students could be grouped together because certain characteristics, such as gender or age or rural/urban background, were key aspects of 'self' that influenced how the domains of 'Landscape of fulfilment' interacted for them. The model has utility in analysing the influences on location choice for the majority of students. Moreover, this analysis could be useful in applying the model to the development of differing rural medical recruitment strategies suitable for the various groups of students.

On the basis of differences that had already been found in the groups of students in the previous analysis, I decided to apply the model to the following groups of students: Male, Female, Younger (aged 17 to 25), Mature-aged (over 25), Rural background, and Urban background. For this analysis I decided to use only the interview data because it provided picture of each student in greater depth than the focus group data, as well as following their development over a three-year period, while the focus group data was not included in this analysis because it did not provide sufficient detail to apply the model to individuals. As part of this analysis I decided to include a case study of a 'typical' student in each group to illustrate the application of the model to each group. In

order to make these case studies easier to follow I decided to give each student in the case studies a pseudonym.

5.2 FEMALE STUDENTS

5.2.1.1 Family orientation of female students

As previously discussed, female students could be family oriented in three different ways: as 'primary family carers', 'shared carers' or 'care delegators'.

Their family orientation influenced their work and location intentions as demonstrated in Figure 5-2 and Figure 5-3, which illustrate diagrammatically how the demands of family members' work and their needs interacted to effect location and discipline choices.

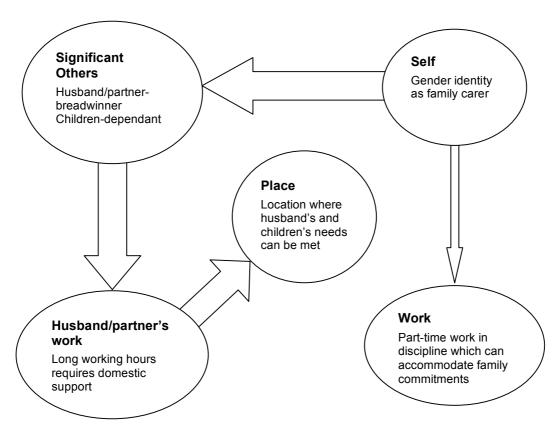


Figure 5-1 Landscape of fulfilment for female family-oriented primary family carer

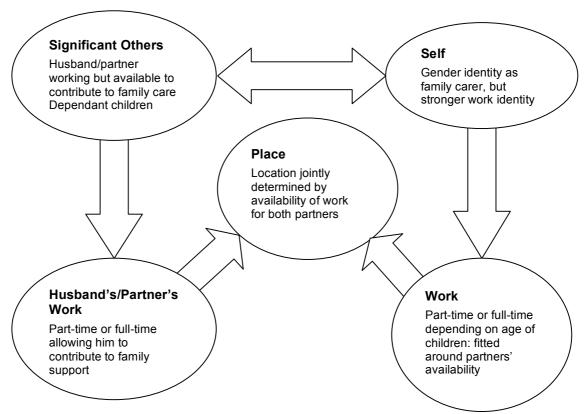


Figure 5-2 Landscape of fulfilment for family oriented female shared carer

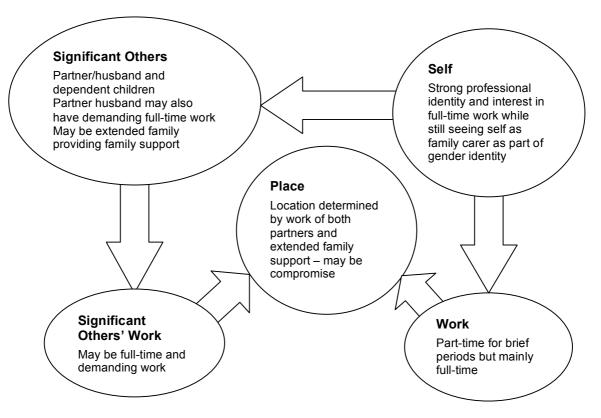


Figure 5-3 Landscape of fulfilment for female care delegators

5.2.2 Case studies

5.2.2.1 Kristen: Student number 1: A female family carer student

Kristen was a female student who at the commencement of the research interviews was in her final year of medicine, which she had studied after completing another undergraduate degree.

At the first interview Kristen indicated that she was in a long-term relationship with a doctor (John), that she wanted to have children in the future and saw herself as working part-time so that she would be available to care for the children, discussing her experience as a child being an influence on her as follows:

I'd like to have a family, definitely... My mother worked part-time, maybe only two days a week when I was younger, and looking back I appreciate the fact that she was at home and she spent a lot of time with me and my brothers and sisters, so I would like to do the same thing for my family. So it's important to me that the career that I choose allows me to do that.

Kristen saw her own career path and future location as being dependent on John's career:

In the back of my mind is[becoming] a rural GP or City Physician but, apart from where my own path goes next year and what I end up enjoying, it'll depend on what my boyfriend does as well.

Kristen saw her work as being secondary to her partner, John's, saying she was 'happy to... let my boyfriend sort of do what he wants to do and do that straight away and then I can fit in later.'

When Kristen was reinterviewed after her internship during her RMO1 year she had become engaged to be married to John who was now a surgical registrar. At this time she was enrolled in a GP training program, saying that working as an intern had 'confirmed that I wanted to do GP', partly because of 'seeing what you have to go through to be a surgical boss or a physician boss, and all the training and the exams and the years'. Kristen and John had also 'pretty much decided on going to the[region], probably[regional city] area, as his family's from[regional city]' after John completed his surgical training in Sydney. Kristen felt that as a GP she would be able to 'go anywhere and... be more flexible' and that she would 'go where he has to go'. Kristen had chosen the GP training program because she thought it would give her 'the flexibility that he doesn't have in a surgical program.' She indicated that she would like to

have children, 'sooner rather than later... probably in the next two or three years'.

Kristen was typical of the group, female family carers, in that she saw herself as the primary family carer, with a role in the family of being responsible for the care of children and supporting her husband by sustaining home life, and that she saw her own work as being secondary to that of her husband's and would accept their future location as the one which would best suit his work needs.

5.2.2.2 Jane: Student number 2: A female shared carer student

Jane was a female student who at the commencement of the research interviews was in her final year of medicine, which she had studied after completing one year of university in another undergraduate course. Jane was a rural background student and was interested in working in general practice in a rural area in the future. At the time of the initial interview Jane was engaged to be married to Michael, and it was she and her fiancé's intention that she would work to support the family financially while Michael would be the primary carer of children. At the initial interview she said:

He's going to look after our children. And do other things... he's interested in hobby sort of stuff at home. So he's been making a bit of furniture already at home this year... His interest is in doing things with his hands, and he's quite happy to do that at home while we have children.

However, Jane had some reservations about this arrangement:

I imagine that it's going to be difficult for me to leave my children at home. Even leaving them at home with [husband], I think its going to be difficult.

Jane was married during her intern year and early in her RMO1 year had a baby, taking maternity leave for a few months. She was reinterviewed when the baby was six months old and at this time she had enrolled in a GP training program. Her intentions to work in general practice had been reinforced by both the birth of her baby and her experiences working in hospitals, as she expressed here:

I've got to say, definitely, having [baby] has made me think that I want something not hospital and something where it's easy to do part-time work in the future at some stage.

At this stage Jane said that her time at home with her baby had:

confirmed for me, without a doubt, that I couldn't stay at home permanently. I felt like I was getting brain dead and I needed to get out of the house and talk to someone about something that wasn't a baby. She's lovely, and it's a whole new experience of life, but I needed some mental stimulation that I wasn't getting.

However Jane also wanted to spend time with her child and expressed a preference for part-time work. She and Michael were 'definitely going to have more children', planning to have 'another child while I'm doing my training, basically.'

Jane was typical of a female shared carer student in that she saw herself as having a major role in the care of children but chose to share the care of and responsibility for children and home with her partner, working part-time while her children were small, and seeing her work as just as important as her partner's. While she was committed to continuing working she preferred to work part-time so that she would be able to participate in the care of children and spend time with them.

5.2.2.3 Carla: Student Number 3: A female care delegator student

Carla was a female student who at the commencement of the research interviews was in her final year of medicine, which she had studied after completing another undergraduate course. Carla was an urban background student and was interested in working as a specialist surgeon in a large rural town in the future. She did not have a partner at this stage.

At the first interview Carla indicated she had been influenced by her rural experiences during her undergraduate studies to become interested in moving to a rural area because of 'the overwhelming need that's out there for doctors in the field', and because she felt that 'it's a better way of life' because of 'the people and mainly the pace and, and your closeness to the environment without the traffic.' She was very keen to become a surgeon; the only other discipline in which she indicated any interest was obstetrics and gynaecology.

When interviewed at the end of her RMO1 year Carla had enrolled in the surgical training program, saying that her enjoyment of her RMO surgical term had reinforced her interest in surgery. She thought she would need to stay in Sydney for her surgical training but 'would like to leave Sydney eventually, but the timing of that depends on a lot of factors'. Carla did not have a partner at

this point but thought that if she did have a partner in the future it would influence her long-term location if her 'partner could not find a job in their profession, if it's something that they will never be able to find in a regional centre that will have an impact.' While Carla expected to continue to work as a surgeon after she had children in the future, she did not mention her partner as being a primary carer of children, saying:

If I had surgery as a career I'd need a support and, say, my parents are looking after my children I'd have to stay in Sydney.

Carla expected that the availability of family support, which would enable her to continue her surgical career, would be an influence on her future location choice.

Carla was typical of female care delegators in that she did not see giving up her medical work in order to stay at home to care for children as an option. She spoke about having children and a surgical career in the future and thought that this would be feasible for her if she was supported by extended family and was able to delegate some the primary care of children to her family. Carla did not appear to expect that her partner would be a primary carer of children. Although she was interested in a rural location in the future, the availability of family support that would enable her to work in the way she wanted in the future would outweigh her preference for a rural location.

5.3 MALE STUDENTS

5.3.1 Relationships between domains within landscape

Male students were more likely than female students to be work oriented, either vocation or career oriented, but many were family oriented seeing their family relationships as taking precedence over the domains of Work, Place, and Recreation. This is illustrated in Figure 5-4.

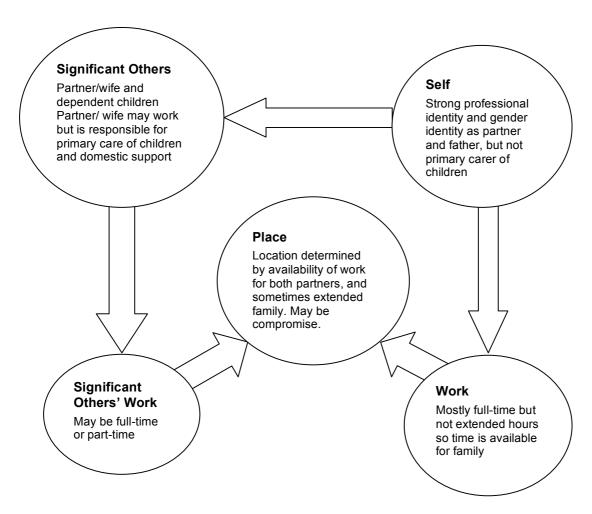


Figure 5-4 Male family oriented students- family providers

5.3.2 Case studies

5.3.2.1 Jason: Student Number 4: A family oriented male student

Jason was a male student who at the commencement of the research interviews was in his final year of medicine, which he had studied after studying and working as an allied health professional. Jason was an urban background student and was interested in working in a rural or regional area in the long-term, having experienced life in a coastal town when working. He was married at the time of the first interview to Amy, an allied health professional and Amy, was also interested in settling in a regional or rural area. Amy was pregnant with their first child at this time. Jason's choice of discipline was strongly influenced by his desire to limit his working hours so that he could spend time with his family. Jason commented on his reasons for an interest in general practice or psychiatry:

The reason I'm interested in psychiatry is the lifestyle aspect. We've got a baby on the way, which is good, but I want to make family a big part of my life and that really turned me off surgery 'cause I was quite interested in surgery but I just wouldn't want to be working all those hours and studying all those hours.

When questioned about the hours he wished to work Jason replied that he would prefer:

Nine to 5, 8 to 4, Monday to Friday and maybe half-a-day off week... I don't know what it is about medicine. It's one of the few jobs where that can happen, where it seems like you're being taught it's all work. Your consultant's having ward rounds at 6 o'clock on Friday afternoon, and Sunday: "oh, can you come in for ward round on Sunday" and gosh it's a joke.

Jason was very definite that he did not:

want to get to the end of my life and look back and think, I don't even know my own kids, and almost made work and my patients a priority in front of, like, at the expense of the people who I really should be making a priority: my family.

When Jason was interviewed during his residency Amy had had the baby and was working part-time as an allied health professional in the rural town where he was undertaking his residency. Jason was working full-time and had enrolled in a GP training program, although he was still interested in mental health and was thinking of either practising as a GP with an interest in mental health or in undertaking psychiatry training at some time in the future.

Jason and Amy had agreed that they would 'settle here in the [coastal area] so we're close enough to Brisbane, to the Grandparents, but also close to other friends and the beach as well.' He saw this as 'the best of both worlds.'

As a family oriented male student, Jason was keen to have time to spend time with his family and supporting his wife and child by limiting his working hours, but expected to work what would be normally regarded as full-time in Australia. Jason's discipline choice was influenced by his desire to limit his work hours and his location choice was made jointly with his wife, taking into account availability of work for both of them, availability of recreational activities, and accessibility to extended family and friends.

5.4 RURAL BACKGROUND STUDENTS

For this analysis, rural background students were defined as students who had spent most of their childhood and school years living in RRMA 3-6 areas.

5.4.1 Relationships between domains within landscape

As might be expected, rural background students were more likely be oriented towards rural places than urban background students, with most of them feeling rural locations were very much within their comfort zones, and some having quite a strong attachment to rural places. However, a number had wide comfort zones because they had spent some time in the city as students and had adapted to city life during this time. A few had developed a preference for metropolitan locations, and some had relationships with partners who either needed to stay in a large city for work or who were urban oriented. Both rural and urban background vocation oriented students expressed a preference for rural locations because of the health care need of the populations there, but rural background students who were vocation oriented wished to work in rural locations because of their own experience of the health care need of rural communities, wishing to contribute to a population sector with whom they identified guite strongly. Many were family oriented, and location would be partly based on partners' needs, but family oriented females were more likely to express desire to be near parents if possible.

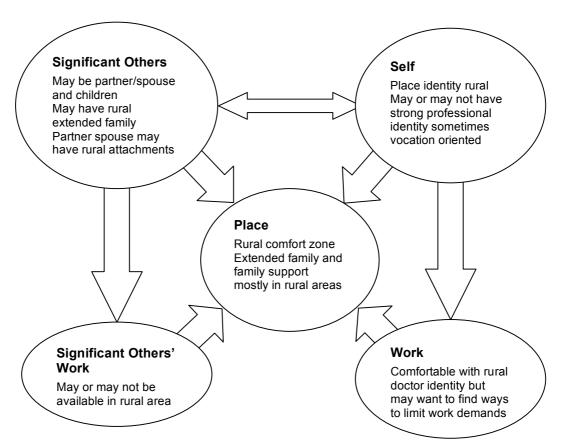


Figure 5-5 Landscape of fulfilment for rural oriented rural background students

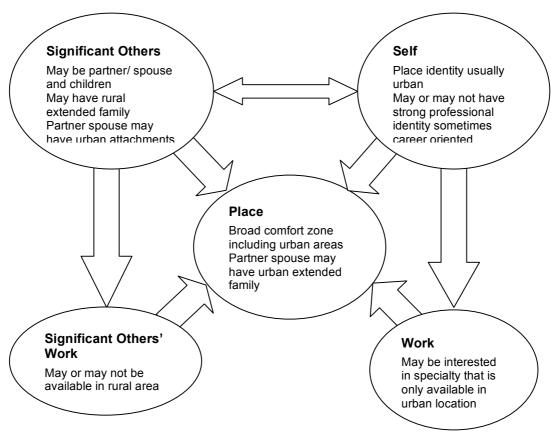


Figure 5-6 Landscape of fulfilment for urban-oriented rural background students

5.4.2 Case studies

5.4.2.1 Student number 5: A rural oriented rural background student

Lily was a female student who at the commencement of the research interviews was in her first year of medicine, which she had studied after completing a previous undergraduate degree and having worked overseas for a year. Lily had a long-term partner (Mark) who was overseas at this time, and in the long-term was interested in working in a rural town with a population of about 20,000 to 30,000. Lily was uncertain about the discipline she would pursue but thought she might be interested in general practice and possibly obstetrics.

When speaking about her future location Lily indicated she saw living in Sydney as something short-term, related to study and training, but she was not interested in a remote location:

For me Sydney is a bit of a means to an end. I like it here while I am here but there's no way I'd want to stay. At the same time I'm quite realistic about the sort of person I am and how I would handle a town of twenty people... I think for me it would be quite wise to go back to something quite similar from where I come, so something around the size of [medium sized country town] would suit me just fine.

When interviewed in her third year of medical studies Lily was still interested in general practice and thought she would be able to incorporate obstetrics by undertaking a diploma of obstetrics. Lily still had the same partner, Mark, and he was studying in an Arts discipline overseas, with plans to 'do a Masters and possibly a PhD with in mind of becoming an academic.'

Lily hoped their future was together but said that where they would live in the long-term was 'very much still up in the air... sort of on hold at the moment.' She felt that they would need to decide 'which continent we're likely to be on' and thought they might compromise by living for periods of time in either country.

Lily's preference would be eventually to return to and settle in a medium sized town, similar to her hometown, because 'it would be a great place to have a family and... to raise kids.'

Lily had been strongly influenced by her experience and life in a rural town, so that her comfort zone included medium to large rural towns. While Lily was happy enough to live in a capital city while studying and training, she would prefer to settle in the long-term in a rural (but not remote) town. Lily was interested in general practice with the opportunity to practice obstetrics, and this would fit in well with the size of town she preferred. However, her situation was complicated by a long-term relationship with a partner who was overseas and was interested in an academic career long-term. Lily thought they would need to make compromises in relation to location, including which country they lived in, to ensure that they both were able to continue their careers and have adequate contact with both extended families.

5.4.2.2 Julia: Student number 6: An urban oriented rural background student

Julia was a female student who at the commencement of the research interviews was in her first year of medicine, which she was studying after training and working as an allied health professional overseas. She had completed a PhD prior to entry into the medical course. Julia had lived in a rural area throughout her childhood and school years, and she had a long-term partner, Peter, who was working in a professional occupation (not health) in Sydney. Initially, Julia was interested in the discipline of general practice.

At the first interview Julia commented:

I don't mind working rurally, in fact, I think I'd quite enjoy it. Because of where I come from, I grew up in very rural areas... But I suppose the primary issue for me would be whether my partner could get work and the type of work he does, he really needs to be near a centre.

When interviewed during her third year Julia had decided that she was not interested in general practice and would prefer a specialty, working in a teaching hospital because of the opportunity to undertake research and teaching there and the availability of academic positions. Her partner, Peter, was now working as an academic in his discipline and so his future work options were narrower than they had been two years earlier. At this point, Julia thought they would stay in a metropolitan area in order to further both of their careers, perhaps with some time to be spent overseas in the future because this was likely to provide more career opportunities, also.

Thus while Julia had a rural background, she had broadened her comfort zone by living for a prolonged period in metropolitan areas, and the work her partner preferred would only be available in a metropolitan area. As Julia progressed through her medical studies she also developed an interest in medical disciplines and an academic career, which would also necessitate living in an urban area. While Julia had expressed an interest in a future rural location at the beginning of the study, she did not express a strong rural attachment and over time this interest lessened, so that by the third interview she did not mention a rural location as an option.

5.5 URBAN BACKGROUND STUDENTS

For the purposes of this analysis urban background students were defined as students who had spent most of their childhood and school years in RRMA 1 or 2 areas.

5.5.1 Relationships between domains within landscape

As might be expected, urban background students were more likely to be oriented towards urban places than rural background students, with most of them feeling metropolitan locations were very much within their comfort zones, and a few having quite a strong attachment to urban places. However, some had broadened their comfort zones with rural experience since childhood, and in particular during their undergraduate training. Some had developed quite a strong sense of attachment to particular rural locations, and this formed the basis of their interest in living and working in a rural location in the future. For career oriented urban background students, everything within their landscape tended to be congruent, with their significant others usually based in urban locations, their preferred work being available in urban locations, and their comfort zone being urban. Vocation oriented urban background students tended to express an interest in either rural practice or in working in developing countries. However, in some cases this interest was overridden by the needs of partners to work in urban areas, and they often then indicated a desire to spend brief periods of time working in rural areas, for example providing fly-in/fly-out services.

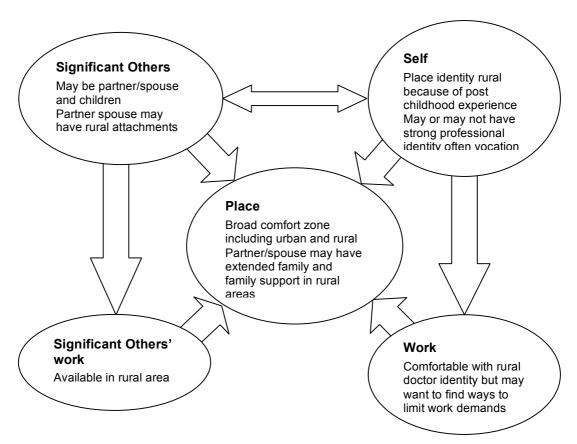


Figure 5-7 Landscape of fulfilment for rural oriented urban background students

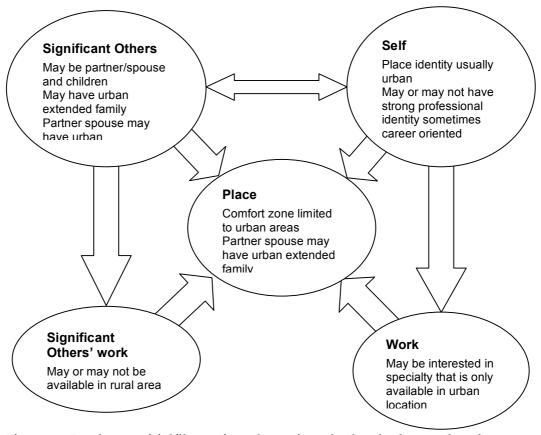


Figure 5-8 Landscape of fulfilment for urban-oriented urban background students

5.5.2 Urban background students: case studies

Ben: Student number 7: A rural oriented urban background student

Ben was a male student who at the commencement of the research interviews was in his first year of medicine, which he was studying after completing a prior undergraduate degree. He had lived in Sydney most of his life, but had developed an interest in working in a rural area because of holidays and visiting friends in rural areas, and a brief period spent living in a medium sized rural town. Ben was interested in working in a specialty in the future, although he was unsure which specialty it would be. At the time of the first interview he had a girlfriend, Elly, who was studying for a higher degree in a basic science.

At the first interview Ben described how he had developed his rural interest:

I have spent time in the regional cities 'cause I've been on holidays with my family there, I've got friends who have lived and been to school there, and I've spent a fair bit of time in places like [medium sized country town 1] and [medium sized country town 2], and I just see that that's where I want to bring my kids up.

However, Ben was not interested in 'a remote place because I want to be working in research as well as in medicine', and because of his preference for a specialty.

When interviewed in his third year, Ben had spent a year of his undergraduate training in a large country town and this had reinforced his interest and intention to work in a rural location because, he said, 'Being away from the city has actually increased my love for working in the country.'

Ben had now decided on the discipline of anaesthetics, saying:

After doing four weeks of anaesthetics, I absolutely have fallen in love with it... There was no element of it which I found boring, and I wanted to avoid. And so, and it really, it sort of fulfilled my love of science and sort of chemistry and physics and I am really hell bent on trying to get into that now.

Ben also thought that if he did anaesthetics there would be the opportunity to work while travelling to various areas prior to settling long-term in one location.

Ben now had a new girlfriend Louise, who was also a medical student, so it was unlikely that she would be constrained by only being able to work in an urban location and he said that, in relation to location, 'Her mind set is exactly the same as mine'. Louise was interested in becoming a physician and, while Ben

understood that they might need to work in metropolitan locations in the short-term for their postgraduate training, they were both keen to eventually settle in a large country town with a population of 30,000 plus, as Ben would 'definitely like to be in a place where the chance to do sort of more complex work is available'.

When asked if he thought there was anything that would interfere with his current plan, Ben replied:

If I end up being married to my current partner, and she said I need to work in Sydney, I'm not flexible on that, then that would obviously be a very difficult decision. And I don't think that I would sort of you know, risk sort of you know marriage crisis to stick to the country.

Ben, while having an urban background, had broadened his comfort zone with brief rural experiences during and since childhood, and then with a longer rural experience during his undergraduate training. Ben was quite strongly rurally oriented but his future location would need to accommodate both his and his partner's work interests. Ben indicated that it was possible that his partner's work interest might override his rural interest in the future, although this seemed unlikely with his current partner.

5.5.2.1 Mae: Student number 8: An urban oriented urban background student

Mae was a female non-English speaking background student who at the commencement of the research interviews was in her first year of medicine at a regional city university, having started her medical degree immediately after completing her secondary schooling. Mae had lived all of her life in one Australian capital city and was interested in the long-term in returning to the capital city where she had grown up. Mae did not have a partner at this time and was interested in specialising probably in paediatrics.

Mae's reasons for wanting to return to her home city are described as follows:

Long-term I'd like to go back to [capital city] simply because it's where I grew up, it's what I know, my family and all my friends are there, and it's where my roots are.

However, she said her long-term location:

might depend on my personal life, a relationship with a partner, my parents, my little sister and friends. At the moment I see my parents as the most important relationship but there has to be some stage in life when I start to put my boyfriend first.

When Mae was interviewed in her third year of medicine she still thought that, in the long-term, she would return to her home city even though she had now had some experience of other cities:

Now that I've seen other places, some places more than others, I sort of realise that bustling cities like Sydney, they're not for me. Like they'd be so nice to visit, and just have fun. Because they're so busy and bustling and exciting and everything, But it seems to be a bit too busy and large for me to live in, it's not the sort of place I want to live in. Some people can live there, want to live there, that's fine.

Mae's comfort zone only encompassed cities of a limited size as she thought Sydney was too big and '[regional city] a bit small'. Mae described the atmosphere of the regional city where she was studying as being 'very much country-like for me' and 'very different to what I'm used to.' Mae felt that if she stayed in a regional city long-term she 'would get really stifled', but if she was in Sydney long-term she would 'get really overrun as well'.

Mae was still uncertain about which discipline she would work in, in the future, but was considering a specialty such as paediatrics.

When asked how she thought she would balance priorities in relation to work, location, and family in the future, Mae said:

If I didn't have a partner it wouldn't be an issue. The job type, I mean, it would certainly be a factor, like some job types I might just not, maybe the jobs in a place I don't want to go. Like if it's a long-term job in Sydney, I don't think I'd take it. But if it's only short-term job then I would.

In relation to family priorities, she said:

I think my partner takes precedence over my parents, because, I'd still visit my parents and things like that, but my immediate family which would be me, my partner, my children we would come first in a setting, as opposed to you know grandparents.

5.6 YOUNG STUDENTS

For the purposes of this analysis younger students were defined as students aged 17-25 years.

5.6.1 Relationships between domains within landscape

For many young students, their 'Landscape of fulfilment' was very much still in a process of development and undergoing change. This was because they were still learning about the options available to them both in terms of discipline choice and location choice. A number had not formed long-term relationships with significant others at the time of the study, and while they often expressed their expectations of long-term relationships in the future they were uncertain what would actually eventuate. Many were at a stage of life where they were focused mainly on the domain of work because they did not have long-term partners or children. Some of the female students spoke about delaying children until they had completed postgraduate training to ensure their future careers were viable. A number spoke of using study and work opportunities to explore new locations, had flexible comfort zones, and were open to change in the future. Some, particularly rural background students, had quite strong rural attachment but acknowledged that their future location decisions could be influenced by relationships with significant others.

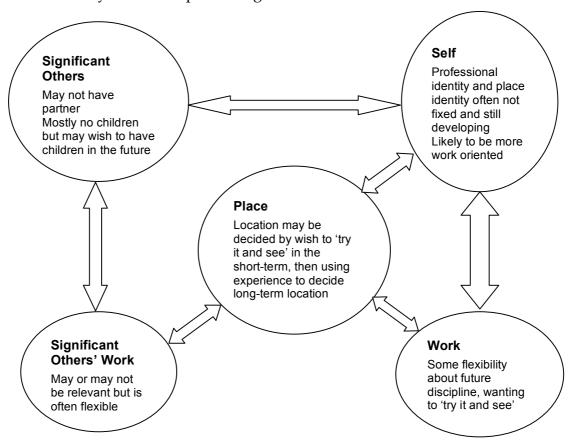


Figure 5-9 Landscape of fulfilment for younger students

5.6.2 Case study

5.6.2.1 Jasmine: Student number 9: A younger student

Jasmine was a female student who at the commencement of the research interviews was in her first year of medicine at a regional city university, having

started her medical degree immediately after completing her secondary schooling. She had spent childhood and primary school years in rural areas and had lived in a regional city from the beginning of her high school years. Jasmine was very uncertain as to where she would live in the future, seeing anywhere from small country towns to large capital cities as options. She was uncertain about her future discipline although she did express some interest in obstetrics and gynaecology. Jasmine did not have a partner at the time of the first interview.

Jasmine expressed an interest in travelling to a range of locations when undertaking her postgraduate training and during her early postgraduate years, and when talking about her long-term location she said 'it could be anywhere from some place with, like, 5000 people to, I don't know, Sydney or Melbourne or something. It all depends what happens when I get there, cause like I'll be 30, 35 by then.'

Jasmine indicated she would be happy to live in a large capital city, saying:

It all depends, 'cause I'm hoping by that stage I'd like to be married, so it'd all depend on what my partner did, where we'd want to settle down or whatever, and have a family or whatever.

When interviewed during her third year, Jasmine student said that she now she had a boyfriend, Josh, who was also studying medicine and she felt that if they were together in the future, 'what he wanted to do would play a part in what I wanted to do.' However, if Jasmine was on her own she would 'like to go to places like Thursday Island, just somewhere where I get a broad feel for a lot more things in a shorter amount of time before I settle down.'

Jasmine was still interested in Obstetrics and Gynaecology, and expressed an interest in 'working in Ethiopia with the incontinence hospital over there, the one that Catherine Hamlin set up', for a year or so after completing specialist training.

Jasmine also expressed a desire to have children in the future:

Realistically, it's probably better off to wait until I'm finished and then work in private practice... set up my own place, and then get maybe another female gynaecologist who's about my age and we both work part-time and then have your kids then, so then, like, you job share and you share babysitting and stuff.

Jasmine was typical of other younger students in that her 'Landscape of fulfilment' was very flexible and undergoing change. Jasmine had started a

relationship with a boyfriend during the three years of the study, but was uncertain whether this would be long-term, and had very broad ideas on where she might work in the future. Jasmine expressed an interest in working in a developing country and remote community for a period of time and thought that doing this would provide the opportunity to learn more medically and contribute to areas of health care need. Her discipline intentions remained fairly stable over the time of the study. Jasmine had thought about when she would have children in the future and, like other female students, spoke about delaying children until she had completed postgraduate training.

5.7 MATURE-AGED STUDENTS

For the purposes of this analysis mature-aged students were defined as students aged 26 years and over.

5.7.1 Relationships between domains within landscape

Mature-aged students generally had much more fixed 'Landscapes of fulfilment', with much more formed ideas about their career intentions, location intentions, and with much more established long-term relationships with partners, than younger students. A few did not wish to move from their current locations, usually urban due to their university studies, because they had established homes there, their partners had work commitments, and their children were attending local schools. However, several saw the completion of their medical training as an opportunity to move to a different location, for example a regional or rural area, where they planned to establish themselves and settle. As with students in all other groups, some were constrained by their partners' work needs. A number were influenced by their family commitments (they already had children) in their choice of discipline, rejecting disciplines they perceived as being very demanding of time.

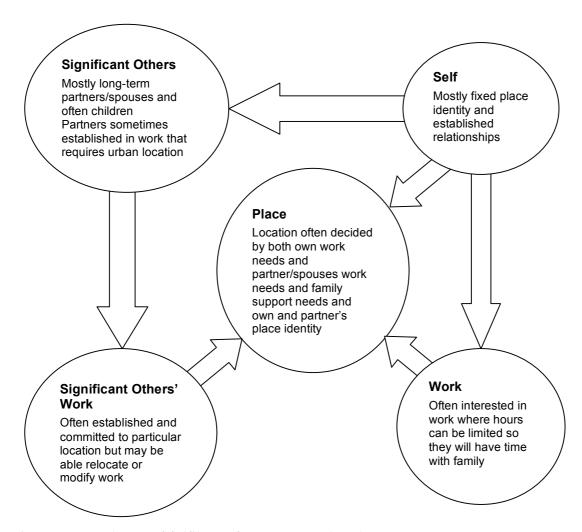


Figure 5-10 Landscape of fulfilment for mature aged students

5.7.2 A case study

5.7.2.1 Phillip: Student number 10: A mature-age student

Phillip was a male student who at the commencement of the research interviews was in final year of medicine at a Sydney university, having started his medical degree in his 30s after working in a non-medical profession for some years. Phillip had lived for most of his life in a regional city, apart from the periods of time when he was at boarding school and studying. Phillip was married and had a baby at the time of the first interview. His wife, Mary, was on maternity leave and had previously worked in administrative positions. Phillip indicated that he:

was always thinking GP work when I finished. I wasn't thinking specifically rural or urban but it has changed to be more rural since, but I've also got married while I was doing the course and that's influenced things in some ways. My wife's sort of choices and her saying is that she wants to be within four hours of Sydney. My family are in [regional city] so that's... family reasons is a main thing, and also friends as well in Sydney. We've got a lot of friends in Sydney.

Phillip planned to return to his hometown (a regional city) for his internship and residency and then enrol in a GP training program, with a view to eventually working in a rural general practice in the region close to his hometown. Phillip and Mary were very keen on the rural lifestyle because Sydney 'seems so crowded, and so many people, and so many problems with traffic and all that sort of stuff.' They hoped to:

be able to afford a larger place with a bit more land to play around with. We both really like working in the garden, things like that, I think it would be nice to have the space to do those sort of things. And also, you get to know people a bit more, become a bit more of a community, that's the nice part of it.

Mary's work would not restrict their future location because she was 'interested in maybe us starting up our own business, and her feeling is she can do that from anywhere, really, so not cemented to a country or a city place.'

At the final interview Phillip had enrolled in a GP training program and Mary had had their second child. His intentions had not changed in relation to either discipline or future location:

I think my view hasn't really changed from when I last spoke to you. I want to do GP. I enjoyed this year and I still want to keep going down that pathway. I have always wanted to go that way, and the more I see of medicine, the more I want to go that way.

Phillip wanted to complete his training and finally settle in a suitable town as soon as he could, saying, 'I'm (age in 30s) now. I can't afford to keep on putting those things off.'

Phillip had a fairly fixed 'Landscapes of Fulfilment', being married with a child, and having well formed ideas about his career intentions (rural general practice), and specific location intentions (country town in a region close to his extended family). Phillip saw the completion of his medical training as an opportunity to move to a location he and his wife would prefer in the long-term, and where they planned to establish themselves and settle. Phillip's postgraduate experiences during his internship and RMO1 year reinforced his intentions, as did events in his personal life (the birth of another baby and his parents-in-law moving from interstate closer to him and his wife).

5.8 SUMMARY

These case studies demonstrate a range of ways in which the 'Landscape of Fulfilment' can vary for individuals, and between groups of students. The case studies demonstrate the ways in which place, professional and gender identity interact for different groups of individuals and influence their location choice. They also show that medical students are not homogeneous, there are groups of students with similar perceptions of various aspects of their lives, and that the 'Landscape of fulfilment' model is flexible enough to incorporate the perceptions of these students. This model could be used to develop rural recruitment strategies tailored for particular groups and based on the perceptions of each group of students. The use of the model for the development of rural recruitment strategies will be discussed in chapter 8. This model was tested for its fit with individual students in this chapter. In the following chapters the model's application to another group, female rural GPs, will be explored and its use in understanding rural retention will be discussed. In Chapter 7 the fit of the model with existing rural medical recruitment and retention literature will be discussed, and in Chapter 8 the usefulness of the model in the development of rural medical recruitment and retention research will be explored.

CHAPTER 6 WOMEN IN RURAL GENERAL PRACTICE

BACKGROUND

In Chapter 4, the 'Landscape of fulfilment' model was developed on the basis of a thematic analysis of the data from the student study and in Chapter 5 this model was further validated by applying it to a variety of student groups. This model comprises a number of domains the students perceived as being the key aspects of their lives that influenced their location choices.

However, as already discussed in the literature review, recruitment and retention are two distinct processes so that, in order to explore the applicability of the model to the retention of doctors in rural practice, it is essential that it also be validated with data collected from doctors actually working in rural practice. The limitation of the analysis already done is that it is based on data collected about the medical students' expectations for the future. In this chapter, I shall explore the experience and perceptions of female rural GPs. Female rural GPs were investigated for this Thesis because they are a part of the medical workforce whose views will be particularly important in medical workforce retention in the future.

As discussed in Chapter 1, a range of factors that affect retention of doctors in rural practice has been identified. These factors have been grouped in various ways by researchers, but they mostly relate to either factors in the doctors themselves (such as age, sex and rural background marital status and/or experience)[1, 3, 8, 48, 107, 119, 146, 349, 357] and to the perceptions of the doctors of the advantages and disadvantages of living and working in particular locations[3, 52, 53, 107, 120, 121, 358]. Some research has focused on the processes by which doctors decide to stay in or leave rural practice, but there has been limited research focusing on concepts of place and self or considering issues such as the relationship between professional and gender identity. Cutchin's model of 'Experiential Place Integration' focused on the relationship between self and place but his discussion of gender identity was limited[25, 82]. This chapter will consider whether the data collected in the two

female rural GP studies fits the model developed using the data from the student study. The chapter will then go on to explore whether this model provides a way to incorporate place identity, gender identity, and professional identity into an understanding of the retention of female GPs in rural areas of Australia.

RESEARCH QUESTIONS

This chapter will consider these questions in relation to the retention of female rural GPs in Australia:

- Do the domains developed in the 'Landscape of fulfilment' model for recruitment of doctors into rural practice (self, place, significant others, work, recreation, and significant others' work) encompass the experience of female rural GPs? If not, what domains would encompass their experience?
- Do the domains for female rural GPs differ in any way (such as content and interrelationships) from those developed in the 'Landscape of fulfilment' model for students?
- If the domains encompass their experience, how do these domains interact?
 Are there groups of female rural GPs for whom the domains interact in a particular way?
- Can the location choice of female rural GPs be understood in relation to concepts of self and place, and what role do place, professional, and gender identity play in location choice?
- How does the interaction between the domains relate to retention of female GPs in rural areas? Can this model be developed in a way that would assist in rural retention strategies for female GPs?

RESULTS

6.1 DESCRIPTIVE ANALYSIS OF FOCUS GROUPS AND IN-DEPTH INTERVIEWS

The grouping of emergent themes identified from initial analysis of the focus groups and interviews are listed in Table 6:1.

Table 6:1 Issues identified by focus group and interview participants

	Positive aspects of rural practice	Negative aspects of rural practice
Professional	Variety of work	Excessive work load and on call work
	Relationships with patients	Balancing work and family: role conflict
	Professional autonomy	Lack of flexible work opportunities
		Difficulty accessing locums
		Remuneration
		Professional isolation
		Community expectations relating to availability as a doctor
		Lack of easily accessible CPD
		Discrimination from male colleagues
		Personal safety
Personal	Rural lifestyle	Limited career opportunities for spouses/partners
	Rural community relationships	Limited educational opportunities for children
	Opportunities for family	Availability of childcare
		Lack of anonymity
		Social isolation
		Community expectations of them as women

These themes, comprising a descriptive analysis of the data, were reported in detail in the reports: 'Educational and Support Needs of Female Rural General Practitioners: Final Report'[126], and 'The National Female Rural General Practitioners Research Project: Final Report'[124].

A further thematic analysis of the data from both the focus groups and the interviews conducted in NSW was undertaken, producing a grouping of themes into domains, such as was done for the student study, and analysis of the interaction between the domains. This analysis is reported in detail in this chapter of the Thesis.

This chapter shall discuss the female rural GP data in relation to the 'Landscape of fulfilment model'. This discussion includes:

 description of the content of each domain (place, work, significant others, recreation, and significant others' work/education) with a discussion of the relationship between each domain and 'self'

- discussion of the other relationships of the domains within the 'Landscape of fulfilment' (including significant others and place; and significant others' work, and own work)
- an analysis of the interview data in relationship to retention in rural practice
- an analysis of how participants managed conflicts between domains
- a discussion of place, gender, and professional identity
- an analysis of how participants found fulfilment in the 'Landscape of fulfilment'

6.2 THEMATIC ANALYSIS OF DATA IN RELATION TO DOMAINS OF 'LANDSCAPE OF FULFILMENT'

On analysis of the data from the female rural doctor studies, the factors identified in the descriptive analysis fitted well into the domains that had been developed in the analysis of the student data. However, there were some differences in emphasis and in the ways in which the domains interacted with each other for the doctors, when compared with the students. The domains used in the analysis are, therefore, the same as those used in the analysis of the student data, with the different aspects of the domains that arose in the female doctor data being discussed within each domain.

6.3 CONTENT OF EACH DOMAIN AND RELATIONSHIPS BETWEEN DOMAINS

6.3.1 Place

6.3.1.1 Content of domain: Aspects of place

The aspects of place as identified in the female rural doctor data were physical environment, social environment, cultural environment, and accessibility. However, the female GPs spoke about some aspects of the relationship between place and self in more depth than the students. These aspects were: support from the community, acceptance by the community, knowing and being known by the community, expectations from the community, and commitment to the community. These relationships between self and place

were added to the 'Landscape of fulfilment' for female rural doctors to reflect these findings.

The aspects and the relationship between self and place for the female doctors are summarised in Figure 6-1.

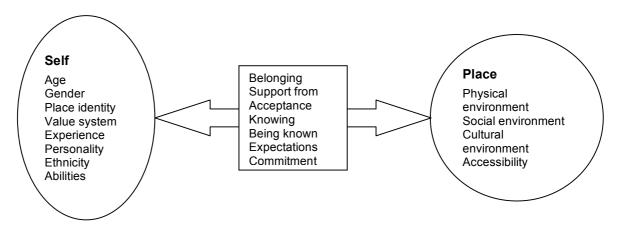


Figure 6-1 Aspects of place and relationship between self and place

Physical environment

The physical environment identified from the female GPs' data includes climate, landscape, urban structures, and infrastructure. The particular aspects of the physical environment discussed by the GPs were travel time, attractive physical environment, housing, and agriculture.

The female GPs spoke about the advantage of minimal travel time within a small town, although those living on a property out of town sometimes found travelling time could be a problem when they were on call for emergency work. For example, one doctor who worked 30 kilometres from the farm did not do any on call work, while another would 'go home (when on call) but she'd come in and then stay the night if there were things going on'.

A number enjoyed the physical environment, describing it as being 'much more pleasant than a city' and 'not exactly the ugliest place on earth'. Several participants were involved in farming, either by themselves or with their partners, and agriculture provided part of their livelihood. Thus, some were also dependent on the physical environment for some of their family income (something not necessarily anticipated by the students).

Social environment

The social environment of the GP participants included: the community, as in traditional community based on space; relationships within community; and relationships between GP and community. Again, these issues loosely mirrored those developed from the student data. However, for the female rural GPs, the concept of community was divided into three sub-themes: the general community, the community of their own patients, and their close friends. There was sometimes overlap between these groups with some people belonging to all three groups. This overlap is illustrated in Figure 6-2.

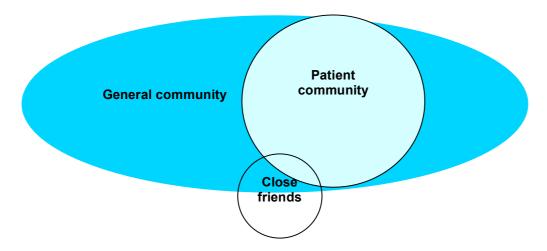


Figure 6-2 Aspects of the community with whom female rural doctors had relationships

Cultural environment

As with the student study, the cultural environment for the female rural doctors encompassed values and norms of the community and shared ways of seeing believing and behaving. Some GPs found the rural communities in which they lived quite conservative in their attitudes to women's roles in work and the family, such as the belief 'that women with young children should be at home, particularly if they have a choice about going out to work.' Rural culture was perceived as tending to value some skills, such as procedural skills, more than other skills, such as counselling skills, by some GPs who saw this as 'the entrenched devaluing of women's skills'. For example, one participant said:

Different skills are valued and other skills are not valued... Somebody who, maybe, is good at that[emergency medicine] but has absolutely no empathy or ability to talk to people, or in any way deal with more subtle problems, will actually be seen as a very valuable medical practitioner within the community.... And the fact that the women don't particularly like doing that and may be better at doing other types of things doesn't have a value. And it's by the town people and by the nursing staff. (GP No 1)

A number of the GPs also thought the communities in which they lived were generally politically conservative. For example, one GP expressed concerns about 'the narrowness... of the country mind set', saying she 'would like[her] children to experience bigger things'.

Some participants had also experienced racism in the rural community where they were working. For example, a NESB registrar described racial discrimination against her children in a small rural town:

The children have trouble settling, finding playmates. Told they couldn't play, as they were Asian. (GP No 2)

These more conservative attitudes were described by participants living in inland rural areas and remote areas, while some of the participants living in coastal areas described their community as being 'quite cosmopolitan'.

Accessibility

The GPs spoke of ability to easily access family and friends, resources including cultural activities such as music, art, food, sport, and housing affordability. This concept is called 'accessibility', as with the student analysis.

As would be expected for those living in remote communities, accessibility to other areas was a major issue. For example, a remote area GP said:

If we want to go anywhere else we have to travel vast distances and it requires many, many days off to do it. Like [large country town] is our nearest big town and that's a six-hour drive, and[capital city] is... eleven hours away, so... it's not really an option just for a weekend. (GP No 14)

In contrast, a GP living in a big town close to a major city said:

I'm lucky, I think. I live in a bigger town and only an hour-and-a-half from [capital city], and so we can go to [capital city] for the afternoon, you know, and it's close enough to do. (GP No 34)

However, for most GPs accessibility related more to 'the facilities and whether you're in a town that you can pursue... your hobbies, or whether it satisfies your personal needs.'

6.3.1.2 Relationship between self and social environment

Having described the content of the domain of place, I will now discuss the relationship between the domains of self and place, in particular the

relationships between the GPs and the people in the community in which they lived. Participants spoke of a number of aspects of their relationship with the rural community where they lived and worked, including knowing and being known, expectations and acceptance, belonging, and support from the community.

Knowing

Many participants enjoyed 'knowing everyone in the town' and the familiarity with people that characterized rural life, which this participant described:

You get to know to know all the families and that can be very satisfying, too, because you just get, they become friends. $(GP\ No\ 4)$

Being known

However, almost all participants had difficulties with 'the intrusion into your life, the sort of lack of free personal space'. Most described incidents where they were annoyed by the lack of anonymity they encountered as rural doctors. For example, several noted:

You can't even walk around that supermarket without people checking what's in your trolley. (GP $No\ 5$)

This was a particular problem for some of the participants working in remote communities who found:

In order to relax, you really just need that separation from the people you are seeing as part of your patient population, and I can't do that in my environment because wherever I go my patients are there. (GP No 6)

Expectations and acceptance

Several GP participants spoke about the expectations their community had of them, particularly relating to the time they committed to work, as community members and leaders, and as wives and mothers. Some GPs suggested that many rural communities had little experience of female doctors working there:

They might have an idea in their mind of what a GP is, or has been probably more likely, and specially rural small towns they're 10-15 years behind the city in terms of this. Women are still a great novelty, and they don't have a clear plan or idea of what you can be. So it's not like you can fulfil their expectations, even if that is, that was your desire. (GP No 7)

In relation to their role as doctors, many thought that the community 'have an image of a doctor who is working all the time'. Most GPs felt that community

'find it difficult to accept that you have time with your family', and others felt the community undervalued part-time work, for example:

Sometimes I get messages like that: "Oh so you're sort of doing it to keep your hand in." You like to think you are making a bit more of a contribution than that by doing a bit of practice. (GP No 8)

Many who had children felt that there was:

pressure on us to perform within the community—I mean, we're expected to work flat out and look after our children, be on the board of the local school, help with charities, be on the women's auxiliary for the hospital, be a leader in sort of things like that. (GP No 9)

Some even felt that there was pressure on them to maintain a certain personal appearance, for example:

We're supposed to dress well, make ourselves up. I've worked with another female GP, and patients used to come and say to me, "I couldn't go and see her: you've seen the dresses she wears, she doesn't wear any make up. I couldn't go to her." (GP No 5)

Some had found 'it takes a long time to feel part of the community', as described by this participant:

I don't think you're ever a local unless you're born here or married into local family. It took me a long time, probably eighteen months, two years, before I started to feel like this is home and I do now. (GP No 3)

Despite these perceptions of difficulty in being accepted, many participants had stayed in their communities long enough to feel accepted and to develop a sense of belonging.

Belonging

GP participants, particularly those who had lived in a particular community for many years, had a real sense of belonging to that community. Meanwhile, some who were relatively new to a rural town wanted to belong to the community: for example one said, 'that's my main priority to be part of the community.'

This GP described her very strong sense of belonging:

I love being here... because... I'm part of the community. It's like it's pretty much why I moved here and why I love the place so much. It's such a beautiful community; it's a core network that you wouldn't get in the city. Like, I think that I'm supported more there than I would be if I was living in a city, say, in terms of friendship. (GP No 10)

A few GPs had returned to the area where they had grown up, with one GP describing the community as 'very nurturing':

My father was a farmer when he was alive. I was born and bred in the foothills and it's a wonderful place to bring kids up and where the community is wonderful. We lived in[small rural town] when originally it was very small, and it's grown up with us and we're very much part of the community there. (GP No 11)

However, some GPs had moved to their rural towns because of their partners' work, some saying they 'just fell into it', and they tended to have less sense of belonging.

Support from

Associated with their sense of belonging to the rural community, most participants also sought support from the communities, such as childcare and personal emotional support.

Some GPs lived in communities where there was 'no formal childcare facility,' with some indicating that the lack of suitable childcare had prevented them working full-time. One who had had difficulty making suitable child care arrangements for her three small children said, 'My whole life revolves around childcare'. While some GPs had had some difficulty finding appropriate child carers initially, once participants had suitable childcare arrangements in place these arrangements were generally long-term, and many participants saw their child carers as 'an immense support'. While most had eventually been able to make suitable arrangements for in hours childcare, many doing after hours work and obstetrics had problems with 'getting access to child care at short notice and at odd hours... being flexible if you're doing unusual sessions or weekends or whatever.' While some GPs' husbands or partners were available to care for children when they attended patients after hours, this was not always the case, for example if their husbands were away (often with work) or had other commitments, such as shift work or farm work, over the weekend. Most said that they had no extended family locally, so that they 'don't have anyone to call for emergencies or whatever' and needed to 'rely on neighbours, friends'.

This meant that, at times, a number of participants had 'to bring the children to the hospital or even down to the surgery (where I'd prefer they weren't) just because I can't get anybody to look after them.'

The GPs also sought personal support and friendship from the community in which they lived. Most GPs had moved to rural towns where they had not previously lived, and did not have any extended family living in the area. Many GPs had had problems developing close relationships with friends because of the lack of a suitable peer group, boundary issues between professional and personal lives, and privacy issues. A number of the GPs found that 'in smaller rural areas, there is often a lack of a peer group for professional women.' For example, this participant's comments were typical:

It can be, whilst there are plenty of women to chat over childcare pits with and cups of tea, there's also not an intellectual peer group, especially in very small communities, and I think that sometimes can be an issue. (GP No 12)

Because of the smaller pool of people with whom to be friends, some GPs had difficulty 'finding someone who I could basically call a friend... because it's very difficult to find someone who you could actually relate with when you're in a small country town.' Some thought that, because they were doctors, the community saw them as not needing social support in the same way as other community members. For example, this GP spoke about her experiences as a new mother in a rural town:

When[child] was born, she was born premature and it was tricky, and there was a lovely lady who took a lot of time to knock on the door occasionally and invite me to be involved with Nursing Mothers, and she relayed a comment that her husband made, which illustrates that, but her husband said, "She's a doctor, she doesn't need to be involved in this." (GP No 13)

For some GPs, the border between professional and personal relationships was a problem in negotiating relationships with community members. Many found the intimate knowledge they had about individuals in their professional capacity as doctors became a barrier to having close friendships with some people, as described here:

You really sort of touch people at a very deep level about very sensitive issues and then... sometimes it's hard to sort of make light chit chat with them in the shops or whatever. (GP No 14)

Some coped by making very clear distinctions between personal and professional lives, having 'a bit of a black-and-white line', which one described as follows:

I personally can divide up between being a doctor when I'm in the surgery and being a friend when I'm out. And so I choose not to talk about the kids, the family, what's going on, in my sort-of doctor chair, and that's worked very well for me. (GP No 15)

Some felt that they, themselves, had no difficulty separating their personal and professional roles, but thought that the problem arose from the patients. These GPs thought that people who were their patients were embarrassed to be friends with a doctor because of the intimate knowledge the doctor had about them. The GPs thought that this probably was more of a problem for female than male doctors because of the female doctors' work content, in that female doctors 'tend to do pap smears' and 'talk about their depression or their marriage', and that this was different for male GPs whom many female GPs thought dealt more with less intimate problems, such as 'talk[ing] to someone about their sun spots'.

Many GPs did feel some degree of social isolation, with one saying 'it's going to be a bit lonely sometimes.' in particular single doctors, such as this one who commented

It's been very socially isolating... the only friends I've made have been medical; I haven't met anybody outside. (GP No 17)

Thus, for many GPs there were two contrasting aspects of their relationship with the community where they lived and worked. They enjoyed living in a community where 'everyone knows everyone', and which they were able to know and understand because of its smallness. They enjoyed being known by community members and many had a sense of belonging to their community, seeing themselves as very much part of their community. However, paradoxically, many also felt socially isolated because of professional and personal boundary issues, and because of the lack of a suitable peer group of other professional women in some rural communities.

6.3.1.3 Relationship with place: Comfort zone and attachment

In exploring the relationship between self and place, I explored the female GP data, investigating whether any general concept, which underpinned retention, emerged in the way that the concept of 'comfort zone' had emerged as a concept underpinning recruitment.

Comfort zone

Because of the importance of comfort zone in students' location choice, the data from the female rural doctor studies was explored in relation to this concept.

Some GPs discussed comfort zone in relation to place, but only in terms of

moving on to a new place or in relation to the needs of their children. A number of GPs spoke about the need to move on in the future because of their children's educational needs, despite currently being in an environment in which they, themselves, felt comfortable. For example, some GPs who were happy living at their current locations but intended to move to somewhere less remote because of issues relating to their children's education spoke about the sort of location where they would like to live next:

The other thing is, we have this constant issue of where to go... We honestly don't know, and we don't really know how to go about finding out... We don't want to go back to the metropolitan area; we still want to stay in the country but probably more semi rural than rural. It would be nice to be somewhere closer, where you can go away for a weekend or something and it's not too big a deal. (GP No 3)

From this analysis it would seem that 'comfort zone' in relation to place was more of a concept which characterised recruitment than retention, with the relationship most of the GPs had to place after living in their communities for some years being characterised commonly by the much deeper relationship of attachment.

Attachment to place

Many of the GP participants had been living and working in their rural communities for more than 10 years, and up to 25 years, and had a very strong attachment to all aspects of place already discussed. For the GP s, attachment to place entailed being within one's comfort but also encompassed many aspects of their relationship to place, which have already been discussed including: belonging; knowing and being known in the community; mutual support; being accepted; mutual expectations of the community, commitments to place, including social commitments, work commitments, and financial commitments. For example, this GP spoke about the long-term attachment, which meant that she would be unlikely to move in the near future:

It happened for me almost without me being aware, and it's almost impossible to back out of, with financial commitments and family commitments and town commitments. I'd have to move, start again, and that's a big thing to do after all this time. (GP No 6)

Some had made a deliberate and logical choice, together with their partners, to commit to living and working in a rural area long-term. As one GP who had moved to her rural town in the last two years described:

It's wonderful. And just with kids, and don't miss the city at all, but I think we did the cities and so when we moved it was a really clear choice, and we set it up so we both were employed. (GP No 11)

For many, their relationship with place had developed over a number of years before their final decisions to move there, with their attachment to place starting before they entered rural practice, as this participant described:

I trained as a GP Registrar in the practice who delivered my son... My supervisor did the resuss... I chose that. I went back there as a student. I've been coming up here ever since I left: my favourite place in Australia. (GP No 31)

A GP registrar expressed her desire for this kind of attachment, talking about wanting 'to put down roots somewhere'. She and her partner were considering 'staying up here for a few years', but had not as yet made a final decision.

Some GPs were thinking of moving to a more urban environment because of their children's educational needs, but mostly felt some reluctance to break the ties they had with their current community.

This attachment to place formed a key part of the GPs' identity with 'place identity' being 'the contribution of place attributes to one's self identity' [304] as already discussed in the literature review..

However, for many GPs, the boundaries between their professional and personal lives were difficult to maintain at times. For many, the very aspects of rural life that contributed to their place identity, in particular the smallness of the rural community, also meant that their work could be very demanding and intrusive into other aspects of their lives. This relationship with work shall be discussed in the next section.

6.3.2 Work

In this section I shall describe aspects of the content of the domain of work, and then go on to discuss the relationship between self and work for the GP participants. This relationship is summarised in Figure 6-3.

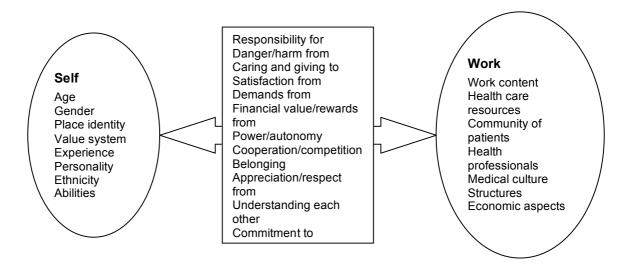


Figure 6-3 Aspects of work and relationship between self and work

6.3.2.1 Aspects of work: Content of the domain of Work

For the GP participants, the domain of work encompassed work content, the community of patients, medical colleagues, economic aspects of work, practice structures, and rural medical culture.

Content

The GP participants referred to not only rural content of their work but also to specific female GP content of their work, including women's health and mental health. The practice content of each GP's work varied according the size of the town where she was working, the health care services available in the town, her level of participation in the practice, her interests, and the mix of interests amongst other medical practitioners in the town. Thus, the GP's work content could relate to either her rural location or to her gender, and in this section the way in which rural location and female gender interacted in relation to work content shall be discussed.

Rural practice content

Many GPs spoke about the breadth of rural practice, seeing it as 'cradle to grave' medicine, where they were 'much more involved in the lives of[their] patients' than urban GPs. For example, one GP described the role of a rural doctor as follows:

You may be seeing two or three generations of the same family... where you can become very involved in palliative care, and you know when they decide to shoot themselves you're the one that's getting involved in picking up the pieces with the whole family.(GP No.3)

Most saw rural practice as involving 'the continuity of care' of patients over a period of time. Those involved in hospital and emergency work, mostly worked in small to middle-sized country towns that had small GP staffed hospitals, generally with no resident medical staff or specialists in the town. For example, this participant described this situation:

If we live in a small country town we do our share of on call, have to do a lot more emergency medicine than our fellow GPs in the city.(GP No.32)

Most GPs found this aspect of rural practice interesting and enjoyable. Some GPs chose not to be involved with hospital work because of the commitment to on call and after hours work involved, or because they felt they did not have appropriate skills to undertake this type of work. Thus, while some GPs provided the broad range of rural practice including procedural services and obstetrics, many limited their work, with some providing mainly women's health services and mental health services.

Women's health content

Although the majority of the GP participants enjoyed the broader aspects of general practice, they indicated that there were specific services that their communities and practice colleagues expected female GPs to provide, in particular women's health services and mental health services. Many worked in areas where there were a limited number of female GPs and found that many women preferred to see a female GP, in particular for gynaecological services. Many would have preferred to have a less limited practice as described by this participant:

Today was a classic example where I didn't see one man, and I'd used about ten speculums and I sort of thought at the end of the day, 'ohh'. I had a female medical student with me and we sort of laughed about it, saying that it is a little bit of a problem sometimes where... you're getting booked out with routine pap smears and you know it would be quite nice to do a bit more ordinary stuff. (GP No 14)

This predominance of women's health services in their practices could be a problem for some participants. Some GPs explained that many patients made bookings some time in advance for women's health services (e.g. pap smears), so that they had no appointments available to see patients with other problems. However, some had overcome this problem by using a booking system such as 'a sort of on call system, where you don't take any routine bookings that day you only see whatever presents that day.' Some GPs preferred a more limited practice comprising mainly women's health, but most indicated a preference for 'see[ing] a good variety of medicine', because they found having a broader practice, seeing a range of problems, more interesting.

Mental health content

Most GPs also described a large mental health component of their practices, saying that they were responsible for the 'lion's share of emotional illness of the practice'. They indicated that the community expected that they would have an interest in mental health problems, so that a large proportion of the practice patients with mental illness presented to them rather than their male colleagues. The reason that some GPs gave for this expectation was 'partly because I'm a woman and probably they... perceive women as listening'. Thus, the GPs thought that many community members perceived female GPs as being skilled at managing mental illness in a way that was different from male GPs.

Another reason given by many of the GPs for their heavy mental health workload was that many of their male colleagues were not interested in mental health work, so that patients chose a female doctor whom they expected to be interested in their problems when they had psychological problems. For example, this GP said:

I do find that I pick up a lot of the emotional problems in the town, but not because I'm particularly interested in it, it's just that difficulty of you know why doctors in a town of 80[doctors] are not interested. (GP No 18)

While this applied to most participants, a few worked with male GPs who were interested in mental health, so the mental health workload was more evenly distributed between the doctors in the town or practice.

Some GPs found it was not only the patients who had an expectation that they should be interested in managing mental health problems but that other health professionals, such as 'community welfare, the counselling service, the clinic sister, the nursing post nurse, untold agencies', also referred a large number of patients with mental health problems to them. Most participants felt that their mental health workload further limited their ability to see patients with other problems because managing mental health problems was so time consuming.

GP participants perceived their rural location as being a major influence on the content of their work because of the limited health care resources available in rural areas. As might be expected, the lack of readily available specialist services meant that, as rural GPs, they often needed to provide a much broader range of services than in urban areas. However, the GPs also referred to the lack of allied health professionals in rural areas as impacting on their work content and workload, and exaggerating the 'female doctor' aspects of their workload. In particular, a number of participants commented on the lack of counsellors and psychologists in their areas and the impact that lack had on their own practice content:

I think it is a partly rural problem because one difficulty here is that we have very, very few counsellors and in the city there are all sorts of people who can provide counselling, whereas we don't have any other options. (GP No 19)

They also commented on the ability of urban people to 'self refer' to counselling services and psychologists, an option that was generally not available in the communities in which participants worked. Another example some GPs discussed was people seeking dietary advice, with GPs being expected to provide this advice in rural areas where dieticians were not available. In this case, the GPs thought that community members had a perception of some types of work, such as dietary advice, being 'feminine', so they chose female GPs to consult about dietary matters, as described by this GP

I think women[doctors] are probably singled out as being the dietary advisers and I don't know a thing about it really, but they love me. (GP No 20)

Thus, in the case of dietary advice, as with women's health services and mental health services, the rural location of the GP and the gender of the GP combined to produce a particular pattern of work content.

Community of patients

Another aspect of the domain of work discussed by the GPs was their patients. While for some participants who were working in small remote communities, virtually all members of their local community were their patients, for most others their patients were a subgroup of the wider community, which I have called their community of patients. While most of their patients lived in the town in which the GPs worked, in some remote areas some patients came from distances as far as 300 kms away in order to see a female doctor.

A large proportion of most GPs' community of patients were women and children, reflecting the patients' choice of a female doctor. For example, one participant described 'an extra tendency for female patients to select out the female practitioner to bring their problems to'. The community of patients often included whole families, which most participants saw as being an advantage because it provided knowledge of the social context in which the patient lived.

GP colleagues

While a few participants were working as solo doctors in remote communities, most were working in towns with other doctors. Most were also working in group practices, usually with at least two or more medical colleagues. Most GPs preferred to work in group practices because 'the ability to share the workload... takes the pressure off', and those working in large group practices had the advantage of being able to take time off with 'no need for us to seek a locum as such to work in our place'.

Many participants were 'GPs in smaller country towns where manpower is a problem', and some were working in towns where there was a severe shortage of GPs for the population being serviced. For most participants, the number of other doctors working in their towns impacted on their own work, as described by this participant:

When I worked in a city practice... there was a choice of working less hours than here. There is not much choice; we have only two doctors in [remote community], and we both have to work long hours to share the load. (GP No 5)

A few worked in an all female GP practice, but most worked in group practices in which they were the only female GP or where there was only one other female GP. Thus, most of their GP colleagues were male, and several participants were married to GPs with whom they mostly worked.

Most of the female GP participants' male GP colleagues worked full-time, usually providing a full range of rural GP services including after hours services, and most of these male colleagues were practice principals.

Medical culture

A number of GP participants spoke about values and norms of the rural medical profession and shared ways of seeing, believing, and behaving of rural general practitioners, which are here called 'rural medical culture'. These participants spoke about the rural general practice profession being characterized by a very strong commitment to work, to the extent of being a 'missionary zeal', valuing of toughness and self-sacrifice and heroism. This involved 'soldiering on' in the face of great difficulty, for example enormous demands from work. Some GPs felt that, as well as behaving in this way themselves, their mostly male colleagues saw this commitment and toughness as a core part of what it was to be a rural doctor and also expected that other doctors should have the same level of commitment both in terms of time commitment (working full-time, and not taking holidays) and availability (after hours work). For example one focus group GP said:

That sort of thing you're describing is sort of what I call the missionary zeal... a few people I've worked with who... have that sort of attitude: they can do everything and they do everything, and any time I display a bit of tiredness or want to say no to something I'm made to feel lazy and inadequate. (GP No 21)

Rural medical culture was also seen to value the ability of an individual doctor to provide a very broad range of services, and in particular those having procedural skills, such as skills in emergency medicine, obstetrics, anaesthetics, or surgery. For example, another GP participant commented:

The country attitude about the skills politics... there is a sort of yardstick by which people are judged medically. Different skills are valued and other skills are not valued. (GP No 5)

Some GPs participants indicated they did not feel part of this rural medical culture, and how they related to this aspect of work shall be discussed in greater detail in the section 6.3.2.2.

Practice Structures

Practice structures were discussed by almost all GP participants and appeared to be the most important work structures to which participants related.

To a degree, the size of the practices and the numbers of doctors in town affected the structure of the practices, which in turn affected the GP's workload and the flexibility of her working hours. For example, in a small practice there was far less flexibility, while in a larger practice with more doctors, there tended to be a smaller workload and more flexibility.

There was a wide range of practice structures, and participants related to these or were employed in these in a variety of ways. The majority of the GP participants worked in private general practice, although some worked in salaried positions for Area Health Services, in Non Government Organisations, or in Aboriginal Health services. Some GPs worked in more than one practice or for more than one organisation. The GP could relate to the practice as a practice owner, or as a contractor, or as an employee, or as a registrar, and these relationships are described in detail here.

Practice Principals

Some participants were practice principals and were either in partnerships or associateships. Practice principals owned a share of the practice and had made a financial commitment in buying a share of the practice, and generally only practice principals contributed to decisions in relation to the practice. In partnerships, the doctors each owned an equal share in the practice and generally shared the income and costs of the practice equally, although the arrangement could vary in different situations. In associateships, the doctors each owned a share in the practice, received the fees they earned individually, and then paid an agreed amount to the costs of the practice: in some cases this was a fixed amount, in others it varied according to their level of income, and in others there were fixed and variable components of the amount paid. Some GP participants who were married to other GPs shared a practice principal's

position with their husbands, described by one GP participant as being 'sort of half of my husband's associate', with their views on the running of the practice being considered along with their husbands, and with their husbands often providing after hours services on their behalves.

Practice principals were more likely to be working full-time than other participants, although some were part-time, especially those sharing a principal position with their husbands.

Contractors

Many GP participants worked as contractors, receiving all the fees they earned and paying a percentage of their income to the practice to cover overheads. The percentage paid varied from 35% to 55% of their earnings, and generally covered the practice costs such as rent, staffing, and consumables, but not car expenses or medical indemnity costs. These GPs were also responsible for their own superannuation contributions.

Salaried sessional employees

Some GP participants were employed to work in private practices, being paid sessional or hourly rates. Those GPs who were paid sessional rates mostly were not paid any extra if the time of their session extended beyond an agreed time, such as four hours. The practice employers mostly contributed to their superannuation (as employers in Australia are legally bound to do) and in some cases the GPs received a car allowance. However, the GPs were all responsible for their own medical indemnity costs.

The practice structure and the GP participant's position within that structure was a key element in relation to her commitment to the practice, how she related to colleagues, and the income she earned, and shall be discussed in detail in section 6.3.2.2

Economic aspects

All GP participants discussed economic aspects of work as being a key aspect of work. This area of the domain of work included income, either as fees or salaried or sessional payments, and the costs of working, such as practice overheads and childcare costs.

Because the GPs worked in a variety of different practice arrangements they received their income in a variety of ways. Those working as practice principals, or on many contractual arrangements, received income in the form of fees paid by patients or the national health insurance system (Medicare) for specific services they provided. As the Australian government has been attempting to develop a blended payments system, some GP participants also received additional income in the form of a share of grants made to practices by the Practice Incentives Payments Scheme. Others received some income from hospital work, again mostly on a fee for service basis, but sometimes in the form of on call payments also. The GPs who were salaried were mostly paid either a salaried or a sessional rate (for example for working a four hour session), with the practice taking all of their fees, paying all the practice overheads, and then paying them for the work undertaken.

As well as income, the GPs' final level of remuneration was determined by the costs involved in earning that income. GP participants included in these costs the costs of practice overheads, costs of medical indemnity insurance, and car costs (usually not included in practice costs), costs of continuing medical education and professional development, and the costs of childcare. For example, this GP summed up these costs as follows:

What we talked about is the financial side of life of women... that by virtue of working means most mothers are paying pretty high childcare rates to be at work, then as a rural person you pay higher travel rates to attend any conferences, and then you pay exorbitant rates often enormously out of all proportion for locums, so you're left without, on a financial limb... so it's those three things. (GP No 22)

Some GP participants felt that if they included the cost of childcare as part of the costs of earning their income, their remuneration was really quite low to the point that some questioned whether working was worth the effort from a financial viewpoint.

Some of the aspects of the domain of work already discussed, such as practice content and practice structures, had a major impact on the economic aspects of `work for many GPs. For example, work content affected the income the participant earned because procedural work was rewarded better, financially, than consulting work. This shall be discussed in more detail in the discussion about financial rewards and value in section 6.3.2.2 Relationship between Work and Self. At the same time, practice structures and the GP participant's role in

them also affected both the income she earned and the costs of earning that income.

Interrelationships within the domain of work

This section has discussed the aspects of work, which made up this domain. In summary they were work content, GP colleagues, rural medical culture, practice structures, and economic aspects. From the analysis so far, it is clear that the GP's perception of the domain of work was influenced by her gender. For example, the female GPs often perceived at least some of their work content as being gendered: most GP colleagues were male, and the rural medical culture in which they worked was perceived by many female GPs as being masculine. Many of the female GP participants related to practice structures as employees or contractors, with male practice owners. Economic aspects of practice, such as income, were affected by work content, which in turn was affected by gender, with costs of working including childcare, which was seen as a female responsibility. In addition, rurality could also have an affect on various aspects of work, with the lack of allied health services in rural areas serving to exaggerate the demands of the community on female rural GPs for services patients perceived as best provided by women.

The complex interrelationships between aspects of the domain of work is illustrated in Figure 6-4.

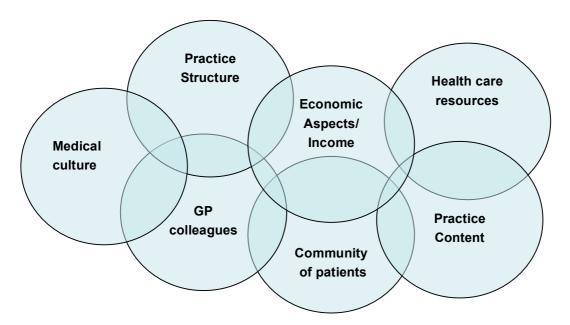


Figure 6-4 Interrelationships between aspects of the domain of work for female rural GPs

In the following section I shall discuss in detail the processes by which the female GPs interrelated with the various aspects of work already discussed.

6.3.2.2 Relationship between Work and Self

This chapter has so far described the content of the domain of work for the GPs and will now outline the relationship between self and work.

The GP participants' relationship with the domain of work encompassed a number of dimensions, including responsibility for patients, application and maintenance of medical knowledge, caring and giving to the community of patients, cooperation (or competition with colleagues), economics, appreciation and respect from colleagues, satisfaction, commitment to work, work placing demands on them, and work posing a danger for them. The GPs discussed a number of the dimensions of their relationship with work as being a complex two-way relationship. For example, economic aspects could include financial rewards from work, or the domain of work giving a value to the work they did.

The details of this complex interaction between the participants and the domain of work shall be discussed in detail in this section of the Thesis.

Responsibility for patients

A very dominant theme in relation to work was the responsibility the GPs had as doctors to provide care for their patients and to provide support for their colleagues, and the ambivalence they felt at times in relation to this dimension of their relationship with work. The GPs saw themselves as having a much greater level of responsibility than urban doctors because of the lack of specialist support and other services to provide patient care. For example, one GP described the level of responsibility involved:

It takes a lot of responsibility, too. Because you're isolated you have to carry a much greater medical load, I mean, not just because you're seeing a lot of patients but because a call back will mean you have to basically do it. (GP No 25)

They perceived rural GPs as healthcare professionals responsible for providing good quality 24-hour care for their patients, and saw themselves as contributing to this care. This involved being available or ensuring someone was available to provide care at all times, and sometimes caring for patients in

life-and-death situations. This responsibility to patients as a rural doctor meant that, even though most GP participants did not enjoy providing after hours or emergency services, many accepted that it was an obligation they had to meet. For example one GP explained:

Just lately, it's starting to weigh with me. I don't want to be on call at night any more, but I have to be available here anyway because that's what the requirement is.(GP No.26)

For others, this responsibility meant working longer hours than they wished because of their community's health care needs:

The problem is that there is no way of cutting down the hours; so that's my problem, I have to work long hours. (GP No 5)

A number of GPs who worked part-time felt a responsibility to provide continuity of care for patients, and tried to make themselves available for some of their patients, for example visiting hospital patients on their days off.

The majority of participants who had children described feeling 'split loyalty' between their responsibility to their patients and their children. One GP participant described herself as having an 'overwhelming sense of obligation' in relation to caring for both patients and family.

These conflicting responsibilities will be discussed in more detail in section 6.3.7.2 Conflict in the 'Landscape of fulfilment'.

Most GP participants also expressed a strong sense of responsibility towards their GP colleagues, wanting to support them and feeling guilty if they were unable to provide adequate support. This was a particular issue for those GPs in smaller towns with fewer doctors, or in towns where there was a major problem with medical workforce shortages. For example, one GP in a two-doctor town felt she could not 'leave him without a locum—it would just be too much.' Similarly, other GP participants spoke about feeling concerned about their GP colleagues' heavy workload:

I don't have to feel guilty about patients, but I feel we give them a pretty good going rate... It's the fellows that I'm concerned with, in[country town] we had a bad situation a few years ago when someone was killed and someone else left, and probably the manpower was low, and you just see the other fellows look so tired and so over-worked. (GP No 32)

Other GP participants spoke about feeling that 'it's not fair on the others, too, if you're not doing your share of after hours.' A number also felt that 'everyone tends to feel they carry the load for you'. The issue of responsibility for after hours work was a source of conflict with GP colleagues for some GP

participants. While most GP participants accepted as much responsibility as they could, they were often limited by their responsibilities in relation to other domains of the landscape, and this conflict shall be discussed in section 6.3.7.2.

Application and maintenance of knowledge and skills

The dimension of the application and maintenance of medical knowledge and skills was seen as a key component of being a doctor that related closely to the dimension of responsibility. The GPs saw practising competently as part of their responsibility to patients, and this required the application and maintenance of knowledge and skills. The GP participants thought that as rural GPs they applied broad medical skills and knowledge. The level of knowledge a rural GP needed was seen both as a positive thing, in that it resulted from the wide variety of problems a rural doctor managed, and at the same time a negative thing because of the difficulty in acquiring and maintaining such broad knowledge. Some GP participants felt 'forced to take on trying to get a bit of training or expertise in these areas with less knowledge.'

For many GPs, the time and energy needed to maintain medical knowledge added to the demands of work, and at times was in conflict with their family responsibilities. Most GPs found attending continuing medical education away from their area to be 'an organisational feat' because they had to cope with the logistics of arranging time away from work (which involved 'making sure you've covered the obstetrics, and you've got a locum, and it's not your weekend on, and you won't be too tired the weekend after, and all those sorts of things') as well as being responsible for arranging childcare. So, for some, rurality contributed to the sum of the difficulties they had in maintaining their medical knowledge and skills because of the broad range of skills they needed as rural doctors, and because professional development activities were not always easily accessible locally. But gender also contributed to their difficulties for those GPs who were responsible for the care of young children because, in order to attend professional development activities, they needed to arrange suitable childcare.

However, several GP participants in the second female rural GP study commented that continuing medical education had become easier to access in

recent years because of 'teleconferences and a lot of functions on much closer to home'.

Demands

Almost all GP participants spoke about the demands of work, which were also closely related to the responsibility of work. Most GPs spoke about the demands their work made on their time, in particular that 'there's always a pressure to increase your hours', with many feeling under 'a lot of pressure from patients and from peers... to work full-time.' One commented that in her town, even though the female GPs were regarded as working part-time, they 'all worked between 40-50 hours a week, anyway' and wondered 'how full-time do they want it?'

Few GPs had access to proper maternity leave and many had returned to work relatively quickly after childbirth, with a number speaking about time periods as little as one to two weeks because of 'pressure to go back way earlier than I wanted to' after the birth of a baby. For example, one GP described her return to work with a nine-day-old baby:

When I first went to the country I'd just got married and didn't have any children... I got pregnant, worked until I was 38 weeks pregnant, had two weeks off; when the baby was nine days old I went back to work two hours a day, and that was really from the pressure. (GP No. 9)

GPs both with and without family responsibilities also complained that 'just the basic things like going shopping, mopping out your house, things like that, do become more difficult' because of the demands on their time. Some also referred to the problems of being easily accessible to people when they lived in small towns, so that even when not on call their time with their family was interrupted as described by this participant:

So, with two little children, that is difficult because it means that there's no time you are actually/completely off duty or able to, you know, definitely commit time to families because of the routine things without the chance of someone coming to the front door or ringing in. (GP No 12)

Some GPs discussed the demands on their time when on call. For example, this GP described a recent experience of a weekend on call:

My family find it very difficult when I'm on call on a weekend. We had a rodeo weekend last weekend and my little x-ray machine was running hot. But the family didn't really appreciate it. I went down to watch the rodeo and I was only there five minutes and I was basically lifted out. (GP No~24)

Most GPs also felt their practice content and style added to the time demands of their work because they often needed to provide long consultations, which meant they often were 'running behind' in their practice sessions. This often occurred because consultations took longer than expected:

People are not willing to always make long consultation appointments so... you get stuck with somebody who's going to take forty minutes for a ten-minute appointment, and it's very hard to cut them off when they're weeping, or say, "Could you please come back tomorrow?" (GP No 3)

This also meant that the GPs' practice sessions were prolonged because of their inability to complete paper work in between patients. Some GPs indicated that they thought this was one way in which they differed from their male colleagues, for example:

The difference is that they go home at half-past-four because they've been able to do their paperwork during the day because they can fit them in, in between their consultations. I can't, so I go early and I leave late and I think that's, again, a major difference between men and women's practices. (GP No 17)

Most GP participants saw their work as putting heavy demands on them emotionally, and some spoke about developing 'emotional burn-out' and complained of severe tiredness. They saw the emotional demands as relating to the predominance of time-consuming mental health consultations as part of their work 'because the hours have to be worked longer and then you have your family life as well, and you have the extra emotional problems [of patients]', and in this respect saw the demands of their work as relating to gender. However, they regarded other demands as relating more to rurality and being a problem for both male and female rural doctors, but not urban doctors, for example the need to work longer hours than they wished because of medical workforce shortages, and the demands of providing emergency services.

A number of GP participants discussed finding emergency work stressful and emotionally demanding, in particular dealing with life-and-death situations, such as these GPs:

I'd find that still quite draining at times, especially when I see overdoses, shooting accidents, and high speed accidents, and things like that. (GP No 24)

Some GPs found it 'scary' dealing with serious emergencies because they did not have a great deal of confidence in their emergency medicine skills. Many GP participants had not planned to work as rural GPs, but had followed their husbands' work, so in a sense became rural rather than urban GPs by default. For this reason, many of the GP participants had not undertaken extra training to prepare them for the emergency medicine work they would need to undertake in rural general practice. One GP had left working in medicine, altogether, because she found emergency work so stressful due to her lack of confidence in her skills. Others, who had not undertaken any emergency work for many years because they had worked part-time when they had young children, did not feel confident that they had the skills to start providing emergency services. But they thought 'there was a fair bit of pressure put on us to do it' from male colleagues who wanted them to be available for emergency work after hours.

A number of GP participants also discussed 'the tiredness factor' due to the combined demands of work and family responsibilities, such as this full-time GP who described how tired she felt when her child was young:

I was very tired all the time. I was extremely tired all the time because you'd work, you'd work nights, you'd be up, you've got a child who keeps you up at night, you did obstetrics and, and then you went to work the next morning and you worked all day and started all over again. (GP No 26)

While many GPs felt guilty about limiting their workload, some did attempt to control the demands of work by strategies such as asking the patient to come back for a second consultation if there was insufficient time to cover every problem, as described by this GP:

I've got no qualms about saying, "Look I really can't do any more today," or "I know we won't be able to cover the whole topic today, could you please come back next week?" (GP No~26)

Some GPs controlled their workload by not taking on new patients, but others found it difficult to do this due to a lack of doctors (sometimes more specifically a lack of female doctors) in their area. Others attempted to limit the number of long consultations by keeping some appointments for patients with urgent problems, which often could be dealt with in a shorter time than their usual consultations. However, most GP participants continued to work longer hours than they wished, feeling that they were not really in control of the demands the domain of work put on them.

Caring and giving

The GPs regarded their role as doctors as involving caring and giving to their community of patients, with most of them speaking about giving in terms of 'putting a lot of yourself into your work'. Some indicated that caring for patients was one aspect of work they really enjoyed, a typical comment being, "I love my patients, and I love helping them."

This was not an aspect of their relationship with work that they saw as particularly relating to gender, but which they saw as relating to rurality because of the opportunity to be more involved with patients in a smaller community.

Satisfaction

The enjoyment of giving to a community in need was just one of the many aspects of work as a rural doctor that the GP participants found satisfying, with most of them also explaining that they enjoyed the stimulating and challenging work content, the involvement with patients, and the ability to provide continuity of care. Some also enjoyed specific substantive work content such as women's health and obstetrics. Most GP participants referred to finding the breadth of their work satisfying, for example:

You never know what's going to walk in the door next, and it's so broad, which I love about it. I love the fact that my knowledge stays open and wide. (GP No.10)

For some, work satisfaction was one reason why they were working in a rural area, such as this GP participant:

The main benefit of rural practice is the variety of the work and... that's why you chose to do it. I mean the cradle-to-grave work, where you cover everything and look after the whole family. (GP No 26)

At the same time, many GP participants found their work both 'very stimulating' and 'stressful at times', 'very challenging' and 'never, ever boring'.

They saw the broadness of their work relating to rurality and applicable to male GPs as well as female GPs.

While some GP participants preferred broad work content, others enjoyed women's health and the opportunity rural practice provided to work mainly in this area, such as this GP, who said:

I quite enjoyed gynaecology, but I suppose it's lucky that I do because I've sort of cornered the market. (GP No 18)

Thus, most GP participants found various aspects of their work satisfying, but at the same time many felt that their contribution to rural general practice was not appreciated by their male GP colleagues.

Appreciation/respect from colleagues

The GPs discussed appreciation and respect from colleagues as being an important dimension of their relationship with work. Many of the GPs worked part-time, attempting to balance their family responsibilities against their work responsibilities by limiting and controlling the demands of their work.

But many of the GP participants had a perception that they were not appreciated or respected by some of their full-time male colleagues because they limited their working hours. Some GP participants spoke about being seen as 'not a proper doctor' and being 'regarded as probably a bit inferior' if they worked part-time.

I think also one of the problems is being accepted as a doctor on equal par with a male counterpart who sees himself as working full-time, whereas you consider your practice as just as important and you follow up your patients just as diligently as they might. The fact that you might only be working three or four days a week instead of five days, you are seen, maybe, as this is what you do as an addendum to your life when its really not. (GP No 20)

Thus, many GP participants felt that as female GPs the choices they made in relation to working hours, which mostly related to their gendered roles in their families, were not accepted or respected by their colleagues. Some female GPs saw this lack of respect for the choices they made in relation to their working hours as an aspect of rural medical culture that was based in entrenched aspects of medical culture as a whole:

I think that it's a little bit of that old bastardisation process that existed in medicine—I had a hard time therefore you should have a hard time, too. It goes right through the residency training with the hospital system, and anyone who's perceived to be only working part-time or taking slabs of time off for other reasons—for the family—is not perceived as pulling their weight in the system. (GP No 12)

In addition to the issue of hours worked, some GP participants spoke about being seen as not contributing enough to the work of the practice because rural medical culture did not value their style of work, which they themselves regarded as being typical of female doctors and which involved more long consultations. For example:

That's my style of practice and I book less people in a day, and I'm booked up in advance and the boys think I'm not pulling my weight because I'm not there to, not available to see the semi-emergencies who ring up and want to be seen that day. I'm not available to do the quick ones, like, "I've got a sore throat and I want a day off work" type things and they think I'm not actually working as hard as them because I don't see as many patients as them. (GP No 6)

Another said:

I think women GPs in general suffer from a perception that they're not serious doctors. And I think that's a big problem for many women at the moment, even women who are working in general practice and running their own practices are often perceived as being not real doctors, by their colleagues rather than by their patients. (GP No 22)

Some of the GPs felt 'marginalised' because they felt their skills in women's health and mental health were not valued as described here:

So I keep feeling more and more marginalised, and those are the things that aren't valued necessarily by medicine but they're what I like doing and what I'm good at. (GP No 11)

Most GP participants wished to be appreciated and respected for the sort of services they provided, which they themselves perceived as being of value to the community, even though they were different from the types of services provided by most of their male colleagues.

While the perception of not being appreciated and respected by male colleagues was common amongst the GP participants, it was not universal. Some participants felt their colleagues appreciated the contribution they made to the practice:

Just the fact that I'm here generates work and takes the pressure off the other people, and it's more the taking the pressure off the other people because they're so overwhelmed. (GP No 3)

Some had the experience that:

The male doctors in my practice are appreciative that I see those patients because they don't want to see them. They can certainly make a lot more money to start off with the patients that are in and out and they don't like counselling: they don't like seeing depressed women and women involved in domestic violence. (GP No 1)

Others thought their male colleagues 'really enjoyed having a female around and having that balance.'

Although many GP participants explained that some of their colleagues did not appreciate and respect them, mostly they felt their community of patients did appreciate and respect them, and felt that rural people were 'more appreciative' of their doctors than urban people.

Financial value/financial rewards

Financial value and financial rewards were related to the dimensions of appreciation and respect because the GP participants perceived financial rewards to be a reflection of the way in which their work was valued.

Many GP participants indicated that their income was lower than most of their male GP colleagues on an hourly basis, giving them a lower total income than their male colleagues even when the hours they worked were similar to those worked by their colleagues. Several practice principals spoke about how much lower their incomes were than their male colleagues' incomes, as described by these GPs:

I mean you're one of the full-timers. I've got the lowest income out of all of them and I contribute the same amount of money to the practice. (GP No 17)

I went and saw my Accountant and... and he pretty much deals with doctors most of the time, that's what he does, and he said to me, "You know I see a lot of figures come in and out of this office and that's probably the lowest." (GP No 10)

A major factor contributing to the lower incomes of these female rural GPs was the structure of the fees in the Medicare benefits schedule. The Medicare benefits schedule is an Australian schedule of medical fees determined by the Health Insurance Commission, an arm of the Commonwealth Department of Health. This fee-for-service schedule remunerates various services in different ways, with procedural services and briefer consultations being better remunerated than longer consultations when the times that these services take is taken into account. Many of the female GPs were remunerated at a lower hourly rate than their male colleagues because they tended to provide larger numbers of longer consultations and less procedural services than their male colleagues.

It was clear from the way in which many GP participants spoke about their remuneration that they saw money as having a meaning beyond just the dollars earned, saying for example, "It's not just the financial value, though, it's... the skills value."

While most participants felt some resentment towards the government who determined the Medicare benefits schedule, several non-practice principals also indicated that they felt there was some level of unfairness in the way they were remunerated by their practices. Many of the GP participants felt the way in

which they were valued by colleagues was reflected in the way in which their GP colleagues who owned the practices remunerated them. A typical GP participant who worked as an employee in a private practice spoke about how she felt her remuneration was relatively low, seeing that as a lack of appreciation:

I do work hard: there is that emotional input; there is that time. You can spend time with the people, that as women GPs often you see the chronic sort of people and people that often the male practitioners really haven't got any time for, and I'm quite happy to do that and... it's what I do well but... in terms of remuneration, and I'm really beginning to feel not appreciated. (GP No 11)

A few GP participants had been distressed because the principals in their practices had attempted to reduce their rates of pay without giving any reason related to their work for the reductions, as described by this GP:

After I started there they decided that I was being paid too much money and so they said, "We'll take your pay, we'll take it down to forty-five dollars an hour." And I said, "That's fine, if you take it down to forty-five dollars an hour, I'm leaving, my value is fifty-five dollars an hour, that's the AMA rate, I will work for that and if you're not going to pay me that with superannuation, that's fine I'll leave." And so they just left me with that. (GP No 15)

Other GP participants had had similar experiences of practice principals attempting to reduce their levels of remuneration. A number of GP participants who were contractors and paid a percentage of their earnings felt they were particularly disadvantaged by the Australian government's move to a blended payments system for GPs. Extra payments for undertaking various activities and reaching various targets were made to GP practices rather than individuals, and the practice principals decided on how this extra income was distributed. None of the contractors interviewed received any share of the Practice Incentive Payments (PIP) from the practice, although many felt that some of their work did contribute to the level of PIP funding received by the practice. This GP participant describes a typical experience:

I mean, I did ask them about that because when I read the brochure I understood that I should be getting the Practice, the PIP payment, and they just said very neatly, "You're reliant on us for after-hours cover therefore we get your payment, thank you very much." (GP No 15)

Some participants felt disappointed about their exclusion from this income, seeing this as 'unfair'.

Nevertheless some GP participants felt 'that the guys, the principals, in our practice are really nice and they're very fair.' Some thought that the practice principals appreciated their contribution to the practice rather than expecting them to make a profit for the practice. For example, this participant said:

As an employee of this practice, the philosophy is that I break even, so they'll keep paying me as long as I keep, you know... They don't expect me to make a profit. And I probably don't. (GP No 3)

Thus many GP participants felt that they were financially disadvantaged by their feminine practice content and practice style. To many who worked as employees or contractors for practices, their level of remuneration represented the level of appreciation by their colleagues for their contribution to the practice so that to some GPs money had a symbolic meaning relating to how their work was valued.

Power/autonomy

Power and autonomy were other important dimensions of the relationship between the GPs, which related closely to the structures within which the GPs were working and the positions they held in those structures. GPs who were practice principals mostly had a sense of having some control in relation to many aspects of their work, in particular income and running of the practice. Most GP practice principals enjoyed the control and autonomy they had being self-employed. For example, a GP who had previously been a practice principal and was now an employee described the advantages of being a practice principal:

I just enjoy it. It's nice to have your own place, the pay's better... much more money when you've got your own practice. (GP No 15)

In contrast, most GP participants who were not practice principals and who were generally working as employees or contractors indicated that they felt quite disempowered in a number of ways in relation to their working conditions and to the running of the practices in which they were working. Few of the contractors and sessional workers felt that they had any power or autonomy in relation to their remuneration; many feeling 'it's just unfair.'

Part-time GPs tended to feel that they were excluded from input into the practice administration and management because they worked part-time. For example, this GP participant said:

I've always been part-time and I've always contributed but there is that, there's kind of a line where you know that you're a part-timer and, really, I might have these ideas or these suggestions but you feel that the full-timers have the more power or the more say. (GP No 15)

Another GP participant described herself as being 'not regarded or don't see myself as the backbone of any practice that I've been in', saying:

I think in that sense you always feel like you are the sidekick or you always feel that you're part of the team and, therefore, you tend to put up with things because it suits you to stay in the situation you are and you don't feel you've got the power. (GP No 11)

Paradoxically, some participants preferred 'casual' work despite the lack of input into the practice, because they felt the lack of commitment to the practice gave them more flexibility in relation to hours of work and 'freedom to increase my hours/decrease', as described by this participant:

I don't get any other benefits, I do like that... it gives me a sense that I'm autonomous... I feel like I still have some input into what I'm doing. (GP No 11)

While most non-principals had chosen not to commit themselves to being practice principals, some were excluded from being practice principals because their practice's structure could not accommodate part-timers as practice principals, or because the practice had certain requirements of practice principals, such as participation in after hours work, which they were unable to fulfil. While the GP participants did not discuss this issue of power and autonomy specifically in relation to their gender, many of the GPs were excluded from being practice principals because of their preference to part-time work and the difficulties some of them would have had meeting their family obligations if they were working extended hours. So, insofar as this family role tended to be role taken on commonly by women, their lack of power and autonomy in their practices could be seen as being related to choices they made because of their gender.

Cooperation/belonging Vs Competition

Some GP participants enjoyed a sense of cooperation with their colleagues and drew a sense of belonging from their work. Several GPs described cooperative relationships with their practice colleagues, indicating that they enjoyed sharing professional support with colleagues, where 'we back each other up; we talk to each other about problems', as described by this GP participant:

We have our few little personality sort of clashes, but everyone is fairly like-minded, I think... Things run fairly smoothly usually, and everyone is a bit bitchy now and then, but it's not too bad and, as far as within the practice itself, we're not all best friends but we all work well together. (GP No 3)

Some GPs described working in large practices where there was a 'diversity of interest and experience' and the way in which the practice worked as a team, learning from each other, with members of her practice supporting each other professionally:

In contrast some GPs felt that in their practices their colleagues were more interested in 'money issues... rather than the satisfaction and the fulfilment and the happiness of everybody that works here.' For example, a practice principal discussed how this occurred in her large group practice:

There have been times when, for instance, if there's a conflict about the use of a room ... we can't accommodate them because one other person, who has prior tenure, has had use of it and the guys tend to put forward the money issues as the reason why we should do it, and I usually end up being the one on the moral and ethical wonderful ground because I end up being the one saying, "Hang on a minute, but this person has been with us and we need to support what they're trying to do and there is a balance that we need to strike here."(GP No 17)

In this case, the GP felt that her priorities differed from those of her male colleagues whom she perceived as regarding financial issues as overriding long-term loyalties to colleagues, and she perceived this difference in priorities as relating to gender.

However, this solo practitioner described her professional isolation and how it affected her as follows:

I think that's probably one of my senses of greatest exhaustion because you feel like you're taking it all on your own and, like I said, I'm pretty young at this. (GP No 10)

As well as discussing cooperation within their practices, some participants also discussed cooperation with other practices and colleagues outside their own practices. This sometimes involved sharing after hours rosters and sometimes sharing professional experiences and debriefing. For example, a GP participant described a 'women GP support group', which had 'made a huge difference' to her. This group of female doctors from various practices in her area met regularly for social and professional support, and the GP who described this group greatly valued the opportunity to share her experiences of rural practice with other female doctors.

Thus while supportive colleagues were common, some GPs had differences of opinion with their colleagues in relation to practice administration and, at times, felt that these differences of opinion related to gender differences.

Commitment

The differences between some GP participants and male GP colleagues seemed to relate to differing levels of commitment to work and to the particular practice. The way in which the GP participants committed themselves to work varied, with some being heavily committed financially and emotionally to a particular practice, and with others being committed to caring for their patients but not to the practice itself. Practice principals spoke of being heavily committed to their practices and some felt concerns about the possibility of their circumstances changing in the future. For example, a single GP participant who was a full time practice principal commented:

Should my circumstances change, which is unlikely to happen. But should Prince Charming ride over the hill on a white charger, well, I'm in a situation where I can't afford not to work, just to maintain the debt, let alone income, just to maintain my foothold in this situation. (GP No 17)

However, some GPs described hesitancy to invest financially in a practice unless they were sure about where their future lay, such as this GP:

I don't know where my life is going to lead at the moment but I'm pretty definitely staying here. I'm not going to go anywhere, so of late I've really thought about investing in it. (GP No 29)

A number of part-time participants felt strongly committed to work, saying they were 'more committed than similar part-time city GPs', and felt that they demonstrated this by their willingness to provide patient care at times when they were officially not working, and by their provision of many unpaid services. But they distinguished this commitment to work and caring for their patients from making the financial commitment that would be required to become a practice principal. For some, who had become rural GPs because they were GPs who happened to move to a rural town because of their husband's work, their most important commitment was their family. This shall be discussed in greater detail in section 6.3.7.

Some participants thought the level of commitment younger doctors made to rural general practice was different from 'the commitment that doctors made a

long time ago', saying 'a lot of them are the young men, not wanting to do the after hours, and not even wanting to work full-time, wanting to work part-time.' This trend was described by a participant, as follows:

Doctors have changed; doctors are not going to go and live somewhere for fifty years and die there any more. It's not going to happen. Doctors prefer a life these days outside of work and, therefore, we need more doctors. (GP No 3)

One spoke about how her practice had changed from only seeking full-time partners to being 'happy to employ someone from nine to five, or nine to three, or whatever, if they chose to' because 'it's preferable, but we would rather have someone who comes and works than no-one at all'.

There was general agreement among the GPs that the way in which people committed themselves to work as a rural GP was changing, with less GPs being willing to commit themselves to working very long hours for a lifetime in the one community, as had been the case in the past.

Danger and harm

Another dimension of the relationship between work and self, which several GPs referred to, was the risk of danger and harm from patients. Several GPs indicated they did 'sometimes feel quite concerned about personal safety', especially when providing emergency and after hours services.

Mostly, they thought that, while personal safety was a problem for both male and female doctors, women were 'at risk of feeling vulnerable because the patient was an over-bearing male or a guy who's making sort of sexual suggestive comments', and that this was 'a real issue for some female doctors, especially when they know that there's no people around to protect you'.

Many thought that rural GPs were exposed to greater danger of violence from patients than urban GPs because rural GPs were more likely to provide after hours services in isolated situations. They felt particularly vulnerable in situations where they were on their own and in isolated places:

Having to go out on a house call to a remote area to maybe deal with the intoxicated male or something on your own, or having to go out to your practice with a couple of young fellows coming in can sometimes be a bit daunting, especially if you don't know them. You don't know whether they might want to take something from your bag or something like that. (GP No 22)

Some described incidents that had frightened them, such as:

That was with a psychotic male adult and it seemed to take forever for the police to arrive and help me... to actually apprehend this guy and adequately sedate him... This [was] very frightening for me, especially as I was with the psychotic and he thought the baby in my tummy was actually his child and wanted to get it out. (GP No 16)

Thus, the GPs indicated that both gender and rurality contributed the risk of violence to which they were exposed as female rural GPs, feeling less able to defend themselves than male GPs, and feeling more exposed to violence because of the more frequent need to attend to patients in isolated situations than would be the case for urban GPs.

While most participants seemed to accept this danger as 'part of the job', a number described ways in which they had attempted to keep themselves safe from harm. Some had limited their after hours work, either by not providing after hours services or by limiting where and how they would provide after hours services, for example only seeing patients after hours at the hospital. Some enlisted help when they felt there might be some danger, for example calling the police or taking their husbands with them.

So, as with some of the other work issues, participants perceived that both rurality and gender contributed to their risk of violence from patients.

Work and comfort zone

Because 'comfort zone' was important for the students in relation to work, I explored the female GP data to see whether a similar concept emerged in relation to work for the GP participants. Like the students, several GP participants described a 'comfort zone' in relation to work, indicating they felt 'forced to do things you don't feel very comfortable with', especially emergency medicine, and that they were sometimes lacking confidence in the adequacy of their knowledge and skills for the situations in which they were working. One participant had left medicine altogether, mainly because she was concerned that in the future, because of her husband's work, she might be obliged to move to an area where she would be expected to undertake emergency work. She said:

I wasn't prepared, I didn't have the skills, the emergency skills to work solo, in a little place on my own. I knew I didn't have the skills, so I thought I would get out then. (GP No 30)

Another had decided to retrain for a specialty because she felt her medical knowledge had insufficient breadth:

The variety of work—some of that I didn't like. I didn't particularly like the demands, of having to do everything. (GP No 13)

A few participants spoke about how they 'lost [my] skills in doing emergency work' because for many years they had limited their practice by not doing any on call work or hospital work because of their family responsibilities, and now saw themselves as 'a medical liability for emergency work'. Some had coped with what they saw as deficiencies in their emergency medicine skills by seeking extra training. Some also spoke about needing other specific skills over and above what they would need in urban practice, for example sexual assault counselling skills, because 'there's no-one really that, you know, other than the female GP, that step into the breach even if one's knowledge or expertise in the area is fairly flimsy.'

Thus, for GP participants, 'comfort zone' was a key area in their relationship to work affecting the retention of some in rural general practice.

Summary of relationship between self and work

In summary, the GPs' relationship with work provided them with: satisfaction; at times, appreciation and respect from their patients; and enjoyment in caring and giving to their community of patients. As doctors, they took their responsibility to their patients very seriously and, for most of them, this meant work demanded much of them in terms of time and emotional commitment, both to actual work and to maintaining their work skills. Some felt unappreciated because the feminine aspects of their practice did not fit the professional mould expected by rural medical culture, and because they were unable or unwilling to commit themselves to work in the way many of their male colleagues did. Their level of commitment usually related to competing commitments to their family relationships and responsibilities, and their relationships with significant others were a key aspect of how they balanced their commitments in other domains of the 'Landscape of fulfillment'.

6.3.3 Significant Others

In this section, I shall describe aspects of the content domain of significant others for the female GPs, and then discuss the relationship between self and significant others. This relationship is illustrated in Figure 6-5.

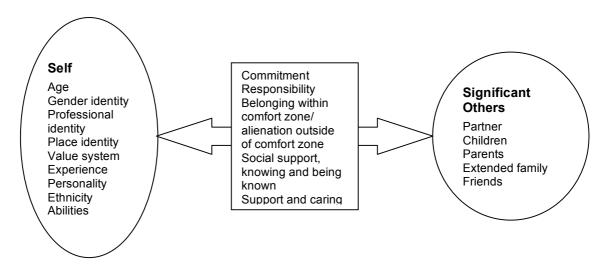


Figure 6-5 Aspects of significant others and relationships between self and significant others

6.3.3.1 The content of the domain of significant others

For the GP participants, the domain of significant others included relationships with partner/spouse; children; parents; extended family and friends. These relationships varied between participants, depending on their age and circumstances.

Partner

Twenty-five of the 28 focus group participants were married, and 16 of the 18 interviewees were married or living with long-term partners. One of the interviewees had a long-term partner but they were living apart because of his work commitments in Sydney. Most of the participants' partners were working full-time in a variety of occupations including medicine, farming, other professions and businesses. A few of the participants' spouses/partners were working part-time or were not working in the paid workforce. The sample did not include any participants who were in same sex relationships.

Children

Twenty-four of the 28 GP participants of the focus groups had children, who varied in age from preschoolers to adults, while 15 of the 18 GP interviewees had children, who also varied in age from babies to adults. A few GPs had one child, one had four children, and with most having two or three children. A few GP participants had children who were away from home attending boarding school, but most of the children were living at home with the GPs. The sample did not include any single mothers with children living at home, although some of the GP participants referred to the experiences of single mothers working as female rural GPs, who were their colleagues and close friends.

Parents and extended family

Only a few GP participants had parents or extended family living near where they were living at the time of the interview. A few GPs had moved to the rural area partly because they had parents or other family living close by, and one GP participant's mother had moved to the area where she was so that they could be close geographically. One GP participant said she and her husband had moved to the large country town where they were because:

We've got my husband's mother and all his brothers and their families—a country family that have been here forever. (GP No 27)

However, a more common situation was described by this GP:

I have no family support here, whatsoever... My family are five hours away and [husband's] family are six hours away. (GP No 3)

6.3.3.2 Relationships with significant others

In this section, I will discuss the relationship between the domains of self and significant others. These relationships include interactions between self and partner, self and children, and self and extended family.

The female rural GPs involved in this study were not a homogeneous group, and their relationships with significant others (particularly partners and children) varied between individuals. Groups similar to those of the family oriented female medical students emerged on analysis of the data, with some GP participants being directly responsible for providing all family care and support, and others delegating much of the family care and support, usually, to people outside their nuclear family.

Roles in family

GPs who had partners and children had a range of different roles in their family: some taking most of the responsibility for household duties and childcare, and seeing themselves primarily as wives and mothers; and others sharing these responsibilities much more evenly with their husbands/partners.

GPs could be grouped similarly to the student participants into primary family carers, shared carers, and care delegators. Some saw their roles in the family as having 'evolved' and they did not necessarily see these roles as permanent, such as this older participant who had teenage children:

[Husband], sort of, is often looking at other things, it's largely dependent on at the moment; it will be he is the main breadwinner; that's the way we've evolved, so we do have that sort of traditional role happening. (GP No 28)

Primary family carers

Many of the GPs in this study were primary family carers who accepted the primary care of children as their responsibility, and also saw themselves as playing a major role in sustaining home life in a way that would provide care and support for their partners. So, in these families, the female rural GP took on the role of housekeeper and childcarer in the family, with their husbands being either 'other doctors or other professionals', and 'the major provider of income.' These GP participants saw their own capacity to work outside the home as being limited by these roles. For example, this GP spoke about her husband:

He's just assuming that I'm here, so there are sort of limits as a woman... if you choose that role, and I suppose I have. We could have a dialogue and have a few changes but we haven't. You know there are limits to how far you can push your career if you haven't got that same kind of support. (GP No 29)

Mostly, these GPs' husbands had their own demanding careers and some were often away with work; these women supported their husbands by ensuring that everything at home ran well, as described here:

[I] perform sort of a wife role but... in the sense that... I think the underlying assumption is that I am here. (GP No 28)

Other GP participants whose husbands were farmers ran the household while their husbands were 'off on a tractor or miles away'. Many primary family carers had chosen a rural location because they had 'followed my husband's work'. Some primary family carers said that if they had been in the city they would have undertaken specialty training, but had foregone the opportunity to become specialists so that they could be with their husbands who preferred to work in the country.

These GPs worked part-time, usually one or two days per week, using paid child carers. Most were reluctant to ask too much of their husbands, who worked full time, because they felt that their husbands needed time out, as this GP indicated:

[Husband] doesn't mind looking after them, it's not like he's the father that feels put upon if he looks after the kids because he's a really wonderful Dad, but I just feel if he's worked the whole full week and he's only got a few days to do things and just have a nap. (GP No 11)

Most primary family carers seemed satisfied with their role in the home, although some felt guilty about their inability to work longer hours.

Shared family carers

Shared carers also had a major role in the care of children, but they were able to share the care of children with partners whose work allowed them to be available to care for the children at least some of the time. A few GPs' partners did not work in the paid workforce, while the GP worked full time, but this was described as 'an unusual circumstance'. Many GPs' partners were involved in caring for children at some time: for example, caring for children while they had a day off from work during the week, or caring for children while the female doctor was working after hours, as described here:

My husband doesn't work on Mondays, so he can look after the kids, cos we couldn't get any childcare for that day, and he's actually quite happy with that. (GP No 3)

GPs who had this arrangement felt it was a good experience for the whole family, as discussed by this GP participant:

[Husband] got the advantage of seeing what it was like to be at home minding toddlers, and I was out there in the workforce for two full days. And I still remember sometimes coming/driving home sometimes at seven-thirty or eight at night and reaching [husband] on the doorstep tearing his hair out, saying, "I need a drink." (GP No 15)

The arrangement of shared care of children was common in families where both partners were working as GPs, although in these families it was usual for the male GP to work more than the female GP, and to take more responsibility for after hours work while the female GP 'looked after the children'.

Most shared carers worked part-time when their children were small, increasing working hours when their children started school, and many also used paid childcare. They tended not to see their own work as being as secondary to their partners' work, as primary family carers did.

Care delegators

Some GP participants who had children worked hours approaching full-time, even when their children were small, employing paid child carers for their children but still regarding the arrangements for childcare as primarily their responsibility. Some who were working full-time employed a 'full-time day nanny' or a child carer to work in their homes. They mostly had partners who were also working full-time or involved in demanding carers. At times, they had difficulty making adequate child care arrangements and sometimes took their child with them to work as described here:

You can't expect hubby, unfortunately, in our society... not all of them are happy to just be around to be the babysitter. Some are, but some aren't, and there's times when you have to take your child with you. (GP No 3)

These GP participants mostly took only a brief period of time off work after giving birth, with some returning to work in some capacity within weeks of childbirth, working out ways to combine the care of their babies, including breast feeding, with their working hours.

They saw the domains of work and significant others as being equally important in their 'Landscapes of fulfilment', speaking about 'juggling' the care of their children with work, and often feeling that there was conflict between the domains of work and significant others. This conflict shall be discussed in more detail in 6.3.7.2 Conflict in the 'Landscape of fulfilment'.

The relationships between self and their significant others, including partners, children, and extended family, were underpinned by the roles each of the GPs had in their families. However, some aspects were common to most of the GPs' relationships, whatever the roles of each partner in the family. For example, almost all described being supported by and providing support to their partners in some respects, and being responsible for and providing support and care for their children.

Self and Partner

GPs who were married or living with long-term partners mostly spoke about mutually supportive relationships where they supported each other in a variety of ways.

Support from partner

Most GPs spoke of their partners/husbands being their 'main personal support', with the degree to which they relied on their partners/husbands for personal support varying.

Some GPs worked closely with their husbands professionally, being in practice with them, and in these cases their husbands also supported them professionally, often providing the participant's share of after hours services for the practice. One described the way her husband and she worked together as follows:

He and I are very much a team... cos we've always worked together. We've worked together for 14 years... That has never been a problem; in fact, it works quite well. And, the patients like it, cos they see us as one person. (GP No 7)

However, most GPs felt that their husbands did not provide the same sort of support that was provided to their male colleagues by their wives, with some GPs indicating that their colleagues were able to work full-time because they 'are looked after at home'.

For the single GP participants, the lack of any support at home was particularly difficult with one saying:

It is really hard—like, everybody else has got a support person in their lives and there's no complaints. There's not even a consideration made for the fact that I'm trying to do this all alone. (GP No 10)

This lack of support for single GPs extended to practical issues, such as the preparation of food and housework, as well as the emotional support of someone with whom to talk problems over, as discussed by these GPs:

You come home at nine-thirty at night and you're just too exhausted to even cook. I've got plenty of money to buy food and it sits in the fridge. (GP No 10)

I keep saying I need a wife... I'm not unhappy with my situation but if I leave here at seven-thirty, which I often do to get home, and then cook your meal and then think, "OK, now what else have I got to do?" It's just really hard, there's no one to bounce things off... The guys, I think even the girls with families have other things to concentrate on... I talk to the cats. (GP No 17)

Support to partners

Most GPs also saw themselves as providing support to their partners/husbands, with the level of support they provided to their partners/husbands varying according the roles in the family. Primary family carers provided all the domestic support their husbands needed to maintain their careers, while care delegators were less able to provide the same level of domestic support (although they were usually responsible for employing housekeepers to do this).

Commitment

Some GPs talked about the commitment they had to their husbands, although they seemed to mostly assume that this was part of their marriage. Some had shown their commitment by 'following' their husbands, according to their husbands' work commitments. This GP described how she had relocated to the town where her husband had a business, and then started her own practice:

He had a business here; he was here a couple of years before me. I met him and moved here, and then evolved into working here because this was where I happened to be living. (GP No 26)

This scenario of the female GP locating to an area where work was available for her husband and then looking for work for herself was very common among the GP participants.

Self and Children

Support and care for

All of the GPs who had children saw themselves as having a major role in the care of their children, whatever their roles in the family were, although the way in which they provided care and support for children varied. While primary family carers saw themselves as 'mothers first and then doctors', shared carers and care delegators still saw themselves as providing much of their children's care. Most GPs had worked out ways to combine breast-feeding babies with their work: for example, one participant had breast fed some of the time and bottle fed her baby at other times, saying 'half breast-fed is better than not'. Some GPs had taken their young babies with them to work, although many commented on the difficulties of doing this as the child grew older. Even GPs

who were working full time thought that children 'want Mum if they're sick', and felt stressed trying to care for a sick child as well as meeting their work commitments:

If the child is sick, you're it, and if they're contagious sick. If they're not contagious, just simply trying to take care and that's an incredible stress, trying to sort of juggle patients' expectations. As a Mother, I find that was the most tearing thing of all, all the way along. (GP No 28)

Some GPs whose husbands shared the care of children spoke about their children's needs for a mother's care as well as a father's care, for example:

With children oftentimes dad might go to some of the things, but... it's Mum they also want, or it's not the same if Dad does it; they want Mum. $(GP\ No\ 1)$

GP participants with school-aged children also spoke about supporting their children with their activities at school.

Responsibility for children

Most GPs saw themselves as having primary responsibility for the children in their families, even if they were working full-time. One commented:

Quality of life and contributing to a normal happy family seem to be more the responsibility of women (GP No 18).

A common sentiment among GPs was that they felt driven by an 'overwhelming sense of obligation', and 'that mothering is never-ending, so is doctoring; you're doing both of them'. Their responsibility for children was a major factor determining the hours that many worked, with this mother being an example:

I don't work the four hours on Saturdays because I have very young children—it's my duty that I have to spend some time with them. (GP No 24)

Others limited their involvement in activities such as practice meetings because they felt a responsibility to be with their children when not doing clinical work, as described by this GP participant:

If I'm not at work I'm being a Mum, so it's not like I've got time to sit down and think about making a meeting, like, to make a time to meet the principals. (GP No 15)

Some GPs who worked in an all female practice saw their responsibility to their families as their primary responsibility and based their practice philosophy and structure on this principle:

One of the things we said very early on was that we wanted to be able to practice and at the same time continue our mothering, and the practice was not to replace that mothering. (GP No 23)

However, these GPs acknowledged that they worked in a situation where there were services other than their general practice that could cover an emergency situation, and that in smaller towns it would not be possible to work in this way.

Other GPs who worked full-time and had children found combining their work and family responsibilities difficult but saw it as 'part of the commitment' both to work and their children. In contrast, a GP who did not have children described herself as 'single and fancy-free', saying that she found it easy to have breaks away from work because she did not have childcare obligations.

Most GPs also saw their responsibility for children as extending to ensuring that their children had the opportunity to obtain a good education. For several GPs, this sense of responsibility meant that they would leave the rural community where they were living when their children reached high school age because of the lack of suitable educational opportunities in their home town, for example this GP who was planning to move to a capital city so her son could go to school there:

It's either move my son or stay here, and I can't—to me there's no battle with that one. (GP No 26)

Rewards

Most GPs did not discuss the rewards of being a mother, probably because they were not asked about them. However, some did indicate that they found motherhood rewarding, for example this GP who was talking about her choice of a career in general practice:

I might have done psychiatry. I did two units in London, but then got pregnant and it was all too hard and that was fine; I really enjoyed being a Mum. (GP No 28)

Self and extended family

As already mentioned, most GPs did not have any extended family living close by and felt that 'that lack of family and/or the distance from family' meant that it was difficult for them to either support their family or be supported by their family. A typical comment was made by a GP, who said:

I think family, sort of not being in contact with family, is a big, big thing; being so many thousands of kilometres across the other side of Australia from your brother and sisters, your cousins, and close family and your friends, I think is an isolating factor. (GP No 14)

For the few who did have extended family close by 'one of the main benefits [of living in a rural area] is that we've got family support here.'

Most participants saw the lack of extended family close by as contributing to a lack of social support, with one participant commenting:

I suppose one of the difficulties there is the social support. You know, we don't have Grandma around the corner. (GP No 28)

Some GPs' parents gave them support in whatever way they could despite the distances, for example staying with participants to provide childcare while the participants attended a conference. Other GPs attended CME events in the areas where their extended family lived, so that their family could baby-sit for them while at the conference. None of the GPs commented on their parents needing support, although some of them may have been quite elderly.

Thus, few GPs had any extended family living close by and most missed the social support that would have been available to them if they had lived closer to their extended family.

6.3.4 Significant Others' work/education

Significant others' work/education formed a separate domain in the GPs 'Landscape of fulfilment', with most GPs discussing the importance of this domain in relation to location choice.

6.3.4.1 Partners' work

As mentioned previously, some GP participants spoke about 'the spouse factor', which related to the work available for their partners/spouses in a rural area, which in turn effected whether participants would choose to live in a rural area, as described by this participant:

It's really important, I reckon. Really, it is so if you want to attract female GPs in the country, you've got to make sure the partner has a job. (GP No 3)

Some indicated that suitable jobs available to their husbands were limited to certain towns while, for themselves, general practice work would be available wherever they went, with this participant saying, 'We waited till he got a transfer, because I knew that there would be work for a female GP.'

While some were happy with the role of the primary family caregiver for themselves, they tended not to see this as sufficiently satisfying for their partners. For example, this GP who was separated from her partner because of his inability to find work in her rural community, said:

There's not much self-worth in taking care of someone. Like, you know, if I was a male and he was a female there probably wouldn't be a question. He'd be up here in an instant, but I can see that he's got his own self-fulfilment (GP No 10).

As already discussed, the nature and demands of partners' work also effected the time and energy participants could commit to their own work, so many whose partners were in demanding jobs, working long hours, chose part-time work.

6.3.4.2 Children's education

The GP participants had concerns that 'the choices are much more limited than in the city' in relation to children's education, which was part of this domain. The availability of suitable education for children affected GPs' location at different stages of their lives, although most GPs felt they had more options in relation to children's education than their partners' employment. The availability of schools and the types of schools available varied according to the location, with more remote areas having much more limited options and large country towns having a much greater range of educational facilities. Most GPs felt that the educational facilities available for their children in their towns were good at a primary school level, but some had concerns about the availability of suitable secondary schools, as expressed by this GP:

I'm very happy with education here. It is an issue when they start getting to upper high school. (GP No 23)

If they were unhappy about the secondary education available in their towns, some decided to either move to another location when their children commenced secondary school or to send their children to boarding school. However many considered:

It's a real dilemma for us to decide what should we do with them when they grow older... sometimes, you just wonder whether boarding schools would be the right choice for them. Certainly, you would have to show a lot more advantage to make up for not being able to grow up together with your children in that way. (GP No 18)

In addition, some GPs had concerns that 'from the financial point of view of sending them to boarding school is not a cheap venture at all.' GPs also felt that they needed to find the best option for each child, recognizing that 'not every school is right for every child, so sometimes you're looking for alternatives.'

In summary, the domain of significant others' work/education was a key aspect of the 'Landscape of fulfilment' model that influenced the female rural GP's location choice. For some GPs whose partners had demanding jobs, this domain also impacted on the way in which the GP practiced, for example the time the GP was able to commit to work.

6.3.5 Recreation

The final domain in the 'Landscape of fulfilment' was the domain of recreation, although for most GP participants this domain was discussed far less than the other domains, and appeared to be of less importance than other domains in relation to location choice. This relationship is depicted in Figure 6-6.

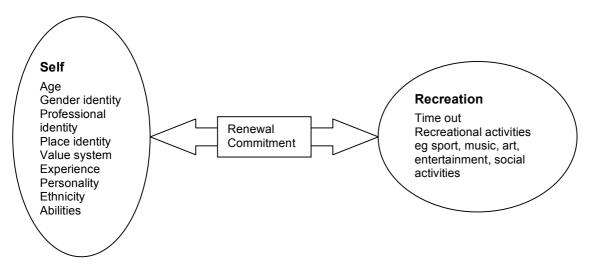


Figure 6-6 Aspects of recreation and relationship between self and recreation

6.3.5.1 Content of domain of recreation

The domain of recreation encompassed taking time out from work in a variety of ways, and included a number of recreational activities such as sport, music, art, entertainment, and social activities.

Time out

Some GPs expressed a need for time out from work and time to relax, describing their work as 'a very stressful job' and saying, 'You really need time

away from it.' Some spoke about the need for time out in order to maintain their mental health, such as this GP:

I'm also the one that takes the most leave, like I would be away from the practice at least six, if not eight weeks, of the year. And I find I go potty if I don't. (GP No 17)

Some GPs, especially those in remote communities, felt a need to go away to relax, but others found ways to relax and have time out without going away from their communities by having regular recreational activities in which they were involved locally.

Recreational activities

There were a number of recreational activities in which the GPs were involved, including singing in a choir, sport such as skiing and going to the cricket, bushwalking and camping, and entertaining and visiting friends. These activities provided them with much pleasure, as expressed here:

I'm in choir and I've been in a choir since I've first arrived here, and that's provided me with an enormous amount of enjoyment. (GP No 3)

For some, recreational activities provided an opportunity to meet people outside of work and socialise, such as this GP described:

I go bushwalking. I've done a lot of that in the last year or two. I've actually found people round here to go. And I've actually got someone to walk with at the moment. (GP No 17)

Some took extended holidays, when possible, and spent them on activities they really enjoyed, for example this GP who described her holiday plans:

I'm taking two months off next year to go to the cricket in Britain, England, and go down to the snow. I love the cricket. (GP No 33)

Others had a variety of farms, and their recreational activities involved working on their properties and farming their land.

6.3.5.2 Relationship between Self and Recreation

While some GPs saw recreation as an essential part of their lives, which provided the renewal they needed to continue to work, most expressed difficulty in finding time for recreation, seeing recreation as a lower priority than work and significant others. For a few, recreation involved a commitment to a long-term activity such as farming.

Renewal and commitment

Because of the demands of their work, some GPs felt that they needed rest to avoid 'emotional burn-out', as described by this GP:

When I was doing obstetrics, I used to sleep the first week whenever I was away; literally, couldn't do anything else but sleep, and then I'd relax and enjoy myself (GP No 14).

Another GP described how regular exercise helped her to cope with the demands of work:

The thing now that I cling to that helps me cope; it's exercise, and I mean I need that badly. (GP No 28)

A few had farms, which provided income as well as pleasure, and they committed considerable time and energy to their farming, for example this GP:

We're starting to get, we've got cash crops in flowers and fruit and we're now getting cash crops in herbs. Next year, we're hoping to establish a cash crop in culinary herbs as well. (GP No 31)

One GP intended only ever to work part-time in order to have sufficient time for her family and recreational activities, saying:

I think medicine will be three or four days, four days maximum, probably three depending on where I end up working and how much money I make. (GP No 27)

Lack of recreation

A common theme among GPs was: 'It can be very difficult to have another outlet at times.'

Many GPs did not mention recreational activities, at all, and described having to cope with 'tiredness because the hours have to be worked longer and then you have your family life as well'. Some discussed a lack of recreational time, because 'work has been so overwhelming that there hasn't been much opportunity.'

Others felt 'a bit guilty about having time off because 'it does make it very stressful on the few people that are left [in the practice].'

Thus, while many GPs recognized a need for time out and recreation, most had difficulty spending time on purely recreational activities.

6.3.6 Other relationships in the landscape

As well as relationships between the rural GP and the domains of the landscape, a few other relationships within the landscape were discussed by the GPs and they are discussed here, in order to complete the discussion of the whole 'Landscape of fulfilment'. These relationships are significant others and place, and significant others' work and work.

6.3.6.1 Significant others and place

A few GPs discussed some aspects of place, which they saw as important for their significant others. Some felt that physical and social aspects of the rural environment offered 'more opportunities for your children to be able to go and visit their friends on properties and see things like that.'

One GP whose preference was to continue living in her rural community, and whose child suffered from a disability, thought:

As [child] gets older, we might need to move back to a city because he won't be able to drive, etc, so that to give him accessibility because it would be probably quite hard in a rural area... We don't want to do that, I mean, it's not what we would choose to do. (GP No 31)

Other GPs indicated that their partners/spouses enjoyed the rural environment in which they lived, with one saying her husband 'thinks it's fantastic here', and another indicating that they had moved to the coastal area where they lived so 'my husband can go surfing'.

Thus, for some participants, the relationship between place and significant others clearly had a bearing on their continuing location in a rural area.

6.3.6.2 Significant others' work and work

For the four interview GP participants whose partners/husbands were GPs working with them in the same practice, there was a direct relationship between participants' work and significant others' work. Mostly, this was a positive relationship, which provided the GP participant who worked part-time with more input into the practice than she would have if her husband was not a practice principal. In all of these cases, the GP's husband also provided her with support in meeting her work responsibilities, such as the GP husbands undertaking the GP participants' share of the after hours work. However, at

times, difficulties were encountered if they were both required to provide after hours services at the same time, or because of the need for childcare when they both attended the same professional development activities.

6.3.7 Balance and conflicts in the 'Landscape of fulfilment' and retention in rural practice

Having described and discussed the 'Landscape of fulfilment' in relation to the female rural GP participants in the previous sections, I will discuss how the GP participants sought to find balance within their individual 'Landscapes' and how this process of finding balance related to their retention in rural practice.

6.3.7.1 Retention of female rural doctors: An analysis of second female rural GP study

Because the GPs interviewed in the second female rural GP study were asked about whether they intended to stay in their current location for the next five years, I was able to explore the relationship between the GPs finding fulfilment in the various domains of the 'Landscape of fulfilment' and their retention in rural general practice. There was a wide range of answers to the question about intentions in relation to future practice and location, and these answers show how complex defining retention of rural GPs can be. One GP registrar was very unhappy in rural practice because of her husband's inability to find work, as well as separation from her teenage daughter, and would definitely enter urban practice as soon as she was able; while the other GP registrar (with her GP registrar husband) was interested in rural practice, but they were yet to decide where they would settle. One GP was leaving the town where she was working, but would stay in the region; one had ceased working in medicine altogether; and one was retraining for a specialty, which would necessitate time spent away from her rural town and eventually working in a larger rural town. Thus, none of these three participants was really leaving their rural communities, and yet they were not retained in rural general practice. Two GPs were leaving the rural areas where they were currently, mainly for their children's education: one to go to a capital city, and the other to go to a less remote rural area. Seven of the GPs intended to stay in the towns where they were currently located for the next five years, but two had recently left the practice where they had worked for many years to start their own practice, and

one intended to change practices in the near future. Of the seven staying in rural practice, two anticipated leaving after five years: one because of her children's education; and the other because of her child's health needs.

All of the GP participants, except for a registrar who was undertaking a compulsory rural term, felt a fairly strong attachment to place and, although some felt lonely at times, most were comfortable and well settled in their communities.

6.3.7.2 Conflict in the 'Landscape of fulfilment'

For some GPs, all the domains of the 'Landscape of fulfilment' were congruent and, although they had some areas of dissatisfaction, they felt reasonably fulfilled in all areas of the 'Landscape'. These GPs were mostly staying in rural practice, but included those planning to leave for children's education. For others, there was significant conflict between the domains of work and significant Others, related to the responsibilities the GPs had both to work and children. For some, this conflict was extreme and is summarized by a focus group participant, who commented:

I mean we are endeavouring to do two jobs. (GP No 6)

For some GPs, the conflict was a physical reality related to child bearing and breast-feeding, and affected their work quite directly. For example, this participant explained why she stopped practicing obstetrics when she was expecting a baby herself:

There was the real loyalty problem of there's your patient up there, you've got to be with your patient, but your baby's dying to be breast fed at home. (GP No 1)

Those who provided after hours services described 'having a small child and being on call' as 'a total juggling act'. However, they felt 'that they should be able to do all these things'. While some GPs discussed how they thought this conflict was partly a result of 'that desire to do everything for everybody and be the best at it', some referred to the work culture and environment of rural medicine as often being unsympathetic to their having responsibilities outside of work. For many, this conflict between work and significant others reflected an interrelationship between their gender identity and professional identity and the culture of rural general practice.

6.3.7.3 Professional identity and gender identity

A number of dimensions of GPs' relationship with work formed a key part of their professional identity. As doctors, the GP participants saw themselves as committed to and responsible for caring for their patients and cooperating with their medical colleagues. While the female GP participants saw these aspects of their professional identity as shared with their male colleagues, many spoke of content and style of their work as being different from their male colleagues. Many GP participants also discussed practicing in what they regarded as a 'female doctor' working style, which involved 'listening' to patients and spending more time with individual patients. Some GPs felt that 'female doctor' roles were being imposed on them by the community because of patient choice and expectations that they, as female doctors, should work in a particular way, but most were willing to accept this type of work as part of their identity as female GPs.

Some GP participants perceived the culture of rural general practice to be at odds with their feminine professional identity. This meant that their feminine style of medicine often did not fit with their colleagues' expectations of a rural doctor, resulting in these participants feeling undervalued.

While these GP participants also saw rural general practice culture as valuing 'heroism' and 'soldiering on', even at great cost to themselves, many were also mothers of young children and being responsible for the care of children and family was a key part of their gender identity, so their commitment to their families limited their ability to 'soldier on' and sacrifice themselves for their work without also sacrificing their families. Again, for these GP participants, there was a conflict between their gender identities and what they saw as the culture of rural general practice.

While their place identity involved a strong attachment to the rural physical and social environment, many participants found it difficult to reconcile their gender and professional identities with the working environment in which they found themselves. Interactions between the various aspects of identity for the female rural GPs and the domains of the 'Landscape of fulfilment' are illustrated in Figure 6-7.

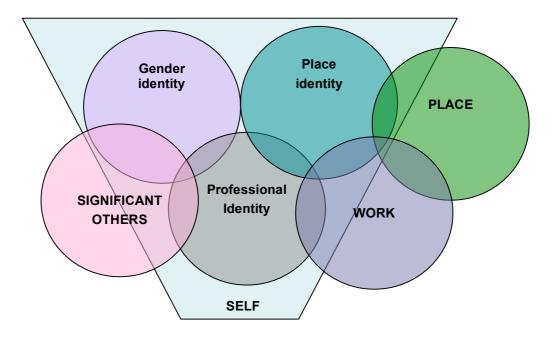


Figure 6-7 Aspects of identity for female rural GPs

6.3.7.4 Fulfilment

Thus, many GPs described conflict and difficulty in reconciling the domains of their lives, with some indicating that they had not expected the degree of conflict they experienced, as this GP commented:

You didn't know that you'd end up doing two jobs and that you couldn't back out of either. (GP No 14)

Some felt that their attempts to 'be the best mother, the best doctor', had been costly to them in terms of their health, saying they 'at times have felt extremely burnt out with it'. However, some GPs discussed how they were now 'in a constructive way trying, with the end result, to work out if there is a better around.' While for some GPs this conflict remained unresolved, others resolved it in a variety of ways. Some, who wanted to stay in their rural towns because of their partner's work and their own attachment to place, had resolved this mismatch between their gender and professional identities by leaving that work environment for another. Participants who used this strategy included: two, who had started their own practice, which was structured to accommodate their family and work commitments; one, who was retraining for a specialty in which she was unlikely to have this conflict; and one, who left working in medicine altogether to retrain for another profession. Another intended to resolve it by leaving the town where she was working as a solo GP to work in a

practice and town nearby, where she would have more support. One, who was a practice principal attempted to influence the predominant culture in her practice by participating in discussions at practice meetings and advocating for changes, which would be more supportive to her and her part-time female colleagues. One felt that, at a personal level, she had come to accept her own limitations and her current situation:

Personally, I have come to the conclusion that... I'm just aiming at good enough, I'm not after best.... What I have had to give away from me, part of personality and the things I would have liked to develop or may have liked to develop, the rivers been deviated and perhaps that's not such a bad thing anyway. (GP No 9)

6.4 COMPARISON OF THE DOMAINS AND INTERRELATIONSHIPS WITHIN 'THE LANDSCAPE OF FULFILMENT' MODEL FOR THE MEDICAL STUDENTS AND FEMALE RURAL GPS

While the domains in the 'Landscape of fulfilment' for the female rural GPs and the medical students were similar, there were some differences in emphasis and in the ways in which the domains interacted with each other for the GPs when compared with the students. These differences probably reflect differences in the perspectives of a person actually experiencing a situation, compared to a person who has only been able to observe the situation without experiencing it directly. For example, the GPs were able to be quite specific about most aspects of rural life and practice, while the students were often speaking hypothetically. In addition, it is possible that age differences between the GPs and the students could have a bearing on some issues.

I shall now discuss in detail the differences between each domain for the GPs and the students.

6.4.1 Place

The major difference for the domain of place between the students and GPs was the way in which the students and GPs related to place. The students' 'comfort zone' was a key dimension of their relationship with place, which affected their location choice. However, the key dimension of GPs' relationship with place affecting retention was 'attachment'. This difference is very much a reflection of the different perspectives from which the GPs and students were viewing rural life.

The students' expectation of a number of the dimensions of a rural doctor's relationship with place was very similar to the GPs' actual experiences. For example, the GPs' descriptions of their experiences of belonging to their rural communities were very similar to the students' descriptions of their own expectations. Similarly, the difficulty some of the GPs had finding a suitable peer group in their communities was anticipated by the students, in particular female students.

A practical issue the GPs discussed frequently, but which was infrequently mentioned by the students, was the availability of childcare. It is possible that this reflects the differing priorities of most of the GPs (who were mothers of young children) and the students (who mostly had not had any children yet).

Thus, while the students and GPs had similar perceptions of many aspects of the domain of place, the GPs spoke about some aspects in more depth than the students did.

6.4.2 Work

As with the domain of place, the domain of work encompassed a number of common aspects for both the students and GPs. The GPs and students had similar perceptions about rural work content and about some of the dimensions of the relationship between self and work—in particular responsibility, the application and maintenance of medical knowledge, caring and giving, and satisfaction—demands from work.

However, there were a number of aspects of the domain of work and dimensions of the relationship between work and self, which the GPs discussed in depth and which were either not mentioned at all by the students or were mentioned only very briefly. These aspects were: rural medical culture, 'female doctor' work content, economic aspects of work, and practice structures. The dimensions of their relationship with work, which only the GPs perceived as important and discussed in depth were: economics, appreciation and respect from colleagues, understanding each other, commitment to work, cooperation with colleagues, work placing demands on them, and work posing a danger for them.

One of the major differences between the female students and female rural GPs related to their professional identity. While the GPs perceived major aspects of their work as relating to their gender, the female students did not have this same perception. For example, the GPs discussed 'female doctor' work content in some depth but none of the students mentioned this aspect of work. In addition, most GPs had quite strong perceptions of rural medical culture as being masculine but none of the students referred to rural medical culture, although a few referred to 'teaching hospital culture'. Some GPs experienced a mismatch between their gender identity as female doctors and rural medical culture, with some feeling marginalised and a few feeling that they were judged and rejected as being inadequate doctors.

Another aspect of work, which was important to the GPs but was not perceived as important by the students, was practice structures. Although student participants were asked specifically about practice structures in which they would prefer to work, most of them had given this aspect of work very little thought, seeing it as being something which was too far in the future and which they would learn about and think about later. Mostly the students could only indicate a preference for working in the public or private system, and usually showed a preference for group rather than solo practice. In contrast, all GP participants discussed the structures within which they worked and to which they related as a key aspect of work.

In contrast to the students, who tended not to discuss economic aspects of work at all, all GP participants discussed economic aspects of work as being a key aspect of work, with many of them discussing economic aspects of work as a cause of dissatisfaction. Some had a perception that their relatively low incomes were a reflection of the way in which some of their colleagues perceived the mental health and women's health work, which many female GPs undertook, as being of lesser value than procedural and emergency work. Many of the GPs also discussed a lack of appreciation and respect from male colleagues, an aspect of work that was not referred to at all by the students.

Thus, the students' perception of the domain of work tended to focus much more on the positive aspects of rural practice, with the students appearing to be unaware of, or not interested in, some of the difficulties that were discussed by the GPs. It is possible that is a reflection of the idealism of youth, or that it

relates to a lack of experience in the working environment of the GPs, or maybe a combination of both.

In contrast, the female students had expectations that they would face very similar conflicts between the domains of work and significant others to those described by the GPs.

6.4.3 Significant others

The GPs' domain of significant others was very similar to that of the students, with both the GPs and students regarding relationships with partners and children as being the most important to them. The female rural GPs involved in this study were not a homogeneous group (in the same way that the participants in the medical student study were not a homogeneous group) and their relationships with significant others, particularly partners and children, varied between individuals. Groups similar to those of the family oriented female students emerged on analysis of the data, with some GPs being directly responsible for providing all family care and support, and others delegating much of the family care and support to others outside the family. GPs in all of these groups saw themselves as being primarily responsible for the care of children in the same way the female students did.

As already mentioned in the previous section on work, the female students and some of the male students had expectations of the kind of conflict between their family responsibilities and work responsibilities that the GPs actually experienced.

As with the students, significant others' work/education formed a separate domain with most GPs discussing the importance of this domain in relation to location choice.

6.4.4 Recreation

As with the students, the final domain was the domain of recreation, although most GP participants discussed recreation far less than the other domains, and far less than the students did. It is likely that the reality of combining rural practice with family responsibilities left many of the GPs with little time for recreation. It is also possible that this reflected age differences and generational

change with the students, who were mainly from a much younger generation than the GPs, perceiving recreation as a much more important part of their lives than the GPs.

6.4.5 Priorities and balance in the 'Landscape of fulfilment'

The GPs sought balance in the 'Landscape of fulfilment' in a way similar to that of the students. For some of the GPs, all the domains of the 'Landscape' were congruent, as they were for some of the students. Most of the GPs felt reasonably fulfilled in all areas of the landscape, although many had some areas of dissatisfaction often relating to the domain of work. Most of these GPs had come to accept that these areas of dissatisfaction as a part of life, although some were proactively attempting to change them.

CONCLUSION

The 'Landscape of fulfilment model, including aspects of the domains and interrelationships between the domains for female rural doctors, is shown in Figure 6-8.

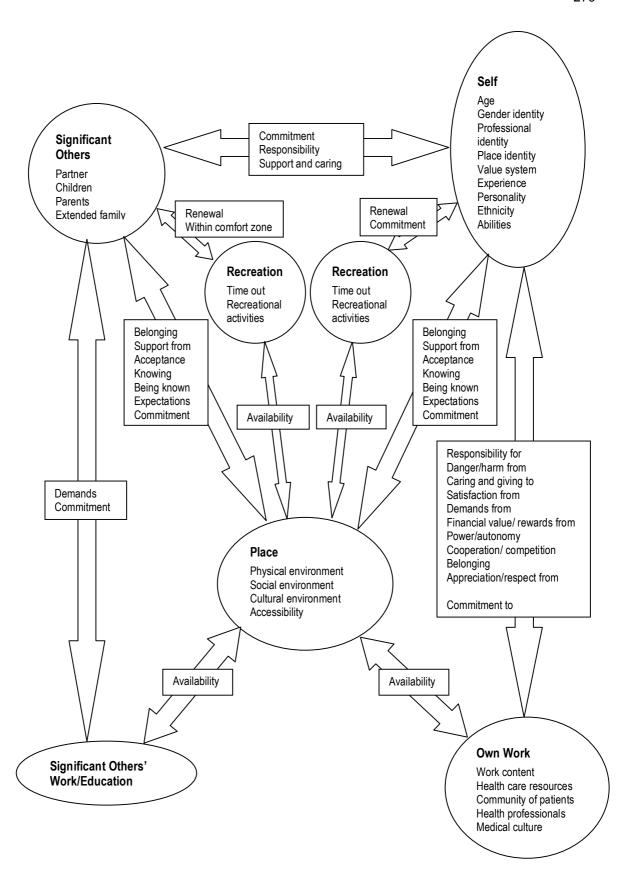


Figure 6-8 The 'Landscape of fulfilment' model for female rural doctors

The domains of 'The Landscape of fulfilment' model, which was developed initially from the data from the student study, do encompass the experience of

the participants of the female rural GP studies, with some domains encompassing a greater range of issues for female rural doctors than for students, and the differences in the various interrelationships between the domains reflecting the reality of working in rural practice for female GPs. This analysis shows that, for many GP participants, there was conflict between the domains of work and significant others; that many participants had difficulty in reconciling their identity as female doctors with what they perceived to be the masculine culture of rural general practice; and that some participants found the social environment of the rural communities where they lived to be, at times, intrusive into their privacy and, at other times, socially isolating. At the same time, most had a strong attachment to place, enjoying the rural physical environment and belonging to a rural community. Some GPs had resolved the conflicts they experienced in a variety of ways, including acceptance of a less than perfect situation, attempting to change the culture in which they working, and leaving their working environment for another.

As shown by the analysis in this chapter, this model provides a basis for understanding how place, professional, and gender identities interact for female rural GPs. The results showed how conflicts between the different aspects of the female rural GPs' feminine identity and their experience of the rural general practice environment affected their location choice. It also showed how the female rural GPs' attachment to place and commitment to their partners often overrode concerns they had about the domain of work, so that they continued to work in rural practice despite feeling some dissatisfaction with their work situation.

In order to further validate this model and to explore the possibility of its application more widely in rural medical recruitment and retention, it is appropriate now to place the model in the context of broader rural medical workforce recruitment and retention research. Thus, in the next chapter, the fit of the 'Landscape of fulfilment' model with the current rural medical workforce recruitment and retention literature will be discussed.

This model could be used to develop retention strategies for female rural GPs, which could attempt to modify the structures and situations that contribute to the conflicts within their 'Landscapes of Fulfilment', and at the same to develop

those aspects of work and place that contribute to their fulfilment. These strategies will be discussed in the final chapter of the Thesis.

CHAPTER 7 DISCUSSION OF 'LANDSCAPE OF FULFILMENT' MODEL IN RELATION TO THE RELEVANT LITERATURE

7.1 AIMS OF THIS CHAPTER

In the previous chapters a model for understanding rural medical recruitment and retention, the 'Landscape of fulfilment' model, has been developed using a series of qualitative case studies. The findings of the initial longitudinal study on medical students were used for initial development of the model, the model was tested for robustness against a number of medical student cases and the data from two female GP studies were explored in relation to the model to see if the model could have application in relation to retention of female GPs in rural practice. This analysis has shown that the model is applicable to the perspectives of a variety of students and that is applicable to the experience and perspectives of a variety of female rural GPs. In this way this model is flexible enough to be applicable for understanding both rural medical recruitment and retention.

In this chapter the model shall be checked further for its robustness and broader applicability by reviewing it in the context of the rural medical workforce literature, the literature on women in medicine, and the literature about place identity, professional identity and gender identity in the medical profession. The way in which the model brings together these divergent streams of the literature to add to an understanding of how place, professional and gender identity interact and influence medical students' and female rural GPs' location choices shall be explored. The way in which the 'Landscape of fulfilment' model fits into this literature shall be checked and the robustness of the model will be tested by exploring how the model fits with current thinking on rural medical recruitment and retention and the currently available literature.

The questions which will be discussed in this chapter are:

- Does the 'Landscape of fulfilment' model encompass the issues identified in the rural medical recruitment and retention literature?
- Does the 'Landscape of fulfilment' model provide a means to understand the complexities of the interrelationships of factors identified in rural medical recruitment and retention literature?
- How does this model relate to conceptual frameworks previously developed?
- How does this model relate to literature on place identity, professional identity and gender identity in relation to the medical profession and rural doctors?
- What does this model add to the rural medical recruitment and retention research?

7.2 MODEL IN RELATION TO RANGE OF ISSUES IDENTIFIED IN RURAL MEDICAL RECRUITMENT AND RETENTION LITERATURE

7.2.1 Fit of recruitment issues within the domains of the 'Landscape of fulfilment' model

In the literature review, in chapter 1, 6 sets of factors were identified as being related to the recruitment of doctors to rural areas. These were the rural background of doctors/students; rural experience of doctors/students after childhood; gender and age of doctors/students; family and partner factors; work factors; and location factors such as lifestyle and social environment. The literature review showed that rural background was a rural workforce predictor[15, 22, 29, 45, 61, 107, 120, 316, 350, 359, 360], and there was an association between rural practice and undergraduate or postgraduate rural experience[29, 43, 74, 156, 176, 177, 361, 362], although it was unclear whether this was a cause/effect relationship. Male doctors were more likely to enter rural practice than female doctors[7] but male and female medical students had similar attitudes to rural practice[167]. There was evidence of family relationships[86, 88, 119], the nature and demands of the work available[83, 147,

363], and the available lifestyle [78, 169] and social environment [71, 86, 185, 352] being either negative or positive influences on location choice. However the relative importance of family, work and lifestyle issues was unclear.

Hays et al[34] discussed the finding that doctors with a rural background had 'an emotional connection with, understanding of and commitment to the welfare of the rural community' (Page 174), but the role of this connection in rural recruitment had not been explored in depth.

In this Thesis the relationship between the individual (self) and place was explored and the concept of 'comfort zone' in relation to place developed from the research data. This concept forms the basis for understanding the tendency of rural background doctors to work in rural areas, as rural areas are within their comfort zone, and some have an attachment to 'place'. The influence of rural experience after childhood on the uptake of rural practice can also be understood, using this concept, as the research demonstrated that the 'comfort zone' of urban background students can broaden in response to their experience in a new place, so that some urban background doctors enter rural practice. Similarly, rural background students often broaden their 'comfort zone' to encompass urban areas, while they are studying in urban environments, so some stay in urban areas after their training. In addition, other areas of the 'Landscape of fulfilment' come into play, especially the domains of work, significant others and significant others' work, so that even though some rural background students may have an attachment to a rural location, this is overridden by their relationships with work and significant others.

Other factors identified as being influences on doctors' location choice including family relationships, the nature and demands of the work available, and the available lifestyle and social environment are encompassed by the domains of the 'Landscape of fulfilment' model.

So, the model not only encompasses the research findings on rural medical recruitment in the literature, but also provides a basis for a new understanding of some aspects of the literature.

7.2.2 Fit of retention issues within the domains of the 'Landscape' model

The literature review identified a number of positive and negative aspects of rural life and work that influence retention of rural doctors. These were positive aspects of rural practice (variety of work, relationships with patients, professional autonomy, financial issues)[8, 17, 33, 38, 64, 85, 120, 177]; negative aspects of rural practice (Excessive workload and on call work, difficulty accessing locums, remuneration, professional isolation, community expectations relating to availability as a doctors, lack of easily accessible CPD)[8, 17, 32, 38, 64, 85, 120, 177]; positive aspects of rural life (rural lifestyle, rural community relationships, opportunities for family)[33, 42, 82, 120, 141, 186, 364]; and negative aspects of rural life (Limited career opportunities for spouses/partners, limited educational opportunities for children, lack of anonymity, social isolation)[1, 32, 87]. As with rural recruitment the way in which these aspects of rural life and work interact to influence rural retention was unclear.

The 'Landscape of fulfilment' model encompasses all the factors that have been identified as influencing rural medical retention in the literature.

The domain of place encompasses rural lifestyle, rural community relationships, lack of anonymity and social isolation. The domain of work encompasses the variety of work, relationships with patients, professional autonomy, financial issues, excessive workload and on call work, difficulty accessing locums, remuneration, professional isolation, community expectations relating to availability as a doctors, and lack of easily accessible CPD. The domain of significant others encompasses family issues. The domain of significant others' work/education encompasses limited career opportunities for spouses/partners, and limited educational opportunities for children.

However, the model also provides a way of understanding the relative importance of each of the influences listed above other than as being simply positive and negative factors. So, that rather than rural lifestyle and rural community relationships being positive or negative factors, the individual has a relationship to the domain of place, which can become a deep level of attachment. The analysis of the data also provided some understanding of why

some aspects of work or place have different levels of importance for different groups. For example female GPs who were 'primary family carers' regarded the availability of work for themselves differently from other female GPs, who were 'care delegators' and from doctors who were 'career oriented'.

So, that the model not only encompasses the issues identified in the rural medical retention literature, but also provides a basis for understanding some of the complexities related to rural medical retention.

7.2.3 Fit of female rural GP issues and female doctor issues with the domains of the 'Landscape' model

As discussed in Chapter 1 the literature review showed that many of the concerns of female rural GPs about rural life and work were similar to those of male rural GPs. Areas of concern to female rural GPs and not male rural GPs were role conflict, apprehension about work related violence, sexual harassment and sex discrimination. However, these issues were of concern to female doctors across the wider medical profession. So, from the literature it appeared that both the sex of the doctor and location of the doctor contributed to issues that were of concern to the female rural doctor.

As with the rural medical recruitment and retention literature the 'Landscape of fulfilment' model encompasses all the issues identified as being of concern to female rural doctors, and in addition provides a useful tool for understanding some issues. For example role conflict can be understood in terms of a conflict between the responsibilities of the individual for aspects of the domains of 'work' and 'significant others'. Using the model the issues of sex discrimination can be understood in relation to the relationship between self and the domain of 'work', where the culture of the medical profession forms part of the domain of work, and is a predominantly masculine culture.

So that the model encompasses not only the issues, identified in the literature on female rural GPs and women in medicine, but also provides a basis for understanding some of the ways in which gender and rurality contribute to some issues about which female rural GPs have concerns.

7.3 MODEL IN RELATION TO OTHER MEDICAL RECRUITMENT AND RETENTION FRAMEWORKS

7.3.1 Decision making frameworks

As already discussed some researchers have sought to understand rural retention and recruitment in relation to decision-making frameworks.

For example, Humphreys et al[8] used a literature review to develop a rural workforce decision making conceptual framework, which mainly refers to retention but also considers recruitment, and developed the notion of 'balance' where a doctor seeks a match between internal aspirations and the external environment. In their model the individual's aspirations and values as well as his/her family relationships are part of the internal environment, with the external environment encompassing various aspects of the physical, social, and work environment at which the doctor is located. Dissonance between the doctor's needs and aspirations can either be resolved by modifying influences to leave or if unresolved can result in the doctor leaving the situation.

Similarly the 'Landscape of fulfilment' model describes a structure within which the individual seeks this 'balance', and within which the processes preceding decision making can be understood. The 'Landscape of fulfilment' model develops the notion of the 'self' as encompassing 'internal aspirations and values', with the other domains encompassing aspects of life and work within which the individual seeks the 'balance' or 'fulfilment'. The model provides a structure, within which more than one issue can be important at the same time, and allows for the importance of particular issues to vary over time, according to circumstances and between individuals. The structure of the model allows for the individual to have congruence in all or most aspects of his/her life; to experience conflict between the domains and within the domains without this conflict resulting in action, or a decision; and for the individual to resolve the conflict by processes such as compromise. Thus this model builds on Humphreys' et al's work[8] by providing a greater understanding of the processes underlying the rural doctor's location choice. It also provides a way of understanding differences within demographic groups for example rural background and urban background students and doctors.

Other decision making frameworks such as those developed by Feely[80] and by Somers[293] drew on Fishbein and Azjen's Theory of Reasoned Action[292], and are based on behavioural science theory. However Feely acknowledged the limitations of this approach and suggested that qualitative methods would provide a way to avoid oversimplifying and compartmentalising factors influencing doctors' retention decisions[80]. The 'Landscape of fulfilment' model is not inconsistent with the findings of these researchers, but takes a different approach and has a different focus from the work of these researchers, and does not seek to develop a way of predicting intention quantitatively, so is able to incorporate some of the complexities of rural recruitment and retention more easily. Rather than focusing just on decision making the 'Landscape of fulfilment' provides a means of understanding more broadly how the GP copes with dissonance and lack of balance in their social world, and places their perceptions and actions in a broad social context.

7.3.2 Frameworks incorporating concepts of Place

While other researchers considered the role of place in relation to rural medical workforce retention, Cutchin developed the concept of place as part of a conceptual framework for understanding retention[25, 82].

In his research on rural medical retention, Cutchin explored his data collected from male GPs in the US state of Kentucky, with a focus on the process of 'place integration' and developed a framework, which included the domains of self, medical community and the community- at-large which were connected to each other by the domain of place[25, 82]. Cutchin's research focused on retention, and was conducted with a population of 14 male doctors, who were all aged over 30 in 1997, and whose wives mostly did not work outside the home (11 of 14) or worked part-time (3 of 14)[25]. Cutchin was primarily interested in the relationship between rural doctors and place, and how the doctors became integrated into place[25]. His domain of place encompassed a number of aspects of the doctors' work as well as relationships with community, which did not relate to work. His domain of self included family relationships, and his framework did not include a separate domain for 'immediate family'.

So while place is a key element in both Cutchin's framework and my model, there are a number of differences between the two. The 'Landscape of

fulfilment' model differs from Cutchin's work in taking a broader approach, with a focus on both recruitment and retention, and with less detailed development of the processes involved in 'integration'. It is based on research conducted on a different population of students, and female rural doctors. The differences between his framework and my model reflect both the differing foci of the research, and also generational change and gender differences in the populations of research participants.

My model includes a separate domain for work, which encompasses a number of aspects, which Cutchin included in the domain of place (for example confidence in medical abilities; challenge and diversity of medical work; and respect of medical community)[25]. While my model recognises that there is a close connection between a number of aspects of work and place, separating the domains for 'work' and 'place' provides a means to explore some aspects of the doctors' work in relation to both place and gender, and to tease out those aspects of the doctors' relationship with work, which relate to gender, those which relate to place, and those which relate to both.

Another key difference is that Cutchin included the doctors' families within the domain of self, stating that 'the physician's self is closely tied to his/her spouse's and children's selves' and that 'the family needs to, in most cases, remain coherent and content for integration to proceed'. He describes one case study, where the doctor's wife gave up her professional career, taking up voluntary work in the community, so that she also became integrated in the community in the way the doctor had. Cutchin's inclusion of family in the physician self is likely to reflect the older male population on whom Cutchin's research was undertaken. Most of Cutchin's participants' wives did not have careers, independent of their doctor husbands, and all aspects of their lives were closely integrated with their husbands' lives. In contrast, many of the student and female rural GP participants in my research saw their spouse's/partner's needs, work and interests as being quite separate from their own. So it was appropriate to include separate domains for 'significant others' and 'significant others' work/education' in the model developed from my data.

Because recruitment is explored in my research, from the data on the relationship of the student/doctor to 'place' the concept of 'comfort zone' was able to be developed in relation to recruitment as part of my model. The

concept of 'attachment' to place, which is developed in relation to retention in my model is similar to Cutchin's concept of a doctor being 'integrated with place'. However, Cutchin focuses on the process by which 'place integration' occurs in far more depth than my research does.

Thus, both Cutchin's framework of 'Experiential Place Integration' and the 'Landscape of fulfilment' model view the relationship between self and place as a key aspect of understanding rural medical workforce retention, exploring 'the social processes that lead to it (retention)'[25]. Cutchin concluded in one paper that his study had not 'adressed to any great extent many of the myriad cultural, political, economic, ethnic, class and gender components of place integration'[25]. The 'Landscape of fulfilment' model, being based on data from a younger population, and from female doctors explores some issues relating to these gender differences and generational change, which Cutchin was unable to explore.

7.4 MODEL IN RELATION TO THE LITERATURE ON PLACE IDENTITY, PROFESSIONAL IDENTITY AND GENDER IDENTITY

7.4.1 Place identity

Cutchin discusses 'place identity' as being a principle, inherent in the process of integration[25]. He refers to identity as being 'the coherence of self in its relation to another person, social group, community or environment' (Page 1163), and considers the doctor's identity to be 'redeveloped in the process of place integration' [25]. He sees rural doctors' identity as being initially centred on the medical practice, and hence sees place and professional identity as being very closely intertwined.

In the 'Landscape of fulfilment' model the domains of 'work' and 'place' are separate, but related. While these separate domains could, perhaps, in part be seen as relating to Cutchin's domains of the 'Medical community' and the 'Community-at-large', the data, collected from the population, being investigated in my research also appear to have had a different experience from Cutchin's participants in their relationship to place. For example, some female rural GP participants felt very much that they belonged to their communities

and had a strong commitment and attachment to their communities, but felt that in some respects they did not 'belong' in the practices, in which they worked, because they felt a conflict between their feminine identity and the masculine culture of the their work environment. In this respect, the domains of 'work' and 'place' were separate for them, although they were still interrelated. Some female GP participants had developed their relationship with the rural community prior to developing a relationship with their practices, as they had followed their husbands' work, and become part of the community, prior to starting work themselves, and some either had time away from work, or worked very part-time on arrival in their rural communities. For both the student and female rural GP participants in my research, place identity had components which related to both professional and gender identity; while professional identity had components which related to both place and gender identity.

Cutchin proposed that 'there is a temporal continuity to integration' suggesting that there is a continuum between recruitment and retention[82]. This is consistent with the student data where the students' relationship with place was in the early stages of development. The students were mostly at a point in their lives, where they were not settled at a particular location, and where change in their place and professional identities was occurring. While some were very flexible about their future location, most identified definite limits to their 'comfort zone' with some considering themselves to be a 'city girl/boy' or 'country boy / girl'. However, most had not identified an exact location where they would settle in the future, and in this respect most did not have a strong attachment to place or a strong place identity at this stage of their lives.

Thus the 'Landscape of fulfilment' model separates place and professional identities, while recognising that they are connected, thus reflecting the experiences of the female rural GP and student participants in these aspects of their lives.

7.4.2 Professional and gender identity

Sinclair investigated the development of professional identity in medical students as they progressed through their medical training[311] and identified a number of professional dispositions which medical students acquire as they train to become doctors. These dispositions included Knowledge, Experience,

and Responsibility, Cooperation and Competition, Idealism, Economy and Status. The dimensions of professional identity emerging from my research data are similar to the dispositions of students to professional identity which Sinclair found in his study of the development of professional identity medical students[96].

The professional dispositions which he describes as being acquired by the students as they progressed through medical school include knowledge, experience, responsibility, cooperation and competition, idealism, economy and status[96]. These have a number of parallels in the dimensions of the relationship with work, which the student participants in my study describe (responsibility, idealism, financial necessity, cooperation/ belonging, and satisfaction). Most of the dimensions of the relationship of the GP participants with Work in my study also fit well with Sinclair's dispositions. Sinclair's disposition of responsibility relates to the dimension of responsibility; knowledge and experience to application and maintenance of knowledge and skills; idealism to caring and giving, and commitment; cooperation and competition to cooperation/competition and understanding each other; economy to financial value/rewards; status to appreciation respect and power/autonomy.

In both Sinclair's and my research the students regarded having responsibility for the care of patients as a key component of professional identity[96]. Similarly the female rural GP participants saw responsibility for patients as a key component of professional identity but for many of the GPs it was at time a source of conflict because of their responsibilities in other domains. Sinclair's dispositions of knowledge and experience are reflected in the findings of my research in relation to work and 'comfort zone', where the student and female GP participants regarded certain sorts of work as being within or outside their 'comfort zone' because of their level of knowledge and experience.

Consistent with the findings of other researchers, my results showed that for female rural GPs, professional identity and gender identity are intertwined[312, 313]. The female GP participants in my research spoke about gender identity in two ways: in relation to their professional identity; and in relation to their roles within their families. Many regarded their professional identity as incorporating

feminine elements for example describing their practice content and style as being typical of female doctors, with their patients and colleagues often having an expectation that they would practice in this way. Similarly Williams found Canadian female GPs saw themselves as 'better listeners and communicators' with an emphasis on relationships and human contact' [312]. Brooks' finding that some female GPs welcomed the role of providing most women's health services in a practice, while others took on this role reluctantly was similar to my findings that some participants were pleased to fill a particular niche and others wanted to have a broader more varied practice, feeling that the 'female doctor' role was imposed on them[313]. Brooks also found that many of her participants, like the female GP participants in my research, enjoyed the opportunity to 'combine nurturing and caring skills with more medical aspects of doctoring'. Like Williams' and Brooks' participants most of my GP participants saw themselves not just as 'doctors who happen to be women' but also as 'women doctors' [313] with their professional and gender identities being linked.

Pringle described two groups of GPs focusing on distinctly different aspects of medicine either traditional clinical medicine; or more social and psychological aspects as emerging within general practice, with the former being mostly male and the latter being mostly female[99]. Similarly many female GP participants in my research described the majority of rural doctors as being strongly focused on traditional clinical medicine in particular procedural medicine, while their own focus tended to be more on the social and psychological aspects of general practice. Because the focus of their general practice differed from the majority of their colleagues they often felt that their practice was regarded as being less important, and was less valued than that of their more traditionally focused colleagues.

At the same time many of the GP participants in my research saw themselves also as rural GPs with responsibilities to their patients beyond those of their urban GP colleagues, including undertaking procedural practice such as obstetrics, emergency hospital work, and in-patient hospital care. As rural GPs many GP participants in my research saw themselves as having a high level of responsibility to their patients and communities and this aspect of their professional identity was often a source of tension and conflict because of the responsibilities which the GPs had in their feminine family roles which were a

key part of their gender identity. Many female students, even quite young first year students, anticipated that they would have a similar experience, and had concerns about how they would manage the family responsibilities which they anticipated they would have as mothers and the professional responsibilities which they saw as being a key part of their professional identity. Their experience echoed the findings of much research on female doctors which showed that many considered role conflict to be a major problem[123, 212, 254, 280, 289, 365-370].

Some of the female rural GP participants in my research felt that practice structures, which had developed historically in the context of a male dominated medical profession, where home support was assumed, and where limits on working hours and flexibility were not needed by a previous generation of male doctors who were supported at home by a full time wife, contributed their experience of conflict between work and significant others. This finding is consistent with other Australian research on female rural GPs[14, 89, McEwin K, 2003. #508, 123, 125, 215, 371].

Many also found the culture of rural general practice to be predominantly masculine, describing it as being characterised by toughness, self sacrifice, and heroism, with procedural skills being more highly valued than traditionally more feminine skills such as counselling. Because of their feminine professional identities some participants felt that they did not fit into this culture and a number spoke about feeling marginalised and being regarded as 'not a proper doctor'. This finding is consistent with Sinclair's view that 'all the professional medical predispositions' were 'historically male' and 'culturally masculine' [98].

Another source of difficulty for some participants was a sense of having little power in the clinical, administrative and financial aspects of the practices in which they worked. Because of their status and income Pringle considered GPs to be the 'subalterns of medicine, who partake of its authority but at a place from the side', with women as 'the subalterns of general practice'[99], and the sense of marginalisation and disempowerment described by some participants in my study would appear to be consistent with her view.

However while Pringle regarded the position of female GPs as subalterns, she also proposed that this placed them in a position where 'they also have the

potential to challenge both medical organization and domestic hierarchy'[99]. Drawing upon the work of Bordieu, she saw female doctors as differently positioned on 'the medical field' and to have different speaking positions available to them and so to be able to bring about change in the field itself. The way in which a number of the female GP participants in my research had coped with the conflict they experienced in their professional and gender identities, and with the mismatch they felt between their gender identity and rural general practice culture showed evidence this change occurring. For example, some GP participants spoke out to encourage change in the attitudes of male colleagues to various aspects of practice functioning and to advocate for the value contributed to rural general practice by female GPs, and others had developed new practice structures that were more sympathetic to female family responsibilities.

7.5 SUMMARY OF FIT OF 'LANDSCAPE OF FULFILMENT' MODEL WITH THE RELATED LITERATURE

The discussion in this chapter shows that the 'Landscape of fulfilment' model not only fits well with the currently available literature on factors affecting rural medical recruitment and retention, but also adds to this literature by providing a means to understand some of the associations between factors identified as influencing rural recruitment and retention. This model incorporates concepts of place, professional and gender identity, which fit well with the current literature on the identity of rural doctors and female doctors. At the same time the sociocultural approach of this research adds to the current understanding of rural medical recruitment and retention, and provides a tool for developing new approaches to rural medical recruitment and retention strategies, which shall be discussed in the next chapter.

CHAPTER 8 CONCLUSION: IMPLICATIONS OF THIS THESIS FOR STRATEGIES TO RECRUIT AND RETAIN RURAL GPS

8.1 LANDSCAPE OF FULFILMENT: A NEW BASIS FOR UNDERSTANDING RURAL MEDICAL RECRUITMENT AND RETENTION

The 'Landscape of fulfilment' model, developed in this Thesis provides a new means for understanding rural medical recruitment and retention in the context of the challenges of feminisation and generational change, which are currently occurring in the medical workforce. Importantly the model was based on data relating to how young people training to be doctors and female rural doctors experience their world, so that it encompasses their views of two groups who are crucial to future rural workforce. Rural medical recruitment and retention are recognised to be two distinct processes[8, 80], so that most previous models have been developed for use either for recruitment or retention[8, 11, 25, 47, 65, 66, 80, 82]. This model is one of the first that has the flexibility to incorporate issues relating to both recruitment and retention within the one model, but at the same time is specific enough to remain meaningful. Additionally this Thesis uses a systems approach to medical workforce research, to analyse complex interrelationships of social factors. This approach is recommended by WHO and so is useful and appropriate in the 21st century[130].

This Thesis is the first to consider rural medical workforce recruitment and retention in relation to three aspects of identity: place, professional and gender identity and builds on the work of other researchers such as Humphreys, Jones et al[38] who have developed decision making frameworks, and the work of Cutchin who considered rural retention in relation to place and professional identity[25, 82].

The use of qualitative methods, and a social case study design, enabled me to consider the complex social interrelationships involved in rural medical recruitment and retention using empirical research[314] rather than develop the

model on the basis of a systematic review of the literature alone, as has been undertaken with the development of most previous models[8, 11, 79, 80]. For the first time a flexible but robust model that incorporates an understanding of the processes in both recruitment and retention has been developed.

This model provides a unique understanding of the aspects of lives and work of female rural GPs and medical students, which they perceive as providing them with meaning and fulfilment. The model was developed on the basis of the experience and perspectives of these two groups, and so provides a key to understanding their decisions regarding location choice. It also provides a way to understand how the individual experiences and manages conflicts between various aspects of his/her life. This understanding offers a new way to consider sometimes apparently contradictory evidence and unanswered questions, in the rural medical workforce literature. For example it provides a way of understanding why some rural background doctors choose urban practice, and why some urban background doctors choose rural practice[46]. Using this model these questions can be understood in terms of changes in 'comfort zone', and the doctors' relationships with the domains of significant others, and work.

The domains of the 'Landscape of fulfilment' model are broad enough to encompass the complexities of the individual's life and the social influences on location choice, and yet are defined clearly enough to remain meaningful. For example while the overall domains remain the same for both medical students and female rural GPs, there are differences in the detailed aspects of each domain for the two groups and there are different emphases in interrelationships between the domains.

In this Thesis, I consider place, professional and gender identity as key aspects of the self. The 'Landscape of fulfilment' model provides a vehicle to bring together these crucial elements of identity in a way that has not previously been attempted in the rural medical workforce literature. The inclusion of all of these three aspects of identity provides a way to understand some research findings in the literature relating to female rural doctors, for example, the nature of role conflict[212, 254, 274, 365, 372], where using my model the doctor was sometimes torn between responsibilities as the primary carer of children and responsibilities to their patients, sometimes in emergency situations. It also provides a way to understand some of similarities and differences between the

views and behaviour of male and female rural GPs[239, 313, 373-378]: for example, differences in gender identity contribute to differences in the practice patterns of male and female doctors. In this way the model is able to draw together the three separate bodies of research on all rural doctors, female rural doctors and female doctors.

The 'Landscape of fulfilment' model is flexible enough to be applicable to the broad sample of different individuals and groups who participated in the research, and for the same individuals at different times of their lives. Although this model was developed using data from Australian medical students and female rural GPs, and has been tested only on these two specific groups, its flexibility means it has the potential to be applied more broadly in the future, because the domains are likely to be adaptable and applicable to the lives of most doctors. Importantly the model incorporates the perceptions of two groups whose views will be pivotal in rural medical recruitment and retention in the future because the model was based on data relating to people training to be doctors and women working in rural general practice.

There are a number of ways in which the 'Landscape of fulfilment' model and the findings of this thesis could be used both in developing strategies to recruit and retain GPs in rural Australia and in undertaking further research and these shall be discussed in Section 8.4 because this model provides a new basis for thinking about rural recruitment and retention.

8.2 How aims of the Thesis were met

The aims of this Thesis were to:

- Investigate qualitatively and in depth the experiences and viewpoints of medical students and recent medical graduates in Australia between the years of 2002 and 2005 relating to rural medical recruitment;
- Investigate qualitatively and in depth the experiences and viewpoints of female rural GPs in Australia between 1997 and 2001 relating to rural general practice retention;

- Use this rich qualitative data to understand how place, professional and gender identity interact and influence recent medical graduates' and female rural GPs' location choice in Australia;
- And develop a model for understanding recruitment and retention of rural doctors in Australia, which incorporates concepts of place, gender, and professional identity and which could be used to develop strategies to address rural medical workforce shortages.

The Thesis presents an in depth analysis of rich qualitative data collected from Australian medical students about their attitudes to rural life and practice, the experiences on which these attitudes are based, and how they see this relating to rural medical workforce recruitment; and from Australian female rural GPs about their experiences of rural life and practice and how they see this relating to rural GP workforce retention.

The analysis of the data found three aspects of identity emerged from both the medical student data and the female rural GP data: professional identity, place identity and gender identity. Many female students and female rural GPs experienced conflict between how they saw their professional identity and gender identity, with the students relating this conflict mainly to the work and training structures in Medicine and some rural GPs also relating this to what they perceived as the masculine culture of rural general practice. Rural place identity, which was characterised by an attachment to Place, was important in both recruitment and retention.

The choices of the individual in relation to location depended on an interaction between his/her own characteristics, needs and desires, and these domains of life. Although most students interviewed had not made final decisions about future work locations, some had put into place definite plans. Most sought balance between the different domains of their lives, with the domains of work, significant others and place being the most important. Some experienced conflict between the domains of place and significant others, for example when the work of partners precluded living and working in the location which the participant would have preferred. Most considered relationships with significant others to outweigh other domains, when making their final location decisions. While the students were heterogeneous, some students had common attitudes towards family and work and were able to be grouped and identified

as being mainly place oriented, work oriented (either vocation or career oriented) or family oriented. Four groups were identified amongst the family oriented students: family oriented male students; Primary carer female students; shared carer female students; and care delegator female students.

The female rural GPs sought to find fulfilment in life by balancing the rewards and demands of the various domains of their lives, in a way similar to the student participants. For some their initial location choice had related to the needs and desires of their significant others, for example those following their husband's work. When they experienced conflict between the 'Landscape' domains, they sought to cope with this either by compromise between domains, or changing some aspect of one of the domains. However, dissatisfaction and conflict in relation to work mostly did not result in female GPs leaving their present location, with those planning to leave often relating their intentions to the needs of their significant others; and with many accepting a situation which they found unsatisfactory in some respects in one domain, because they found sufficient fulfilment in other domains at their present location. For many female rural GPs attachment to place overrode other concerns which they had, so that they would stay in a particular town even though they were experiencing conflict between the domains of work and significant others or they were feeling marginalised in their workplaces, thus accepting greater fulfilment in relation to the domains of place and significant others than work.

Thus, the 'Landscape of fulfilment' model, developed in this Thesis not only incorporates the key aspects of life, which the medical students and female rural GPs felt influenced their location choices, but also provides a structure in which the interactions between these key aspects of life can be understood. For this reason this model could be used for developing a range of strategies to improve rural medical recruitment and retention, and as a basis for some future rural medical workforce research.

8.3 LIMITATIONS OF A QUALITATIVE APPROACH

This Thesis sought to understand issues relating to rural GP recruitment and retention using a new qualitative approach and, as such, sought to complement

rather than supersede previous, mainly quantitative, research. Nevertheless, the use of a qualitative methodology has a number of limitations. Although the use of qualitative methods allowed the domains of life to be identified and an understanding of the processes involved in an individual's location choice to be developed, the relative importance of each aspect of life cannot be quantified using purely qualitative methods. Neither can the relative numbers of doctors/students who regard various aspects of life as important be quantified. Unlike quantitative research, qualitative methods cannot develop predictors of rural recruitment and retention, which have been crucial to policy makers in the development of some rural medical recruitment and retention strategies. Nevertheless, the use of qualitative methods provided an understanding of the way in which complex factors interact in a way that would not be possible even using quantitative methods such as logistic regression and multilevel analysis. Moreover, the domains developed in this Thesis could be used as the basis for further quantitative research.

8.4 IMPLICATIONS OF THESIS

8.4.1 Current rural medical recruitment and retention strategies

In the past many strategies to recruit and retain doctors to rural practice have been developed and there is continuing development of these strategies.

8.4.1.1 Recruitment strategies

Many recruitment strategies have related to predictors of rural practice, which have been identified in quantitative research, for example rural background and rural experience being the commonest predictors. In this way, many recruitment strategies have involved changing potential recruits in some respect for example by recruiting more rural background students into medicine[137, 173, 379, 380], or by providing rural experience to medical students to encourage an interest in rural practice[137, 173, 380]. Other strategies have been related more to marketing the location to which the doctors will be recruited[71], or providing employment with attractive working conditions and/or environment[140]; and/or financial and economic incentives[137, 381]. Some communities have developed packages to attract doctors, and recruit them to their towns[71, 382].

Some recruitment strategies have targeted particular groups, for example recruiting rural background students for entry into medicine then providing special support and experience for them[40, 179, 383], while others have taken a broader approach, for example providing a minimum amount of rural experience for all students no matter what their background[173].

Some strategies, for example the Washington, Alaska, Montana and Idaho (WAMI) program and other similar programs that recruit rural background students into medicine and train them at rural locations have been very successful[384]. However, rural medical workforce shortages still exist nationally and internationally, so there is a continuing need to develop rural medical recruitment and retention strategies. With social change, in particular feminisation of the medical workforce and generational change, there is now the need to build on such strategies with programs that recognise the changing demographics of the medical workforce.

8.4.1.2 Retention strategies

Retention strategies have mainly been directed at providing professional support for the doctor, social support for him/her and his/her family and financial incentives. For example they have included programs to provide easier access to appropriate continuing professional development for rural GPs[54, 385], and locum support[64, 368]. Recent research indicating most rural GPs no longer see such access to CPD as a problem seems to indicate that these programs have been successful in meeting some of the support needs of rural GPs[386]. Financial incentives such as rural retention grants have also been provided in Australia[137, 381]. More recently, it has been suggested that specific strategies to support female rural GPs should include assistance in finding flexible childcare[125].

As with current rural recruitment strategies, there is a need to build on current retention strategies and there is a need for these strategies to reflect the changing needs of the rural medical workforce.

8.4.2 The 'Landscape of fulfilment model in relation to future rural medical recruitment and retention strategies

The 'Landscape of fulfilment' model provides a structure which suggests and demonstrates the interrelatedness of many of the current strategies and which could be used to develop new strategies.

The current and new strategies can be related to each domain of the 'Landscape of fulfilment' model and to minimising conflict between the domains of the model, with strategies including those aimed at:

- altering the doctor's 'comfort zone' or 'attachment' to place;
- changing aspects of work so that the doctor is able to care for his/her community of patients, maintain medical knowledge, feel satisfied and safe at work, and appreciated and valued by community and colleagues;
- providing opportunities for the needs of the doctor's significant others, in particular work for spouse/partner and education for children;
- minimising conflict between the domains of work and significant others, for example decreasing conflict between competing responsibilities for work and family.

Table 8:1 shows current and new recruitment strategies in relation to the domains of the 'Landscape of fulfilment' model.

Table 8:1 Current and new recruitment strategies in relationship to the 'Landscape of fulfilment' model

Domain of the 'landscape'	Modification of 'landscape'	Current strategy	New strategy
Place	Modifying doctor/student's 'comfort zone'	Recruitment of rural background students into medicine Exposure of medical students/ recent graduates to positive rural experience	
	Matching doctor to location within his/her 'comfort zone'	Marketing aspects of rural lifestyle and communities which will match doctor's 'comfort zone'	Could be extended with packages for specific communities and doctors
Work	Developing a professional identity in students/doctors which encompasses rural practice	Rural practice experience in undergraduate and early postgraduate years	
	Providing adequate medical training so that work is within the doctors 'comfort zone'	Undergraduate and early post graduate training particularly in emergency and procedural services	
	Modifying work environment so it fits with the doctor's professional and gender		Development of practice structures to accommodate flexible working hours. Provision of maternity leave.
	Identity		Discussion within the medical profession of gender differences in practice content and style.
			Remuneration which recognises the value of women's health and mental health work in GP

Domain of the 'landscape'	Modification of 'landscape'	Current strategy	New strategy
	Marketing rural practice as providing a work environment which would fit with the doctor's professional identity		Marketing of rural practice to younger doctors and women as being able to accommodate their work needs
Significant others	Modifying partner/spouses' work opportunities		Assisting the doctor's partner to find work or to modify his/her work to fit into a rural environment eg making him/her aware of distance education opportunities, work that can be done using electronic communications
	Marketing the rural environment as providing unique opportunities for young children		Emphasis on marketing on adequate primary school education and many other lifestyle opportunities for young children
Conflict between domains of work and significant others	Minimising conflict between responsibilities to children and work		Flexible child care particularly for after hours work Discussion within the medical profession about work/family commitments and partime work

307

Table 8:2 shows current and new retention strategies in relation to the domains of the 'Landscape of fulfilment' model.

Table 8:2 Current and new retention strategies in relation to the 'Landscape of fulfilment' model

Domain of landscape	Modification of domain of landscape	Current strategy	New strategy
Place	Increasing doctor's 'attachment' to place	Provision of community support so that doctor's sense of belonging increases	Extension of this support to encompass doctors of varying backgrounds
Work	Support for maintenance of medical knowledge work	Accessible and appropriate medical education programs	Opportunities for upskilling for doctors wishing to extend their practice eg older women who have had time off for childbearing
	Increase sense of being appreciated and valued by community and colleagues		Discussion within the medical profession of gender differences in practice content and style. Remuneration which recognises the value of women's health and mental health work in GP
	Provision of a safe working environment		Training for doctors in safety issues Availability of safe location to see patients esp. after hours
	Financial and economic aspects of practice		Practice structures which allow flexibility combined with fair remuneration Discussion within medical profession about fair distribution of income within practices

		308
Conflict between domains of work and significant others	Minimising conflict between responsibilities to children and work	Flexible child care particularly for after hours work Maternity leave Discussion within the medical profession about work/family commitments and part-time work Development of practice structures which can allow flexible working hours

8.4.2.1 Diverse strategies for diverse students and doctors

The diversity of the outlooks and attitudes of medical student and female GP participants in this research indicates a need for diverse recruitment and retention strategies.

The heterogenicity of the participants in this research indicates the need for not only 'broad brush' strategies, such as those based on rural practice predictors, but also for development of specifically targeted packages, which will allow individuals to find balance in their own 'Landscape of fulfilment'. Organisations seeking to recruit doctors for specific towns could develop packages that enable an individual doctor to find fulfilment in their work and at the same time meet his/her family commitments. For example, if the potential recruit were a female GP with a young family an appropriate package might include provisions for maternity leave, assistance in finding partner employment and assistance in finding flexible child care, and the position could be marketed by emphasising the advantages of rural living for the family and the interesting nature of rural practice for the doctor. However, if the potential recruit were a young single doctor without children, the package might include more financial incentives, opportunities for leave for travel, and the position could be marketed by emphasising the availability of social and sporting activities in the town and the opportunity to practice hospital medicine and learn new skills.

8.4.2.2 Strategies for specific groups of students and doctors

While a diversity of recruitment strategies is needed, some groupings of students with similar social outlooks, for example place oriented, work oriented and family oriented students were identified. It would be possible to develop recruitment strategies targeted at each of these groups.

Table 8:3 summarises strategies for recruitment for subgroups of doctors.

Table 8:3 Recruitment strategies suitable for subgroups of doctors

Doctor subgroup	Emphasis on domains in 'landscape of fulfilment'	Possible recruitment strategies
Work (vocation oriented) GP	Domain of work most important	Marketing emphasis on rural health care need
		Marketing emphasis on interesting work opportunities
Family oriented male GP	Seeking balance between domains of work and	Assistance with finding work for partner
	significant others	Flexible practice allowing time to be spent with family
		Marketing emphasis on advantages of lifestyle for family
		Marketing emphasis on interesting work opportunities
Shared carer female GP	Seeking balance between domains of work and	Assistance with finding work for partner
	significant others	Flexible practice allowing for part-time work
		Assistance with flexible childcare
		Availability of maternity leave
		Marketing emphasis on advantages of lifestyle for family
Care delegator female GP	Seeking balance between domains of work and	Assistance with finding work for partner
	significant others, but more emphasis on work	Assistance with flexible childcare
	than shared carer	Availability of maternity leave
		Marketing emphasis on advantages of lifestyle for family
		Marketing emphasis on interesting work opportunities
Young single GP seeking short to medium term rural experience	Main emphasis on work and recreation	Availability of short to medium term work with structure that allows easy entry and exit
		Marketing emphasis on interesting work opportunities
		Marketing emphasis on financial opportunities
		Marketing emphasis on social opportunities
Older gp seeking sea/tree change		Training for upgrading of skills if needed
		Marketing emphasis on interesting work opportunities
		Marketing emphasis on rural lifestyle

For example, family-oriented doctors are more likely to be attracted to locations where they can balance the domains of work and significant others easily for example the availability of opportunities to work in practices where there is the opportunity to limit hours of work and for some to work part-time. Work oriented students who wished to work in rural areas were mainly vocation oriented, and would be more likely to be attracted to working in an area where it is clear that there is a health care need which they would be able to meet.

While the population of female rural GPs was less diverse demographically than that of the medical students (with the majority being married, and having children) and less diverse in their social outlooks, groupings of female GPs similar to the student groupings could be identified in relation to the family orientation. While some very strong common themes emerged from almost all female rural doctor participants (for example issues relating to work and feminine identity), the way in which they related to the 'Landscape' domains varied with individuals, with some taking on the role of primary family carer, some sharing this role, and some delegating family care to others outside the family. Again this indicates that there is a need for diverse retention strategies to cater for a range of different groups within the female rural GP population.

Most of the research participants were motivated by a desire to find fulfilment and balance in their lives and maximise fulfilment in all domains of their lives. For them, location choice was very much influenced to interrelationships between the domains. Thus, rural recruitment and retention strategies that help them to find this fulfilment and that focus on these interrelationships, minimising conflict between domains of the landscape, are likely to be successful. For example, the effectiveness of the current recruitment strategies of recruiting more rural background students to Medicine and providing rural experience for medical students, could be understood in terms of their focus on the students' relationship with the domain of place and because they maintain or modify the students' 'comfort zone' in relation to place.

Similarly a number of the female GP participants would have found it easier to balance the domains of work and significant others if they had had greater support for their family roles, such as flexible childcare, so that the availability of flexible child care would be one strategy which would assist in retaining female GPs in rural practice. Many of the female rural GPs felt there was conflict between their work and gender identities, in that their colleagues undervalued their work because of their limiting their hours of work to meet their family commitments, and because of the nature of much of their work. Strategies to address this problem might involve the promotion of rational discussion about work/life balance and gender differences within the medical profession. The development of more flexible practice structures within which different GPs in the practice are able to vary their working hours would also allow many female rural GPs to more easily find balance between the domains of work and significant others.

The inclusion of maternity leave, with locum coverage for women on maternity leave, in recruitment and retention strategies is another example. This strategy would be likely to decrease conflict between the domains of work and significant others for new mothers and so would be likely to improve retention and would be attractive in terms of recruitment. Similarly assistance in finding appropriate flexible childcare for women who are care delegators would decrease conflict between the domains of the 'Landscape of fulfilment' for these women.

8.4.2.3 Flexibility of strategies to fit individual's life-time frame

This research indicated that the individual's 'Landscape of fulfilment' was dynamic with various life events and changes in relationships changing the priority that the students and doctors gave to the each of the domains. Even during the time period of three years, for which the student participants were followed, significant changes occurred in the 'Landscapes of fulfilment' for a number of individuals. The commonest change to occur was a change in their domain of significant others, sometimes because a partner had changed or because a partner's employment situation had changed. Additionally, many students spoke of expecting their lives to change over time so that various aspects of their individual 'Landscapes of fulfilment' would change at different stages of their lives. Some spoke about an interest in rural practice early in their careers, others about an interest later in life, some spoke about rural practice as a long-term option, with others speaking about short- to medium-term periods of time in rural practice. Thus, the dynamic nature of the individual's

'Landscape of fulfilment' over time means their location choice will vary over time as their 'Landscape of fulfilment' changes.

Recruitment strategies need to be developed to take advantage of the changes in doctors' lives at different stages of life, and be designed to appeal to doctors in a way that takes into account the emphasis which the doctors give to the different domains of the 'Landscape of fulfilment' at various times. So a range of marketing approaches aimed not only at recent graduates but also at older doctors need to be developed. For example, some young doctors who are work oriented, and in particular vocation oriented, with few attachments to significant others may be interested in working in rural practice in the short to medium term prior to settling in a metropolitan area, and are likely to respond to marketing that emphasises the health care needs of rural communities. Rural practice is likely to appeal to other young doctors, who are family oriented and would like their young children to experience rural life. The marketing of rural practice for this group would need to emphasise the advantages of living in a rural area for a young family. Some older doctors may be interested in a 'seachange' or 'tree-change' when their children have completed their education, and, again, are likely to be attracted by rural lifestyle, and some would be interested in the opportunity to work in a style different from the way they have worked in urban areas.

8.4.2.4 The implementation of strategies at a range of levels

In order to implement rural medical recruitment and retention strategies, the strategies need to be considered at several levels at which they can be developed and trialled at a practical levels. In this section of the Thesis I will consider levels at which strategies could be developed including global, national, state, Division of General practice, and local community and individual practice levels.

Global strategies

There has been discussion at an international level about ways in which female doctors could be encouraged and supported to work in rural areas. At the World Rural Health Conference in Calgary in 2000 the 'Calgary commitment to women in rural family medical practice' was adopted. This commitment was 'to

continue the essential work of restructuring rural practice to attract women, ... to working towards the equal representation of women on the WONCA Working Party, conference organising committees, and other working parties developing policy on issues in rural practice.' [387]. At this conference issues relating to the difficulties which many female rural GPs had with role conflict and in relation to a perception of how their work was valued, were discussed and recognised. These issues are directly mirrored in the findings of this Thesis in relation to female rural doctors balancing the domains of work and significant others, and issues relating to professional and gender identities. The conference made a number of recommendations, which were to be developed into policy at an international level. These included recommendations relating to the availability of flexible, safe, locally available, and culturally appropriate practice which is sustainable for women; appropriate valuing and financially rewarded rural practice, and the need for female representation on committees dealing with rural general practice issues. This policy development at an international level recognises the need for rural medical recruitment and retention strategies that will enable female rural doctors to find balance in their 'Landscapes of fulfilment'.

National Strategies

At a national level there are already a number of strategies relating to the rural exposure of medical undergraduates and postgraduates. However new recruitment strategies, which arise from this Thesis could include:

- Marketing emphasis on rural lifestyle, opportunities for flexible work
- Funding of retraining for 'tree/sea changers'
- Support for partners of new GPs accessing work/education in rural areas, for example low interest loans for business start up in a rural area and subsidies for the doctor's education might be trialled
- Continuation and extension of health insurance funding for women's health and mental health work content
- Funding to identify models of flexible child care suitable for rural GPs who are responsible for the care of children after hours

State Strategies

- As with national strategies a number of rural medical recruitment and retention programs already exist. However these could be extended to include Marketing emphasis on rural lifestyle, and opportunities for flexible work in rural general practice
- Programs for retraining for 'tree/sea changers'
- Assistance to rural GP recruits in identifying work/education opportunities for partners
- Trialling of flexible practice structures for example extending the NSW RDN

 'Easy entry, gracious exit initiatives, to include availability of part-time work
- Assistance for communities in developing packages for individual doctors and matching of doctors and communities
- Provision of opportunities for rural general practice profession to discuss issues relating to gender differences and encouragement of mutual understanding and resolution of conflicts for example at State conferences.
- Identifying female rural GPs who may want retraining to upgrade skills and extend practice after limited practice during childbearing years, and providing support to these GPs
- Assistance to communities and practices to develop and trial flexible child care
- Assistance for female rural GPs requiring locums for maternity leave and high priority given to GPs needing locums for maternity leave

Division of General Practice Strategies

Rural divisions of general practice are often already involved in medical recruitment and retention activities, for example supporting medical students visiting their communities and providing easily accessible professional development activities for their members. Some strategies which arise from this Thesis which could be developed or extended include:

Assistance of practices to develop and trial flexible practice structures.

- Assistance for communities in developing packages for individual doctors and matching of doctors and communities
- Provision of opportunities for rural general practice profession to discuss issues relating to gender differences and encouragement of mutual understanding and resolution of conflicts
- Assistance to members requiring flexible child care to find access appropriate child care

Localised community and General Practice Strategies

A number of the strategies already discussed relate to supporting general practices to trial new models of practice, and the actual changes suggested would occur at a local community and general practice level. These include:

- Development of flexible practice structures
- Discussion of issues relating to gender differences and exploration of ways to distribute work fairly
- Development of individual packages for recruitment of rural doctors

8.4.2.5 In summary

In summary, the implications of this Thesis in relation to rural medical recruitment and retention strategies are that strategies need to be diverse, take into account the dynamic nature of doctors' social relationships, and to provide ways in which doctors can find the fulfilment and balance in their lives that they are seeking.

8.4.3 Implications for future research

The research for this Thesis was undertaken on two specific populations, Australian medical students, and Australian female rural doctors, so any generalisation of the findings needs to be undertaken with care. However, the model fitted well with the rural recruitment and retention literature, and encompassed the issues identified in this literature. So it is likely that the domains of the model and the interrelationships developed in the model will be applicable to other groups, albeit with changes in emphases. However, in order to further validate this model, qualitative research with other groups, in

particular male rural doctors, and international medical graduates would need to be done. The findings in relation to female GPs' gender and professional identity and their perception of rural medical culture raise a number of questions about male GPs' perceptions about gender and professional identity and rural medical culture. These questions could only be answered by new research. Particular areas of investigation might include enquiry into male GPs' perceptions of what they perceive a rural doctor is and should be, and their perceptions and expectations of their female colleagues. An important question is whether the perceptions and experience of male GPs vary according to age, and whether the perceptions of younger male GPs are similar to those of female GPs, reflecting generational change. Such new research could investigate whether the 'Landscape of fulfilment model' encompasses the perceptions and experience of male GPs and if not whether it would be possible to modify the model so that it would be workable for this group of doctors.

Another area of research that might be developed using this model would be action research trialling recruitment and retention strategies using the model as an evaluation tool.

It is also possible that this model could be used in quantitative research, where doctors' priorities in relation to factors associated with rural recruitment and retention are being investigated. For example the domains could be used to form groupings of factors, and quantitative investigation and analysis using these groupings might be valuable in determining the relative importance of these groups of factors to different groups of doctors.

While this Thesis leads to a number of new research questions, the model developed in the Thesis, in itself, provides a new and unique way of approaching the rural recruitment of doctors and rural retention of female rural GPs because it considers the issues from a new viewpoint and adds a different perspective to the body of rural medical workforce research

REFERENCES

- 1. Australian Medical Workforce Advisory Committee, *The medical workforce in rural and remote Australia AMWAC Report* 1996. 1996: Sydney.
- 2. Johnston, G. and D. Wilkinson, *Increasingly inequitable distribution of general practitioners in Australia*, 1986-96. Australian & New Zealand Journal of Public Health. 2001;25(1):66-70, 2001.
- 3. Strasser, R.P., et al., *Is Australian rural practice changing? Findings from the National Rural General Practice Study.* Australian Journal of Rural Health. 2000 Aug;8(4):222-6.
- 4. Wilkinson, D., Inequitable distribution of general practitioners in Australia: analysis by state and territory using census data. Australian Journal of Rural Health. 2000 Apr;8(2):87-93, 2000.
- 5. Moorhead, B., *Some differences between Australian country and city general practice.* Australian Family Physician. 1990 Apr;19(4):531, 533-5, 537.
- 6. Verby, J.E., *Physician redistribution: a worldwide medical problem.* Family Practice. 1985 Sep;2(3):151-8.
- 7. Australian Medical Workforce Advisory Committee, *Career decision making by doctors in vocational training*, in *AMWAC Report 2003.2.* 2003: Sydney.
- 8. Humphreys, J., et al., *A critical review of rural medical workforce retention in Australia*. Australian Health Review. 2001;24(4):91-102, 2001.
- 9. DiLisio, J.E., *Health manpower supply and demand: the case of a family practice residency program.* Social Science & Medicine., 1981. 15(D): p. 295-303.
- 10. Cullison, S., C. Reid, and J.M. Colwill, *Medical school admissions, specialty selection, and distribution of physicians*. JAMA. 1976 Feb 2;235(5):502-5, 1976.
- 11. Crandall, L.A., J.W. Dwyer, and R.P. Duncan, *Recruitment and retention of rural physicians: issues for the 1990s.* Journal of Rural Health. 6(1):19-38, 1990 Jan., 1990.

- 12. Hart-Hester, S. and C. Thomas, *Access to health care professionals in rural Mississippi*. Southern Medical Journal. 96(2):149-54, 2003 Feb., 2003.
- 13. Doescher, M.P., K.E. Ellsbury, and L.G. Hart, *The distribution of rural female generalist physicians in the United States.* Journal of Rural Health. 16(2):111-8, 2000., 2000.
- 14. Australian Medical Workforce Advisory Committee, Female participation in the Australian medical workforce. AMWAC Report 1996.7. 1996: Sydney.
- 15. Shanley, B.C., et al., Factors influencing career development of Australian general practitioners. Australian Family Physician., 2002. 31(1): p. 49-54.
- 16. Tolhurst, H.M. and S.M. Stewart, *Balancing work, family and other lifestyle aspects: a qualitative study of Australian medical students' attitudes.* Medical Journal of Australia. 181(7):361-4, 2004 Oct 4.
- 17. Kamien, M. and I.H. Buttfield, *Some solutions to the shortage of general practitioners in rural Australia. Part 4. Professional, social and economic satisfaction.* Medical Journal of Australia. 1990 Aug 6;153(3):168-71.
- 18. Elam, C.L., M.E. Rosenbaum, and M.M. Johnson, *Geographic origin and its impact on practice location in Kentucky*. Journal of the Kentucky Medical Association. 1996 Oct;94(10):446-50.
- 19. Boulger, J.G., Family medicine education and rural health: a response to present and future needs. Journal of Rural Health., 1991. 7(2): p. 105-15.
- 20. Baldwin, L.M., et al., Two decades of experience in the University of Washington Family Medicine Residency Network: practice differences between graduates in rural and urban locations. Journal of Rural Health. 1995 Winter;11(1):60-72.
- 21. Bass, M. and W.J. Copeman, *An Ontario solution to medically underserviced areas: evaluation of an ongoing program.* Canadian Medical Association Journal. 1975 Sep 6;113(5):403-7.
- 22. Brooks, R.G., et al., *The roles of nature and nurture in the recruitment and retention of primary care physicians in rural areas: a review of the literature.* Academic Medicine. 77(8):790-8, 2002 Aug.

- 23. Cameron, I., *Retaining a medical workforce in rural Australia*. Medical Journal of Australia. 169(6):293-4, 1998 Sep 21.
- 24. Coombs, D.W., H.L. Miller, and J. Leeper, *Predictive validity of medical student choices of practice location*. Southern Medical Journal. 88(2):190-4, 1995 Feb.
- 25. Cutchin, M.P., Physician retention in rural communities: the perspective of experiential place integration. Health & Place, 1997. 3(1): p. 25-41.
- 26. de Vries, E. and S. Reid, *Do South African medical students of rural origin return to rural practice?* South African Medical Journal. 2003 Oct;93(10):789-93.
- 27. Dobie Sharon A, C.J.D., Laskowski Michael B, *An early preceptorship and medical students' beliefs, values, and career choices.* Advances in Health Sciences Education, 1996. 2(1): p. 35-47.
- 28. Dorner, F.H., R.M. Burr, and S.L. Tucker, *The geographic relationships between physicians' residency sites and the locations of their first practices.* Academic Medicine. 1991 Sep;66(9):540-4.
- 29. Easterbrook, M., et al., Rural background and clinical rural rotations during medical training: effect on practice location. CMAJ Canadian Medical Association Journal., 1999. 160(8): p. 1159-63.
- 30. Fry, L.J. and M.A. Terry, Factors that predict medical students' interest in rural practice. Academic Medicine. 1995 Feb;70(2):167-8.
- 31. Hays, R.B., *Common international themes in rural medicine*. Australian Journal of Rural Health. 1999 Aug;7(3):191-4.
- 32. Hays, R.B., et al., *Why doctors leave rural practice*. Australian Journal of Rural Health. 1997 Nov;5(4):198-203.
- 33. Hays, R., et al., *Getting the balance right? GPs who chose to stay in rural practice.* Australian Journal of Rural Health. 11(4):193-8, 2003 Aug.
- 34. Hays, R., et al., *Choosing a career in rural practice in Queensland*. Australian Journal of Rural Health, 1995. 3: p. 171-174.

- 35. Heaney, S., Almost a decade down the track: a review of the NSW rural resident medical officer cadetship program. NSW Rural Doctors Network Discussion Paper. 1998: Sydney.
- 36. Heath, C., C. Stoddart, and J. Renwick, *Urban and rural origins of Otago medical students*. New Zealand Medical Journal. 2002 Nov 8;115(1165):U238.
- 37. Hsueh, W., T. Wilkinson, and J. Bills, *What evidence-based undergraduate interventions promote rural health?*. New Zealand Medical Journal. 117(1204):U1117, 2004 Oct 22.
- 38. Humphreys, J.S., et al., *Workforce retention in rural and remote Australia: determining the factors that influence length of practice.* Medical Journal of Australia. 2002 May 20;176(10):472-6.
- 39. Humphreys, J.S. and F. Rolley, *A modified framework for rural general practice: the importance of recruitment and retention.* Social Science & Medicine. 1998 Apr;46(8):939-45.
- 40. Inoue, K., Y. Hirayama, and M. Igarashi, *A medical school for rural areas*. Medical Education. 1997 Nov;31(6):430-4.
- 41. Jones, A.R., et al., *Influence of a rural primary care clerkship on medical students' intentions to practice in a rural community*. Journal of Rural Health. 2000 Spring;16(2):155-61.
- 42. Joyce, C., C. Veitch, and L. Crossland, *Professional and social support networks of rural general practitioners*. Australian Journal of Rural Health. 2003 Jan;11(1):7-14.
- 43. Kamien, M. and I.H. Buttfield, *Some solutions to the shortage of general* practitioners in rural Australia. Part 3. Vocational training. Medical Journal of Australia. 1990 Jul 16;153(2):112-4.
- 44. Kamien, M. and I.H. Buttfield, *Some solutions to the shortage of general* practitioners in rural Australia. Part 2. Undergraduate education. Medical Journal of Australia. 1990 Jul 16;153(2):107-8, 112.

- 45. Kamien, M. and I.H. Buttfield, *Some solutions to the shortage of general practitioners in rural Australia. Part 1. Medical school selection.* Medical Journal of Australia. 1990 Jul 16;153(2):105-7.
- 46. Laven, G. and D. Wilkinson, *Rural doctors and rural backgrounds: how strong is the evidence? A systematic review.* Australian Journal of Rural Health. 11(6):277-84, 2003 Dec.
- 47. MacIsaac, P., et al., *General practitioners leaving rural practice in Western Victoria*. Australian Journal of Rural Health. 8(2):68-72, 2000 Apr.
- 48. Mackay, B., *Are spouses the key to retention of rural MDs?* CMAJ Canadian Medical Association Journal. 168(4):473, 2003 Feb 18.
- 49. Miller, K.E., B.C. Fox, and G.L. Mitchell, *Medical students' and private family physicians' perceptions of family practice*. Family Medicine. 1996 Jan;28(1):33-8.
- 50. Norris, T.E. and S.B. Norris, *The effect of a rural preceptorship during residency on practice site selection and interest in rural practice.* Journal of Family Practice. 1988 Nov;27(5):541-4.
- 51. Pathman, D.E., T.R. Konrad, and T.C. Ricketts, 3rd, *Medical education and the retention of rural physicians*. Health Services Research. 1994 Apr;29(1):39-58.
- 52. Pathman, D.E., E.S. Williams, and T.R. Konrad, *Rural physician satisfaction:* its sources and relationship to retention. Journal of Rural Health. 12(5):366-77, 1996.
- 53. Pathman, D.E., et al., *Retention of primary care physicians in rural health professional shortage areas.* American Journal of Public Health. 94(10):1723-9, 2004 Oct.
- 54. Pathman, D.E., et al., *Preparing and retaining rural physicians through medical education*. Academic Medicine. 74(7):810-20, 1999 Jul.
- 55. Paulman, P.M. and L. Davidson-Stroh, *The effect of a rural family practice preceptorship on medical students' residency selection*. Family Practice Research Journal. 1993 Dec;13(4):385-9.

- 56. Peach, H. and N. Barnett, *Effect of an early rural placement on later elective choices of medical students*. Medical Education. 2000 Jul;34(7):587-8.
- 57. Rabinowitz, H.K., et al., *Critical factors for designing programs to increase the supply and retention of rural primary care physicians*. JAMA. 2001 Sep 5;286(9):1041-8.
- 58. Rabinowitz, H.K., et al., *Demographic, educational and economic factors* related to recruitment and retention of physicians in rural Pennsylvania. Journal of Rural Health. 1999 Spring;15(2):212-8.
- 59. Rabinowitz, H.K., Evaluation of a selective medical school admissions policy to increase the number of family physicians in rural and underserved areas. New England Journal of Medicine. 1988 Aug 25;319(8):480-6.
- 60. Rabinowitz, H.K., Relationship between US medical school admission policy and graduates entering family practice. Family Practice. 1988 Jun;5(2):142-4.
- 61. Rolfe, I.E., et al., Finding solutions to the rural doctor shortage: the roles of selection versus undergraduate medical education at Newcastle. Australian & New Zealand Journal of Medicine., 1995. 25(5): p. 512-7.
- 62. Rosenblatt, R.A., et al., *Which medical schools produce rural physicians?* JAMA. 1992 Sep 23-30;268(12):1559-65.
- 63. Rosenblatt, R.A., *The WAMI Rural Hospital Project. Part 1: Historical and theoretical underpinnings.* Journal of Rural Health. 7(5):473-91, 1991.
- 64. Rourke, J.T., et al., *Keeping family physicians in rural practice. Solutions favoured by rural physicians and family medicine residents.* Canadian Family Physician. 2003 Sep;49:1142-9.
- 65. Rourke, J.T., *Politics of rural health care: recruitment and retention of physicians.* CMAJ Canadian Medical Association Journal. 148(8):1281-4, 1993 Apr 15.
- 66. Scammon, D.L., S.D. Williams, and L.B. Li, *Understanding physicians'* decisions to practice in rural areas as a basis for developing recruitment and retention strategies. Journal of Ambulatory Care Marketing. 1994;5(2):85-100.

- 67. Shannon, C.K., *A community development approach to rural recruitment.* Journal of Rural Health. 19 Suppl:347-53, 2003.
- 68. Somers, G.T., A.E. Young, and R. Strasser, Rural career choice issues as reported by first year medical students and rural general practitioners.

 Australian Journal of Rural Health. 2001 Dec;9 Suppl 1:S6-13.
- 69. Szafran, O., R.A. Crutcher, and R.G. Chaytors, *Location of family medicine graduates' practices*. What factors influence Albertans' choices? Canadian Family Physician. 47:2279-85, 2001 Nov.
- 70. Tollan, A. and J.H. Magnus, [Graduates from Tromso--do they stay in Northern Norway? Geographic origin determines selection of professional practice location in Northern Norway]. [Norwegian]. Tidsskrift for Den Norske Laegeforening. 1993 Jan 10;113(1):27-9.
- 71. Veitch, C., et al., Community participation in the recruitment and retention of rural doctors: methodological and logistical considerations. Australian Journal of Rural Health. 1999 Nov;7(4):206-11.
- 72. Ward, A.M., M. Kamien, and D.G. Lopez, Medical career choice and practice location: early factors predicting course completion, career choice and practice location. Medical Education. 38(3):239-48, 2004 Mar.
- 73. Wilkinson, D., et al., *Positive impact of rural academic family practices on rural medical recruitment and retention in South Australia*. Australian Journal of Rural Health. 2001 Feb;9(1):29-33.
- 74. Wilkinson, D., et al., *Impact of undergraduate and postgraduate rural training, and medical school entry criteria on rural practice among Australian general practitioners: national study of 2414 doctors.* Medical Education. 2003 Sep;37(9):809-14.
- 75. Wise A, H.R., Craig M, Adkins P, Mahoney M, Nicholls A, Sheehan M, Siskind V, Vocational Training and Continuing Education for the Rural Medical Practitioner. University of Queensland Postgraduate Medical Education Committee. 1992, University of Queensland Postgraduate Education Committee, Royal Australian College of General Practitioners Family Medicine Programme.

- 76. Woloschuk, W. and M. Tarrant, *Do students from rural backgrounds engage in rural family practice more than their urban-raised peers?* Medical Education. 38(3):259-61, 2004 Mar.
- 77. Woloschuk, W. and M. Tarrant, *Does a rural educational experience* influence students' likelihood of rural practice? Impact of student background and gender. Medical Education., 2002. 36(3): p. 241-7.
- 78. Bilodeau, H. and N. Leduc, [Inventory of the main factors determining the attraction, installation and retention of physicians in remote areas]. [French]. Cahiers de Sociologie et de Demographie Medicales. 43(3):485-504, 2003 Jul-Sep.
- 79. Eisenberg, B.S. and J.R. Cantwell, *Policies to influence the spatial distribution of physicians: a conceptual review of selected programs and empirical evidence.*Medical Care. 1976 Jun;14(6):455-68.
- 80. Feeley, T.H., *Using the theory of reasoned action to model retention in rural primary care physicians.* Journal of Rural Health. 19(3):245-51, 2003.
- 81. Elley, R., Women in rural general practice: the stresses and rewards. New Zealand Medical Journal. 114(1137):358-60, 2001 Aug 10.
- 82. Cutchin MP, Community and Self: Concepts of Rural Physician Integration and Retention. Social Science & Medicine., 1997. 44(11): p. 1661-1674.
- 83. Hill, D., I. Martin, and P. Farry, *What would attract general practice trainees into rural practice in New Zealand?* New Zealand Medical Journal. 2002 Sep 13;115(1161):U161.
- 84. Iversen, L., J.C. Farmer, and P.C. Hannaford, *Workload pressures in rural general practice: a qualitative investigation*. Scandinavian Journal of Primary Health Care. 20(3):139-44, 2002 Sep.
- 85. Janes, R. and A. Dowell, New Zealand Rural General Practitioners 1999

 Survey--Part 3: rural general practitioners speak out. New Zealand Medical

 Journal. 117(1191):U815, 2004 Apr 2.
- 86. Kazanjian A, P.N., Key factors in physicians' choice of practice location: findings from a survey of practitioners and their spouses. Health & Place, 1996. 2(1): p. 27-34.

- 87. Monnickendam, S.M., et al., *Trials and tribulations of country doctors: a qualitative study of doctor-patient relationships in rural Israel*. Israel Journal of Medical Sciences. 32(3-4):239-45; discussion 245-7, 1996 Mar-Apr.
- 88. Spenny, M.L. and K.E. Ellsbury, *Perceptions of practice among rural family physicians--is there a gender difference?* Journal of the American Board of Family Practice. 13(3):183-7, 2000 May-Jun.
- 89. Wainer, J., L. Bryant, and R. Strasser, *Sustainable rural practice for female general practitioners*. Australian Journal of Rural Health. 2001 Dec;9 Suppl 1:S43-8.
- 90. Han, G.S. and J.S. Humphreys, *Overseas-trained doctors in Australia: community integration and their intention to stay in a rural community.* Australian Journal of Rural Health. 13(4):236-41, 2005 Aug.
- 91. Kearns, R., et al., What makes 'place' attractive to overseas-trained doctors in rural New Zealand? Health & Social Care in the Community. 14(6):532-40, 2006 Nov.
- 92. Australian Rural and Remote Workforce Agency Group, *Doing the sums:* Will there be a future health workforce for rural and remote Australia? 2006, HWQ and ARRWAG: Brisbane. p. 8.
- 93. Australian Medical Association, *Training and Workplace Flexibility. Final Report.* November 2002, .
- 94. Australian Medical Workforce Advisory Committee, *Australian Health Workforce Trends*. 2004: Sydney.
- 95. World Health Organization, *World Health Report 2006: Working together for health*, W.H. Organization, Editor. 2006: Geneva. p. Overview page xxii.
- 96. Sinclair S, Making doctors. An institutional apprenticeship Page 194. 1997, New York: Berg.
- 97. Sinclair S, Making doctors. An institutional apprenticeship Page 286. 1997, New York: Berg.
- 98. Sinclair S, Making doctors. An institutional apprenticeship. Page 313. 1997, New York: Berg.

- 99. Pringle, R., Sex and Medicine. Gender power and authority in the medical profession. First ed. 1998, Cambridge: Cambridge University Press.
- 100. Leonardson, G., Lapierre, R, and Hollingsworth D., Factors predictive of physician location. Academic Medicine, 1985.
- 101. Hicks, L.L., *Social policy implications of physician shortage areas in Missouri*. American Journal of Public Health. 1984 Dec;74(12):1316-21.
- 102. Zurn P, D.P.M., Stilwell B, Adams O, *Imbalances in the health workforce*. 2002, World Health Organisation: Geneva.
- 103. WONCA, *Policy on Rural Practice and Rural Health*. Web address: Globalfamilydoctor.com/about WONCA/working groups/rural
- 104. Glasson W, B.R., Medical workforce issues in Australia: 'tomorrow's doctors too few, too far'. Medical Journal of Australia., 2003. 179(10): p. 556.
- 105. Alexander, C., *The shortage of rural general practitioners in north western NSW*. Australian Journal of Rural Health, 1997. 5(1): p. 31-6.
- 106. Kamien M, Report to the Ministerial Enquiry into the recruitment and retention of country doctors in Western Australia. 1987, University of Western Australia: Perth.
- 107. Strasser, R., Rural General Practice in Victoria, The Report from a study of attitudes of Victorian general practitioners to country practice and training. 1992, Department of Community Medicine. Monash University: Melbourne.
- 108. Australian Medical Workforce Advisory Commitee, *The General Practice Workforce in Australia: Supply and Requirements to 2013. AMWAC Report* 2005.2, AMWAC, Editor. 2005: Sydney.
- 109. Australian Institute of Health and Welfare, *The Health of Australians living in rural and remote areas: preliminary results: discussion paper*. 1998, Australian Institute of Health and Welfare: Canberra ACT.
- 110. Australian Institute of Health and Welfare, *Australia's health* 2006, in *AIHW cat no. AUS 73*, AIHW, Editor. 2006, AIHW: Canberra.

- 111. Australian Institute of Health and Welfare, *Health in rural and remote Australia*, AIHW, Editor. 1998: Canberra.
- 112. Humphreys, J., Rural health status: what do statistics show that we don't already know? Australian Journal of Rural Health. 7(1):60-3, 1999 Feb.
- 113. Shi L, M.J., Starfield B, Politzer J, Xu J,, *Primary Care, Race and Mortality in US states*. Social Science & Medicine., 2005. 61(1): p. 65-75.
- 114. Humphreys, J.S., S. Mathews-Cowey, and H.C. Weinand, *Factors in accessibility of general practice in rural Australia*. Medical Journal of Australia. 166(11):577-80, 1997 Jun 2.
- 115. O'Reilly, D., et al., *General practice out-of-hours service, variations in use and equality in access to a doctor: a cross-sectional study.* British Journal of General Practice. 2001 Aug;51(469):625-9.
- 116. Access Economics, Primary health care for all Australians: An analysis of the Widening Gap between Community Need and the Availability of GP services. 2002, Australian Medical Association: Canberra ACT.
- 117. Australian Health Minister's Conference, *National Rural Health Strategy*. 1994, Australian Health Minister's Conference: Canberra.
- 118. Dixon, J. and N. Welch, Researching the rural-metropolitan health differential using the 'social determinants of health'. Australian Journal of Rural Health. 8(5):254-60, 2000 Oct.
- 119. Laven, G.A., et al., Factors associated with rural practice among Australiantrained general practitioners. Medical Journal of Australia. 2003 Jul 21;179(2):75-9.
- 120. Strasser, R.P., Attitudes of Victorian rural GPs to country practice and training. Australian Family Physician. 1992 Jun;21(6):808-12.
- 121. Veitch, C. and L.J. Crossland, *Medical family support needs and experiences in rural Queensland*. Rural & Remote Health. 5(4):467, 2005 Oct-Dec.
- 122. McEwin, K., New rural workforce strategies for female doctors. Findings of a survey of women in rural medicine. Discussion paper. NSW Rural Doctors Network. 2001, NSW Rural Doctors Network: Sydney.

- 123. Wainer, J., *Female rural doctors in Victoria*. 2001, Rural Workforce Agency Victoria: Melbourne.
- 124. Tolhurst H, L.N., *The National Female Rural General Practitioners Research Project. Final Report.* 2001, University of Newcastle: Newcastle.
- 125. Doyle, S., *Women doctors in rural Australia: workforce support strategies.* 2003, Australian Rural and Remote Workforce Agencies: Sydney.
- 126. Tolhurst H, B.P., Baker L, Cleasy L, Talbot J., *Educational and Support Needs of Female Rural General Practitioners*. 1997, Charles Sturt University: Bathurst.
- 127. Janes, R., D. Cormack, and A. Dowell, *New Zealand rural general practitioners* 1999 *survey part* 4: *analysis of specific sub-groups*. New Zealand Medical Journal. 118(1208):U1256, 2005 Jan 28.
- 128. Vaughn, C., Career choices for generation X. BMJ. 1995 Aug 26;311(7004):525-6.
- 129. Warde, C., W. Allen, and L. Gelberg, *Physician role conflict and resulting career changes. Gender and generational differences.* Journal of General Internal Medicine. 1996 Dec;11(12):729-35.
- 130. World Health Organization, *Preparing a health care workforce for the 21st century: The challenge of chronic conditions*. 2005, World Health Organisation: Geneva.
- 131. Humphreys, J.S., *Delimiting 'rural': implications of an agreed 'rurality' index for healthcare planning and resource allocation*. Australian Journal of Rural Health. 1998 Nov;6(4):212-6.
- 132. Lin, G.E., T.C. Rosenthal, and M. Horwitz, *Physician location survey: self-reported and census-defined rural/urban locations*. Social Science & Medicine. 1997 Jun;44(11):1761-6.
- 133. Australian institute of Health and Welfare, *Rural, regional and remote health- Indicators of health,* in *Rural Health Series no. 5,* A.C.N.P. 59, Editor. 2005, AIHW: Canberra.

- 134. Australian Institute of Health and Welfare, *Rural, regional and remote health: a guide to remoteness classifications*, AIHW, Editor. 2004, Australian Institute of Health and Welfare: Canberra. p. 5.
- 135. Curran, V. and J. Rourke, *The role of medical education in the recruitment and retention of rural physicians*. Medical Teacher. 26(3):265-72, 2004 May.
- 136. Humphreys, J., et al., *Whither rural health? Reviewing a decade of progress in rural health.* Australian Journal of Rural Health. 10(1):2-14, 2002 Feb.
- 137. Department of Health and Ageing, *Rural health policy: Federal budget*. 2001, Dept. of Health and Ageing: Canberra ACT.
- 138. Australian Medical Association and Rural Doctors Association of Australia AMA, *Rural health strategy AMA*. 1997.
- 139. Dunbabin, J., General practice ownership in rural and remote NSW: its impact on recruitment and retention. 2003, NSW Rural Doctors Network.
- 140. Lynch M, B.M., *Easy Entry, Gracious Exit*. 2003, NSW Rural Doctors Network: Newcastle.
- 141. Alexander, C., Why doctors would stay in rural practice in the New England health area of New South Wales. Australian Journal of Rural Health. 1998 Aug;6(3):136-9, 1998.
- 142. Kamien, M., Staying in or leaving rural practice: 1996 outcomes of rural doctors' 1986 intentions. Medical Journal of Australia., 1998. 169(6): p. 318-21.
- 143. Department of Health and Ageing, *Health Workforce: development of retention categories.* 2004: Canberra.
- 144. Australian Medical Workforce Advisory Committee, *The General Practice Workforce in Australia, AMWAC Report* 2000.2. 2000: Sydney. p. 378.
- 145. Young, A.F., J.E. Byles, and A.J. Dobson, *Women's satisfaction with general practice consultations*. Medical Journal of Australia. 1998 Apr 20;168(8):386-9.

- 146. Dickinson, J., J. Hickner, and S. Radford, *The changing characteristics of rural GPs*. Australian Family Physician. 1995 Jul;24(7):1272-8.
- 147. Jones JA, H.J., Adena MA, Rural GPs ratings of initiatives designed to improve rural medical workforce recruitment and retention. Rural and Remote Health, 2004. 4(on line): p. 314.
- 148. Humphreys, J.S., et al., *The influence of geographical location on the complexity of rural general practice activities.* Medical Journal of Australia. 2003 Oct 20;179(8):416-20.
- 149. Tolhurst, H.M., M.C. Ireland, and J.A. Dickinson, *Emergency and after-hours work performed in country hospitals*. Medical Journal of Australia. 1990 Oct 15;153(8):458-65.
- 150. Slade, S. and N. Busing, Weekly work hours and clinical activities of Canadian family physicians: results of the 1997/98 National Family Physician Survey of the College of Family Physicians of Canada. CMAJ Canadian Medical Association Journal. 166(11):1407-11, 2002 May 28.
- 151. Whitcomb, M.E. and W.W. Myers, *Physician manpower for rural America:* summary of a WAMI region conference. Academic Medicine. 1990 Dec;65(12):729-32.
- 152. Cutchin, M.P., et al., *To stay or not to stay: issues in rural primary care physician retention in eastern Kentucky*. Journal of Rural Health. 1994 Fall;10(4):273-8.
- 153. Mainous, A.G., 3rd, M. Ramsbottom-Lucier, and E.C. Rich, *The role of clinical workload and satisfaction with workload in rural primary care physician retention*. Archives of Family Medicine. 1994 Sep;3(9):787-92.
- 154. Lepnurm, R. and M. Trowell, *Satisfaction of country doctors*. Healthcare Management Forum. 1989 Fall;2(3):14-20.
- 155. Stefanu, C., et al., *Impact of a family practice residency program on physician location in small communities*. Southern Medical Journal. 1980 Oct;73(10):1372-4.
- 156. Watanabe, M. and G.H. Fick, *Influence of undergraduate and postgraduate education on recruitment and retention of physicians in rural Alberta*. Clinical

- & Investigative Medicine Medecine Clinique et Experimentale., 1995. 18(3): p. 217-28.
- 157. Kamien, M., *Undergraduate rural incentives program. Assisting medical schools to help solve the shortage of rural doctors.* Medical Journal of Australia. 1995 Mar 6;162(5):228-9.
- 158. Peach, H. and B. N, Effect of an early rural placement on internship choices of medical students. Medical Education. 2002 Aug;36(8):791-2.
- 159. Strasser, R.K., M. Hays, R. Carson, D.. Report on the National Rural General Practice Study. Executive Summary. GPEP Grant no 465 (1997d). 1997, Monash University Centre for Rural Health, Monash University.: Melbourne.
- 160. Hill, D., I. Martin, and P. Farry, What would attract general practice trainees into rural practice in New Zealand? New Zealand Medical Journal. 2002 Sep 13;115(1161):U161, 2002.
- 161. Martin, C.A., J.L. Jones, and M.A. Bird, *Support systems for women in medicine*. Journal of the American Medical Womens Association. 1988 May-Jun;43(3):77-8, 83-4.
- 162. Alexander, C. and J. Fraser, *Medical specialists servicing the New England Health Area of New South Wales*. Australian Journal of Rural Health. 9(1):34-7, 2001 Feb.
- 163. McEwin, K., New Rural Workforce Strategies for Female Doctors. Findings from a Survey of Women in Rural Medicine. NSW Rural Doctors Network Discussion Paper. 2001, NSW Rural Doctors Network: Sydney.
- 164. Strasser, R.K., M. Hays, R. Carson, D., Report on the National Rural General Practice Study. Quality of Life. GPEP Grant no 465.(1997c). 1997, Monash University Centre for Rural Health, Monash University.: Melbourne.
- 165. Shanley, B.C., et al., Factors influencing career development of Australian general practitioners. Australian Family Physician. 2002 Jan;31(1):49-54.
- 166. Azer, S.A., D. Simmons, and S.L. Elliott, Rural training and the state of rural health services: effect of rural background on the perception and attitude of first-

- *year medical students at the University of Melbourne.* Australian Journal of Rural Health., 2001. 9(4): p. 178-85.
- 167. Somers, G.T. *The medical student's intentions to practice in rural Australia: A questionnaire*. in *6th National Rural Health Conference*. 2001. Canberra ACT: Nationa Rural Health Alliance.
- 168. Azer, S.A., D. Simmons, and S.L. Elliott, Rural training and the state of rural health services: effect of rural background on the perception and attitude of first-year medical students at the university of melbourne. Australian Journal of Rural Health. 9(4):178-85, 2001 Aug.
- 169. Silagy, C.A. and L. Piterman, *Attitudes of senior medical students from two Australian schools towards rural training and practice*. Academic Medicine. 1991 Jul;66(7):417-9.
- 170. Wilkinson, D., Selected demographic, social and work characteristics of the Australian general medical practitioner workforce: comparing capital cities with regional areas. Australian Journal of Rural Health. 2000 Dec;8(6):327-34.
- 171. Kassebaum, D.G. and P.L. Szenas, *Rural sources of medical students, and graduates' choice of rural practice.* Academic Medicine. 1993 Mar;68(3):232-6.
- 172. Cooper, J.K., K. Heald, and M. Samuels, *Affecting the supply of rural physicians*. American Journal of Public Health. 1977 Aug;67(8):756-9.
- 173. Commonwealth Dept of Health and Human Services, *Reforming* undergraduate medical education for rural practice: Final report of the Rural Undergraduate Steering Committee May 1994. 1994: Canberra.
- 174. Talbot, J. and A. Ward, Alternative Curricular Options in Rural Networks (ACORNS): impact of early rural clinical exposure in the University of West Australia medical course. Australian Journal of Rural Health., 2000. 8(1): p. 17-21.
- 175. Lynch, D.C. and S.E. Willis, *Can a 3-day preceptorship change first-year medical students' opinions about living and working in small towns?* Family Medicine. 2000 Jul-Aug;32(7):495-9.

- 176. Tavernier, L.A., et al., *Does exposure to medically underserved areas during training influence eventual choice of practice location?* Medical Education. 37(4):299-304, 2003 Apr.
- 177. Matsumoto, M., et al., Factors associated with rural doctors' intention to continue a rural career: a survey of 3072 doctors in Japan. Australian Journal of Rural Health. 13(4):219-25, 2005 Aug.
- 178. Magnus, J.H. and A. Tollan, Rural doctor recruitment: does medical education in rural districts recruit doctors to rural areas? Medical Education. 1993

 May;27(3):250-3.
- 179. Rabinowitz, H.K., et al., A program to increase the number of family physicians in rural and underserved areas: impact after 22 years. JAMA. 1999 Jan 20;281(3):255-60.
- 180. Kamien, M., A comparison of medical student experiences in rural specialty and metropolitan teaching hospital practice. Australian Journal of Rural Health., 1996. 4(3): p. 151-8.
- 181. Strasser R, K.M., Hays R, Carson D. (1997a) . . Report on the National Rural General Practice Study. Demography and Family Characteristics GPEP Grant no 465. 1997, Monash University Centre for Rural Health, Monash University: Melbourne.
- 182. Strasser R, K.M., Hays R., *National Rural General Practice Study. Report to DHFS*. 1997, Monash University: Melbourne.
- 183. White MA, M.J., Miles HR. Medical students and career choice.
- 184. Wilkinson, D., et al., Associations between rural background and where South Australian general practitioners work. Medical Journal of Australia. 2000 Aug 7;173(3):137-40.
- 185. Piterman, L. and C. Silagy, *Hospital interns' and residents' perceptions of rural training and practice in Victoria*. Medical Journal of Australia. 1991 Nov 4;155(9):630-3.

- 186. Alexander, C. and J. Fraser, *Medical specialists servicing the New England Health Area of New South Wales*. Australian Journal of Rural Health. 9(1):34-7, 2001 Feb., 2001.
- 187. Pathman, D.E., et al., *Medical training debt and service commitments: the rural consequences.* Journal of Rural Health. 2000 Summer;16(3):264-72.
- 188. Sibbald, B., et al., *Solving inequities in provider distribution: loan repayment*. Health & Social Care in the Community. 2002 May;10(3):162-7.
- 189. Ulmer, B. and M. Harris, *Australian GPs are satisfied with their job: even more so in rural areas.* Family Practice. 2002 Jun;19(3):300-3.
- 190. Walton, V.A., S.E. Romans-Clarkson, and G.P. Herbison, *Variety and views in general practice*. New Zealand Medical Journal. 1990 Jun 27;103(892):287-90.
- 191. Hays, R., et al., *Getting the balance right? GPs who chose to stay in rural practice.* Australian Journal of Rural Health. 11(4):193-8, 2003 Aug., 2003.
- 192. Humphreys, J.S., et al., Workforce retention in rural and remote Australia: determining the factors that influence length of practice. Medical Journal of Australia. 2002 May 20;176(10):472-6, 2002.
- 193. Kamien, M., Report to the Ministerial Enquiry into the recruitment and retention of country doctors in Western Australia. 1987, University of Western Australia: Perth.
- 194. Rural Doctors Association of Australia, *RDAA Budget Submission*, V. RDAA News, Issue 1, Editor. 2003.
- 195. Hays, R.B., et al., *Why doctors leave rural practice*. Australian Journal of Rural Health. 1997 Nov;5(4):198-203, 1997.
- 196. Dunbabin, J., *Procedural Medicine in Rural and Remote NSW*, NSWRDN, Editor. 2002: Newcastle.
- 197. NSW Rural Doctors Network, NSW Rural Doctors Network. A model for regional coordination through rural health training units in NSW. A Proposal from the NSW Rural Medical Training Forum; a Discussion Paper. 1999, NSW Rural Doctors Network.: Sydney.

- 198. Sanmartin, C.A. and L. Snidal, *Profile of Canadian physicians: results of the* 1990 *Physician Resource Questionnaire*. CMAJ Canadian Medical Association Journal. 1993 Oct 1;149(7):977-84, 1993.
- 199. Colditz, G.A. and C.J. Elliott, *Workload in rural practice: implications for education and health service structure*. Australian Family Physician. 1978 May;7(5):571-5.
- 200. Colditz, G.A. and C.J. Elliott, *Queensland's rural practitioners: background and motivations.* Medical Journal of Australia. 1978 Jul 15;2(2):63-6.
- 201. Mainguy, S. and B.J. Crouse, *Maternity and family leave policies in rural family practices*. Minnesota Medicine. 81(9):22-4, 1998 Sep.
- 202. Forti, E.M., et al., Factors influencing retention of rural Pennsylvania family physicians. Journal of the American Board of Family Practice. 1995 Nov-Dec;8(6):469-74.
- 203. Strasser R, K.M., Hays R, Carson D. (1997c), Report on the National Rural General Practice Study. Quality of Life. GPEP Grant no 465. 1997, Monash University Centre for Rural Health, Monash University.: Melbourne.
- 204. Wise, A.L., et al., *Training for rural general practice*. Medical Journal of Australia. 1994 Sep 5;161(5):314-8.
- 205. Mayer, E.S., Academic support for rural practice: the role of area health education centers in the school of medicine. Academic Medicine. 1990 Dec;65(12 Suppl):S45-50.
- 206. Rourke, L.L., J. Rourke, and J.B. Brown, *Women family physicians and rural medicine. Can the grass be greener in the country.* Canadian Family Physician. 1996 Jun;42:1063-7, 1077-82.
- 207. Wainer J, S.R., Bryant L, Sustainable rural practice: successful strategies from male and female rural doctors. 2004, Monash University, Medicine Nursing and Health Services: Melbourne.
- 208. Cheney H, W.J., Wilson E, It's more than the money: the relationship between social values and demographic change in sustaining a rural general practitioner workforce. Rural Society, 2004. 14(3): p. 256-274.

- 209. Charles, D.M., A.M. Ward, and D.G. Lopez, Experiences of female general practice registrars: are rural attachments encouraging them to stay?

 Australian Journal of Rural Health. 13(6):331-6, 2005 Dec.
- 210. Gardiner, M., et al., *The role of psychological well-being in retaining rural general practitioners.* Australian Journal of Rural Health. 13(3):149-55, 2005 Jun.
- 211. Wainer, J.S., R. Bryant, L., *Sustainable rural practice: successful strategies from male and female rural doctors*. 2004, Monash University, Medicine Nursing and Health Services: Melbourne.
- 212. Dennerstein, L., et al., *Practice patterns and family life--a survey of Melbourne medical graduates*. Medical Journal of Australia. 1989 Oct 2;151(7):386-90.
- 213. Langwell, K.M., *Career paths of first-year resident physicians: a seven-year study*. Journal of Medical Education. 1980 Nov;55(11):897-905.
- 214. Australian Rural and Remote Workforce Advisory Group, *Reality bites:* Rural and Remote GP Workforce Information, ARRWAG, Editor. 2003: Melbourne.
- 215. Wainer, J., *Work of female rural doctors.* Australian Journal of Rural Health. 12(2):49-53, 2004 Apr.
- 216. Britt, H., et al., *The sex of the general practitioner: a comparison of characteristics, patients, and medical conditions managed.* Medical Care. 1996 May;34(5):403-15.
- 217. Tolhurst, H.B., P. Baker, L. Cleasby, L. Talbot, J., *Educational and Support Needs of Female Rural General Practitioners*. 1997, Charles Sturt University: Bathurst.
- 218. Tolhurst, H., et al., Rural general practitioner apprehension about work related violence in Australia. Australian Journal of Rural Health. 11(5):237-41, 2003 Oct.
- 219. Tolhurst, H., et al., Rural general practitioner experience of work-related violence in Australia. Australian Journal of Rural Health. 11(5):231-6, 2003 Oct.

- 220. Australian Medical Workforce Advisory Committee, Female Participation in the Australian Medical Workforce., in 1996.7, Australian Medical Workforce Committee., Editor. 1996: Sydney.
- 221. McMurray, J.E., et al., *Women in medicine: a four-nation comparison*. Journal of the American Medical Women's Association. 2002 Fall;57(4):185-90.
- 222. Uhlenberg, P. and T.M. Cooney, *Male and female physicians: family and career comparisons*. Social Science & Medicine. 1990;30(3):373-8.
- 223. Baker, L.C., *Differences in earnings between male and female physicians*. New England Journal of Medicine., 1996. 334(15): p. 960-4.
- 224. Bobula, J.D., *Income differences between male and female physicians*. Profile of Medical Practice. 1980;:123-33, 1980.
- 225. Dennerstein, L., et al., *Practice patterns and family life--a survey of Melbourne medical graduates*. Medical Journal of Australia. 1989 Oct 2;151(7):386-90, 1989.
- 226. Ohsfeldt, R.L. and S.D. Culler, *Differences in income between male and female physicians*. Journal of Health Economics. 1986 Dec;5(4):335-46.
- 227. McMurray, J.E., et al., *The work lives of women physicians results from the physician work life study. The SGIM Career Satisfaction Study Group.* Journal of General Internal Medicine. 2000 Jun;15(6):372-80.
- 228. Sleath, B. and R.H. Rubin, *Gender, ethnicity, and physician-patient communication about depression and anxiety in primary care.* Patient Education & Counseling. 2002 Dec;48(3):243-52.
- 229. Australian Medical Workforce Advisory Committee, *Doctors in vocational training: rural background and rural practice intentions.* Australian Journal of Rural Health., 2005. 13(1): p. 14-20.
- 230. Frey, H., Swedish men and women doctors compared. Comparison between Swedish-trained men and women doctors for background, demographic characteristics, professional activity and motives leading to choice of medical career. Medical Education. 1980 Mar;14(2):143-53.

- 231. Lambert, T.W., et al., Career destinations in 1994 of United Kingdom medical graduates of 1983: results of a questionnaire survey. BMJ. 1996 Apr 6;312(7035):893-7.
- 232. Heslop, B.F., For better or for worse? Women doctors at the end of the decade. New Zealand Medical Journal. 1987 Mar 25;100(820):176-9.
- 233. Redman, S., et al., *Determinants of career choices among women and men medical students and interns*. Medical Education. 1994 Sep;28(5):361-71.
- 234. Reed, V. and B. Buddeberg-Fischer, *Career obstacles for women in medicine: an overview*. Medical Education. 2001 Feb;35(2):139-47.
- 235. Wheeler, R., L. Candib, and M. Martin, *Part-time doctors: reduced working hours for primary care physicians*. Journal of the American Medical Women's Association. 1990 Mar-Apr;45(2):47-54.
- 236. Bolton-Maggs, P.H., V. Van Someren, and F. Lefford, *The need for part-time work: a survey of doctors 10 years after graduation*. British Journal of Hospital Medicine. 1988 May;39(5):413-6.
- 237. Bolton-Maggs, P.H., V. Van Someren, and F. Lefford, *The need for part-time work: a survey of doctors 10 years after graduation*. British Journal of Hospital Medicine. 1988 May;39(5):413-6, 1988.
- 238. Fett, I., *The future of women in Australian medicine*. Medical Journal of Australia. 1976 Nov 20;2(2 Suppl):33-9.
- 239. Chambers, R. and I. Campbell, *Gender differences in general practitioners at work*. British Journal of General Practice. 1996 May;46(406):291-93.
- 240. Davidson, J.M., T.W. Lambert, and M.J. Goldacre, *Career pathways and destinations 18 years on among doctors who qualified in the United Kingdom in 1977: postal questionnaire survey.* BMJ. 1998 Nov 21;317(7170):1425-8.
- 241. Dickstein, L.J., Female physicians in the 1980s: personal and family attitudes and values. Journal of the American Medical Women's Association. 45(4):122-6, 1990 Jul-Aug.
- 242. Woodward, C.A., M.L. Cohen, and B.M. Ferrier, Career interruptions and hours practiced: comparison between young men and women physicians.

- Canadian Journal of Public Health. Revue Canadienne de Sante Publique. 1990 Jan-Feb;81(1):16-20.
- 243. Sells, J.M. and C.J. Sells, *Pediatrician and parent: a challenge for female physicians*. Pediatrics. 84(2):355-61, 1989 Aug.
- 244. Mayer, K.L., H.S. Ho, and J.E. Goodnight, Jr., *Childbearing and child care in surgery*. Archives of Surgery. 136(6):649-55, 2001 Jun.
- 245. Sinal, S., P. Weavil, and M.G. Camp, *Survey of women physicians on issues relating to pregnancy during a medical career*. Journal of Medical Education. 1988 Jul;63(7):531-8.
- 246. Williams, A.P., et al., *Women in medicine: practice patterns and attitudes*. CMAJ Canadian Medical Association Journal. 1990 Aug 1;143(3):194-201.
- 247. Lewis, J.M., et al., *The lives of female physicians*. Texas Medicine. 1994 Mar;90(3):56-61.
- 248. Bobula, J.D., *Income differences between male and female physicians*. Profile of Medical Practice. 1980;123-33.
- 249. Baker, L.C., Differences in earnings between male and female physicians. New England Journal of Medicine. 334(15):960-4, 1996 Apr 11.
- 250. Osler, K., *Employment experiences of vocationally trained doctors*. BMJ. 1991 Sep 28;303(6805):762-4.
- 251. Kikano, G.E., M.A. Goodwin, and K.C. Stange, *Physician employment status and practice patterns*. Journal of Family Practice. 46(6):499-505, 1998 Jun.
- 252. Cooke, M. and C. Ronalds, *Women doctors in urban general practice: the doctors.* British Medical Journal Clinical Research Ed.. 1985 Mar 9;290(6470):755-8.
- 253. Littlewood, J., et al., *Against women: are we looking after our general practitioners? GPs' views of the 1990 part-time contract.* Journal of the Royal Society of Health. 119(2):85-8, 1999 Jun.

- 254. Kilmartin, M.R., C.J. Newell, and M.A. Line, *The balancing act: key issues in the lives of women general practitioners in Australia.* Medical Journal of Australia. 177(2):87-9, 2002 Jul 15.
- 255. Mazza, D. and S. Northfield, *Are part timers real GPs? Attitudes of general practitioners toward those who work part time*. Australian Family Physician. 2000 Sep;29(9):900-4.
- 256. van den Brink-Muinen, A., D.H. de Bakker, and J.M. Bensing,

 Consultations for women's health problems: factors influencing women's choice
 of sex of general practitioner. British Journal of General Practice. 1994

 May;44(382):205-10.
- 257. Fennema, K., D.L. Meyer, and N. Owen, *Sex of physician: patients'* preferences and stereotypes. Journal of Family Practice. 1990 Apr;30(4):441-6.
- 258. Waller, K., *Women doctors for women patients?*. British Journal of Medical Psychology. 1988 Jun;61 (Pt 2):125-35.
- 259. Lurie, N., et al., *Preventive care for women. Does the sex of the physician matter?* New England Journal of Medicine. 1993 Aug 12;329(7):478-82.
- 260. Halvorsen, G.H., W.B. Karlsen, and A. Tollan, [Do male and female physicians give the same contraception guidance?]. [Norwegian]. Tidsskrift for Den Norske Laegeforening. 1990 Nov 10;110(27):3503-4.
- 261. Woodward, C.A. and J. Hurley, Comparison of activity level and service intensity of male and female physicians in five fields of medicine in Ontario. CMAJ Canadian Medical Association Journal. 1995 Oct 15;153(8):1097-106.
- 262. Bryson, L. and P. Warner-Smith, *Choice of GP: who do young rural women prefer?* Australian Journal of Rural Health. 1998 Aug;6(3):144-9.
- 263. Graffy, J., *Patient choice in a practice with men and women general practitioners.* British Journal of General Practice. 1990 Jan;40(330):13-5.
- 264. Ahmad, F., et al., Rural physicians' perspectives on cervical and breast cancer screening: a gender-based analysis. Journal of Womens Health & Gender-Based Medicine. 2001 Mar;10(2):201-8.

- 265. Desnick, L., et al., Clinical breast examination in primary care: perceptions and predictors among three specialties. Journal of Women's Health. 1999

 Apr;8(3):389-97.
- 266. Oandasan, I. and R. Malik, What do adolescent girls experience when they visit family practitioners? Canadian Family Physician. 1998 Nov;44:2413-20.
- 267. Kaplan, S.H., et al., *Patient and visit characteristics related to physicians'* participatory decision-making style. Results from the Medical Outcomes Study. Medical Care. 1995 Dec;33(12):1176-87.
- 268. Scholle, S.H., et al., *Physician gender and psychosocial care for children: attitudes, practice characteristics, identification, and treatment.* Medical Care. 2001 Jan;39(1):26-38.
- 269. Hall, J.A. and D.L. Roter, *Do patients talk differently to male and female physicians? A meta-analytic review.* Patient Education & Counseling. 2002 Dec;48(3):217-24.
- 270. Long, S.O., Roles, careers and femininity in biomedicine: women physicians and nurses in Japan. Social Science & Medicine. 1986;22(1):81-90.
- 271. Hammond, J.A., *Mother, doctor, wife.* Canadian Family Physician. 1993 Jul;39:1591-6.
- 272. Geis, R.E., P. Jesilow, and G. Geis, *The Amelia Stern syndrome: a diagnosis of a condition among female physicians?* Social Science & Medicine. 1991;33(8):967-71.
- 273. Brown, J.B., *Female family doctors: their work and well-being*. Family Medicine. 1992 Nov-Dec;24(8):591-5.
- 274. Ducker, D., Research on women physicians with multiple roles: a feminist perspective. Journal of the American Medical Womens Association. 1994 May-Jun;49(3):78-84.
- 275. Gross, E.B., Gender differences in physician stress: why the discrepant findings? Women & Health. 1997;26(3):1-14.

- 276. Heim, E.,[Stressors in health occupations. Do females have a greater health risk?].[German]. Zeitschrift fur Psychosomatische Medizin und Psychoanalyse. 1992;38(3):207-26.
- 277. Carr, P.L., K.C. Gareis, and R.C. Barnett, *Characteristics and outcomes for women physicians who work reduced hours*. Journal of Women's Health. 2003 May;12(4):399-405.
- 278. Woodward, C.A., et al., *Time spent on professional activities and unwaged domestic work*. *Is it different for male and female primary care physicians who have children at home?* Canadian Family Physician. 1996 Oct;42:1928-35.
- 279. Carroll, J.C., J.B. Brown, and A.J. Reid, *Female family physicians in obstetrics: achieving personal balance*. CMAJ Canadian Medical Association Journal. 1995 Nov 1;153(9):1283-9.
- 280. Davis, E.M., *Gender stress: a preliminary survey with specific reference to female physicians*. West Indian Medical Journal. 42(3):126-8, 1993 Sep.
- 281. Carpenter, L.M., A.J. Swerdlow, and N.T. Fear, *Mortality of doctors in different specialties: findings from a cohort of 20000 NHS hospital consultants.*Occupational & Environmental Medicine. 1997 Jun;54(6):388-95.
- 282. Tyssen, R.,[Health problems and use of health services among physicians].[Norwegian]. Tidsskrift for Den Norske Laegeforening. 2001 Dec 10;121(30):3527-32.
- 283. Welner, A., et al., *Psychiatric disorders among professional women*. Archives of General Psychiatry. 1979 Feb;36(2):169-73.
- 284. Miller, N.H., V.L. Katz, and R.C. Cefalo, *Pregnancies among physicians*. *A historical cohort study*. Journal of Reproductive Medicine. 1989 Oct;34(10):790-6.
- 285. Rosvold, E.O., et al., *Breast self-examination and cervical cancer testing among Norwegian female physicians. A nation-wide comparative study.* Social Science & Medicine. 52(2):249-58, 2001 Jan.
- 286. Janes, R., R. Elley, and A. Dowell, *New Zealand Rural General Practitioners* 1999 Survey--Part 2: gender issues. New Zealand Medical Journal. 117(1191):U814, 2004 Apr 2.

- 287. Hobbs, F.D., General practitioners' changes to practice due to aggression at work. Family Practice. 1994 Mar;11(1):75-9.
- 288. Phillips, S., Sexual harassment of female physicians by patients. What is to be done? Canadian Family Physician. 42:73-8, 1996 Jan.
- 289. Field, D. and A. Lennox, *Gender in medicine: the views of first and fifth year medical students*. Medical Education. 1996 Jul;30(4):246-52.
- 290. Somers, G.T., *Is change needed to attract young GPs to the country?*, in *Monash Newsline*. 2005.
- 291. Vaughan, G., Hogg M., *The Nature and Measurement of Attitudes*, in *Introduction to Social Psychology*, P. Hall, Editor. 1998, Prentice Hall: Sydney. p. 86-90.
- 292. Gaston, G., Kok G, *The theory of planned behaviour: A review of its applications to health-related behaviours.* American Journal of Health Promotion, 1996. 11(2): p. 87-98.
- 293. Somers, G. An approach to the understanding and measurement of medical students attitudes toward a rural career. in RACGP Annual Scientific Conference. 2006. Brisbane.
- 294. Harrison ME, *A doctor's place:female physicians in Mexico DF.* Health & Place, 1995. 1(2): p. 101-111.
- 295. Relph E, *Place and Placelessness*. 1976, London: Pioneer. Page 39.
- 296. Kearns, R., *Place and Health:Towards a reformed medical geography*. Place and Health, 1993. 45(2): p. 139-147.
- 297. Durey A, M.B., Coffin J. The social construction of place and identity as obstacles to male students from rural and remote areas choosing health careers. in 6th National Rural Health Conference. 2001. Canberra ACT: National Rural Health Alliance.
- 298. Strasser, *Is rural practice a distinct discipline?* Australian Family Physician. 24(11):2144, 2146, 1995 Nov.

- 299. Strasser, R., Rural general practice: is it a distinct discipline? Australian Family Physician. 1995 May;24(5):870-1, 874-6.
- 300. Smith, J. and R. Hays, *Is rural medicine a separate discipline?* Australian Journal of Rural Health. 12(2):67-72, 2004 Apr.
- 301. Australian College of Rural and Remote Medicine, *Establishing ACCRM*. 2007.
- 302. Giddens A, c.i.P.D.o.S., *Modernity and Self-identity:Self and society in the late modern age.* 1991, Cambridge: Polity press.
- 303. Abercrombie, N.H., S. Turner, BS, *The Penguin Dictionary of Sociology*. 5th ed. 2006, London: Penguin. Page 190.
- 304. Hull B, L.M., Vigo G, *Place identity: symbols of self in the urban fabric.* Landscape and urban planning, 1994. 28: p. 109-120.
- 305. Abercrombie, N.H., S. Turner, BS, *Dictionary of Sociology. Page 163*. 2006, London: Penguin Books.
- 306. Bilton T, B.K., Jones P, Lawson T, Skinner D, Stanworth M, Webster A,, *Introductory Sociology. Page 131*. 2002, London: Palgrave MacMillan.
- 307. Bilton T, B.K., Jones P, Lawson T, Skinner D, Stanworth M, Webster A,, *Introductory sociology page 132*. 2002, London: Palgrave MacMillan.
- 308. Bilton T, B.K., Jones P, Lawson T, Skinner D, Stanworth M, Webster A,, *Introductory Sociology Pages* 139-141. 2002, London: Palgrave MacMillan.
- 309. Abercrombie, N.H., S. Turner, BS, *Dictionary of Sociology. Page* 238. 2006, London: Penguin Books.
- 310. Davies., C., *The sociology of professions and the profession of gender*. Sociology, 1996. 30(4): p. 661-678.
- 311. Sinclair., S., Making doctors. An institutional apprenticeship. 1997, New York: Berg.
- 312. Williams, A.P., K.D. Pierre, and E. Vayda, *Women in medicine: toward a conceptual understanding of the potential for change.* Journal of the American Medical Womens Association. 1993 Jul-Aug;48(4):115-21.

- 313. Brooks, F., Women in general practice: responding to the sexual division of labour? Social Science & Medicine. 47(2):181-93, 1998 Jul.
- 314. Higginbotham, N., G. Albrectht, and L. Connor, *Health social science: A transdisciplinary and complexity perspective*. 2001, Melbourne: Oxford University Press.
- 315. Minichellio V, S.G., Greenwood K, Axford R, Research Methods for Nursing and Health Science Page 62. 2nd Edition ed. 2004, Sydney: Pearson Education Australia.
- 316. Xu, G., et al., Factors influencing primary care physicians' choice to practice in medically underserved areas. Academic Medicine. 1997 Oct;72(10 Suppl 1):S109-11.
- 317. Rabinowitz, H.K., et al., *The impact of multiple predictors on generalist physicians' care of underserved populations*. American Journal of Public Health. 2000 Aug;90(8):1225-8.
- 318. Milliken P, S.R., Can you 'do' Grounded theory without Symbolic Interactionism?, in Using Grounded Theory in Nursing, S.P. Schreiber R, Editor. 2001, Springer: New York.
- 319. Hansen E, *Successful Qualitative Health Research Page 63*. 2006, Crows Nest, Australia: Allen and Unwin.
- 320. Minichellio V, S.G., Greenwood K, Axford R, Research methods for Nursing and Health Science. 2004, French's Forest: Pearson Education Australia.
- 321. Yin, R.K., *Enhancing the quality of case studies in health services research.* Health Services Research. 34(5 Pt 2):1209-24, 1999 Dec.
- 322. Yin R cited in Higginbotham, *Health Social Science, A Transdisciplinary and Complexity Perspective*. 2001, South Melbourne: Oxford University Press. 325.
- 323. Hansen E, Successful Qualitative Health Research Page 54. 2006, Crows Nest: Allen and Unwin.
- 324. Hansen E, Successful Qualitative Health Research Page52. 2006, Crows Nest: Allen and Unwin.

- 325. Green J, T.N., *Qualitative Methods for Health Research. Page* 102. 2004, London: Sage.
- 326. Minichellio V, S.G., Greenwood K, Axford R, Research Methods for Nursing and Health Science Page 226-227. 2004, French's Forest: Pearson Education Australia.
- 327. Hansen E, Successful Qualitative Health Research Page 53. 2006, Crows Nest: Allen and Unwin.
- 328. Minichellio V, S.G., Greenwood K, Axford R, Research Methods for Nursing and Health Science Page 452. 2004, French's Forest: Pearson Education Australia.
- 329. Schreiber R, *The how to of grounded theory: avoiding the pitfalls Page 64-65*, in *Using Grounded Theory In Nursing*, S.P. Schreiber R, Editor. 2001, Springer: New York.
- 330. Green J, T.N., *Qualitative Methods for Health Research. Page* 179. 2004, London: Sage.
- 331. MacDonald M, Finding a Critical Perspective in Grounded Theory, in Using Grounded Theory in Nursing, S.P. Schreiber R, Editor. 2001, Springer: New York.
- 332. Morse J, R.L., *Readme First for a users guide to qualitative methods Pages 118-119*. 2002, Thousand Oaks, California: Sage.
- 333. Schreiber R, *The how to of grounded theory: avoiding the pitfalls Page 72-73*, in *Using Grounded Theory In Nursing*, S.P. Schreiber R, Editor. 2001, Springer: New York.
- 334. QSR, N6 Release. 1991-2000, QSR International.
- 335. Hansen E, Successful Qualitative Health Research Page 149. 2006, Crows Nest: Allen and Unwin.
- 336. Schreiber R, *The how to of grounded theory: avoiding the pitfalls Page 60-61*, in *Using Grounded Theory in Nursing*, S.P. Schreiber R, Editor. 2001, Springer: New York.

- 337. Morse J, R.L., *Readme First for a users guide to qualitative methods Pages 130-131*. 2002, Thousand Oaks: Sage.
- 338. Schreiber R, *The how to of grounded theory: avoiding the pitfalls Pages 57-58,* in *Using Grounded Theory in Nursing*, S.P. Schreiber R, Editor. 2001, Springer: New York.
- 339. Green J, T.N., *Qualitative Methods for Health Research. Page* 194. 2004, Cambridge: Cambridge University Press.
- 340. Hansen E, Successful Qualitative Health Research Page 124. 2006, Crows Nest: Allen and Unwin.
- 341. Edwards, C., et al., *Early medical career choices and eventual careers*. Medical Education. 31(4):237-42, 1997 Jul.
- 342. Veitch, C., A. Underhill, and R.B. Hays, *The career aspirations and location intentions of James Cook University's first cohort of medical students: a longitudinal study at course entry and graduation*. Rural & Remote Health. 6(1):537, 2006 Jan-Mar.
- 343. Morse J, R.L., *Readme First for a users guide to qualitative methods Page* 94. 2002, Thousand Oaks: Sage.
- 344. Hansen E, Successful Qualitative Health Research Page 132. 2006, Crows Nest: Allen and Unwin.
- 345. Hansen E, Successful Qualitative Health Research Page 12. 2006, Crows Nest: Allen and Unwin.
- 346. Minichellio V, S.G., Greenwood K, Axford R, Research Methods for Nursing and Health Science Page 449. 2004, French's Forest: Pearson Education Australia.
- 347. Tolhurst H, D.S., *Using teleconferencing to enable general practitioner participation in focus groups.* Journal of Primary Health Care Research and Development, 2004. 5: p. 1-4.
- 348. Minichellio V, S.G., Greenwood K, Axford R, Research Methods for Nursing and Health Science Page 456. 2004, French's Forest: Pearson Education Australia.

- 349. Barley, G.E., et al., *Characteristics of and issues faced by rural female family physicians*. Journal of Rural Health. 17(3):251-8, 2001.
- 350. Australian Medical Workforce Advisory, C., Doctors in vocational training: rural background and rural practice intentions. Australian Journal of Rural Health. 13(1):14-20, 2005 Feb.
- 351. Mutha, S., J.I. Takayama, and E.H. O'Neil, *Insights into medical students'* career choices based on third- and fourth-year students' focus-group discussions. Academic Medicine. 1997 Jul;72(7):635-40.
- 352. Orpin, P. and M. Gabriel, *Recruiting undergraduates to rural practice: what the students can tell us.* Rural & Remote Health. 5(4):412, 2005 Oct-Dec.
- 353. South Australian Health Commission, Royal Australian College of General Practitioners, Australian Medical Association(SA). *Review of General Medical Practice in South Australia: Third Report: Country General Practice*, S.A.H. Commission, Editor. 1992: Adelaide.
- 354. Merriam Webster English Dictionary, *Merriam Webster English Dictionary*. 2007-2008, Merriam Webster: Springfield, MA, USA.
- 355. Random House, I., *The Random House Unabridged Dictionary*,, I. Random House, Editor. 2006.
- 356. American Heritage Dictionary, *The American Heritage® Dictionary of the English Language*,.
- 357. Rabinowitz, H.K., *Recruitment, retention, and follow-up of graduates of a program to increase the number of family physicians in rural and underserved areas.* New England Journal of Medicine. 1993 Apr 1;328(13):934-9.
- 358. Pathman, D.E., T.R. Konrad, and C.R. Agnew, *Studying the retention of rural physicians*. Journal of Rural Health. 10(3):183-92, 1994.
- 359. Craig, M., C. Jackel, and P. Gerrits, Selection of medical students and the maldistribution of the medical workforce in Queensland, Australia. Australian Journal of Rural Health, 1993. **1**(3): p. 17-21.
- 360. Kwong, J.C., et al., *A comparison of Canadian medical students from rural and non-rural backgrounds*. Canadian Journal of Rural Medicine. 10(1):36-42, 2005.

- 361. Dornan, T., et al., *How can experience in clinical and community settings contribute to early medical education? A BEME systematic review.* Medical Teacher. 28(1):3-18, 2006 Feb.
- 362. Rourke, J.T., *Postgraduate medical education for rural family practice in Canada*. Journal of Rural Health. 2000 Summer;16(3):280-7.
- 363. Nugent, A., et al., *A national census of Irish general practice training programme graduates* 1990-1996. Irish Medical Journal. 2003 Jan;96(1):10-2.
- 364. Bruening, M.H. and G.J. Maddern, *A profile of rural surgeons in Australia*. Medical Journal of Australia. 1998 Sep 21;169(6):324-6.
- 365. Cullen, B., *The balancing act: balancing personal and professional responsibilities.* Journal of Wound, Ostomy, & Continence Nursing. 25(4):175-6, 1998 Jul.
- 366. Dumelow, C. and S. Griffiths, We all need a good wife to support us. Journal of Management in Medicine. 1995;9(1):50-7.
- 367. Gjerberg, E., Women doctors in Norway: the challenging balance between career and family life. Social Science & Medicine. 2003 Oct;57(7):1327-41.
- 368. McEwin K, General Practice Workforce Plan for Rural and Remote New South Wales 2002-2003. 2003., NSW Rural Doctors Network: Newcastle.
- 369. Wainer J, B.L., Strasser R, Carson D, Stringer K. *A life not a wife*. in *5th National Rural Health Conference*. 1999. Adelaide: National Rural Health Alliance, .
- 370. White, B.A., *Women in medicine: a balancing act*. Indiana Medicine. 83(3):198-202, 1990 Mar.
- 371. Australian Medical Workforce Advisory Committee, *Influences on participation in the Australian Medical Workforce AMWAC Report* 1998.4. 1998: Sydney.
- 372. Heins, M., Women in medicine: two points of view. II. Medicine and motherhood. JAMA. 1983 Jan 14;249(2):209-10.

- 373. Bensing, J.M., A. van den Brink-Muinen, and D.H. de Bakker, *Gender differences in practice style: a Dutch study of general practitioners*. Medical Care. 31(3):219-29, 1993 Mar.
- 374. Bertakis, K.D., P. Franks, and R. Azari, *Effects of physician gender on patient satisfaction*. Journal of the American Medical Womens Association. 2003 Spring;58(2):69-75.
- 375. Bertakis, K.D., et al., *The influence of gender on physician practice style.* Medical Care. 1995 Apr;33(4):407-16.
- 376. Gray, J., Women in medicine: practice patterns and attitudes. CMAJ Canadian Medical Association Journal. 144(1):13, 1991 Jan 1.
- 377. Hojat, M., et al., Comparisons of male and female physicians on their practice patterns, professional activities, and perception of professional problems.

 Proceedings of the Annual Conference on Research in Medical Education. 1987.
- 378. Sandvik, H. and S. Hunskaar, *Doctors' characteristics and practice patterns in general practice: an analysis based on management of urinary incontinence.* Scandinavian Journal of Primary Health Care. 1990 Sep;8(3):179-82.
- 379. Berg, A.O. and T.E. Norris, *A workforce analysis informing medical school expansion, admissions, support for primary care, curriculum, and research.*Annals of Family Medicine. 4 Suppl 1:S40-4; discussion S58-60, 2006 SepOct.
- 380. Commonwealth Dept of Health and Aged Care, Report of the third National Undergraduate Rural Health and Curriculum Conference. 1998: Canberra.
- 381. Department of Health and Ageing, *Health workforce: Development of retention payments categories*. 2004: Canberra.
- 382. MacIsaac, P., et al., *Case management: a model for the recruitment of rural general practitioners*. Australian Journal of Rural Health. 8(2):111-5, 2000 Apr.

- 383. Worley, P., et al., *The parallel rural community curriculum: an integrated clinical curriculum based in rural general practice.* Medical Education., 2000. 34(7): p. 558-65.
- 384. Schwarz, M.R., *The WAMI Program: 25 years later.* Medical Teacher. 26(3):211-4, 2004 May.
- 385. Rourke, J.T. and R. Strasser, *Education for rural practice in Canada and Australia*. Academic Medicine. 1996 May;71(5):464-9.
- 386. Strasser R, K.M., Hays R, Carson D. (1997b). Report on the National Rural General Practice Study. Training and Support. GPEP Grant no 465. 1997, Monash University Centre for Rural Health, Monash University.: Melbourne.
- 387. WONCA, Calgary commitment to women in rural family medical practice. 2004, WONCA: Calgary. Website address:
 Globalfamilydoctor.com/about WONCA/working groups/rural accessed 2009.