Compositional, Contextual and Collective Community Factors in Mental Health and Wellbeing in Australian Rural Communities: Perspectives from the front line

Jessica Collins

Bachelor of Behavioural Science (Hons.)

This thesis is submitted in partial fulfilment of the requirements for the Degree of Doctor of Psychology in Clinical Psychology

School of Psychology and Psychiatry.

Faculty of Medicine, Nursing and Health Sciences.

Monash University.

November 2011

Table of Contents

List of Tables	vi
List of Figures	vii
List of Appendices	viii
Abstract	ix
Statement of Authorship	xi
Acknowledgements	xii
Chapter 1: Introduction and Review of Literature	1
1.1 Introduction	1
1.2 Epidemiology of Suicide in Australia	3
1.2.1 Suicide trends in Australia	4
1.2.1.1 Suicide trends for Australian men	5
1.2.1.2 Suicide trends for Australian women	7
1.2.2 Suicide in rural Australia	8
1.3 Risk Factors for Suicide: Can they Explain the Urban-Rural Disparity?	13
1.3.1 Psychiatric disorder and suicide attempt	14
1.3.2 Personality factors and coping style	18
1.3.3 Individual socioeconomic and demographic status	20
1.3.4 Broader social, economic and environmental factors	23
1.4 From Mental Illness to Mental Health	29
1.4.1 Rural conceptions and perceptions of health	30
1.4.2 Rural culture, values and beliefs	32
1.4.3 Community and social connectedness	37
1.4.5 Availability and accessibility of services	40
1.4.6 The rural context	41
1.5 Geographic Variations in Mental Health and Wellbeing	44
1.5.1 Rural diversity: What is "rural"?	49
1.5.2 The importance of "place" in rural mental health	52
1.6 Building a Framework	55
1.6.1 Early contemplations: Emile Durkheim.	57
1.6.2 A modern perspective: Macintyre and colleagues	59

1.7 Summary and Context for the Current Study	65
1.8 Research Aims for the Current Study	70
Chapter 2: Methodology	72
2.1 Introduction	72
2.2 Philosophy of Scientific Enquiry	73
2.2.1 Quantitative and qualitative methodological approaches	75
2.2.1.1 Methodological strengths and weaknesses	78
2.2.2 A qualitative approach: Grounded Theory	81
2.3 Study Design and Context	83
2.3.1 Setting of the study	83
2.3.1.1 Selection of sample towns	84
2.3.1.2 Town demographic profiles	85
2.4 Identification of Informants	91
2.4.1 Recruitment of mental health professionals	92
2.5 Data Collection: Sources and Procedures	94
2.5.1 Interviews	94
2.5.1.1 Development of interview protocol	96
2.5.1.2 Interview process	97
2.5.1.3 Interview recording, field notes and transcription	99
2.5.2 Supplementary data: Non-technical extant texts	101
2.6 Data Analysis	101
2.6.1 Coding procedures	102
2.6.1.1 Open coding	103
2.6.1.2 Axial coding	105
2.6.1.3 Selective coding	106
2.6.2 Adjunctive procedures	107
2.7 Maintenance of Rigour	109
2.8 Ethical Considerations of the Study	112
2.9 Conclusion.	114
Chapter 3: Results	115
3.1 Introduction	115

3.2 Compositional Community Factors	. 116
3.2.1 Population make-up and demographics	. 116
3.2.1.1 What the numbers say: ABS basic community profiles - 2001 census data	. 116
3.2.1.2 What the people said: Perceptions of population make-up and demographics	. 117
3.2.1.2.1 Town A: Perceptions of population make-up and demographics	. 119
3.2.1.2.2 Town B: Perceptions of population make-up and demographics	. 120
3.2.1.2.3 Town C: Perceptions of population make-up and demographics	. 122
3.2.1.2.4 Town D: Perceptions of population make-up and demographics	. 124
3.2.2 Mental health issues	. 126
3.3 Contextual Community Factors	. 129
3.3.1 Physical environment and climate	. 129
3.3.2 Employment opportunities	. 133
3.3.3 Availability of housing	. 136
3.3.4 Mental health and other services	. 137
3.3.4.1 Mental health services	. 137
3.3.4.1.1 Town A: Perceptions of mental health services	. 138
3.3.4.1.2 Town B: Perceptions of mental health services	. 140
3.3.4.1.3 Town C: Perceptions of mental health services	. 142
3.3.4.1.4 Town D: Perceptions of mental health services	. 144
3.3.4.2 Other health and safety services	. 145
3.3.4.3 Transport services	. 150
3.3.4.4 Youth services	. 152
3.4 Collective Community Factors	. 158
3.4.1 Identity of the town	. 158
3.4.2 Values and behaviours	. 162
3.4.2.1 Community norms and values	. 163
3.4.2.1.1 Town A: Perceptions of community norms and values	. 163
3.4.2.1.2 Town B: Perceptions of community norms and values	. 165
3.4.2.1.3 Town C: Perceptions of community norms and values	. 167
3.4.2.1.4 Town D: Perceptions of community norms and values	. 169
3.4.2.2 Social cohesion	. 171

3.4.2.2.1 Town A: Perceptions of social cohesion	172
3.4.2.2.2 Town B: Perceptions of social cohesion	173
3.4.2.2.3 Town C: Perceptions of social cohesion	175
3.4.2.2.4 Town D: Perceptions of social cohesion	177
3.4.2.3 Attitudes towards mental illness	180
3.4.2.4 Perceptions of crime and safety	183
3.5 Conclusion	185
Chapter 4: Discussion	187
4.1 Introduction	187
4.2 Macintyre's Framework: A Good Fit for Rural Mental Health?	188
4.3 Understanding the Difference: Compositional, Contextual and Collective Factors	192
4.3.1 Compositional factors	193
4.3.2 Contextual factors	196
4.3.3 Collective factors	200
4.4 An Emerging Theory: Putting the Pieces Together	207
4.5 Limitations and Strengths of the Current Study	214
4.6 Avenues for Further Research	216
4.7 Conclusion	218
References	221
Appendices	251
Appendix A	252
Appendix B	253
Appendix C	254
Appendix D	257
Appendix E	262
Appendix F	264
Appendix G	265
Appendix H	266
Appendix I	267
Appendix J	268

List of Tables

Table		Page
Table 1	Proposed Explanatory Model for Geographic Variations in Suicide	63
Table 2	Individual and Mean Demographic Information of Selected Towns	88
Table 3	Area Classification for Selected Towns within each Classification System	90
Table 4	Location and Duration of Informant Interviews	99

List of Figures

Figure		Page
Figure 1	Local Government Areas within which each of the four selected towns resides	86

List of Appendices

Appendix		Page
Appendix A	Area categories for each of the RRMA, ARIA, and ASGC classification systems	252
Appendix B	Search strategies and criteria for building initial database of MHPs	253
Appendix C	Template of the Recruitment letter to Mental Health Professionals	254
Appendix D	Template for Explanatory Statement and Consent form for Mental Health Professionals	257
Appendix E	Interview probes for semi-structured face-to-face interviews with respondents	262
Appendix F	Examples of memo excerpts showing preliminary thematic analysis and data conceptualisation	264
Appendix G	Diagram showing preliminary thematic analysis and comprehension	265
Appendix H	Diagram showing preliminary mapping of categories and inter-related subcategories	266
Appendix I	Copy of ethics approval notice from Monash University SCERH	267
Appendix J	Thematic matrix for completed data analysis	268

Abstract

Rates of suicide in rural Australia are disproportionately high when compared with rates of suicide in urban Australia, and have seen alarming increases over the last half-century.

Notwithstanding this, elevated rates of suicide are not consistent across all rural Australian areas, nor does mental health and wellbeing form a homogeneous picture across all rural communities. While there is an extensive body of research into risk factors for suicide, this literature is unable to provide a comprehensive account of *why* rates of suicide have been elevated in some small rural communities but not in others. Macintyre and colleagues (Macintyre, 1997; Macintyre, Ellaway, & Cummins, 2002) proposed that geographic variations in physical and mental health can be understood through the combination of compositional (the individuals), contextual (the physical environment) and collective (the local history and culture) factors pertaining to particular "places".

This qualitative study investigated this framework through an examination of potential "place" effects contributing to disparate rates of suicide between four small rural Victorian communities. The aims of this study were: (i) to gain an in-depth understanding of factors perceived by rural mental health professionals to be important to the mental health of local residents in four rural Victorian towns, two with "high" rates of suicide and two with "low" rates of suicide, in order to ascertain whether these identified factors could be conceptualised within the framework provided by Macintyre and colleagues, and (ii) to assess whether differences in perceived compositional, contextual and collective community factors between the four towns served to build an understanding of the differences in their recorded rates of suicide.

Using a Grounded Theory approach (Glaser & Strauss, 1967) to the analysis of in-depth interviews with rural mental health professionals, the major compositional themes identified in

this study were *population make-up and demographics* and *mental health issues*, the major contextual themes identified were *physical environment and climate*, *employment opportunities*, *availability of housing*, and *mental health and other services*, and the major collective themes identified were *identity of the town* and *values and behaviours*.

Each of the thematic factors which emerged from analysis during this study were able to be adequately mapped under the broad constructs of compositional, contextual, and collective factors and as such could be successfully conceptualised within the framework proposed by Macintyre and colleagues. In the four rural towns included in this study, patterns of variation in both perceived contextual and collective community factors, though not compositional factors, offered insight into possible differences in the mental health and wellbeing of residents in these communities, and contributed important information towards building an understanding of differences in their rates of suicide. Finally, in considering a theoretical account for the data in this study, it is proposed that *connectedness* may be the underlying mechanism by which compositional, contextual, and collective factors influence mental health and wellbeing in small rural communities.

Statement of Authorship

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

The research undertaken in connection with this thesis was approved by the Monash University Human Research Ethics Committee (Approval number CF07/1523 - 2007000428).

Notice 1

Under the Copyright Act 1968, this thesis must be used only under the normal conditions of scholarly fair dealing. In particular no results or conclusions should be extracted from it, nor should it be copied or closely paraphrased in whole or in part without the written consent of the author. Proper written acknowledgement should be made for any assistance obtained from this thesis.

Notice 2

I certify that I have made all reasonable efforts to secure copyright permissions for thirdparty content included in this thesis and have not knowingly added copyright content to my work without the owner's permission.

Jessica Collins		
Signature	 	
Date	 	

Acknowledgements

The completion of this thesis would simply not have been possible without the generous support and assistance from a large number of people to whom I would like to extend my most sincere and deeply heartfelt thanks.

Firstly, my supervisor Associate Professor Pamela Snow. I am unable to find words which can express just how profoundly grateful I am to Pam for her unwavering support and guidance throughout this long and sometimes difficult journey. I want to thank Pam for her unending generosity with her time, moral support and wisdom; at times relating to the thesis and at others relating to life. I want to thank Pam for being my mentor and my grounding but, most of all, I want to thank Pam for never once losing faith in me, even in the face of what seemed like insurmountable odds. Pam, I could not have done this without you.

My enormous thanks to the School of Psychology and Psychiatry and the Faculty of Medicine Nursing and Health Sciences, which extended their support to me following the loss of my home during the 2009 Kinglake bushfires. This support allowed me to access assistance in the completion of data transcription, as well as some additional support with respect to data analysis. Specifically, I would like to thank Leanne Cheney for helping me to complete the transcription process and being so giving of her time. I would also like to say a very special thank you to Sandra Kippen for her astounding wisdom, support and mentoring throughout the completion of the data analysis and final write-up process I thank Sandra for giving so generously of her time and input, and I feel truly honoured to have been able to work with her.

I would like to thank my initial supervisor, Professor Fiona Judd, whose guidance and wealth of knowledge was fundamental during the early formative stages of this research project.

I was very fortunate in being provided with the freedom to create a research project that I was

passionate about, while being supported by Fiona to ensure that the research was well managed. I would also like to thank Caitlin Fraser and Angela Komiti for their assistance during the preliminary research stages of this project, and also for their input into the development of the interview protocol which was used throughout the research.

I am so grateful to all of the rural mental health professionals who took part in this research project. In the face of extremely hectic schedules, each of these people shared my passion for this project and gave warmly and generously of their time, their wealth of knowledge and their extensive experience. It is their words which made this research possible, and I hope that they find these words faithfully and respectfully represented here.

To my incredible friends and family who have been on this journey with me from the start, and whose love and care made it possible for me to see it through to the end. I don't know where to begin in thanking them for their tolerance, their understanding, their kindness and their immeasurable support. I want to thank my mum, Toni-anne, not only for providing me with practical and emotional support at every step along the way, but also for showing me how to get back up in the face of adversity and how to rebuild more than just your home. I want to say thank you to my dad, Rod, and also to Sally, for their unfailing support and kindness throughout this process, for always taking a genuine interest in the project and for reminding me why I felt so strongly about it. I want to say a huge thank you to my sister, Amy, who was my sounding board, my shoulder to cry on, and my friend to celebrate with. I want to thank her for being whatever I needed her to be, and for never once falling short. I want to thank my best friend and fiancé, Rick, whose love, care and kindness was unwavering. I want to thank him for his unlimited patience and understanding even when I had little of either. Finally, to all of my friends and

family, I want to say thank you with all of my heart for always believing in me, even when I found it hard to do so.

Thank you.

Chapter 1: Introduction and Review of Literature

1.1 Introduction

Within public health research and policy development, there is a now well established recognition of the geographical variability in determinants of numerous health indicators and outcomes (Kelly et al., 2010a), and particularly the disparity that exists between metropolitan (urban) and non-metropolitan (rural) areas (Australian Institute of Health and Welfare (AIHW), 2008; Bourke, Humphreys, Wakerman, & Taylor, 2010; Smith, Humphreys, & Wilson, 2008). Rural populations have been reported to suffer from significantly higher rates of cancer, circulatory and respiratory disease, diabetes, perinatal and neonatal conditions, renal disease, and injury and trauma (Smith et al., 2008). One observation which has been pivotal in directing the focus of attention towards rural mental health and wellbeing, and was the fundamental impetus for the current study, is the disproportionately high rates of recorded suicide in rural areas compared with urban areas, particularly among men, both globally and within Australia (e.g., Caldwell, Jorm, & Dear, 2004a; Gallagher & Sheehy, 1994; Phillips, Li, & Zhang, 2002; Singh & Siahpush, 2002).

Despite being a well-documented epidemiological phenomenon around the world, the collective body of empirical and theoretical literature pertaining to this issue suffers from many important limitations, inadequacies and paucities (Bourke et al., 2010; Fraser et al., 2002; Judd, Cooper, Fraser, Davis, 2006a; Kelly et al., 2010a; Smith et al., 2008). The notably more established body of research on risks for suicide in general, while providing much extremely important and relevant information, seems deficient in its ability to provide an adequate account of the profound differences in observed rates of suicide between rural and urban communities.

The literature looking specifically at rural suicide shows a tendency to focus on reporting prevalence and establishing urban-rural differentials, rather than seeking to understand and explain them (Bourke et al., 2010; Fraser et al., 2002). Numerous methodological and analytical issues have been raised as impeding the practical comparability and utility of research in this field (Kelly et al., 2010b), as has the lack of an overarching theoretical framework within which this research can be conducted and understood (Bourke et al., 2010).

In order to provide background and context, this chapter begins with a brief account of the current picture of suicide and important suicide trends which have been recorded within Australia since the early part of the last century. In light of this picture, particular focus is then given to the patterns of suicide which have been recorded and documented for rural Australia, highlighting most notably the increasingly elevated rates of suicide for particular population cohorts. In seeking to understand this phenomenon, this chapter considers some of the more established risk factors for suicide, and how they contribute, or fail to contribute, to our ability to understand and explain the observed urban-rural differentials. From here, this chapter moves to consideration of the criticisms of this body of literature, namely the need to focus on a more complete picture of rural mental health and wellbeing (rather than mental illness), as well as the fundamental need to shift the level of analysis from crude urban-rural location differentials, to considering the unique role of "place". The need for an overarching theoretical understanding is discussed, and a possible framework for conceptualising the disproportionately high rates of suicide observed in some rural communities is presented. In light of the preceding discussion, this chapter concludes with an outline of the approach to, and research aims of, the current study.

1.2 Epidemiology of Suicide in Australia

Although a statistically rare event, the human and economic impact of suicide is vast. According to recent data from the World Health Organisation (WHO) Australia's global rank based on suicide rate is in the mid-range from the pool of just over 100 WHO member nations. Most recent estimates place Australia at number 45 and 44 for males and females respectively (WHO, 2011). In 2009 (the most recent year for which suicide data is available), 1.5% of all registered deaths in Australia were from suicide (Australian Bureau of Statistics (ABS), 2011). While accounting for just under 1.6% of registered deaths in 2004, the number of people in Australia who died from suicide in 2009 was 2,132 (1,634 males and 498 females) compared with 2,098 in 2004 (ABS, 2006a; ABS, 2011).

According to recorded suicide data, males in 2009 were considerably more likely to die from suicide than females, with rates of 14.9 per 100,000 and 4.4 per 100,000 for males and females respectively (ABS, 2011). This finding is consistent with the pattern of reported suicides in 2004 (ABS, 2006b), and also a recent report from the Australian Institute of Health and Welfare (AIHW), which noted that males lose around 70% more potential years of life than females, with suicide being the second largest contributor to potential years of life lost for men (AIHW, 2010). As a point of reference, the number of males in Australia who died by suicide was more than the 1,102 who were killed as a result of road trauma, and was the 14th leading cause of death in 2009 (ABS, 2011). Again consistent with data from 2004 (ABS, 2006b) the most common method of suicide in 2009 was hanging, strangulation or suffocation, deaths from which accounted for 51.3% of all recorded suicides (ABS, 2011).

The highest rate of suicide for males in 2009 was in the age-group of 85+ years (28.2 per 100,000), and the lowest rate was in the age-group from 15-19 years (9.3 per 100,000). When

interpreting this data; however, it is important to note that, as a portion of total male deaths within each age-group, suicide accounted for only 0.2% of deaths in those aged 85+ years, whereas 19% of all male deaths in those aged 15-24 years were due to suicide, making it an issue of serious concern for this population cohort (ABS, 2011). The highest rate of suicide for females in 2009 was in the 50-54 age-group (8.8 per 100,000), while the lowest rate was again in the 15-19 age-group (3.4 per 100,000) (ABS, 2011).

The large-scale cross-sectional suicide statistics presented above are useful in providing an insight into where Australia fits on a global scale with reference to rates of suicide, and also in highlighting broad population strata which appear to experience higher levels of suicide when compared to the Australian population as a whole at any given point in time. What is lacking from these figures; however, is an insight into what underlies these population differences in rates of suicide, and how they may or may not have changed or be changing over time. This data is also limited by a relatively crude breakdown of the population (i.e., gender and broad agegroups), which restricts its utility in identifying those who are likely to be higher risk, either at a small group or individual level. It is important to consider these statistics in conjunction with an analysis of trend data in order to allow for the development of a more complete picture of suicide within Australia, and how suicide statistics may be impacted by changes external to the individual. This analysis also provides a backdrop for a narrowing of the focus of attention to particular groups of concern.

1.2.1 Suicide trends in Australia

One of the notable points when reviewing suicide trends in Australia, is that the patterns which emerge seem to differ markedly as a function of population cohort. Even demographic

groups defined by characteristics as broad and non-specific as age and gender, show very different patterns of changes in suicide rates over time. These highly variable trends serve to reiterate the importance of exercising caution when interpreting suicide rates and statistics at any one point in time, and the need to move beyond broad generalised figures for any given year to looking at smaller-scale levels of analysis in order to build on our understanding of the complex nature of this event.

1.2.1.1 Suicide trends for Australian men

The rate of suicide among Australian men, which is consistently four to five times higher than that for Australian women (Page, Morrel, Taylor, Dudley, & Carter, 2007), has seen considerable and at times rapid change within the last one hundred years. These changes vary substantially as a function of other demographic factors such as age. Suicide rates for Australian men overall peaked during the Great Depression before dropping during World War II and spiking again in the 1960s (Snowdown & Hunt, 2002). For men aged 35 years and older, the suicide rate began to decline in the 1970s; however, this rate continued to rise for men aged 15-34 (Goldney, 2006; Snowdown & Hunt, 2002). For young Australian men aged 15-24, there was a 3.5-fold increase in the rate of suicide from 1964 to 1997, when it peaked at a rate of 30.9 per 100,000, accounting for 29.2% of all deaths for males in this age-group for that year (Lynskey, Degenhardt & Hall, 2000). The year 1997 also saw the national non-age adjusted rate of suicide in Australia peak at 14.7 per 100,000, with 2720 recorded deaths from suicide (Large & Nielssen, 2010; McPhedran & Baker, 2008), although males aged 20-34 years peaked slightly later, in 1998, with a suicide rate of 39.1 per 100,000 (Page, Taylor & Martin, 2010).

Following the unprecedented high rates of suicide in Australia observed during 1997/1998, there was a sharp decline in recorded suicide rates nationally, specifically among young men in the age-groups which had previously yielded the highest levels of suicide. There was a 44% drop in suicide rates among males aged 20-34 from 1999 to 2005, when the recorded rate of suicide fell to 22.4 per 100,000 (Page et al., 2010), and an overall decline of 51% in male suicides from 1998 to 2007 (Large & Nielssen, 2010). This pattern was echoed in the national rate of suicide in Australia which also declined after 1998 and fell to 8.9 per 100,000 in 2007 (Large & Nielssen, 2010).

Considerable changes in the predominant method of suicide have also been observed for Australian men. From the period 1949-1993 to the period 1997-2004, there was a dramatic increase in the proportion of male suicides attributable to hanging and car exhaust fumes in Australia (Cantor & Nulinger, 2000; Goldney, 2006; Snowdown, 1997), while there was a notable decrease in deaths attributable to cutting. Also, while firearm-related suicides increased in males aged 10-29 years between these time periods, they decreased in males aged over 50 years (Snowdown, 1997). In 1988 the leading methods of suicide for Australian men were shooting, hanging and gassing respectively. The decline by 60% of firearm-related suicides was offset by a near doubling of the rate of hanging, which saw suicide rates peak at the end of this period. Consistent with the overall decline in recorded rates of suicide post 1998, there has been a decline in all methods of suicide, although the proportion of male suicides attributable to hanging has increased from 1988 to 2007 (Large & Nielssen, 2010).

1.2.1.2 Suicide trends for Australian women

The rate of suicide among Australian women has been consistently lower than that of Australian men and, likely as a result of this difference, trend analysis of female suicide rates has attracted considerably less attention in the research literature in this field. Despite this, it has been found that, in addition to representing a much smaller portion of the total suicide numbers in Australia, both historically and currently (Large & Nielssen, 2010; McPhedran & Baker, 2008), the patterns of observed suicide rates among Australian women differ from those observed in men. Unlike their male counterparts, women showed no peak in suicide rates during the Great Depression around the early 1930s, but peaked during the late 1960s and early 1970s when the rate for men overall was beginning to fall (Snowdown & Hunt, 2002).

Of note, while the rate of suicide for women in general began to decline following this peak in the 1970s, there was little change for women aged 15-24 in the period 1964-1997, when rates of suicide remained fairly static (Cantor, Neulinger, & De Leo, 1999). Consistent with observations of male suicide rates following the national peak in 1997/1998, rates of suicide among Australian females have also declined since 1997, although at a much slower rate than that of men (McPhedran & Baker, 2008), decreasing by only 26% from 1998 to 2007 compared to 51% in males (Large & Nielssen, 2010).

There has been somewhat of a convergence between males and females with regard to the predominant method of suicide over the last two decades or so. In 1988 the most common method of suicide for women was poisoning; however, similar to the pattern observed for men, from 1988 to 1998 the rate of hanging suicides among Australian women increased by 75%, while all other methods declined, and this coincided with a slight increase in the overall rate of suicide for Australian women during this period (Large & Nielssen, 2010).

The research literature presented above indicates that, within Australia, men are at a much greater risk of suicide than women across all age-groups, and the portion of total deaths due to suicide is particularly alarming among young men, although rates of suicide among older men were the highest in the most recent published data. Similarly, while overall rates of suicide for women have declined, rates of suicide among young women have remained fairly static, suggesting that this is also a higher-risk age-group for Australian women. A particularly positive finding from recent research is the overall decline in Australian suicide rates for men and, to a lesser extent, women following the alarming levels which were recorded in 1997/1998. While these figures suggest a move in the right direction, they remain concerning at a macro level of analysis, and do not capture the nuances observed when this analysis is narrowed to focus on smaller groups. Specifically, the information above describes suicide within Australia on a national level, but fails to provide an account of what is a very different picture of suicide observed within rural Australia. It is this picture which was fundamental in prompting the current study, and which will be considered now.

1.2.2 Suicide in rural Australia

A trend which has received considerable attention, within Australia and internationally, is the increasing disparity in rates of suicide between urban and rural areas, particularly for young males, with rural areas recording rates which far exceed those of their urban counterparts. A number of research projects have investigated these patterns of difference between urban and rural suicide rates within Australia, reporting on data at a national and state level, over a range of different time periods and with a focus on different population cohorts. This body of research provides clear evidence of a growing trend towards elevated rates of rural suicide within

Australia; however, it also reveals some important variability in these patterns, which should be noted when considering this issue.

In a study examining rates of suicide within Australia from 1964 to 1993, Dudley and colleagues (Dudley et al., 1997; Dudley, Kelk, Florio, Howard, & Waters, 1998a) found that in 1964 the rate of suicide for Australian men aged 15-24 years was higher in metropolitan areas than in small rural areas for New South Wales, Victoria, Queensland and Western Australia, but that by 1993 this pattern was reversed. While overall suicide rates for 15-24 year old males in Australia trebled during this time period, they doubled in metropolitan areas, increased fourfold in towns with populations between 4000 and 25,000, and increased 12-fold in towns with populations of less than 4000 people. Further, while the suicide rates for females of this age did not change overall, they increased 4.5-fold in towns with fewer than 4000 people during this time (Dudley et al., 1997). This dramatic increase in suicide rates in small rural towns was not consistent across all states and territories, however. Considering rates of suicide in rural towns with populations of less than 4000 for both men and women aged 15-24 during this time period, rates in Victoria and Queensland increased 34.5 and 31.6 fold respectively, while rates in New South Wales, Western Australia, South Australia and Tasmania respectively increased 9.9, 7.0, 5.5 and 3.6-fold (Dudley et al., 1998a).

Using a broader division of metropolitan and non-metropolitan areas of Australia (population of less than 20,000 as a cut-off), Wilkinson and Gunnell (2000) found that between 1988 and 1997, rates of suicide in males aged 15-24 were around 50% higher than that of their metropolitan counterparts, but that there was no significant difference between metropolitan and non-metropolitan rates of suicide for males aged 25-34. There were no significant differences in suicide rate by geographic area for females aged 15-24, but rates of suicide were higher in

metropolitan areas than in non-metropolitan areas for women aged 25-34 between 1995 and 1997 (Wilkinson & Gunnell, 2000). This was in keeping with a similar finding that rates of suicide in Australia were higher in urban areas than rural areas for females overall between 1991 and 1996 (Yip, Callanan, & Yuen, 2000).

During the time period which followed (1997 to 2000), Caldwell and colleagues again found that rates of suicide for males were significantly higher in both rural centres (population between 10,000 and 99,999) and other rural areas (population less than 10,000) than in metropolitan areas in Australia, for all age-groups except 60+ year old males living in rural centres, and were especially high for the 20-29 age-group (Caldwell et al., 2004a). They found no significant differences between suicide rates for women between locations, with the exception of females aged 30-44, who showed higher rates than females of the same age in either metropolitan or other rural areas (Caldwell et al., 2004a).

In the context of the overall decline in Australian suicide rates since the late 1990s, particularly among males, Page et al. (2007) reviewed rates of suicide for 15-24 and 25-34 year old males and females in metropolitan, rural and remote areas of Australia from 1979 to 2003. They found that while rates of suicide for males in both age-groups increased across all areas from 1979 to 2003, there was a significant divergence between the three geographic groups across this time period, most notably in the 15-24 age-group. The largest overall differentials occurred between 1994 and 2003, while the greatest single differential was in the 15-24 age-group between remote and metropolitan areas during the period from 1999 to 2003. This was largely due to the finding that while rates of suicide for males in this age-group decreased in this period by 24% in metropolitan areas and 28% in rural areas, they continued to increase by 23% in remote areas (Page et al., 2007). Similar patterns were found for males aged 25-34 years. Page

et al. (2007) found that female suicide rates also showed significant differentials, although for females, suicide rates were significantly lower in rural and remote areas than in metropolitan areas, particularly for females aged 25-43, prior to 1993. From 1993 to 2003, increases in rates of overall suicide for females in remote areas saw a convergence with metropolitan rates (Page et al., 2007).

In New South Wales, rates of suicide for males aged 15-19 showed significant increases in rural cities as well as in rural municipalities and shires from 1964 to 1988 (Dudley, Waters, Kelk, & Howard, 1992). Contrasted with a moderate increase in Sydney and no increase in Newcastle or Wollongong, rates of suicide for males in this age-group doubled in rural cities and increased over fivefold in rural municipalities and shires, while no significant changes were found for females of the same age, or for the younger 10-14 year cohort (Dudley et al., 2002). This was consistent with findings from a Victorian sample that showed higher rates of suicide in rural than in metropolitan areas for males but not for females aged 15 to 24 years, from 1980 to 1990 (Krupinski, Tiller, Burrows, & Hallenstein, 1994). In a more recent New South Wales sample of patients from three adult public mental health services from 2003 to 2007, again rural patients were found to have a rate of suicide 2.7 times that of urban patients (Sankaranarayanan, Carter, & Lewin, 2010).

The influence of level of analysis when reporting on suicide rates is highlighted by studies in both New South Wales and Queensland. Morrell, Taylor, Slaytor and Ford (1999) investigated urban-rural rates of suicide in migrant and Australian-born males and females in New South Wales between 1985 and 1994. They found that while, overall, migrant males in rural areas had significantly higher rates of suicide than migrant males in urban areas, there was no overall significant urban-rural difference for Australian-born males. Both migrant and

Australian-born males aged 15-24, however, showed increased rates of suicide in rural areas, and rates of suicide for both migrant and Australian-born females were significantly lower in rural areas (Morrell et al., 1999). In one Queensland study, there were no significant differences in rates of suicide between urban and rural (defined as a population less than 20,000) areas from 1986 to 1990 (Cantor & Coory, 1993). Subsequent analysis following this unexpected result revealed that there was more to this picture than originally identified, and that rural Queensland health regions actually displayed both the highest *and* lowest rates of suicide for the state (Cantor & Slater, 1997).

A final point on the patterns of suicide in rural Australia, is that while the use of firearms in suicide has decreased on a national level, it has been on the increase in rural areas across all states and territories (Dudley et al., 1997; 1998a), and accounted for over 50% of farming suicides in Australia from 1988-1997, compared with 23% for the wider population during the same time (Page & Fragar, 2002).

What this epidemiological literature highlights is the complexity of the relationship between rurality and suicide. There are clearly significant differences in suicide rates and trends between urban and rural areas, and the profoundly elevated and increasing rates of rural suicide justify and in fact necessitate a concerted effort to understand and ultimately address this issue within Australia. What is increasingly apparent though, is that it is not sufficient to look at crude urban-rural differences as the level of measurement if we want to attain truly meaningful information on rural suicide. As noted above, in some instances rural areas record both very high and very low rates of suicide (Cantor & Slater, 1997), thus it seems that a rural classification alone does not account for the whole picture of rural suicide within Australia. Further to this, it is evident from the literature that the risk of suicide in rural areas is not equal for all people, and

that certain population cohorts, particularly young men living in small rural towns with populations of less than 4000, are vastly over-represented in the number of suicides in these areas. With this complexity in mind, the challenge is to develop a meaningful understanding of the patterns of suicide observed in rural Australia.

1.3 Risk Factors for Suicide: Can they Explain the Urban-Rural Disparity?

While patterns of rural suicide are now well documented, they remain relatively poorly understood. In seeking to understand why rates of suicide are so disproportionately high among some population cohorts in some rural areas, it is important at the outset to consider some of the major factors which have been identified in the research literature as impacting on suicide risk. It is worth noting at this point that while the body of research on risk factors for suicide is extensive, and a large number of factors have been identified as impacting on suicide risk in both direct and indirect ways, our understanding of *whether* and *why* specific people will ultimately commit suicide while others will not, is limited (Leenaars, 1996).

Perhaps the only thing that is known definitively about suicide is that it is complex and multifaceted, without any one single cause (King, 1994; Leenaars et al., 2000). For the most part it seems that some form of stressor encroaches on an individual who is in some way vulnerable, and this in turn promotes suicidal thoughts and behaviours of varying intensity (Judd et al., 2006a). This vulnerability is likely to reflect the combination of a number of internal and external influences in the person's life, from their personal constitution to their family and from their immediate environment to their broader social and communal context (Ayyash-Abdo, 2002). A detailed discussion of every potential risk factor for suicide which has been proposed in the literature, is well beyond the scope and focus of the current review. Instead, this section will

present some of the more established findings in relation to suicide risk factors, and consider the extent to which they serve to further our understanding of the urban-rural differentials in Australian suicide rates.

1.3.1 Psychiatric disorder and suicide attempt

The body of research on the relationships between psychiatric disorders and suicidal thoughts and behaviours is well established, with consistent findings emerging from case-control and longitudinal studies, as well as psychological autopsy studies (Beautrais, 1999). Psychological autopsy studies aim to discover the reason for an individual's suicide through gathering as much information as possible about the circumstances of the death, including interviews with the victim's family and other relevant people (Hawton et al., 1998). Psychiatric disorder is arguably one of, if not the most, significant predictors of suicide and suicidal behaviour. Psychological autopsy studies have found over 90% of suicide victims had at least one diagnosable psychiatric illness at the time of their death (Henriksson et al., 1993; Shaffer et al., 1996). A review of 894 cases of suicide found that the most common diagnosis was mood or affective disorder (42.1%) (see also Conwell, Duberstein, & Caine, 2002), followed by substance abuse disorders (40.8%), disruptive behaviour disorders (20.8%), and personality disorders (11.6%) (Fleischmann, Beautrais, Bertolote, & Belfer, 2005). When a mood disorder was present, it was most often Major Depressive Disorder (Fleischmann et al., 2005; Vajda & Steinbeck, 2000). Further, a trend analysis in Australia found that greater exposure to antidepressant prescriptions, in both men and women, was associated with a declining rate of suicide (Hall et al., 2003).

In addition to depression, an association between anxiety and suicide has been demonstrated (Brent et al., 1996; Valentiner, Gutierrez, & Blacker, 2002), both as an independent risk factor for suicidal behaviour (Valentiner et al., 2002) and through its effects on depression and hopelessness (Thompson, Mazza, Herting, Rendell, & Eggert, 2005). Substance abuse has also been directly linked to suicidal behaviour (Thompson et al., 2005) and particularly alcohol abuse (Fleischmann et al., 2005). It has been estimated that the relative risk of suicide is almost seven times greater in alcohol abusers than in non-alcohol abusers (Rossow & Amundsen, 1995). The majority of suicide completers with a diagnosis of disruptive behaviour disorder were diagnosed with conduct disorder (Brent et al., 1993; Fleischmann et al., 2005; Shaffer et al., 1996).

As previously mentioned, a considerable number of suicide victims had a DSM-III-R (American Psychiatric Association (APA), 1987) Axis II disorder at the time of their death, with up to 31% of cases having an identified personality disorder in some studies (Henriksson et al., 1993). In those cases where a personality disorder was identified, the most common were antisocial personality disorder (38.7%) and borderline personality disorder (35.5%) (Fleischmann et al., 2005). Further, there is some research to suggest that personality disorders are associated with repeat suicide attempts (Vajda & Steinbeck, 2000). While each of the mental disorders discussed has been associated with increased risk for suicide, in the majority of cases, estimates of more than 70% (Henriksson et al., 1993; Shaffer et al., 1996), there is some psychiatric comorbidity. Patterns of comorbidity typically include a mood disorder, usually major depressive disorder, comorbid with a substance abuse disorder or personality disorder (Fleischmann et al., 2005; Vajda & Steinbeck, 2000). Further, it has been suggested that suicidal intent increases as a function of the number of symptoms present (Socco, Marietta, Tonietto, Buono, & De Le, 2000).

In conjunction with major mood disorders, as well as independently of psychiatric disorder, it has been suggested that the single biggest predictor of completed suicide is previous suicidal behaviour, both in adolescents (Beautrais, 1999; Bridge, Goldstein, & Brent, 2006), and in adults (Nordstrom, Samuelsson & Asberg, 1995a). The proportion of suicide completers who have made at least one previous suicide attempt is significantly greater than that of control subjects (Brent, Baugher, Bridge, Chen, & Chiappetta, 1999; Shaffer et al., 1996), and is a particular risk factor for subsequent completed suicide within the first year following the suicide attempt (Nordstrom, Asberg, Aberg-Wistedt & Nordin, 1995b).

Given the strength of the association which has been demonstrated between psychiatric disorder (particularly mood disorders), suicide attempt and subsequent risk of suicide, it seems reasonable to assume that one potential explanation for elevated rates of rural suicide may be higher rates of psychiatric disorder and suicide attempt in rural populations when compared with urban populations. What has been found through detailed meta-analysis, is that the collective body of research investigating these risk factors specifically within rural areas fails to support this assumption with any consistency, and in some instances *lower* levels of psychiatric disorder are found in rural populations in comparison to comparable urban populations (Judd et al., 2002; Nicholson, 2008).

One large federal government survey of Australian adult residents during the latter part of 1997, the *National Survey of Mental Health and Wellbeing*, found that there were no significant differences between urban and rural areas in terms of prevalence of affective disorders, anxiety disorders or drug and alcohol dependence (Andrews, Hall, Teeson, & Henderson, 1999). Caldwell et al. (2004a) in their analysis of the survey above in conjunction with Australian national mortality data from 1997 to 2000 using the rural, remote, metropolitan area (RRMA)

index, again found no significant differences between metropolitan areas, rural centres, and other rural/remote areas of Australia in prevalence of affective or anxiety disorders, and found lower incidences of recorded substance use and "any mental health disorder" in males from other rural/remote areas. Similarly, a further study utilising the data from the 1997 *National Survey of Mental Health and Wellbeing*, found no significant urban-rural differences for mental health items, although it did find that women had higher rates of mental health items than men (Taylor, Page, Morrell, Harrison, & Carter, 2005a), which is also inconsistent with preponderance of male suicides observed within Australia.

Comparable results have been observed at a state level. In a study of files from a sample of 10-19 year olds who had been deemed by the coroner to have committed suicide between 1988 and 1990 in New South Wales, there were no significant differences between rural and non-rural levels of psychiatric diagnosis (Dudley et al., 1998b). Similarly, in a study of self-reported mental health problems among rural residents in Victoria and New South Wales, no association was found between reported psychological distress and level of rurality (Murray et al., 2004). Most recently, Kelly et al. (2010a) investigated self-reported levels of distress in a sample from non-metropolitan New South Wales, and found that overall levels of distress (according to K10 scores), were lower in remote regions relative to both inner regional areas and very remote regions, and that the highest rate of "threshold" cases were found in very remote regions, which does not reflect a linear increase in distress with level of remoteness.

Again using analysis of national survey data, it has been found that there was no metropolitan/non-metropolitan differential for suicidal ideation or attempt in either males or females across all age-groups, and also specifically among younger cohorts (Pirkis, Burgess, & Dunt, 2000; Taylor et al., 2005a). Further to this, and again, inconsistent with patterns of

observed suicide, the only significant finding from this data was that the rate of suicide attempt was greater in women than men (Taylor et al., 2005a). Taken together, these findings suggest that despite what is known of the relationship between psychiatric diagnosis, suicide attempt and completed suicide, this fundamental group of risk factors is insufficient, in isolation, to account for the elevated rates of suicide observed in some rural areas within Australia.

1.3.2 Personality factors and coping style

Outside of psychiatric diagnosis, a number of personality factors have been proposed as predisposing individuals to greater risk of suicide and suicidal behaviour. Personality factors thought to increase risk of, and even predict, subsequent suicide and related behaviours have included low self-esteem (Martin, Richardson, Bergen, Roeger, & Allison, 2005), impulsivity (Brezo, Paris, Turecki, 2006; Kingsbury, Hawton, Steinhardt, & James, 1999), hopelessness (Beck, Brown, Berchick, Stewart, & Steer, 1990; Brezo et al., 2006), neuroticism (O'Boyle & Brandon, 1998), an external locus of control (Martin et al., 2005) and extraversion (Brezo et al., 2006). Of note, in one recent study, it was found that higher levels of extraversion were reported in males who later committed suicide than males who did not; however, the reverse pattern was found in females (Hirvikoski, & Jokinen, in press). Higher scores on hostility components including irritability, resentment and guilt have also been found in suicide completers without a DSM-IV-TR (APA, 2000) Axis I diagnosis (Brezo et al., 2006).

The relevance of various personality characteristics in understanding an individual's vulnerability to suicide has been supported by a number of researchers; however, there are inconsistencies in this literature. One case-control study exploring a number of personality characteristics, found that independent influence on risk of suicidal behaviour came only from

hopelessness, neuroticism and external locus of control (Beautrais, Joyce, & Mulder, 1999), whereas Martin, Richardson, Bergen, Roeger, and Allison (2005) found independent effects of self-esteem and locus of control on suicide and related behaviours in young people. In addition to personality traits, there have been links demonstrated between emotional health and wellbeing (Borowsky, Ireland, & Resnick, 2001; Borowsky, Resnick, Ireland, & Blum, 1999), effective coping skills, and risk of suicide (Malone et al., 2000). In two studies of psychiatric inpatient populations, researchers found significant positive correlations between certain dominant coping styles, namely "blame", "substitution", and particularly "suppression" (defined in terms of avoidance of the issue thought to be creating the distress) and risk of suicide (Horesh et al., 1996; Josepho & Plutchik, 1994).

While the research available on urban-rural differentials specifically in relation to personality traits and predominant coping styles is limited, these factors taken in context with much of what is known in general terms of rural communities, may have the potential to provide some insight into the increasingly elevated rates of suicide in Australian rural communities. In the context of environmental and economic change, and specifically the impact of this environmental volatility on agriculture, there is a growing concern about reported levels of hopelessness among farming populations, especially among farming males, in rural communities both within Australia (Berry, Hogan, Owen, Rickwood, & Fragar, 2011), and internationally (Ni Laoire, 2001). Compounding this, macro-level global changes in climate which impact on the sustainability of individual agricultural businesses, are also seen to be removing the locus of control from farming individuals (Wainer & Chesters, 2000), which may have an adverse impact of risk of suicide for this group. Interestingly, one study examining mental health and personality factors in farmers found that farmers scored significantly lower on neuroticism than non-farmers

(Judd et al., 2006c), which is at odds with what would be expected given the relationship found between neuroticism and suicide, and again speaks to the complexity of understanding this issue.

In relation to coping styles, it is generally recognised that rural values, especially in males, but also in females, are dominated by certain agrarian features such as high levels of stoicism and self-reliance (Alston, 2010; Harvey, 2007; Judd et al., 2006b). Stoicism is defined by Wagstaff and Rowledge (1995) in terms of denial, suppression and control of emotion. In addition to the findings that stoicism is higher in males and negatively correlated with help-seeking (Judd et al., 200b), the definition provided here would also suggest that these common rural values are closely tied to the characteristics of the "suppression" coping style found to be associated with increased suicide risk (Josepho & Plutchik, 1994). This said, a Canadian study found no difference in coping strategies between urban and rural adolescents (Elgar, Arlett, & Groves, 2003). While there is a paucity of systematic research comparing the distribution of personality traits and coping styles between and within urban and rural populations, there seems to be some indication that this research focus, while likely to be impacted by a number of additional factors, may provide a useful contribution to building on our understanding of the patterns of rural suicide in Australia.

1.3.3 Individual socioeconomic and demographic status

The body of research examining the relationship between individual level of social disadvantage and rates of mental disorder and suicide is well established, internationally and within Australia. Numerous studies have found significant correlations between socioeconomic disadvantage, unemployment and lower educational attainment, and prevalence of mood disorder, rates of suicide and suicide attempt (Brenner, 1979; Burnley, 1995; Cantor & Slater,

1997; Cantor, Slater, & Najman, 1995; Gunnell, Peters, Kammerling, & Brooks, 1995; Neumayer, 2003; Li, Page, Martin, & Taylor, 2011; Pirkis et al., 2000; Wainwright & Surtees, 2004). While generally indicating an inverse relationship between rates of mood disorder and suicide with individual socioeconomic status, employment status and level of education, the literature on this relationship is at times inconsistent and inconclusive, suggesting that the interplay between these variables is complex and dynamic, and that due attention must be given to related variables which may impact on these observed correlations.

One of the most notable influencing variables on the relationship between socioeconomic disadvantage and suicide is gender. One Australian study found that socioeconomic status was related to suicide rates for men only (Taylor et al., 2005b). Other more recent studies, using large population samples in Canada and Denmark, found that individual level disadvantage was associated with increased risk for suicide in both men and women, but that the strength of the relationship was greater in men (Andres, Collings, & Qin, 2010; Burrows, Auger, Gamache, St-Laurent, & Hamel, 2011). Interestingly, while Burrows and colleagues found that rate of suicide decreased fairly consistently with increases in education and income for both men and women (Burrows et al., 2011), Andres, Collings and Qin (2010) found that for women, but not men, having a middle level income was protective against suicide when compared with women who had either the highest or lowest income.

Other demographic indicators have also been found to impact on rates of suicide. For both men and women, rates of recorded suicide are considerably higher for those living alone (Burrows et al., 2011), and for those with a marital status of anything other than "married", including separated, divorced, widowed or never married (Andres et al., 2010; Burrows et al., 2011; Luoma & Pearson, 2002). Men in particular showed an increased rate of suicide with a

marital status of divorced (Kposowa, 2000) or widowed (Luoma & Pearson, 2002). Parenthood appears to be protective against suicide in both men and women, although for women this reduced risk seems to extend to parenting a child up to age six, while for men this is protective only while parenting a child to age 2 years (Andres et al., 2010; Qin & Mortensen, 2003). Unsurprisingly, the loss of a child has been found to be a risk factor for both men and women (Qin & Mortensen, 2003).

Specific to rural areas, two further demographic categories warrant particular attention with respect to associated risk of suicide. As discussed previously in section 1.2.2, suicide rates in rural migrant males in New South Wales were significantly greater than in their metropolitan counterparts, and accounted for much of the urban-rural differential in suicide rates for older males (Morrell et al., 1999). The second demographic group of particular importance in the context of suicide risk in rural areas is farmers. One Australian study looked at rates of suicide in farmers, farm managers and agricultural labourers during the period from 1988 to 1997 (Page & Fragar, 2002). They found age-adjusted suicide rates for farm managers of between 24.8 and 51.4 per 100,000 over this 10 year period, and between 23.8 and 41.9 for agricultural labourers. This was considerably higher than the national average, and equated to around one farm suicide every four days (Page & Fragar, 2002). Elevated rates of suicide among farmers, predominantly male, have been reported with some consistency both within Australia (e.g., Andersen, Hawgood, Klieve, Kolves, & De Leo, 2010) and internationally (e.g., Browning, Westneat, & McKnight, 2008; Das, 2011).

Wainer and Chesters (2000) contended that, given rural populations tend to be characterised by lower socioeconomic status, higher levels of unemployment, ill health and older age, these risk factors are likely to play an important role in understanding rates of rural suicide.

However, despite the repeated associations that have been found between suicide, socioeconomic disadvantage and certain demographic identifiers, there are still important limitations in the utility of this research to fully explain the differences in reported urban-rural rates of suicide. In the study by Page et al. (2007), national urban-rural suicide differentials between 1979 and 2003 were investigated. This study found that while adjusting for socioeconomic status reduced the urban-rural suicide differentials in both men and women, these differentials remained significant nonetheless. Similarly, while the study by Morrell et al. (1999) found that adjusting for country of birth accounted for the urban-rural suicide differential in men overall, there were still significant urban-rural differences in rates of suicide for both migrant and Australian-born males aged 15-24 years.

Finally, although increased risk of suicide in farming populations is a common finding around the world, it is not a consistent finding, and in some instances this particular group has been found to have *lower* relative rates of suicide when compared with other occupational groups (Skegg, Firth, Gray, & Cox, 2010). While likely to be important in understanding the picture of urban-rural disparities in suicide, the variability described above suggests that other factors beyond the individual socio-demographic profile of rural residents may be impacting on elevated rates of suicide found in some rural areas of Australia.

1.3.4 Broader social, economic and environmental factors

Individuals do not exist in isolation, but rather they exist in a dynamic way within their social and contextual environment. With this in mind, suicide research has identified a number of features of this environmental context which impact both positively and negatively on risk of suicide. There have been multiple studies which indicate that a person's experience of their

immediate social and interpersonal environment has an important impact on risk of suicide, particularly among young people. Parental loss, through death, separation or divorce (Agerbo, Nordentoft, & Mortensen, 2002; Gould, Fisher, Parides, Flory, & Shaffer, 1996), parental psychopathology (Fergusson & Lynskey, 1995; Gould, Shaffer, Fisher, & Garfinkel, 1998), family history of suicidal behaviour (Agerbo et al., 2002; Gould et al., 1996), a history of physical and sexual abuse (Tiet, Finney, & Moos, 2006; Vajda & Steinbeck, 2000), as well as problematic parent-child relationships and communication (Fullagar, 2003; Gould et al., 1996), have all been associated with risk of suicide.

In contrast, from a protective perspective, support from friends and family, talking about problems, and family connectedness, have been found to be associated with a decreased risk of suicide attempt in young males and females (Borowsky et al., 1999; Nisbet, 1996). Importantly, these studies also found that risk of suicide attempt decreased at greater rate by increasing protective factors rather than reducing risk factors, with the presence of three protective factors reducing the risk of suicide attempt by up to 85%, even in the presence of risk factors (Borowsky et al., 1999; 2001).

Beyond the immediate interpersonal and social environment, studies have found an association between a broader sense of social connectedness (De Leo, Buono, & Dwyer, 2002; Motto & Bostrom, 2001; WHO, 2004), community levels of social capital, and rates of suicide, at both a regional (Kopp, Szekely, & Bagi, 2010) and national level. One study by Helliwell (2004) examined multiple indicators of social capital in relation to suicide rates across some 50 countries in between the period 1980 to 2000. The results of this study showed a negative relationship between national rates of suicide and national rates of membership in non-religious voluntary organisations, levels of trust in others, and levels of belief in God, with a positive

relationship found between suicide rates and national divorce rates (Helliwell, 2004). In another study of 11 European countries (Kelly, Davoren, Mhadain, Breen, & Casey, 2009), social trust (as an indicator of social capital), was found to be inversely related to national suicide rates, even after controlling for gender, age, marriage rates, average income and self-reported levels of sadness.

In addition to research on community level social influences, there has been much research investigating the relationship between features of the broader socioeconomic climate and levels of recorded suicide. The collective results of this research suggest that there is a correlation between the two; however, once again there are complexities which warrant attention. A systematic review of 86 English-language publications between 1897 and 2000 (Rehkopf & Buka, 2006) found that while the majority of research suggests an inverse relationship between area-level socioeconomic status and rates of suicide, results varied as a function of level of analysis. Studies using smaller areas of analysis, such as neighbourhood, more often found significant inverse relationships between suicide rates and socioeconomic level of the area than those using larger areas. Further, studies measuring area-level economic deprivation, such as the proportion of residents living below the poverty line, were more likely to find significant inverse relationships with rates of suicide than studies measuring median income level of residents (Rehkopf & Buka, 2006).

Striking variability in the relationship between macroeconomic variables and suicide rates have also been observed as a function of demographic factors such as age and gender. In an Australian study mapping the relationship between macroeconomic variables and national suicide rates between 1968 and 2002, it was found that economic adversity was related to suicide rates for men and women equally in strength, but in almost opposite direction (Berk, Dodd, &

Henry, 2006). Suicide rates for men were significantly and positively associated with housing-loan interest rates, while suicide rates for women were significantly and negatively associated with this measure. Further, they found that while, in general, housing-loan interest rates were positively correlated with rates of suicide in younger cohorts, in those aged over 50 years the relationship was reversed, and the highest levels of suicide were associated with the lowest levels of interest (Berk et al., 2006).

The complexity of the relationship between area-level deprivation, gender and risk of suicide was further demonstrated in the Canadian study by Burrows et al. (2011). This study considered two markers of area-level deprivation: (i) social deprivation, defined by the portion of the population that was separated, divorced or widowed, the portion of single parent families and the portion of persons living alone, and (ii) material deprivation, defined as the portion of persons without a high school diploma, the level of unemployment and average income. They found an increased rate of suicide for males living in areas high in social or material deprivation, but increased rate for females in areas high in social deprivation only. It was also found that rate of suicide for low income females relative to high income females was greater in areas with high social deprivation, but actually lower in areas with low social deprivation (Burrows et al., 2011). Although by no means a simple relationship, there does appear to be a relationship between the broader social and economic context and population rates of suicide, both in conjunction with, and independent of, individual factors.

In keeping with this body of research, there has been a growing emphasis placed on the potential role of broader social, economic and environmental factors impacting negatively on rural communities specifically. At a social level, researchers have considered the role of rural culture (Bourke, 2003; Fullagar, 2003; Secker, Armstrong, & Hill, 1999), community attitudes to

mental illness and stigma around help-seeking (Nicholson, 2008; Wrigley, Jackson, Judd, & Komiti, 2005), and the preponderance of stoic and agrarian values (Alston, 2010; Judd et al., 2006b) in impacting on vulnerability to suicide. Contextual influences such as lack of service availability and accessibility has been proposed (Fiske, Gatz, & Hannell, 2005; Murray et al., 2004; 2005) as has access to firearms as an independent risk factor for suicide in rural communities, particularly in light of increasing firearm suicides in rural areas across all states and territories of Australia despite a decrease of this method of suicide on a national level (Dudley et al., 1998a), as well as the prominence of firearms in rural suicides (Dudley et al., 1998b; Page & Fragar, 2002). Further, given the research on the impact of macroeconomic deprivation on rates of suicide, there has been considerable attention given to the potential impact of the rural crisis and decline within Australia (Baume & Clinton, 1997; Bourke et al., 2010; Fraser et al., 2005; Gallagher & Sheehy, 1994), which is postulated to have affected rates of suicide in many rural communities.

The body of research pertaining to the broader social, economic, and environmental influences on rates of suicide is likely to be a crucial piece in the puzzle of understanding elevated rates of rural suicide; however, again there are important considerations which must be noted. As discussed, social factors such as connectedness and social capital are thought to be associated with lower incidence of suicide; however, research into these factors in rural communities has found that while these constructs tend to be strong, they can also be associated with negative impacts such as lack of privacy, social exclusion or reduction in help-seeking (Nicholson, 2008; Smith et al., 2008). Further, while the economic decline in rural agricultural areas is likely to have considerable implications for farming communities, recognition must be given to the fact that not all rural Australian communities are farming communities, and not all

rural Australian areas have suffered the same decline (Fraser et al., 2002; 2005; Kelly et al., 2010b).

So then to our original question for this section on risk factors for suicide: can they explain the urban-rural disparity? It seems that the answer is "not entirely". Despite all that is known of, and proposed as, risk factors for suicide, our ability to clearly and comprehensively explain the urban-rural differences in suicide rates and changing trends over time remains limited. While the research described here provides highly valuable insight into a number of pieces of the puzzle, it does not provide the complete picture.

One criticism of this research area has been the relative paucity of research looking at rural mental health (as opposed to psychiatric disorder) (Berry et al., 2011; Fraser et al., 2002). While there have been many epidemiological studies mapping the prevalence of mental illness across urban and rural areas, there is little research focussing on these differentials in mental health, and less research still has focussed on investigating the underlying relationship between living in a rural community and psychological and emotional wellbeing (Bourke et al., 2010). Particularly given the consistent findings that rates of psychiatric diagnosis do not differentiate between urban and rural areas, (Andrews et al., 1999; Dudley et al., 1998b; Judd et al., 2002; Pirkis et al., 2000; Taylor et al., 2005a), and that there is an independent risk for suicide in rural areas even after accounting for important socio-demographic factors (Page et al., 2007; Morrell et al., 1999), any understanding of the complex patterns of rural suicide is likely to require a more complete account of a person's physical, psychological, emotional and social health experience, and how this experience is impacted by living in a rural area.

A second major criticism of this research area has been the general reliance on crude urban-rural classifications of areas for investigation (Fraser et al., 2002; Judd et al., 2006a; Smith

et al., 2008), and high levels of inconsistency with which "rural" is defined (Kelly et al., 2010b; Murray et al., 2004; Nicholson, 2008), often resulting in highly diverse areas being clustered together for analysis, and potentially important differences between them being lost (Kelly et al., 2010a). Rural Australia is not one collective and mental health and wellbeing is not consistent across all rural communities. Even at a macroeconomic level, while some rural communities have seen significant decline over the last two decades, others have experienced growth (Fraser et al., 2005). While some rural towns have recorded the highest rates of suicide in the state, others have recorded the lowest (Cantor & Slater, 1997). This is a highly heterogeneous group of towns and communities (Wainer & Chesters, 2000), and there is a growing recognition of the need to move to an approach which respects the variability that exists between these rural communities, and a focus on if and how these differences in "place", rather than just geographic location, impact on mental health and wellbeing (Fraser et al., 2002; Hart, Larson, & Lishner, 2005; Judd et al., 2006a).

1.4 From Mental Illness to Mental Health

Mental health is more than simply the absence of mental illness, although this is certainly one contributory component. Rather mental health is framed more positively, in terms of providing a foundation from which people can engage successfully in their lives. Mental health is typically operationalised as a composite outcome of levels of psychological distress and levels of subjective wellbeing (Murray et al., 2004), and is generally thought to result from a number of factors pertaining to both the individual and their environment. The WHO define mental health as "a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her

community" (WHO, 2010, ¶ 2). Similarly, in this holistic context, Wainer and Chesters (2000, p. 141) define mental health as:

...having enough money to live on, having a home, a job, relationships and friends and being fee from violence. It is dependent upon having a sense of meaning and control over one's life. For both indigenous and non-indigenous people it is particularly about belonging and connection to place. Mental health is about being able to obtain treatment and support for physical and mental health problems when and where you need it.

Although it is acknowledged that there is a paucity of research looking systematically at rural mental health, and particularly at understanding the impact of living in rural areas on psychological and emotional wellbeing (Bourke et al., 2010; Fraser et al., 2002), much of the existing research and thinking on this issue nonetheless offers important insights into this complex question. Indeed a number of factors have been highlighted as features which are, albeit in broad and generalised terms, seemingly common and unique to many rural people and rural places, and which appear to interact in dynamic relationships to impact on mental health in both positive and negative ways.

1.4.1 Rural conceptions and perceptions of health

While there is considerable literature documenting the association between poorer health and rural location, in thinking about the health and wellbeing of people living in rural communities, it is necessary to consider the ways in which this notion is defined by these people themselves, and how this may serve to impact on various health behaviours and outcomes relating to mental health. Contrasting with urban conceptions of health, Weinert and Long (1987)

found that rural residents typically define health in terms of "the ability to work or to be productive in one's role" (p. 452). In keeping with this, there is a strong propensity for rural residents, particularly those associated with farming, to delay seeking help for any health issues until they are severe enough to be an obstacle to productivity, and even then, only to seek at a time that has the least impact on achieving what needs to be done (Elliott-Schmidt & Strong, 1997).

This performance-based definition of health, coupled with generally lower levels of mental health literacy in rural communities (Nicholson, 2008), has important implications for how mental health is conceptualised and responded to. Although non-psychiatric mental health symptoms will invariably be associated with differing levels of individual distress, this may be simply accepted as being part of the challenge of rural life and may not be recognised as a health problem that is contributing to a reduction in functioning to a level where it is interfering with an individual's ability to perform in their role. Research has found that within many rural communities, "mental health problems" are generally equated with severe psychiatric illness and psychosis, and do not include less severe affective symptoms (Fuller, Edwards, Procter, & Moss, 2000). For this reason, rural residents appear less likely to report mental health symptoms or subjective distress as a health problem *per se* (Elliott-Schmidt & Strong, 1997; Fuller et al., 2000), and subsequently are less likely to seek appropriate help or support (Elliott-Schmidt & Strong, 1997).

Although these notions of health and mental health in rural communities are often highlighted as a barrier to encouraging people to access appropriate support services, it is interesting to consider them in conjunction with rural communities' perceptions of what their levels of health and wellbeing are. One of the most striking findings regarding rural mental

health is that, despite generally experiencing higher levels of physical illness, and being exposed to numerous socioeconomic stressors, both men and women living in rural areas are significantly less likely to say that they are "unhappy" than those living in urban areas (Mathers, 1994).

Further, levels of self-reported stress for middle-aged women living in rural and remote areas have been found to be significantly lower than that of their urban counterparts (Brown, Young, & Byles, 1997), and no urban-rural differences were found in a sample of Canadian adolescents, despite the levels of unemployment and poverty within the rural community (Elgar et al., 2003). These findings would indicate that the way in which rural communities think about and define health not only impacts on their health behaviours, but also has an influence on the way in which they conceptualise their own health and wellbeing. It is likely these definitions have their origins within the broader context of rural culture, and the prominent values and beliefs which will be discussed below.

1.4.2 Rural culture, values and beliefs

Conceding that talking of "rural culture" necessitates broad generalisations which are likely to apply with varying levels of authenticity to different rural communities, there nonetheless seem to be a number of common elements to traditional rural culture which have been widely and consistently observed. In many ways, rural culture embodies the values of stoicism, self-reliance, and intolerance of weakness (Elliott-Schmidt & Strong, 1997; Fuller et al., 2000). These values are inextricably tied to traditional concepts of rural masculinity, and generate a reluctance to seek any mode of formal assistance, placing the onus on rural women to assume a multifaceted supportive role within the family (Wainer & Chesters, 2000). Although levels of stoicism have been found to be higher in men than women (Judd et al., 2006b), qualitative studies with rural women suggest that the values of responsibility, strength, self-

reliance, competence, care and support are all fundamental to their identity (Harvey, 1997). Indeed rural women identify themselves as responsible for the health and wellbeing of their men and their families, tending to place their own health needs to the side, and often feeling frustrated by their inability to help (Alston, 2010).

There is a certain degree of functionality inherent in stoic values of self-reliance and rural masculinity which have been historically protective for men in rural communities who have needed to negotiate difficult times in the face of limited accessibility and availability of resources. While facilitating a "keep on going" approach, in the face of unmanageable adversity created through recent macro social, climatic and economic changes, these values are becoming a danger for many rural men, creating a sense of failure and preventing them from seeking help (Alston, 2010). The sense of identity for many rural men is in their sense of being strong and providing well for their family. The loss of capacity to do so and, in a growing number of cases, reliance on the income of their wives, has damaged many men's views of themselves and their ideas around traditional rural masculinity. Difficulty adjusting to new concepts of masculinity and femininity is thought to be leading many rural men into despair, to increased self-medication through alcohol, as well as to increased domestic violence, possibly as the focus of blame for their perceived failure is redirected towards their wives (Alston, 2010; Wainer & Chesters, 2000).

In a recent Australian study, it was found that while reported levels of stoicism were unrelated to subjective distress measures, they were associated with subjective indicators of quality of life; for example, higher levels of stoicism were associated with lower levels of self-rated quality of life, especially among rural men (Murray et al., 2008). One aspect of the stoic disposition thought to impact negatively on the mental health of rural men is the tendency to

personalise their experiences and assume responsibility for events outside of their control, such as the impact of climate change, resulting in an unwarranted sense of failure (Alston, 2010). In an Australian song about farming suicide (Storer, 2007, track 2), Sara Storer writes:

Now he's tired and he's stopped fighting

And he thinks that he's let everybody down

A desperate man, desperate measures

A desperate fire rings out...

Despite the common assumption that rural values, which champion stoicism and have little tolerance for weakness, are associated with higher levels of stigma concerning mental health problems and mental illness, there is relatively limited research examining differences in levels of stigma related to mental illness between urban and rural populations (Jones, Cook, & Wang, in press). This noted, preliminary research would suggest that stigma is an issue which has implications, both directly and indirectly, for the mental health of rural residents. A qualitative Australian study found high reported levels of stigma and fear around mental health problems in rural communities (Fuller et al., 2000). Similarly, quantitative studies have found that rural residents tend to report high levels of perceived stigma towards mental illness (Komiti, Judd, & Jackson, 2006) and when compared with urban residents, higher levels of stigma were found for rural males even after adjusting for income and education level (Jones et al., in press).

The impact of stigma towards mental health problems on help-seeking behaviour is still unclear, and research to date has been somewhat inconsistent. While level of stigma was not found to be an independent predictor of help-seeking for mental health problems in two rural Australian samples (Komiti et al., 2006; Wrigley et al., 2005), lower levels of stigma were

associated with more positive attitudes toward help-seeking (Wrigley et al., 2005). Positive attitudes towards help-seeking, in addition to a greater belief that seeing a general practitioner would be helpful, did predict levels of help-seeking for mental health problems in some studies (Jackson et al., 2007; Kmoiti et al., 2006); however, this result was not consistent (Judd et al., 2006b). While further research is needed to fully understand the impact of stigma concerning mental health problems in rural communities, there does seem to be some relationship with help-seeking behaviour, which is of fundamental importance in the context of rural mental health.

Data would suggest that there are considerable disparities in the use of professional services for mental health issues between urban and rural populations, despite no established difference in the rate of occurrence of mental health problems. Australian research has found that compared to their urban counterparts, rural and remote residents typically receive less help from specialist mental health providers (Paslow & Jorm, 2000), and that the rate of mental health problems which are managed by general practitioners is considerably less per 1000 population than that for metropolitan residents (Caldwell et al., 2004b). While service availability and accessibility is a prominent issue in rural areas, a further explanation for this under-utilisation of mental health services, particularly among rural men, relates to the agrarian values thought to characterise rural communities, as discussed above (Judd et al., 2006b).

With no fewer reported mental health problems than their urban counterparts, young rural men in an Australian study were found to be significantly less likely to seek professional help for mental health problems than were young metropolitan men (Caldwell et al., 2004a). Research into barriers to service utilisation in rural communities have found that lower levels of stoicism and lower levels of self-efficacy are associated with seeking professional help for a psychological problem (Jackson et al., 2007; Judd et al., 2006b). In general, rural women

demonstrate a more positive attitude towards seeking professional psychological help than men, and more rural women than men report having sought help for a psychological problem in their lifetime (Judd et al., 2006b). It is suggested the rural Australian concept of masculinity reduces rural men's willingness to seek help, and encourages withdrawal from social networks due to fear of exposing weakness and failure (Alston, 2010).

A consistent finding is that both men and women in rural communities have a reluctance to seek help for mental health issues specifically, due to high levels of exposure and the difficulty in maintaining anonymity and confidentiality in a small community (Nicholson, 2008). Qualitative Australian research has identified that issues relating to rural "gossip networks" and high levels of social visibility are particular barriers for help-seeking among young people (Aisbett, Boyd, Francis, Newnham, & Newnham, 2007). Despite these issues with privacy, in a somewhat conflicting way, an earlier study by Weiner and Long (1987) suggested that rural people tended to report a preference for managing health problems themselves or within their local community, with a general reluctance to use service providers whom they see as "outsiders" to the community. This tension between managing mental health problems locally and maintaining a sense of anonymity within a small community is likely to have a complex influence on seeking professional help.

One notable hiatus in the research literature is around mental health differentials between rural "locals" and rural "newcomers". While rural communities are often depicted as fairly stagnant, there is considerable research showing that some communities are undergoing significant changes in their population, be that growth or decline (Fraser et al., 2005). Given that many of the rural values and beliefs discussed above are steeped in tradition and most likely transgenerational within rural communities, it is reasonable to consider that the attitudes and

beliefs around mental health and help-seeking are different for locals and newcomers, yet this has not been explored in any great length (Nicholson, 2008). When considering the impact of rural culture, values and beliefs on rural mental health, it is important again to recognise that while generalisations may be useful in directing the focus of attention, in truth different rural communities and different rural people will relate to and be affected by these concepts in varied ways and to varying degrees.

1.4.3 Community and social connectedness

Communities are a complex and multifaceted system of physical, social, psychological and symbolic features connecting people, and these develop, grow and change in dynamic relationships with their members. The community is purported to be an important source of support and empowerment for the people within it, and a major contributor to overall health and wellbeing (Chavis & Newbrough, 1986). Traditionally, rural lifestyle has been associated with higher levels of perceived "community"; many small rural communities report a stronger sense of belonging, greater levels of community spirit, and higher perceived social support, with people more willing to help each other when needed (Gething, 1997), irrespective of distance from neighbours or health care centres (Weinert & Long, 1987). Consistent with this, older rural residents, particularly women, have reported that they both gave and received more help and support from friends when needed than did urban women, even though they tended to engage in fewer activities with their friends (Scott & Roberto, 1987), which may be due to the geographic distance between neighbours.

In a qualitative study of the impact of the drought in NSW, researchers interviewed both farming and non-farming residents of rural communities, and found that community connection

represented a fundamental characteristic of rural identity, and a vital source of support in coping with the adversity (Sartore, Kelly, Stain, Albrecht, & Higginbotham, 2008). Based on discussions with rural general practitioners, Wainer and Chesters (2000) highlighted a number of features which were identified as enhancing mental health, resilience and recovery from illness within the context of living in rural communities. These included a sense of belonging, worth, and ability to make a contribution as well as a greater sense of community and strong community ties within which people know each other and can ask for help (Wainer & Chesters, 2000). Of note, even in the face of a pervasive culture of self-reliance and an intolerance of weakness, rural communities are also thought to display a tolerance of greater degrees of eccentricity among community members than would be accepted elsewhere (Fuller et al., 2000).

Similar to a sense of community, having a strong social network, which is described as the formal and informal links between group members, is thought to be a strong source of support and a positive factor for people's wellbeing (Nicholson, 2008). A study of social networks in Italy divided the concept into social contacts, practical support and psychological/emotional support (Magliano, Fiorillo, Malangone, De Rosa, & Maj, 2006). It was found that social contacts and psychological support was higher in females who were younger and living in rural areas and that practical support was higher in males in small and medium density areas. Interestingly, in this study it was also found that social contacts did not necessarily equate to social support (Magliano et al., 2006), suggesting that the two are related constructs but that perceived support in rural communities extends beyond simple levels of contact resulting from a small number of residents. The preponderance of practical over emotional support experienced by men, may be related to reports that rural men over the last decade have reported an increasing sense of loneliness and social isolation (Alston, 2010).

The perceived sense of community and the support obtained through strong social networks felt by many rural residents has considerable implications for rural mental health and wellbeing, although there are complexities inherent in these relationships which warrant attention. In a large Australian study using national survey data, social capital, defined by the combined constructs of community participation and personal social cohesion, was found to be strongly associated with all aspects of measured health, but most strongly to mental health (Berry & Walsh, 2010). However, Stain et al. (2008) found that community support was more strongly associated with decreased levels of distress for non-farming rural residents than for those who lived and/or worked on the farm, indicating that different groups within rural communities may have different experiences of community and social networks, and be affected in varied ways by the impact of community and social connectedness.

In the context of understanding the impact of community and social connectedness on rural mental health, a vital point must be made. While sense of community and strong social networks are generally thought to be protective for mental health, they are not without their downsides and risks (Chavis & Newbrough, 1986). The flipside of a strong sense of community is that many established rural communities become highly independent and resistant to outsiders (Gething, 1997), and as a result can be extremely exclusive and isolating for people who have not been able to integrate into the established community structure (Nichoson, 2008). This is of particular relevance in many rural communities where there are clear distinctions made between old-timers/insiders and new-comers/outsiders, which are based predominantly on length of residence in the area, as well as the history of the family and the occupation of the resident. In most of these communities, it is generally recognised that people need to have been in the areas for a number of decades before they can be considered an insider (Weinert & Long, 1987). In the

face of the changing population and subsequent community structure of many rural communities in Australia, this social division is likely to present challenges for the mental health of both new and old residents.

As with communities, potentially adverse effects of strong social networks have been identified also. Closed social networks may limit people's freedom and autonomy, may require adherence to unspoken norms and rules in order to maintain acceptance, and may create further social divisions and exclusions (Harvey, 2007; Nicholson, 2008). Studies on the mental health and wellbeing of rural women have found that there are often experiences of isolation resulting from geographical distance and limited transport, but also from a reluctance to share personal feelings and experiences with members of their social network for fear of being ostracised by the community for their failure to meet implied standards or conform to the local norms and culture (Harvey, 2007). While the importance of community and social connectedness for the mental health of rural people is evident, these factors must be considered with an appreciation of the potentially double-edged nature of their impact, and the need to understand how individuals in different communities experience their effects.

1.4.5 Availability and accessibility of services

As the impact of community is likely to vary between rural areas, so too is the availability and accessibility of services. That said, it is widely agreed that rural areas are not equipped with the same degree of service provision as urban areas, and that this diminishes with degree of remoteness. Services tend to be centralised and more difficult to access for rural communities both within Australia and around the world (Nicholson, 2008). It is well documented that the number of general practitioners available to service people with mental

health issues decreases in small rural areas compared even with regional centres, and there are even fewer, if any, specialist services (Judd, 2006d). Lack of reliable transport and long waiting lists have been identified by rural adolescents in Australia as impeding their ability to access mental health service (Aisbett et al., 2007). While already thought to be impoverished in terms of services and resources, decline in rural communities, stemming from the impact of climate and global economic change, is likely to further reduce the already limited services available, and may exacerbate the mental health problems of remaining residents (Berry et al., 2011).

Furthering these problems, from the outset it can be difficult to establish highly accessible mental health services for rural areas due to the high cost of running the services for low numbers, difficulties in attracting and maintaining appropriately qualified staff, extended scope of professional responsibilities due to limited supplementary services, boundary issues and professional isolation (Nicholson, 2008). While addressing issues relating to the availability of mental health services in rural areas is an important component of rural mental health, this is only one part of a larger picture. As stated by Nicholson (2008), "not only must a service be available, but it must be acceptable... a person's health-related beliefs must include the possibility that accessing the service is both necessary and important for their health" (p. 307).

1.4.6 The rural context

The rural context itself is thought to be a likely source of many features impacting on the mental health and wellbeing of rural residents by virtue of the environment in which they live and work. Wainer and Chesters (2000) describe the dichotomous stereotyped depictions of rural life, from the picturesque surrounds with its lush greenery, wide open spaces and supportive communities, to the deprived and dangerous world of rural hardship and isolation. Rural

residents identify both positive and negative aspects of rural living, and it is likely that the reality lies somewhere in between, varying considerably as function of which rural areas are being described and individual circumstances. While there is much diversity, many rural areas carry inherent risks relating to environmental hazards, occupational hazards, and limited accessibility and availability of services (Smith et al., 2008). This, coupled with generally lower economic means, may put rural residents at increased risk of exclusion from both local and wider society (Nicholson, 2008).

While it is acknowledged that not all rural communities are farming communities, it warrants consideration that agriculture remains a vital feature of Australia's economy and this industry is under threat from both global economic and climate change, the latter of which is thought by many to underlie some of the worst drought, fire and flood that Australia has seen (Berry et al., 2011). The effects of these extreme weather conditions have had a profound financial impact on many farming communities, which is likely to increase mental health issues for these rural residents (Alston, 2010; Berry et al., 2011). Current climatic conditions serve to exacerbate a history of economic decline in many rural communities, which has resulted in fewer staff to work farms, meaning enormous workloads for both men and women performing multiple roles on properties (Elliott-Schmidt & Strong, 1997), as well as diminishing the locus of control for many rural residents in their capacity to sustain their employment and lifestyles (Wainer & Chesters, 2000). Further, while engagement in community activities and volunteer committees is seen as a positive source of social interaction and support, they add to the already extensive and growing demands on the time and energies of many rural residents (Fuller et al., 2000).

Coping with adversity is seen to be an inescapable fact of rural life (Harvey, 1997).

However, rural residents are increasingly faced with not only the economic hardship impacting

on communities devastated by declining viability of local agriculture, but also the diminishing social networks in these communities as people leave, reducing important sources of support and connection, and impacting on the mental health and wellbeing of those who remain (Alston, 2010). These changes have also meant a requisite shift in thinking among farmers from a focus on property improvement, to a focus purely on survival (Alston, 2010). It is worth noting at this point however, that despite the frequent assertions of the detrimental relationship between climate-driven impacts on farming and decreasing mental health among farmers, there have been no systematic empirical investigations into this claim (Berry et al., 2011).

As stated, there are many aspects of rural living that residents identify as being a positive influence on their wellbeing including, for some rural men and women, a deep sense of personal connection to the land (Harvey, 1997; Stain et al., 2008). Similarly, there are many perceived benefits of living in rural areas which relate to the beauty of the landscape, the peace and quiet, and feelings of relative safety. However, again, it is also important to appreciate that people may experience these qualities differently. For some, the open space is liberating, but for others it may be isolating (Nicholson, 2008). Similarly, while some rural areas are characterised by beautiful bush land or coastal scenery, others, such as inland urban fringe towns, are unable to offer these virtues to their residents, and present an entirely different experience.

The research discussed above would suggest that living in rural areas and within rural communities entails a number of potentially important factors which may impact on mental health and wellbeing in both positive and negative ways. As previously mentioned, a number of these factors appear to be unique to living in rural areas, and as such raise questions as to the differentials between rural and urban residents on levels of mental health and wellbeing (rather than mental illness which has been the focus of most investigations), and whether rurality

contributes independently to overall quality of life. This noted, in acknowledging the extensive variability in the constitution of rural towns, we return to the second major criticism of this body of literature. While it is apparent that any impact of living in rural areas on mental health is likely to stem from a combination of individual, social and environmental factors, there is minimal research analysing within-rural variations in mental health. To specify "rural" is not enough, what is ultimately required is a focus on the features of different "places" and how these features may impact on mental health and wellbeing (Fraser et al., 2002; Hart et al., 2005; Judd et al., 2006a). The following section outlines what is known of broad geographic variations in mental health, before turning attention to the diversity of rural towns and research attempting to identify how particular aspects of this diversity impact on mental health and wellbeing.

1.5 Geographic Variations in Mental Health and Wellbeing

The profound social and economic decline suffered by many rural areas since the early 1990s, coupled with increasingly elevated rates of rural suicide, have been influential in driving increased attention (if not necessarily research) on urban-rural differentials in health outcomes, and the potential impact of rural living on mental health, particularly within Australia (Bourke et al., 2010; Fraser et al., 2002). Investigation into geographic variations in health and health outcomes is not a new field of research (Macintyre, Maciver & Sooman, 1993) although, while it has a long history, there seems to have been a resurgence of interest on this in the last two decades (Judd et al., 2006a). Though not the focus of the current review, it should be noted that there is a considerable body of research into geographic variations in health outcomes, and it would seem that there is a fairly consistent demonstrated effect of area of residence on health, after controlling for individual socio-demographic variables (Pickett & Perl, 2001). Despite this,

international research into rural-urban differentials in health outcomes is inconsistent and variable both within and between countries, and has also revealed significant within-rural differences, suggesting rurality alone does not necessarily equate to health disadvantage (Smith et al., 2008).

As stated previously, research into urban-rural differentials in mental health is sparse and, similarly to research into physical health outcomes, is inconsistent (Fraser et al., 2002; Judd et al., 2006a; Kelly et al., 2010a, b). Despite this noted inconsistency, there is a growing body of research both within Australia and also internationally, which would suggest that there does appear to be some independent link, albeit not completely understood, between where people live and their mental health (Kim, 2008; Mair & Diez-Roux, & Galea, 2008; Stafford & Marmot, 2003). Within this literature there have been differing measures of mental health and related constructs utilised for comparison, as well as different definitions of rurality. Additionally, there have been conflicting findings both between and within different countries which have been studied. Perhaps the only consistent finding from this research is that the relationship between rurality and mental health is complex.

It has already been noted that within Australian samples, rural men and women between the ages of 25 and 64 years were significantly less likely to say that they were "unhappy" than urban men and women from the same age group (Mathers, 1994), and that there were lower levels of self-reported stress for middle-aged women living in rural and remote areas when compared with their urban counterparts (Brown et al., 1997). Similarly, in a more recent Australian study using national survey data, it was found that, while much of the urban-rural differences found in self-reported levels of mental health were able to be accounted for by the inclusion of individual-level variables, there remained a small, but nonetheless significant,

association between area and mental health, such that living in an inner regional centre was associated with better mental health than living in a major city (Butterworth, Rodgers, & Jorm, 2006).

In a finding consistent with that of Butterworth and colleagues (2006), a large study investigating differences in self-reported symptoms of common mental disorders across areas of England, Wales and Scotland found that rural residents reported slightly but significantly fewer mental health problems than urban residents, after controlling for individual level confounding variables (Weich, Twigg, & Lewis, 2006). Further, an English study using national survey data for a large sample across 892 areas classified as urban or rural, found that living in a rural areas was associated with overall better mental health, and that this difference remained significant even after controlling for individual-level socio-demographic variables, area-level deprivation, and area-level social cohesion; the latter also being found to be significantly higher in rural areas (Riva, Bambra, Curtis, & Gauvin, 2010).

It is interesting to note that social cohesion did not account for the increased mental health in rural areas, particularly in light of findings from a Dutch study which demonstrated that while social capital was significantly higher in rural areas, it was only related to health for those living in urban areas and was not predictive of health for rural residents (Mohnen, Groenewegen, Volker, & Flap, 2011). In contrast, while rural areas in the previous sample were generally characterised by less unemployment than urban areas, the protective effect of employment for mental health was more pronounced in rural than urban areas, and was as protective in rural areas as it was in the most economically deprived areas included in the study (Riva et al., 2010). The profound impact of employment on mental health of rural residents has also been reported in Australian samples (Fragar et al., 2010).

Despite common findings of better mental health in rural areas as described above, these findings are not universal. In a comparative study of urban and rural areas on measures of quality of life and psychological stress (in addition to others) across six European countries, there were significant between-country differences in urban-rural differentials (Kovess-Masfety, Alonso, de Graaf, & Demyttenaere, 2005). In France, better quality of life and less psychological stress was reported by rural men compared with urban men, while in Belgium urban women scored better on these mental health measures than rural women. In both Italy and the Netherlands, rural women reported significantly better quality of life and less psychological stress than urban women, and in both Germany and Spain there were no significant rural-urban differences on mental health measures. A further finding from this study was that for those people with a mood disorder, rural residents were more likely to indicate that it affected their ability to carry out daily activities than were urban residents (Kovess-Masfety et al., 2005).

Investigating other proposed facets of mental health, consistent with Australian research on urban-rural rates of psychiatric disorder (Dudley et al., 1998b; Judd et al., 2002; 2006a), a study of New Zealand women found that while rural women did not record lower levels of psychiatric disorder than urban women, they did have more adequate attachments and higher levels of social integration, in the absence of any urban-rural differences in perceptions of the availability of social interaction (Romans, Walton, Herbison, & Mullen, 1992). Finally an American study again revealed a complicated picture of mental health as it relates to rurality and population density (Greiner, Li, Kawachi, Hunt, & Ahluwalia, 2004). This study found that community ratings, assessed by the question "how would you rate your community as a place to live?", were negatively associated with depressive symptoms. When classifying areas as high or low population density, people from low-density areas reported more involvement with their

community, but rated their communities less favourably than those from high-density population areas. When they separated the sample into five classifications of rurality, however, they found that frontier (lowest density) and rural regions had significantly higher levels of community involvement than did densely populated rural regions, semi-urban and urban (highest density) regions, but that community ratings were highest for frontier and urban regions, and lowest for densely populated rural regions, which in turn recorded the highest levels of depressive symptoms (Greiner et al., 2004).

It may be relevant to consider these findings in relation to research within an urban sample, which found that after controlling for individual and neighbourhood socio-demographic factors, residents' perceptions of their neighbourhood's reputation were significantly associated with both their level of trust in people as well as their overall sense of wellbeing, such that those residents who rated the reputation of their neighbourhood to be "good", reported being "happier" than those who rated their neighbourhood's reputation as "poor" (Kullberg, Timpka, Svensson, Karlsson, & Lindqvist, 2010). Indeed, this may be an important issue to consider in the context of rural mental health, as it is likely that differing patterns of growth and decline across rural areas will generate disparate reputations as to the degree of affluence or desirability of these areas, and impact on the mental health of residents.

It seems from the above review of research conducted both within and outside of
Australia that there is considerable evidence to attest to differences in mental health and mental
health outcomes between urban and rural areas; however, there are also many inconsistencies
and substantial variability. The picture of rural mental health appears complex and multifaceted,
and in some instances seems to be related to area of residence in unique ways when compared
with urban settings. The question remains then, why is mental health better in some rural areas

than others? It is likely that much of this variability comes from a failure of large-scale research projects to capture the finer nuances of the "places" investigated, and how these micro-level differences impact on the mental health outcomes of interest. In order to appreciate the challenges inherent in using broad-level classifications of rurality when considering impacts on mental health, it is imperative to consider the marked variability that exists within this group.

1.5.1 Rural diversity: What is "rural"?

The concept of rurality has a degree of implied or face-value meaning for most people, and is likely to conjure notions of rural people and places, however accurate, derived from personal experiences and stereotypes (Hart et al., 2005). It is argued that there are no *a priori* grounds on which to classify rural areas as such (Nicholson, 2008), and the inconsistency with which areas are classified as rural in the research literature, serves to reduce the ability to draw generalisations from this research as a collective body (Kelly et al., 2010a). One of the greatest challenges for defining rurality in any sort of meaningful and consistent way is the enormous diversity that exists between so-called rural areas. Hart and colleagues (2005) described the variability in demography, economics, culture and environment of rural areas in the United States. They noted that only a relatively small portion of the rural population is actually involved in agriculture, population sizes in rural areas ranged from tens of thousands to very small numbers, and distances to urban centres and services were anywhere from a few miles to a few hundred miles. They noted that, for some larger rural towns, the resemblance to metropolitan areas far outweighed that to their remote neighbours (Hart et al., 2005).

Similar to the concerns raised by Hart and colleagues (Hart et al., 2005), any collective description of "rural Australia" is essentially a false one, as it fails to account for the vast

heterogeneity that exists within this construct, other than to define it by what it is *not*; namely "metropolitan Australia" (McManus & Pritchard, 2000). Within Australia, so-called rural areas include broadacre farming regions consisting of many thousands of square kilometres, highly irrigated rice and cotton producing regions, coastal areas, regions centered on minerals, areas housing large populations of defence personnel, and desert regions populated largely by Aboriginal communities (Difty & Gibson, 2010). Given this eclectic mix, it would be anticipated that many of the factors discussed in the preceding sections of this Chapter in relation to individual and area-level socio-demographics, rural culture and values, community and social connectedness, service and infrastructure and environmental context will show marked variability between each of these "types" of rural areas in Australia. This variability is likely to result in different experiences for residents of these areas, and could be expected to produce differentials in both physical and mental health and wellbeing.

A further very important point in considering rural diversity and mental health and wellbeing, is that while economic and population changes have often been profound, they have been far from uniform across rural areas of Australia within the last thirty or forty years (Fraser et al., 2004). Although a major contributor to the Australian economy during the 1950s and 1960s, global and local economic and environmental changes saw dramatic destabilisation of broadacre wheat, sheep and beef farms, particularly between the 1980s and 1990s. The reduced financial viability in these communities, and changes in local governmental support, has resulted in the amalgamation of smaller farms, reduced employment opportunities for farm staff, derivative economic decline in towns servicing the local agricultural community, significant outmigration of both farming and non-farming residents (Tonts, 1999), and sizable population decline (McKenzie, 1994).

This has not been the experience, however, for other rural areas of Australia. There has been significant in-migration and resulting population-growth in select rural areas which are in close proximity to large metropolitan areas, are targeted for tourism, and/or offer scenic surrounds such as coastal and mountainous regions (Curry, Koczberski, & Selwood, 2001). In stark contrast to the population decline described above, much of the reported influx to coastal areas has resulted from non-monetary drivers relating to lifestyle choice and picturesque scenery, drawing new groups of wealthy retirees and "hippies" (Curry et al., 2001). The pattern of population change within rural Australia, however, is complex, and is made more so by improvements in transport and communication infrastructure which reduce the rural-urban divide (Hugo, 1994). While there has been some consistency in the decline of broadacre farming areas and the growth of coastal regions, there are certain regional centres in New South Wales which have not seen the anticipated decline, and even some very remote areas which, perhaps due to tourism or even mining, have prospered (McKenzie, 1994). It has been suggested that patterns of non-metropolitan population change in Australia since the 1980s are becoming increasing complex and less predictable, and that not just the size, but also the diversity of these communities is changing (Hugo, 1994).

The above discussion demonstrates that trying to conceptualise "rurality" in any sort of theoretically or operationally sound way within a single country, let alone with international consistency, is not only challenging, but is likely to become increasingly so as the boundaries between metropolitan and non-metropolitan areas continue to blur. Given the difficulties in defining rurality, and the considerable variations that exist between rural areas, it is reasonable to question the usefulness of this classification at all when considering mental health and wellbeing. It has been suggested that it may prove more useful, for researchers to deliberate on, and

nominate their classification system in light of their particular areas of interest or concern (Hart et al., 2005). This move away from traditional amalgamative conceptualisations of rural areas allows for and encourages, the consideration and investigation, at a finer level of analysis, of characteristics of certain places which may be important for mental health and wellbeing.

1.5.2 The importance of "place" in rural mental health

Though limited, research within Australia which has looked to systematically investigate the relationship between mental health and specified parameters of rurality has yielded important and, at times, unexpected findings. In order to investigate the impact of one feature of rurality, namely accessibility, on mental health, Murray et al. (2004) explored differences in self-reported levels of satisfaction with life and positive affect (as well as measures of psychological disability and distress) across a range of non-metropolitan areas defined by the Accessibility/Remoteness Index of Australia (ARIA) (ABS, 2001a; Department of Health and Aged Care (DHAC), 2001). The ARIA was chosen as it was thought to provide an objective measure of accessibility to services and opportunities for social interaction (Murray et al., 2004). While, as mentioned previously, no correlation was found between psychological disability measures, a small but significant relationship was found between level of accessibility and mental wellbeing. Increasing levels of accessibility were associated with increases in both satisfaction with life and positive affect, and while the inclusion of demographic and personality factors rendered the relationship between accessibility and positive affect non-significant, the relationship to satisfaction with life was resistant to the addition of all identified confounders (Murray et al., 2004). It was argued that these findings may indicate a relationship between accessibility to social and service resources and resilience to respond to life challenges (Murray et al., 2004).

In a large Australian study of adults from non-metropolitan areas of New South Wales, Kelly and colleagues (2010b), explored a range of factors pertinent to these rural areas which were thought to potentially impact on mental wellbeing. While the results of this study indicated a complex relationship between the variables of interest, there were some important findings which warrant attention. The univariate analysis indicated that wellbeing was positively and significantly associated with lower levels of neuroticism, fewer recent adverse events, higher levels of social support, sense of community and service accessibility. Interestingly, personal drought worry, and remoteness were only moderately associated with wellbeing, while area-level population change and socioeconomic status were not associated with overall wellbeing scores (Kelly et al., 2010b). It was contended that the results of this study provide further support for the importance of factors relating to social capital in the mental health and wellbeing of rural residents, even above the relative impact of area-level adversities such as drought (Kelly et al., 2010b).

In what was reported to be the first such investigation, Fraser and colleagues (2005) investigated the relationship between mental health and population change in four towns across New South Wales and Victoria, two of which were classified as experiencing population growth and two as experiencing population decline. They found that overall, mental health was significantly and negatively associated with living in a declining area, even after controlling for individual socio-demographic confounders. An unexpected finding from this study was that population change, either growth or decline, did not produce homogeneous changes in the demographic profile of the four towns. Rather it seemed that the specific drivers behind the population growth or decline in each town were particularly important in shaping the emergent population of the area, and subsequently, were likely to have a different relationship to

residential mental health (Fraser et al., 2005). Within the towns sampled in this study, growth of the two towns was due to ex-urban migration of young affluent families in one instance, and the influx of residents from smaller declining towns in the region for the other. Population decline in the remaining two towns was due in one instance to the decline in agriculture, and in the other to the closure of major mines (Fraser et al., 2005). This has important implications for understanding rural mental health in areas of considerable population change, with a focus needed on the drivers of this growth or decline.

Finally, in a study mentioned previously, Stain et al. (2008) compared farming and non-farming populations in rural and remote New South Wales on a number of factors postulated to impact on mental health. In this study, no significant differences were found between overall levels of psychological distress or levels of connectedness, defined by community support and social support networks, between the farming and non-farming samples, although they did find an association between levels of perceived community support and psychological distress. It was of particular note when conceptualizing variability in rural mental health, that the farming population reported significantly more distress related to the drought, and reported a greater "sense of place" (described in terms of a connection to the land and yearning for the lost environment) than non-farming rural residents (Stain et al., 2008). These findings confirm the importance of not only considering unique aspects of each "place" of investigation, but also how these aspects may impact on mental health differently for different people within them.

Taken collectively the research described already in this Chapter provides essentially irrefutable evidence to suggest that differences do exist both between and within rural and urban communities across numerous physical and mental health indicators. The alarmingly elevated rates of suicide recorded in certain rural communities suggest that some combination of risk

factors in these areas is culminating in tragic outcomes. Despite the weight of the epidemiological evidence, "...rural and remote health consist of complex and messy phenomena..." (Bourke et al., 2010, p.56) and our understanding of these observed patterns remains poor. There is growing research into rural mental health suggesting that there are a number of factors unique to certain rural communities which impact on mental health in protective or harmful ways, and that these factors surpass any generic classification of rurality to highlight the importance of considering the role of "place" in mental health. With these findings established, what is needed is a move beyond demonstrating place variations in mental health outcomes, to developing a theoretical framework within which we can begin to *understand* them (Bourke et al., 2010; Fraser et al., 2002). As Macintyre et al. (1993, p. 232) have observed, we need to

...go beyond treating 'social class' and 'area of residence' as though they were, in themselves, explanatory factors. What we need... is more information on the mechanisms by which social class or area of residence might influence health in positive or negative ways.

1.6 Building a Framework

Essentially, theories allow us to move beyond understanding which groups are at greater risk for suicide, to understanding *why* (McIntosh, Santos, Hubbard, & Overholser, 1994), and what the underlying relationships are between influential factors in the observable patterns (Nevid, Rathus, & Greene, 2003). In a recent Australian paper, Bourke et al. (2010) argued that while increased government attention towards rural and remote health since the 1990s has seen a growing body of academics involved in researching health outcomes in these communities, there

is currently no overarching theoretical framework within which this research is constructed, conducted and understood. They proposed that the development of a theoretical framework for studying rural and remote health is necessary for five key reasons; 1) theory outlines how the area of investigation should be approached for study, 2) theory makes transparent any key assumptions about the development of knowledge in the area, 3) theory increases the transferability of knowledge by systematically arranging it around key concepts, 4) theory increases the predictability of likely outcomes following intervention, and 5) theory provides a more comprehensive understanding of the area of interest, allowing for the inclusion of constructs which may be difficult to operationalise and measure (such as sense of community or social capital), as well as the inclusion of knowledge development around strengths of rural and remote health (Bourke et al., 2010).

Adding to this, in their paper on the future for research into rural mental health, Fraser and colleagues (2002) emphasised that research aimed at understanding the factors underlying both urban-rural and within-rural differences in mental health will need to encompass a number of critical features within both its theoretical and methodological approaches. They contended that meaningful research will entail a more elegant construct than crude urban-rural classifications of areas. Instead, research will be investigating the importance of "place" variables on mental health, where "place" is constructed to mean more than geographical location, but rather represents a myriad of factors relating to the physical and psychosocial environment with which people engage.

Fraser et al. (2002) also reiterated the importance of recognising and understanding the individual determinants of mental health (or ill health), and stressed that research must look to understand the interplay between these individual and place variables in order to elucidate the

mechanisms underlying area and population differentials in mental health and wellbeing. They proposed the utilisation of a variety of qualitative and quantitative research methodologies, drawing from multiple disciplines in order to provide information that can serve to improve the provision of mental health care services based on real and relevant information (Fraser et al., 2002). With these considerations in mind, we turn to consider how "place" impacts on mental health may be conceptualised within a framework that promotes understanding rather than description of area-level differentials in mental health and rates of suicide, and provides structure and direction for further research.

1.6.1 Early contemplations: Emile Durkheim.

Interest in observed geographic differentials in mortality and morbidity has a long history within epidemiological research (Auchincloss & Diez-Roux, 2008; Cummins, Curtis, Diez-Roux, & Macintyre, 2007; Macintyre et al., 1993). In a classic work on suicide, and among the first theoretical perspectives, Emile Durkheim (1897/1951) provided an approach that contrasted starkly against the individualist notions of psychoanalytic reasoning (McIntosh et al., 1994), and what was likely to be one of the first accounts of the importance of place in suicide. It was postulated by Durkheim that rates of suicide are determined by characteristics of society, namely the degree of social integration and social regulation (Stockard & O'Brien, 2002; Tartaro & Lester, 2005), and therefore vary across geographic locations. Social *integration* refers to the degree to which members of a given society are joined by social networks such as religion, marriage and family (Tartaro & Lester, 2005; Yang, Lester, & Yang, 1992). Social *regulation* refers to the degree to which the activities of members in a society are regulated by that society

(Tartaro & Lester, 2005), for example through government and economy (McIntosh et al., 1994).

Durkheim proposed that deficits in either of these areas result in one of three causally distinct types of suicide (a fourth type is mentioned but only as a footnote). The first, which he termed *egoistic suicide*, results from what he described as "excessive individualism" (Durkheim, 1897/1951, p. 209), in which the person is not sufficiently integrated into society or the family and as a result is no longer controlled by societal and institutional rules, including those prohibiting suicide. The second, *altruistic suicide*, results when a person is excessively integrated into society, and their circumstances are such that "it is his duty" (Durkheim, 1897/1951, p. 219), to commit suicide as a sacrifice for the greater good of the society. The third type of suicide proposed by Durkheim was *anomic suicide*, which occurs as a result of "man's activity's lacking regulation" (Durkheim, 1897/1951, p. 258). This deregulation of members of a society is suggested to occur when the equilibrium is disturbed, such as in rapid economic change or rapid domestic change such as widowhood.

A strength of Durkheim's (1897/1951) original theoretical propositions was that he supported them with official statistics of the time (McIntosh et al., 1994), providing empirical support for his assertions from the outset. Further, despite being one of the oldest theories of suicide, current research into the epidemiology of suicide around the world continues to lend support to Durkheim's original premises regarding the impact of social integration and regulation on suicide rates, through measures including economic strength (i.e., gross domestic profit), marriage and divorce rate, female participation in the workforce and unemployment (Stockard & O'Brien, 2002; Tartaro & Lester, 2005; Yang et al., 1992). One criticism of Durkheim's work is that the conclusions he drew from his original statistics are flawed, and represent an

interpretation based on ecological fallacy (van Popple & Day, 1996). While this criticism is just, Durkheim's account nonetheless provided important insight into the impact of social factors on collective suicide rates, including in data stratified by birth cohort (Stockard & O'Brien, 2002).

With that said, the body of research into the impact of individual factors on mental ill-health and risk of suicide is extensive and Durkheim's entirely sociological explanation underplays the complexity of suicide antecedents, and undervalues the role of individual factors which interact with societal ones. A comprehensive framework for understanding why mental health and suicide show such marked differentials between places needs to account for both the impact of those things pertaining directly to the individual, and how these interact with influences from outside.

1.6.2 A modern perspective: Macintyre and colleagues

A modern sociological framework for conceptualising geographic variations in health, and an approach which has been receiving increasing attention within the health and place research literature, comes from Macintyre and colleagues (Macintyre, 1997; Macintyre, Ellaway, & Cummins, 2002; Macintyre et al., 1993). Macintyre and colleagues offer a more inclusive sociological explanatory framework of health and health behaviours, which encompasses the social indicators proposed by Durkheim, while expanding the theoretical understanding to include factors at the individual and community level. In an early paper by the group, Macintyre, Maciver and Soomans (1993) provided the background and context within which they would come to propose their theoretical framework for understanding geographic variations in health. It was noted that while Britain had a long history of research into area-based differentials, the focus of this research had been on mortality, only recently broadening to include health and morbidity.

The authors reported that despite this history, there had been little investigation into the socio-economic and cultural features within geographic areas which may impact on morbidity and mortality, the former typically being employed as a control variable (Macintyre et al., 1993). A second major criticism was that research which did use area-level analysis of deprivation in relation to morbidity and mortality, relied on aggregated population data to create the measure of deprivation, and as such was not providing an indicator of area deprivation beyond that which was the average of the people living there. It was argued therefore, that while these studies did provide an account of area variations in health, they did not offer any examination of the influence of area on health *per se*. Based on their own research and review of the literature, Macintyre et al. (1993) proposed that various aspects of the physical, social, cultural and economic environment in which people live are likely to interact in dynamic ways with the individual characteristics of people and may then directly or indirectly influence both their mental and physical health in positive or damaging ways.

One of the factors thought to be a contributor to the lack of systematic research into particular characteristics of areas which may impact on physical and mental health outcomes for residents, was the general tendency to take for granted that the relationship between area and health is "obvious", and that everyone simply has an intuitive sense of what it is like to live in different areas (Macintyre et al., 1993). This notion was dismissed and, while it was acknowledged that there were particular methodological challenges inherent in systematically investigating certain physical, social, cultural and economic factors within areas, the authors advocated for an holistic approach to understanding the interactive relationship between individuals and their local environment, and proposed five types of socio-environmental influences that should be considered when investigating the impact of area on health; 1) physical

features of the environment shared by all residents in a locality, 2) the availability of healthy/unhealthy environments at home, at work, and at play, 3) services provided, privately or publicly, to support people in their daily lives, 4) socio-cultural features of a neighbourhood and 5) the reputation of a neighbourhood. It should be noted that for the last in particular, this is a measure of perceptions, and it was articulated that objectivity was not necessarily important in this instance, it was the perception which had the capacity to impact either positively or negatively on residents' mental health (Macintyre et al., 1993).

In a subsequent paper, Macintyre (1997) proposed that the socio-environmental features of places which could be postulated to have an impact on the mental and physical health of individuals living in those places, could be categorised under three primary constructs; compositional factors, contextual factors and collective factors. Within this framework, compositional factors relate to the socio-demographic characteristics of the individuals living within a certain area or place such as age, sex, ethnicity, or employment status; contextual factors refer to the broader social and physical opportunity structures within the area or place, such as availability of healthy environments and accessibility of services; and collective factors refer to the socio-cultural and historical features of the area or place, including norms, values, levels of social cohesion and area reputation (Macintyre, 1997; Macintyre et al., 2002).

In the later paper by Macintyre, Ellaway and Cummins (2002), the authors highlighted what they had identified as a problem within the research literature on place effects on health, in the conceptualisation, operationalisation, and subsequent measurement of the variables of interest. It seemed that one of the biggest barriers to this clarification was that many researchers were attempting to control for and essentially isolate the independent impact of each level of variable. This was thought to be problematic in two ways. Firstly the authors conceded that there

is considerable overlap between the constructs, and that they are not always entirely separate from one another. Secondly, given the dynamic and interactive relationship between the features defined within the three constructs, it was argued that nominated control variables which were treated as confounders within research paradigms, may in fact be the factor(s) which mediate(s) the pathway between health and place in that instance (Macintyre et al., 2002).

The authors were also concerned by what appeared to be a very narrow range of collective factors being considered, namely social cohesion, social capital and perceived social hierarchical status, noting that this construct should be expanded to encapsulate other non-material factors such as shared histories, religious or political ideologies, role definitions and so on. It was suggested that researchers should focus on articulating the particular variables of interest within each of the three constructs, taking into account their fluid and dynamic nature, and that measures be modified appropriately to apply to diverse settings such as rural areas. It was further suggested that testable hypotheses around the impact of features of particular places on certain physical and mental health outcomes be developed and empirically investigated (Macintyre et al., 2002).

In considering possible explanations for the elevated rates of suicide in rural Australia, Judd, Cooper, Fraser, and Davis (2006a), suggested that "place" variables appear to be a particularly important component of this observed phenomenon, and contended that the compositional, contextual, and collective factor framework proposed by Macintyre (1997), is both readily applicable to, and potentially useful for, exploring the underlying mechanisms behind these observed urban-rural geographical variations in suicide. With a particular focus on rural suicide, Judd et al. (2006a) proposed an explanatory model (see Table 1) utilising the compositional, contextual and collective components described above, which may provide

elucidatory information on geographic variations in rates of suicide. Within this framework, compositional variables thought to influence geographic variations in suicide may include prevalence of psychiatric disorder or employment status as a farmer, contextual variables may include the social and economic decline in certain areas, and difficulty accessing services, and collective variables might include rural culture, stoicism and stigma (Judd et al., 2006a).

Table 1

Proposed Explanatory Model for Geographic Variations in Suicide^a

Compositional	Contextual	Collective
Prevalence of psychiatric disorder,	Area-level socioeconomic	Rural (masculine) culture
mental health problems, suicidal	factors (rural decline)	
ideation/suicide attempt		
Socioeconomic status	Income inequality	Community attitudes to
		mental illness
Employment – farmer	Service availability and	Stigma and help-seeking
	accessibility	
Ethnicity – migrants, Aboriginal		Familiarity with firearms
and Torres Strait Islanders		

^a Source: Judd, Cooper, Fraser, and Davis (2006a)

There are a number of merits in the application of this framework to building on our understanding of variations in mental health between and within rural communities, and how these variations may be related to elevated rates of suicide in certain places. One particular appeal of the framework provided by Macintyre and colleagues (Macintyre, 1997; Macintyre et al., 1993; 2002) for explaining geographic variations in mental health and suicide, is that it seems to have an intuitive fit with what has already been discovered in relation to rural mental health. Rather than conflicting with, or dismissing, the existing body of research explored in this

Chapter on rural suicide and mental health, the model appears to be able to account for its patterns and tensions, and provides a structure and a framework within which this highly complex and multifaceted research can be understood.

Further to this, the framework described satisfies the requirements outlined by Fraser and colleagues (Fraser et al., 2002), in that it focuses on the role of "place", in an holistic sense that extends beyond geographic location to include a variety of factors relating to the broader physical and psychosocial environment, as well as to how these interact in dynamic ways with individual factors in impacting on mental health outcomes. Similarly, the framework outlined above appears consistent with the goals for theory in rural and remote health outlined by Bourke and colleagues (Bourke et al., 2010), in that it provides guidance on how the topic should be approached for investigation, it makes transparent key assumptions around the role of the individual and the role of place, it systematically arranges knowledge around key concepts, it allows for increased predictability, and provides a comprehensive approach which includes a focus on difficult to measure factors which may relate to rural mental health, as well as potential strengths within rural communities to increase mental wellbeing.

The framework proposed by Macintyre and colleagues (Macintyre, 1997; Macintyre et al., 1993; 2002) presents a comprehensive and testable model for understanding variations in both mental health and suicide within and between rural and urban communities. It respects the importance of both individual and place level variables, and recognises the highly dynamic relationship which is likely to exist between the two. It is a relatively young theoretical framework, compared with those such as Durkheim's model of social integration and social regulation (Durkheim, 1897/1951), and to date there is little in the way of empirical investigation of its assertions in relation to rural mental health. While a number of isolated factors which are

encapsulated by this model have been studied in relation to suicide and/or mental health, many of which have been discussed in this Chapter, there seems little in the way of research which has explored all levels of explanatory constructs within the model simultaneously in relation to how this may generate geographic variations in mental health. Given the highly dynamic and interrelated nature of the overriding constructs, it seems that this is a notable gap in this literature, as isolating levels of explanation for any phenomenon of interest may impede the ability to ascertain the mechanism by which place variables impact on the outcome being considered. The work of Macintyre and colleagues represents a promising avenue for furthering our understanding of the complex interplay between factors which may influence mental health and suicidal behaviour within the rural context. As such, Macintyre's work was adopted as the primary framework for the investigation of how place impacts on mental health in the current study.

1.7 Summary and Context for the Current Study

The current body of knowledge pertaining to elevated rates of suicide within select rural communities in Australia provides a context for the current study. This enquiry began with the observation that was the fundamental impetus for the current research project: that rates of suicide in rural Australia are extremely high! Australia is generally ranked within the mid-range for suicide rates based on international comparisons (WHO, 2011), with deaths from suicide accounting for around 1.5% of all registered deaths in 2009 (ABS, 2011). However, rates of suicide in rural Australian communities have risen considerably over the last half a century, and are entirely disproportionate to the national average. From the mid-1960s to the early 1990s, suicide rates for 15-24 year old males increased over 30-fold in towns with populations of less

than 4000 people in Victoria and Queensland, with suicide rates for females of this age-range increasing 4.5-fold (Dudley et al., 1997; 1998a). To complicate this, however, it was found that this rural picture was not consistent across all rural Australian towns, some of which reported the *lowest* suicide rates in the state (Cantor & Slater, 1997).

These alarming yet inconsistent epidemiological findings lead then to the question of why rates of suicide for some population groups in some rural areas of Australia are so elevated. The logical progression at this point is to consider the body of literature on risk factors associated with suicide and suicidal behaviour. While an extremely complex phenomenon without any one single cause (King, 1994; Leenaars et al., 2000), there are particular factors which have been found to be associated with increased risk of suicide with some degree of consistency. Two of the most well-established risk factors for suicide are the presence of at least one diagnosable psychiatric illness (Henriksson et al., 1993; Shaffer et al., 1996), and a previous suicide attempt (Brent et al., 1999; Nordstrom et al., 1995b). The problem is that no difference has been found between rural and urban areas in rates of high-prevalence mental health disorders (Andrews et al., 1999; Dudley et al., 1998b; Judd et al., 2002; 2006a) or suicide attempt (Pirkis et al., 2000; Taylor et al., 2005a). Similarly, while suicide rates are often, although not consistently, associated with individual socioeconomic disadvantage (Andres et al., 2010; Burrows et al., 2011), studies which have controlled for these variables have still reported significant urbanrural differentials, at least within certain population subgroups (Morrell et al., 1999; Page et al., 2007). Taken collectively, while the research on risk factors provides important information for understanding suicide within rural communities, it does not seem able to account for the disparities observed.

The inability to explain elevated suicide rates in some rural communities through reliance on the established risk factors for suicide, prompted the recognition that understanding this phenomenon required a more subtle and holistic focus on the mental health and wellbeing of rural residents, including those factors stemming from the individual as well as from their psychosocial and physical environment (Wainer & Chesters, 2000). The question at this stage was whether there are aspects relating to mental health and wellbeing which are unique to people living in rural communities. Interestingly it was found that rural residents tend to conceptualise health in different ways to non-rural residents; defining health in relation to their ability to perform their duties (Weinert & Long, 1987), and typically do not equate mental health problems or distress with a health issue per se (Elliott-Schmidt & Strong, 1997; Fuller et al., 2000). Further, the rural agrarian values of stoicism, self-reliance, and intolerance of weakness, coupled with higher levels of stigma towards mental illness (Elliott-Schmidt & Strong, 1997; Fuller et al., 2000; Komiti et al., 2006; Murray et al., 2008; Wrigley et al., 2005) have been associated with lower satisfaction with life and reluctance to seek help for mental health problems. The strength of community and connectedness within rural communities was noted (Gething, 1997; Scott & Roberto, 1987; Weinert & Long, 1987), along with both the advantages (Berry & Walsh, 2010) and disadvantages of these close social networks (Harvey, 2007; Nicholson, 2008). Limited availability and accessibility of mental health services was highlighted as a particular issue for rural communities (Judd, 2006d; Smith et al., 2008) as was the role of a connection or appreciation of the land or environment for some (Harvey, 2007; Nicholson, 2008). It was apparent that there were many features unique to living in rural communities which were both protective and potentially damaging for the mental health of residents. Given this, the question

moved to whether there were differences in mental health (not suicide *per se*) between rural and urban communities.

Particularly interesting was the finding that both within Australia (Butterworth et al., 2006; Mathers, 1994) and internationally (Riva et al., 2010; Weich et al., 2006), rural residents frequently reported better mental health than urban residents, reporting fewer symptoms of psychological distress, and generally describing themselves as "happier". While this finding was common, it was not universal (Kovess-Masfety et al., 2005). Thus although it seemed that differences between urban and rural communities on mental health did exist, they were inconsistent. So why then is mental health in some rural communities better than some urban communities, but not in others? This question prompted attention to the immense diversity which exists within rural communities (Difty & Gibson, 2010), and the fundamental flaw in a single classification for all areas that are non-metropolitan (McManus & Pritchard, 2000). Appreciating that mental health and wellbeing is not homogeneous across all rural communities (Fraser et al., 2005), the next stage was to consider within-rural differences, and whether particular features of "places", rather than just geographic location, impact on mental health and wellbeing (Fraser et al., 2002; Hart et al., 2005; Judd et al., 2006a). It was found that level of satisfaction with life and general mental health was related to a number of local area variables including accessibility of physical and social services (Murray et al., 2004), population change (Fraser et al., 2005), social support, sense of community, and concern about local drought (Kelly et al., 2010b).

At this stage, having established an extremely complex, but nonetheless apparent, relationship between peoples' overall mental health and wellbeing, and the places in which they live, it was important to progress to looking for a theoretical framework within which the mechanisms underlying this relationship could be understood. It was necessary for this

framework to be sensitive to features pertaining to both individuals and their broader physical and socio-cultural environment, which could in impact on mental health, and promote analysis at the level of "place". Macintyre and colleagues (Macintyre, 1997; Macintyre, Ellaway, & Cummins, 2002), proposed a framework based on the premise that certain aspects of the physical and social environment in which people live may affect their physical and mental health. Within this framework they suggest that variations in physical and mental health can be understood through the combination of three levels of explanation: compositional (the individuals), contextual (the physical environment) and collective (the local culture). Judd and colleagues (Judd et al., 2006a) contended that this framework could be applied to conceptualising variations in rates of suicide between rural places, and called for further investigation of this question.

Given the complexities inherent in the study of "place" differences in rural mental health, as well as the challenges associated with operationalising and measuring many of the constructs likely to be of importance, it has been argued that a number of methodological procedures drawing from different disciplines will need to be employed, including both qualitative and quantitative methods, as well as approaches such as Grounded Theory (Glaser & Strauss, 1967) and ethnography (Fraser et al., 2002). It must be recognised that large-scale quantitative research fails to capture the nuances at the small community level. Instead, these communities and individuals are statistically "smoothed" and their individual characteristics are distorted or lost (Macintyre et al., 2002). Further, quantitative research is restricted to aspects of a phenomenon which can be operationalised, and is less amenable to constructs which are difficult to define and measure (Neuman, 2000; Pope & Mays, 1995).

In order to contribute to a deeper understanding of *why* rates of suicide have been elevated in some rural towns but not others, the perceived role of "place", within the framework

provided by Macintyre and colleagues (Macintyre, 1997; Macintyre et al., 2002) in mental health and wellbeing, from the perspective of those within these areas, is an important yet under researched question. As, to the best of the author's knowledge, there has been little investigation of this framework in its entirety in relation to rural mental health, it is argued that the collection of data should incorporate approaches such as Grounded Theory (Glaser & Strauss, 1967) in order to address the fact that previously unidentified features may be highlighted as important by key informants within specified communities. Details of the methodological approach to the current study are provided in the following Chapter.

With regards to the positionality of the author in relation to this field of study, it is noted that, at the commencement of this research project, the author was a beginning researcher living in a small rural Victorian community.

1.8 Research Aims for the Current Study

This research project represents a preliminary and exploratory investigation of the framework provided by Macintyre and colleagues (Macintyre, 1997; Macintyre et al., 2002) in examining potential "place" effects contributing to disparate rates of suicide between four Victorian rural communities. In light of this, it was important that the research remain open and receptive to any information brought forward during the course of the project. The aims of the current research project were twofold:

1. To gain an in-depth understanding of factors perceived by key informants to be important to the mental health of local residents in four rural Victorian towns, two with "high" rates of suicide and two with "low" rates of suicide, in order to ascertain whether these

- identified factors can be conceptualised within the framework provided by Macintyre and colleagues.
- 2. To assess whether differences in perceived compositional, contextual and collective community factors between the four towns can serve to build an understanding of the differences in their recorded rates of suicide.

Chapter 2: Methodology

2.1 Introduction

The previous Chapter explored the complex body of knowledge pertaining to the disproportionate rates of suicide in rural areas when compared with urban areas within the Australian context, and highlighted the many remaining paucities in our understanding of this multifaceted and highly concerning phenomenon. Through examining the marked variability and diversity which characterises rural people and rural communities, Chapter one made evident the need to recognise and explore within-rural variations in mental health and wellbeing, rather than considering rural communities as a homogenous collective. With this as the focus point, the previous Chapter noted the limitations in using large scale epidemiological studies to capture this important local information, and spoke of the need for multiple disciplinary and methodological approaches and tools to be employed by researchers within this field of enquiry.

This Chapter begins with a brief outline of the underlying philosophical approach to science and knowledge within which the current study was conducted. This includes an articulation of the key assumptions and values inherent in this approach, and how these serve to influence the way in which the current research has been constructed and conducted. The strengths and limitations of employing quantitative and qualitative research methods are considered in lieu of the stated research aims for this study and, based on this, the chosen methodological approach is described. This Chapter moves then to detailing all features of the research conducted, including the design of the study, selection and recruitment of informants, data collection and analysis, in addition to discussing the maintenance of rigour within the research process and the relevant ethical considerations.

2.2 Philosophy of Scientific Enquiry

In providing guidelines for conducting social science research, Neuman (2000) outlines a general framework involving multiple stages of research development and conduct, from the initial identification of the area of study, to the dissemination of findings to the research community. While this framework provides the necessary stages for the conduct of social science research, it is noted that the actual form each stage will take is likely to vary considerably as a function of the research questions being asked, and the researcher themselves. One of the important determinants of which research questions will be asked and how a research project will be executed, is the researcher's philosophical approach to science, as this approach will entail a set of assumptions about knowledge and how knowledge is derived, as well as providing guiding principles, methodologies and techniques for investigation and analysis of particular areas identified for enquiry (Richardson & Fowers, 1998).

The majority of social research is based broadly on principles of either positivist or interpretive social science. Sometimes termed the "old paradigm", traditional positivist science, generally associated with the natural sciences, is founded on a philosophy of knowledge that says there exists a "true" and single reality which can be objectively and independently observed and measured, and that causal relationships can be discovered through control and manipulation of specified variables (Baum, MacDougall, & Smith, 2006; Denzin & Lincoln, 2005). For the positivist social scientist, the goal and purpose of research is the discovery of universal laws by which to explain human behaviours and control or predict events within our environment. Within this philosophy, research is typically conducted using objective experimental methods to collect well operationalised quantitative data (Patton, 1990). Common sense, intuition and sociopolitical values have no place in this type research, and theories are formed by using deductive

logic to connect universal laws which have been "discovered" using repeatable and precise methods of observation (Denzin & Lincoln, 2005; Neuman, 2000).

In contrast to positivist science, interpretive social science does not assume the existence of a "true and objective" social reality, but rather sees social reality as being dynamic, and created through the interactions of the people living within it (Denzin & Lincoln, 2005; Richardson & Fowers, 1998). The goal of science is the discovery of meaning constructed by people in natural settings, with such discoveries allowing scientists to better understand social life and the ways in which the social world is created and maintained (Neuman, 2000).

Interpretive social scientists use qualitative and naturalistic approaches to inductively and holistically explore and understand context-specific human experiences (Patton, 1990), and explanations are thought strong not because they are founded on logic or objective fact, but because they fit well with the experience of the individuals whom they relate to. Theory is not derived from universal laws, but instead provides a rich account of how particular groups' meaning systems are created and maintained in a way that strongly resonates with the group being studied (Denzin & Lincoln, 2005; Neuman, 2000).

There is an increasing appreciation in the social science that aspects of both philosophical approaches have desirable and limiting qualities, and that the choice of research methodology should be guided primarily by the research area and the questions being considered (Neuman, 2000; Pope & Mays, 1995). The nature of the questions being asked in the current study lend themselves to an interpretive philosophical approach to social science. The framework of positivist philosophy with its inherent position of distancing the researcher from their subject of interest, is thought to be unsuited to understanding the subjective, intricate and dynamic nature of people (Richardson & Fowers, 1998). An important concern discussed in Chapter One was that,

while much data exists to demonstrate differences in mental health and suicide between areas, there is little to tell us *why*. The current contention is that the answers to "why?" are likely to be found in the complex interplay between people and the way in which they experience the world around them. This is a subjective truth, and it is not assumed that an objective and independent reality exists, nor that all important variables will be easily amenable to operationalisation and measurement. Rather, what is important in the current context is the way in which subjective realities are created, interpreted and understood.

Having articulated the underlying assumptions about knowledge creation and scientific enquiry within which the current study was conducted, it is acknowledged that the above-described philosophical distinction is not clear-cut, and that researchers should focus on choosing appropriate methodologies for their purposes and ensuring rigour in all of their research practices (Paley & Lilford, 2011). As such, it seems that the rationale for the particular methodological tools employed in any research project, rather than the school of philosophy from which they came, is fundamental to the quality of the research. In light of this, we move now to consider what quantitative and qualitative research methods offer in the investigation of a phenomenon of interest, when and how their use is most appropriate, and ultimately how the methodological approach of the current study was decided.

2.2.1 Quantitative and qualitative methodological approaches

As discussed, quantitative and qualitative methodological approaches stem from different philosophical approaches to scientific enquiry and as a result, are each better suited to capturing different types of data via the use of particular tools, and are targeted at answering different types of questions. In crude terms, quantitative research is generally targeted at quantifying and

measuring phenomena in order to allow researchers to make predictions about likely outcomes given a certain set of conditions, whereas qualitative research is generally employed to describe aspects of certain phenomena and provide insight into why observed events are perceived to have occurred as they did, and why people do what they do (Carr, 1994; Denzin & Lincoln, 2005; Rusinova, Pochard, Kentish-Barnes, Chaize, & Azoulay, 2009).

Quantitative research is designed to test clearly articulated hypotheses which have been deductively generated from existing theory and knowledge, while qualitative research is designed to build an understanding of a phenomenon from a particular perspective, in order to inductively generate suggested explanations and hypotheses which may become a focus for further exploration (Carr, 1994; Neuman, 2000; Rusinova et al., 2009). Qualitative research does not generally begin with a defined hypothesis, but rather a broad question or statement about an area that remains poorly understood, and it is often thought a useful precursor to subsequent quantitative investigation in areas where there is little existing research or theory (Pope & Mays, 1995; Rusinova et al., 2009). Qualitative research is also thought useful for addressing the complexity of studying human beings through employing particular methods for exploring questions that cannot be adequately answered through quantitative methods and numbers, such as the beliefs, subjective experiences, personal meanings and interactions of individuals in a given context (Lincoln & Cannella, 2004; Pope & Mays, 1995; Richardson & Fowers, 1998; Rusinova et al., 2009).

As quantitative and qualitative research approaches are each better able to address different research questions, so too they each employ different methods of investigation, from the recruitment process, to the collection and analysis of data. Quantitative research is conducted in a fundamentally linear sequence from design to data collection and analysis. It uses a

systematic approach to apply standardised and repeatable procedures including experiments, quasi-experiments, closed surveys, or database analysis, in order to obtain what is thought to be objective data in the form of numbers or measurements (Carr, 1994; Neuman, 2000; Rusinova et al., 2009). Data analysis in quantitative research is typically statistical, based on aggregated results, and concepts are represented as distinct and predefined variables (Neuman, 2000; Rusinova et al., 2009). Study samples in quantitative research are generally large, and selected and/or allocated to experimental and control groups through a randomisation process (Rusinova et al., 2009). Through these analyses, quantitative research seeks to produce data which can be widely applied and generalised to the broader population from which they have drawn their sample (Patton, 1990; Pope & Mays, 1995).

In contrast to quantitative research, qualitative research often follows a non-linear path between data collection and analysis, moving back and forth between both stages of the research process as new themes or information emerge (Rusinova et al., 2009). Qualitative research typically employs more holistic and naturalistic data collection methods including field observations, focus groups and interviews, to gather data in the form of words, non-verbal communications and images (Carr, 1994; Neuman, 2000; Rusinova et al., 2009). The analysis of qualitative data requires researchers to immerse themselves in the rich detail of the information collected, in order to develop coding processes used to derive themes, and discover categories and relationships which provides detailed and in-depth information on a select group of cases with an emphasis on the particular meaning and experience of the individuals (Patton, 1990; Pope & Mays, 1995). Study sample sizes in qualitative research are generally smaller than those in quantitative research, and are selected purposively rather than at random (Rusinova et al., 2009). Qualitative research looks for "typicalness" in the data and rather than providing

conclusions which have broad generalisability, it is organised to tell a coherent story of a particular group of people in a particular time and context, which may (or may not) serve to generate hypotheses about larger groups (Neuman, 2000; Patton, 1990).

While quantitative and qualitative research methods differ in their respective approaches, designs, and tools used for the collection and analysis of data, it is argued that neither is fundamentally superior or inferior to the other (Carr, 1994; Paley & Lilford, 2011). Both have features which assist with exploring particular areas of interest and answering particular types of questions. Similarly, both have inherent strengths and weaknesses which must be considered by researchers in deciding on their methodological approach of choice.

2.2.1.1 Methodological strengths and weaknesses

The strengths and weaknesses associated with virtually all aspects of quantitative and qualitative design and implementation need to be made to work in complementary ways in a given study (Carr, 1994). Quantitative research has a number of strengths resulting from its systematic application of standaradised research tools and experimental control procedures, including the ability to gather large amounts of data from which to provide broadly generalisable conclusions (Patton, 1990), as well as high levels of repeatability and, therefore reliability (Carr, 1994; Pope & Mays, 1995; Rusinova et al., 2009). A further strength of quantitative research is that it is generally thought to be more "objective" and less subject to human bias, as a function of the researcher's "distance" from the participants, and is often described as "rational" and well structured (Carr, 1994; Rusinova et al., 2009).

One of the weaknesses of quantitative research is that it requires that the concepts of interest have already been operationally defined, and that there has been some theoretical

explanation proposed, in order to generate hypotheses for testing (Neuman, 2000; Pope & Mays, 1995), limiting the scope of quantitative research in new fields of enquiry. Quantitative research does not allow for unanticipated factors which may be important to the issue being considered, and its statistical handling of "deviant cases" means that data is distorted in the way it is evaluated. Finally, arguably the greatest weakness of quantitative research is that, by definition, it imposes tight experimental controls on data which has been removed from its natural context, and as a result may be low in external validity, with questionable applicability to "real life" situations (Carr, 1994; Rusinova et al., 2009).

Contrasting with quantitative research, a strength of qualitative research is its ability to explore areas about which there is little pre-existing knowledge or theory and where the constructs of interest are difficult to operationalise, quantify and measure (Richardson & Fowers, 1998; Rusinova et al., 2009). The iterative process of qualitative research means that it is able to be more holistic and flexible, allowing for the emergence of new and unanticipated findings. In addition, it has been suggested that the interpersonal relationship between the researcher and the participants in qualitative research means that data collected is rich, intricate, meaningful, and honest (Carr, 1994; Patton, 1990; Pope & Mays, 1995). In studying phenomena within their natural context and without imposing experimental controls, qualitative research is sometimes said to be strong in external validity, by representing the diversity of lived experiences, perceptions, and meanings within the study sample, and as a result being closely tied to "real world" problems (Patton, 1990; Pope & Mays, 1995; Rusinova et al., 2009).

A weakness of qualitative research however, is that, as it is tied so closely to the subjective experience of a small sample, it is generally thought to be limited in its ability to generalise to the broader population (Carr, 1994; Rusinova et al., 2009). While the relationship

between the researcher and the participants provides access to rich and meaningful data, qualitative research does not demonstrate the level of objectivity found in quantitative research and nor does it seek to do so. Data may be influenced simply by the presence or views of the researcher, and the reliability of data depends on the rigour and insights of the researcher throughout the entire research process. Further, a researcher's engagement with participants may threaten the validity of their description and interpretation of the data if careful processes are not employed (Carr, 1994). Finally, while the richness of qualitative data is a noted strength, a potential weakness of qualitative research is that the data may be purely anecdotal or simply become overwhelming and confusing as a result of the volume and amount of detail (Carr, 1994; Rusinova et al., 2009).

It is evident that whichever methodological approach is employed within a research program, thought must be given to the particular strengths and weakness of the chosen approach, and these must be weighed in the context of the area of interest and the questions being asked. Efforts should be made to ensure that the research, irrespective of the approach, is conducted with a focus on rigour. Within the context of the current study, while quantitative research has been invaluable to date in identifying that certain populations within rural communities seem to represent a group which is at higher risk of suicide, there is still a lack of information pertaining to why. Many of the factors which have been postulated to be of importance are not highly amenable to operationalisation and statistical measurement, and there is an absence of an existing unified theory governing this research topic. Given this context, and weighing the strengths and limitations of the approaches discussed above, a Grounded Theory (Glaser & Strauss, 1967) qualitative approach was deemed most suited to the current study. Grounded Theory is briefly

discussed below, before moving to the current study's design and execution, including relevant ethical issues and measures employed to ensure the rigour of the research.

2.2.2 A qualitative approach: Grounded Theory

While it is acknowledged that it is not the only approach to qualitative research,
Grounded Theory (Glaser & Strauss, 1967; Strauss & Corbin, 1990) is often advocated as the
method of choice in instances where there is a substantial void in relevant theory which can be
used to explain a particular phenomenon, or alternatively, where theory does exist, but is deemed
to be too far removed from actual observations to be of practical utility (Martin & Turner, 1986).
Essentially, the ultimate goal of research using a Grounded Theory approach is the generation of
a theory (i.e., an organised set of ideas) about a certain phenomenon, which is explicitly and
faithfully linked to, and inductively derived from, the data collected during the research process
(Charmaz, 2003; Glaser & Strauss, 1967; Strauss & Corbin, 1990).

Grounded Theory is an approach to qualitative research which employs a series of systematic procedures throughout data collection and data analysis, which leads to the formation of a theoretical account of the phenomenon of interest (Glaser & Strauss, 1967; Strauss & Corbin, 1990). As this approach seeks to build inductively-generated theory, research activities should be approached with an open mind as to the possible explanations for a given phenomenon, rather than commencing investigation with a set of predefined hypotheses for empirical testing (Martin & Turner, 1986). This is not to say that existing technical literature in the area is ignored, quite the contrary, this literature is used in a number of important ways within a Grounded Theory approach, including orienting or directing the researcher to areas where there is a lack of strong theoretical explanation of a given phenomenon (Charmaz, 2003),

as in the current study, and/or in the case where significant explanatory tensions are present (Strauss & Corbin, 1990).

As discussed in Chapter One, there are notable gaps in both research and theory around variations in mental health and wellbeing between rural communities. While Macintyre et al.'s (2007; 2002) framework for geographic variations in health has been proposed as possibly useful for conceptualising observed geographic variations in rates of suicide (Judd et al., 2002), there is little in the way of a strong governing theory within which this framework and its components can be understood, and an absence of research into its practical application in the specific context of rural mental health. Given this, working with the above discussed framework as a guide, the current study employed a number of principles of Grounded Theory as a means of exploring the relationship between the framework and the natural data which emerged through qualitative data collection. Not only did this approach facilitate discussion of the "real-world" utility of Macintyre's model in this context, but it assisted in generating a greater theoretical understanding around the proposed role of *compositional*, *contextual* and *collective* community factors in the mental health and wellbeing within rural communities.

The processes by which the principles of Grounded Theory were applied during the current study are outlined in detail throughout the remainder of this chapter. It is important to note at this point, however, that Grounded Theory requires a dynamic and interactive process of sampling, data collection and data analysis (Glaser & Strauss, 1967; Strauss & Corbin, 1990). Each of these research activities occurs simultaneously, allowing for scope and flexibility to target particular areas for deeper exploration as emergent themes, concepts and relationships become apparent (Charmaz, 2003). This approach is again intended to promote the development

of an overall theoretical account of the phenomenon of interest, which truly reflects the observations and accounts of informants (Glaser & Strauss, 1967).

2.3 Study Design and Context

Following the previous discussion of the philosophical and methodological approach to the current investigation, this section provides details of the specific features of the current study's design. It outlines the setting of the study, including the procedure for the selection of towns, as well as providing a brief description of their relevant demographic profiles.

2.3.1 Setting of the study

The setting for the current study was four rural Victorian towns which were classified for the purpose of the research as having either "high" or "low" recorded rates of suicide. The decision to confine the sample to four towns, came from a considered effort to ensure balance between capturing a broad range of perspectives on the issues explored and keeping the scope of the study within the parameters of a doctoral project. Further, the decision to classify towns based on recorded rates of suicide and use these rates to sample towns from opposing ends of the spectrum, was made with the intention of maximising opportunities for identifying potentially subtle differences between the towns on issues of importance for mental health and wellbeing in rural communities. In the absence of any *a priori* method for town selection, the process by which the four towns were selected required that parameters for inclusion and exclusion be selected and defined for the purpose of the current study. These parameters and the grounds on which they were employed are described below.

2.3.1.1 Selection of sample towns

The classification of towns as urban, rural or remote can be arbitrary and inconsistent, both on a national and international level. As discussed in Chapter One, there tends to be variability in the literature pertaining to rates of rural suicide, both in Australia and around the world, as a function of the ways "small rural" towns have been defined. Despite these inconsistencies, it has been suggested that a population of fewer than 4000 may be a useful cut-off point for defining "small rural" towns in the context of the suicide literature (e.g., Dudley et al., 1997; 1998a). For this reason, towns with populations of fewer than 4000 were regarded as "small rural towns" for this research project. Again as noted in the initial discussion of the literature in Chapter One, it is acknowledged that Victorian towns with a population of fewer than 4000 are heterogeneous on many potentially important dimensions relating to mental health (Fraser et al., 2002). As such, the inclusion/exclusion criteria for the current study were such that selection was limited to towns with populations of between 3000 and 4000 in an effort to reduce the variability of the population size, and make the towns more comparable on other theoretically relevant variables.

At the commencement of the initial sampling process and selection of towns, the most up-to-date population data available relating specifically to this classification of rural populations was the 2001 census data (ABS, 2009). Accordingly, there were 13 towns in Victoria with populations of between 3000 and 4000 (Victorian Government Department of Sustainability and Environment (VGDSE), 2007). From this group of 13 towns, a sample of 4 towns was required for in-depth exploration. In order to select towns that were likely to differ in the most theoretically relevant ways, rates of suicide were used as the basis for selecting the four towns.

While suicide is a rare event (in numerical terms) and these numbers were small, they did provide a means of ranking the towns, in order to purposively select them for study.

Rates of suicide for each of the 13 towns and their Local Government Areas (LGAs) were obtained through an existing database accessed through a larger study looking at geographic variations in suicide, which was being conducted from the Monash University Centre for Rural Mental Health (Judd, Jackson, Komiti, Bell, & Fraser, 2010). Again, at the time of ranking the towns, the most recent and up-to-date data available was for the period 2001-2004. Based on these figures, two towns had the equal highest suicide rate, with four suicides during that period, and as such were selected for inclusion in the study. There were six towns which had one recorded suicide during the specified time period. From these six towns, two were randomly selected to be included in the study. The result of these selection procedures was a sample of small rural Victorian towns with either "high" or "low" rates of suicide.

2.3.1.2 Town demographic profiles

In order to minimise the potential for the towns included in this study to be identified¹, only a restricted amount of demographic information is presented here. Relevant demographic information on each of the four towns included in this study is presented in Table 2. As seen in this table, the populations of the four towns ranged from 3017 to 3632 (M = 3337.5, SD = 309.32) people in 2001. The size in square kilometres of the towns ranged from 6.4km² to 15.1 km² ($M = 10.45 \text{ km}^2$, $SD = 4.31 \text{ km}^2$), with population densities from 207.3 persons per km² to 504.4 persons per km² (M = 363.93 persons per km², SD = 146.24 persons per km²). All except

¹ Further discussion of the ethical considerations in the design and execution of the current study is presented in section 2.8

Town C showed population growth over the period from 1981 to 2001, and all towns showed a general increase in the mean age of their population over that time.

The percentage of households with incomes in the highest quartile across the state in 2001 in each of the towns ranged from 9% to 22.1% (M=15.3%, SD=6.66%), while the percentage of households with incomes in the lowest percentiles ranged from 24.3% to 45.6% (M=34.73%, SD=10.50%). The percentage of fully owned private homes ranged from 34.9% to 56.2% (M=45.05%, SD=10.92%), with the percentage of rented public housing ranging from 2% to 6.1% (M=4.08%, SD=1.67%). Finally, levels of unemployment in 2001 ranged from 4.6% to 7.2% (M=6.23%, SD=1.24%). The location of the LGAs of each of the four towns is presented in Figure 1, and distances from Melbourne CBD varied from 60 to 138 kilometres.

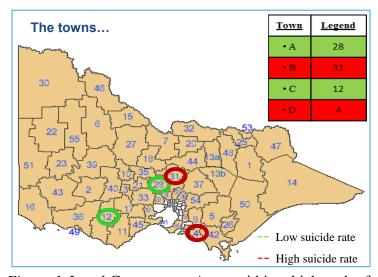


Figure 1. Local Government Areas within which each of the four selected towns resides

In addition to the above demographic information, data on the rurality classification of each town was obtained from the RRMA\Towns Search database accessible through the Health Workforce Queensland (n.d.). This included the Rural, Remote, Metropolitan Area code (RRMA; Australian Institute of Health and Welfare (AIHW), 2004; Department of Primary

Industries and Energy and Department of Human Services & Health (DPIE & DHSH), 1994) and the Accessibility Remoteness Index of Australia (ARIA; ABS, 2001a; Department of Health and Aged Care (DHAC), 2001). These classifications were later updated to include the revised Australian Standard Geographical Classification (ASGC) Remoteness Structures, which provide geographically defined Remoteness Areas using ARIA+ (ABS, 2001b).

Table 2 Individual and Mean Demographic Information for Selected Towns²

Town	Total population in 2001	Area size in km ²	Density in persons per km ²	Average population change (%) from 1981- 2001	Aging or declining population from 1981- 2001	Household income in the highest quartile (%) in 2001	Household income in the lowest quartile (%) in 2001	Fully owned private homes (%) in 2001	Rented - Government homes (%) in 2001	Unemployment (%) in 2001
A^a	3017	6.4	471.4	2.7	aging	19.9	27.3	36.5	4.1	5.9
\mathbf{B}^{b}	3632	7.2	504.4	3.8	aging	22.1	24.3	34.9	4.1	4.6
\mathbf{C}^{a}	3130	15.1	207.3	-0.6	aging	10.2	41.7	52.6	6.1	7.2
D_p	3571	13.1	272.6	4.2	aging	9	45.6	56.2	2	7.2
Mean	3337.5	10.45	363.93	2.53	-	15.3	34.73	45.05	4.08	6.23
(SD)	(309.32)	(4.31)	(146.24)	(2.18)	-	(6.66)	(10.50)	(10.92)	(1.67)	(1.24)

² Adapted from VGDSE (2007) which provided the most up-to-date data available at the time of town selection and description for the purpose of the current study. There has been some subsequent redefinition of town boundaries and revised data can be viewed via Department of Planning and Community Development (DPCD, 2010).

^a town classified as having a "low" rate of suicide for the purpose of this study ^b town classified as having a "high" rate of suicide for the purpose of this study

The RRMA is a seven-category area classification system (see Table 3), formulated on ABS statistical local area (SLA) population numbers, and a measure of remoteness for each non-metropolitan SLA. The remoteness codes are calculated on the basis of each town's distance from urban centres with a population of 10,000 persons or more, as well as personal distance, based on population density and the average distance between residents (AIHW, n.d.; Caldwell, Jorm & Dear, 2004; National Key Centre for the Social Applications of Geographical Information Systems (GISCA), 2000). The ARIA is divided into five remoteness categories, defining remoteness based on geographical accessibility to goods, services and social contacts based on road distance to service centres across Australia. The ARIA ranges from 0 (high accessibility) to 12 (high remoteness) (ABS, 2001a; DHAC, 2001; GISCA, 2000). The ASGC allows for the classification of Census Collection Districts (CCD) which share common characteristics of remoteness into geographical regions called Remoteness Areas (ABS, 2005). These remoteness structures are based on an extended version of the original ARIA classification, namely ARIA+, which ranges from 0-15 (15 = most remote) (ABS, 2003). The mean ARIA+ value for each CCD is calculated and then each CCD is aggregated to form defined Remoteness Areas as shown in Table 5 (ABS, n.d.). The full list of area classifications defined by each categorisation system is shown in Appendix A.

The classification of each of the four towns in the current study within each classification system is presented in Table 3. Each of the four towns had an RRMA classification of 5, i.e., "Other rural areas". Town A had an ARIA of 1.18, Town B had an ARIA of 1.21, Town C had an ARIA of 1.86 and Town D had an ARIA of 2.02. This places Towns A and B in the Highly Accessible ARIA category, with Towns C and D in the Accessible category. Using the revised Remoteness Structures of the ASGC, Town A had an ARIA+ value of 0.91, Town B had an ARIA+ of 0.87, Town C had an ARIA+ of 1.85 and

Town D had an ARIA+ of 1.75. These ARIA+ values meant all four towns in the current study were defined as being Inner Regional Remoteness Areas.

Table 3

Area Categorisation for Selected Towns within each Classification System

Town	RRMA	ARIA	ASGC (ARIA+)
Town A	R3 (5) Other rural area	1.18	0.91
Town B	R3 (5) Other rural area	1.21	0.87
Town C	R3 (5) Other rural area	1.86	1.85
Town D	R3 (5) Other rural area	2.02	1.75

Each of the above discussed rurality classification systems use somewhat varied methodologies for classifying and defining geographical areas of Australia in relation to their level of remoteness. Each has their own strengths and weaknesses in terms of their underlying methodology, and their practical application for rural policy development and resource allocation (McGrail & Humphreys, 2009). Despite these differences, however, there is some consistency in the features used for classification across the systems, particularly with reference to physical distance to goods and services. More importantly for the purpose of the current study, it is apparent that while the location and socio-demographic features of the four towns are varied, they all have similar degrees of remoteness, irrespective of the classification system employed.

This section has detailed the context in which the current study was conducted, including how the criteria were formulated for possible inclusion of towns in the research project, as well as the final selection process for each of the four towns. Following this, the demographic features of each of the four sample towns selected for further investigation were outlined, including relevant demographic profiles and rurality classifications. With the four

sample towns described, the next point of consideration in this Chapter is the initial identification and subsequent recruitment of informants within each town to take part in the interview process. As participation in the current study involved "informing" the researcher on aspects of each town, rather than participating in field observation or other activities, the term *informant* rather than *participant* is used to represent those individuals who took part in the research project (Neuman, 2000).

2.4 Identification of Informants

Having selected the four towns, the next phase was to identify and recruit informants in each town with whom to conduct in-depth interviews around their perceptions of *compositional*, *contextual* and *collective* community variables specific to their towns, and their perceived impact on the mental health and wellbeing of the residents from each of these communities. As with the selection of towns, the process of informant identification commenced with an effort to balance the principles of open/initial sampling (Charmaz, 2006; Strauss & Corbin, 1990); namely seeking breadth and coverage of perspectives, with issues of informant accessibility and the restrictions of scope imposed by the restrictions of a doctoral project. The decision was made to focus the current study on obtaining the perceptions and perspectives of a variety of mental health professionals (MHPs)³ who serviced the towns selected.

This decision was driven by a number of factors relating to the positions within these communities. Firstly, it was anticipated that, by virtue of the nature of their work, this group would be able to offer focused and theoretically-informed perspectives on issues impacting on mental health and wellbeing in the communities they serviced (a similar reasoning was

³ For the purpose of this study, the term 'mental health professional' refers to any professional who has worked with mental health issues in a professional capacity, including psychologists, psychiatrists, case managers, unit managers, GPs, psychiatric nurses, social workers, etc.

provided by Wainer & Chesters (2000) in reference to their recruitment of rural general practitioners). Further, as these informants were employed in local health and mental health services, their knowledge of service availability and accessibility within each town was likely to be extensive. Finally, as many of the MHPs who serviced rural towns are also residents of those towns, it was expected that this group would also be able to provide an insight into the impact of *compositional*, *contextual* and *collective* community variables on mental health and wellbeing from the perspective of a member of these communities. Having identified the informant group of interest, recruitment processes commenced.

2.4.1 Recruitment of mental health professionals

As the first stage of the recruitment process, the researcher conducted an extensive search for publicly listed MHPs servicing each of the four towns of interest. This led to the development of a comprehensive database of MHPs working in and/or servicing each of the four towns of interest, in both the public and private sectors. This database was built on and amended throughout the course of the recruitment and data collection processes. The initial database comprised professionals and/or services identified using a number of specific search strategies and criteria (for information see Appendix B). The search sites used during the initial phase of database development were Beyondblue, the Australian Psychological Society and the Yellow Pages.

The initial database contained available contact details for privately practising professionals and public mental health services, as well as GPs in each of the four towns of interest. In instances where a postal or email address was not provided, the researcher contacted the professional directly by telephone and enquired as to whether they would be interested in providing their postal address and receiving the research information in the mail. This information was then recorded and the database amended accordingly. Once all

available information was obtained and collated, recruitment efforts commenced. Concurrent recruitment strategies were employed, with many strategies occurring simultaneously across more than one town at any given time throughout the data collection period which totalled 11 months. Recruitment did not follow a linear process and as discussed previously, recruitment co-occurred with preliminary and ongoing data collection and analysis, as expected in a Grounded Theory study.

MHPs in each town were contacted by means of a general recruitment letter (Appendix C) which outlined, in plain language, the nature and intention of the research, and their involvement should they choose to participate. Recruitment letters were either sent via post or e-mail where there was not a postal address provided, or where e-mail was stated as their preferred method to receive correspondence. Recruitment letters sent via post had enclosed a reply slip and a reply-paid envelope for informants to indicate their interest in either receiving more information about the study, and/or participating. In those instances where recruitment letters were sent to mental health services or general practices, they were directed to the attention of the team leader, or the unit, service or practice managers. All professionals and services were contacted by the researcher via phone within two weeks of posting/e-mailing the recruitment letter, as a means of follow-up and to provide an opportunity to answer any queries potential informants may have had about the research.

On receipt of the reply slips, the researcher posted/e-mailed a copy of the Explanatory Statement and Consent form (Appendix D) to the potential informants. Again, each of these mail-outs was followed by a phone call within two weeks of sending the information. In those cases where it was indicated that the professional was interested in gaining more information about the study, the researcher was available to discuss the project and answer any questions they had before deciding on their own willingness to participate. In those cases where it was indicated that the professional was interested in participating, the researcher contacted them

via phone to arrange an interview time. On a number of occasions, professionals who were contacted and/or interviewed, offered the contact details of other MHPs servicing their respective town who they thought would be interested in the research. In light of the frequency with which this occurred, and the success rate with which professionals were identified through this mechanism, snowball sampling (Neuman, 2000) was formally incorporated as a central feature of the recruitment process, co-occurring with the data collection phase of the study as described below.

2.5 Data Collection: Sources and Procedures

As the main focus of the current study was on employing qualitative research methods to obtain information relating to the perspectives of MHPs on *compositional*, *collective* and *contextual* factors (Macintyre, 1997; Macintyre et al., 2002; 2006) in the four rural towns selected, the primary data source was in-depth interviews with informants in each town. Subsequently, while data analysis centred predominantly on the themes, issues and relationships which emerged from these interviews, it must be noted that additional materials (e.g., ABS, 2009; VGDSE, 2007) were accessed and evaluated in order to not only facilitate the initial classification, selection and description of each town included in the research, but also to aid in providing supplementary information to the interview data where possible, thereby strengthening the comprehensiveness of the research and subsequent findings (Mays & Pope, 2000). Each of these sources of data and the procedures by which they were obtained are discussed in turn.

2.5.1 Interviews

The use of informant interviews in social research is extensive, and particularly so among Grounded Theorists. Both in Grounded Theory research and also in other,

predominantly qualitative, research paradigms, interviews with informants can serve as either the sole source of data within a study, or can be used in combination with other data sources (Robson, 2002). As with the methodological approach to the study as a whole, the type of interview employed by a researcher in any given study depends largely on the type and the depth of data being sought. While interviews can be differentiated in a number of ways, a fairly standard typology broadly considers three categories of interview: fully structured interviews, semi-structured interviews and unstructured interviews, each of which serve a unique purpose in the context of research design and data collection (Robson, 2002).

In fully structured interviews, the interviewer asks each interviewee the same set of predetermined questions, with exact wording and in a prescribed sequence. In semi-structured interviews, while the interviewer has a number of predetermined questions, they are given flexibility to modify the wording or sequence of questions, to probe for further explanation from the interviewee, or to omit or include additional questions as seems appropriate to the individual interview. Finally, in unstructured interviews, the researcher may have a number of topics they wish to discuss, but they simply encourage conversation to develop around these issues with considerable scope granted to the interviewee (Robson, 2002). In qualitative research studies, interviews are usually either semi-structured or unstructured. These typologies are generally considered to be the most appropriate data-gathering strategy in contexts where the researcher is seeking to understand the meaning that a particular phenomenon has for the informant, and/or where the research is exploratory in nature (King, 1994), as in the current study.

Further to the interview typology discussed above, Charmaz (2006) describes the notion of intensive interviewing, particularly with reference to Grounded Theory. This indepth interviewing style seeks to move beyond informational interviewing to an interviewing process designed to elicit each informant's unique understanding of their experiences,

through reflection and description. Intensive interviewing permits the interviewer to be relatively directive; to probe beyond surface descriptions or responses, to seek further information or explanation, to return to a previous point, and/or ask the interviewee to reflect on their thoughts and feelings. Likewise, interviewees in intensive interviewing are able to tell their story, to reflect on events in a way not typical of everyday conversation, to be selective in what they disclose and, importantly for social research, to be positioned as experts on the issues discussed (Charmaz, 2006).

Intensive interviewing is well suited to Grounded Theory research, as both seek to find the balance between being directed and yet remaining emergent. While always remaining open to what the data presents, Grounded Theorists impose a certain degree of control over their data, through an ongoing process of comparison and analysis of existing data. As emergent themes become apparent, data collection is redirected or refocused through amendments to the initial interview protocol. This open-ended but focused data collection process is well served by the principles of intensive interviewing (Charmaz, 2006) and therefore, this was the interview method employed for the purposes of the current study following the development of a preliminary interview protocol which was then amended as necessary throughout the data collection period.

2.5.1.1 Development of interview protocol

Prior to the commencement of data collection, an initial interview protocol was developed by the researcher, which was intended to encourage interviewees to discuss various features of their respective town, and what they perceived to be some of the risk and protective factors relating to mental health in their community. As the interviews were intended to explore the potential role of *compositional*, *contextual* and *collective* community factors in mental health and wellbeing, interview probes were informed by the propositions of

Macintyre and colleagues (MacIntyre, 1997; Macintyre et al., 2002), and the framework provided by Judd et al. (2006), while also allowing scope for unanticipated or novel themes to emerge. The set of preliminary interview probes was reviewed by two independent researchers at the Monash University Centre for Rural Mental Health, both of whom had extensive research experience in the fields of rural mental health and suicide. Based on the recommendations and suggestions of these researchers, the preliminary set of interview probes was modified, and the final set of interview probes used at the commencement of data collection is presented in Appendix E.

2.5.1.2 Interview process

In the current study, semi-structured, intensive interviews were conducted with MHPs who worked in or serviced each of the four towns of interest. As discussed, MHPs were contacted via phone to arrange an interview time and interviews were conducted at an appropriate location that was safe and convenient for the informants and the researcher. Locations of interviews were varied and included private and home consulting rooms, private residences, offices, community health services, medical centres, and schools. The occupation of each MHP interviewed from each of the four towns, as well as the location and duration of each interview is detailed in Table 4. As all interviews were fully audio-recorded, informants were asked to identify interview locations that were likely to be private and with minimal background noise. Throughout the 11 month data collection period, the researcher visited each of the four towns a number of times in order to meet with each informant and conduct the interviews face-to-face, and a total of 17 interviews were conducted across the four towns.

Upon meeting each MHP who was participating in the research project face-to-face, and prior to the commencement and audio-recording of the formal interview, the researcher

engaged in an informal period of initial rapport building with the interviewee. In qualitative research, and specifically when using interview techniques, the onus is on the researcher to build rapport with the informant and attempt to reduce any feelings of embarrassment, fear or suspicion they may have (Neuman, 2000). This rapport is developed through the researcher holding and demonstrating trust and respect for both the interviewee and the information that they share, and creating an environment in which the interviewee feels safe to disclose and discuss personal experiences and beliefs (DiCicco-Bloom & Crabtree, 2006). During this period, the researcher again thanked the informants for their time in taking part in the research, and spent some time engaging in non-research focussed conversation. The researcher also reviewed the research project and answered any questions, before ensuring that the informant understood the explanatory statement they had been sent, and had signed the accompanying consent form. Prior to commencing each interview, the researcher again asked if informants were comfortable for the interview to be audio-recorded, and provided assurance that they would not be identified by name in the presentation of the data.

As the interviews were not constrained by a fully structured protocol, the interview focus was modified as appropriate on a case-by-case basis. Modifications included prompting interviewees for further information, following unexpected leads presented by the interviewees, and omitting questions where it was deemed that they would be inappropriate or uninformative, or because the material had already been covered. As informants raised new ideas which had not been a part of the initial interview protocol, subsequent interviews were modified to incorporate questions intended to explore informant reflections on these previously unidentified topics. One such example of this, was the inclusion of interview prompts around availability and accessibility of public transport, which emerged early in the data collection process as an important point of consideration. While it was necessary to define the data collection period, and as such it was not possible to employ a pure theoretical

sampling procedure, it was found that interviews conducted late in this period did not generate any new themes, and it was concluded that thematic and theoretical saturation had been reached at this point.

Table 4

Location and Duration of Informant Interviews

Town	Occupation	Interview Location	Duration
A	Psychologist	Home consulting room	1.5hrs
A	GP	Medical Centre	1hr
A	Sector Manager	Community Mental Health	1hr
		Service	
A	Case Manager	Community Mental Health	1.75hrs
		Service	
A	Psychologist	School	1hr
В	Psychologist	Private consulting room	1.75hrs
В	Psychologist	Home consulting room	2hrs
В	Ed. Psychologist	Non-psych office	1.75hr
В	Psychologist	Community Health Centre	1.5hrs
C	GP	Private residence	1hr
C	Psychologist	Private residence	1hr
C	GP	Medical Centre	1hr
C	Psychologist	Community Mental Health	1hr
		Service	
D	Senior Psychologist	Community Mental Health	1.75hrs
		Service	
D	Psychologist	School	1.5hrs
D	Nurse	Private residence	1.25hrs
D	Clinical	Community Health Service	1.25hrs
	Psychologist		

2.5.1.3 Interview recording, field notes and transcription

In order to allow for full orthographical transcription of each interview, they were all audio-recorded using a cordless digital device. In addition to facilitating later transcription,

the decision to record all interviews ensured that the interviewer was not reliant on taking extensive notes during the interview which would then form the basis of data analysis, and was able to be more actively engaged with the interviewee. Supplementing audio-recordings, the researcher took notes of key issues raised by informants during each interview, as well as noting important terms, phrases, proper names and pseudonyms which would be important for accurate transcription. Further to this, immediately after leaving each interview, the researcher took time to make detailed field notes based on reflections of the interview. These notes included comments, as relevant, on the setting of the interview, the degree of engagement with the respondent and general impressions from the interview process. Field notes were also used as part of the ongoing audit trail (Wolf, 2003), to track new emerging themes and relationships which could be considered as areas to include for discussion during subsequent interviews.

Using software compatible with the digital recording device to facilitate efficient play-back/play-forward, all interviews were orthographically transcribed. While it is acknowledged that transcriptions of audio recordings are inherently limited in their ability to provide a complete account of the socio-psychological context of the interview (e.g., Lapadat & Lindsey, 1999; Poland, 1995), extensive effort was made to ensure a verbatim and true transcription of each interview. Interviews were transcribed to include all aspects of the conversation, including pauses, broken sentences, interjections and interruptions (e.g., "Oh no there's a... there's a umm...oh I reckon..." a/002). Transcription also included notes to signify emphasis on a specific word or phrase to imply a particular meaning, or tone of voice used to imply mimicking or sarcasm. Other inclusions during transcription included specifying non-verbals such as laughter or coughing (e.g., "That's...yeah [chuckles], um well..." d/003). In the case of inaudible portions of the audio-recording, the field notes of the researcher were used in an effort to identify the content; however, where this was not

possible, the inaudible portion was noted in the transcript (e.g., "...um [26:52 inaudible] people coming..." b/006 – indicating that the content at minute 26 and 52 seconds of the interview was inaudible).

2.5.2 Supplementary data: Non-technical extant texts

As previously mentioned, further to the data generated through in-depth interviews with MHPs, additional supplementary materials pertaining to each of the four sample towns were accessed during the formative stages of the current study for the purpose of town selection and description (ABS, n.d.; 2009, GISCA, 2000; VGDSE, 2007), which were then considered during the course of the final data analysis. These public Government records can be defined as non-technical (Strauss & Corbin, 1990), extant (Charmaz, 2006) texts, and provide an added unobtrusive data source of information relating to each town which is thought to be a generally "objective" account of particular aspects relating to their sociodemographic characteristics (Charmaz, 2006; Robson, 2002). In the current study, these additional documents provided information relating to potentially important constructs for rural mental health and wellbeing, such as area-level socio-demographic status (as indicated by income quartiles, home ownership and unemployment), as well as population change (as indicated by growth or decline as well as whether the population is ageing or not). This information was considered in relation to data generated from the in-depth interviews. As already mentioned, the incorporation of multiple data sources is aimed at strengthening the comprehensiveness of a qualitative research project (Mays & Pope, 2000).

2.6 Data Analysis

Data analysis in the current study was guided by the principles and coding practices outlined for use within a Grounded Theory approach (Glaser & Strauss, 1967; Strauss & Corbin, 1990). Using this "ground-up" approach to analysis was aimed at broadening the

scope to enable new themes and relationships to emerge from the data, without being restricted to the existing propositions the framework employed. As noted, this allowed for an exploration of the model's ability to capture "real world" data as it emerged in the field, as well as facilitating the generation of an overarching theoretical understanding of the impact of *compositional*, *contextual* and *collective* community factors on the mental health and wellbeing of rural community members.

Grounded Theory employs a process of constant comparative analysis (Glaser & Strauss, 1967; Strauss & Corbin, 1990). This process refers to the concurrent engagement in data collection and data analysis, which requires the researcher to be asking questions of, making comparisons within and generating hypotheses from their emerging data (Glaser & Strauss, 1967), which in the current study referred primarily to field notes and interview transcripts. Such joint processing allows for purposeful modifications or redirections in the ongoing data collection process, facilitating the development and clarification of category dimensions as they emerge (Strauss & Corbin, 1990). As previously discussed, modifications were made to the initial interview protocol throughout the current study, in order to reflect the emergence of new themes identified during preliminary analysis. This iterative process of modifying interview protocols to reflect emergent themes is continued until there is no new information being contributed to thematic categories emerging from the incoming data (Glaser & Strauss, 1967; Strauss & Corbin, 1990), which was observed to have occurred within the data collection period for the current study.

2.6.1 Coding procedures

Within a qualitative research paradigm, specific coding procedures are employed to link the collection of raw data to the generation of theory by providing a language for understanding that which is observed, through the careful and thoughtful defining and

naming of units of the data (Charmaz, 2006). The analysis of data in the current study primarily refers to the coding of data sources, namely interview transcripts, to define and characterise thematic categories and relationships. While the coding procedures outlined for a Grounded Theory approach provide a framework and set of techniques which can be employed, they are not intended to be entirely prescriptive, and support flexible application appropriate to the context of each research program, including choice of level of analysis (Strauss & Corbin, 1990).

Essentially, the coding procedures in this approach promote the generation and building of a theoretical framework that is closely tied to the data, consistent and integrated, and sufficiently operationalised to make it amenable to further investigation (Glaser & Straus, 1967; Strauss and Corbin, 1990). While each of the three levels of coding employed in this research will be discussed independently, it must be reiterated that the nature of constant comparative analysis in this study was such that data analysis involved continuous and ongoing movement between each level of coding, with earlier processes remaining active until such time that the process was complete (see Glaser & Strauss, 1967).

2.6.1.1 Open coding

The first step in a Grounded Theory approach to data analysis is open coding, which refers to the breaking down and close examination of the raw data (i.e., interview transcripts) for the initial naming or labelling of concepts and subsequent categorisation of phenomena identified (Strauss & Corbin, 1990). The unit of analysis for labelling of data during open coding depends on the nature of the data being analysed, the purpose of the analysis and also the stage of the research (Charmaz, 2006). There are a number of approaches to this initial coding procedure, including coding the data word-by-word, line-by-line, or incident-by-incident (Charmaz, 2006; Strauss & Corbin, 1990). Due to the large amount of transcribed

data collected in the current study, the most appropriate unit for coding was incident-by-incident. This process involves identifying "incidents" in the data, which are the "... events, and happenings [which] are taken as, or analysed as, potential indicators of phenomena..." (Corbin & Strauss, 1990, p. 7). Each incident is given a conceptual label, and the data is initially coded into as many categories as possible (Glaser & Strauss, 1967). All data coding and analysis in the current study was conducted manually by the researcher, without the use of qualitative software programs. Throughout this initial process, the researcher was comparing each incident with those already labelled, in order to make decisions as to whether the current unit of analysis represents a unique category, or whether similar phenomena fit together into an already defined one (Glaser & Strauss, 1967; Strauss & Corbin, 1990).

It was vital during this initial phase to "stay close" to the data and avoid imposing preconceived labels on it, in order to allow for the discovery of new categories and theoretical possibilities. It is also important to recognise that these initial codes remained provisional and open to amendment in light of subsequent analysis (Charmaz, 2006). While provisional, part of this initial coding and creation of categories included consideration of not only the properties of each category, but also the conditions under which they are enhanced or minimised (Glaser & Strauss, 1967). This allows for the later development of subcategories and understanding of relationships between categories and subcategories (Strauss & Corbin, 1990). This process of initial labelling and categorisation of the raw data occurred in conjunction with ongoing data collection and additional coding procedures throughout the data collection period. Upon completion of open coding for all interview transcripts, there were 88 coded category labels identified between all interviews across the four towns. As part of the audit trail for the current study, a database was maintained to record from which town or towns the data on each of these categories emerged. This served to build on the

understanding of relationships between categories, as well as being part of the generation of a broader theoretical understanding.

2.6.1.2 Axial coding

Having begun the process of breaking down the data into as many categories as possible, labelling these categories and defining some of their properties and dimensions, the next step in the data analysis process was axial coding. Axial coding describes the process of putting the data "back together" in meaningful and integrated ways based on the establishment of connections between categories and their subcategories (Strauss & Corbin, 1990). While the fundamental process of constant comparative analysis remains active at this stage of the coding, the focus of analysis shifts from comparing incidents with incidents, to comparing category properties. This helps to begin to make theoretical sense of the relationships between the properties of each category (Glaser & Strauss, 1967), and clarifies and develops categories by articulating the conditions that give rise to them (Strauss & Corbin, 1990). Again, at this stage of data analysis, category labels are still being evaluated and refined with reference to their relationships with other categories, and for their contribution to the emerging theoretical account.

Subcategories were developed through defining the relationships and interrelationships with other categories including the context and causal conditions under which they emerge, as well as any intervening conditions, or consequences (Strauss & Corbin, 1990). Through the ongoing process of axial coding in the current study, a number of broad categories were identified from the data, under which multiple subcategories were assigned based on their properties and relationships. As a part of the preliminary assessment of the capacity for the *compositional*, *contextual* and *collective* constructs to capture the data which had emerged, and in order to provide a framework for presenting the findings, major

categories were allocated to one of these three conceptual constructs, along with their respective subcategories.

As during the open coding stage of data analysis, the dynamic process of axial coding in the current study was documented through various textual and diagrammatic representations of the hypothesised relationships between categories. This material was used to track modification or verification of these hypothesised relationships through returning to the data in search of instances that further support or refute the propositions, as well as to chart the ongoing development and redevelopment of the categories and subcategories in terms of their properties and dimensions (Strauss & Corbin, 1990). This documented material, which again forms part of the audit trail of the current study, was also used to facilitate discussion with experienced independent researchers on the emerging categories and category relationships, and strengthen the reliability of the analysis process through consensus on these propositions. Upon completion of this stage of the coding process there were two major categories listed under *compositional* factors, four listed under *contextual* factors and two listed under *contextual* factors, each with a series of related and inter-related subcategories.

2.6.1.3 Selective coding

This final stage of the coding process was aimed at integrating categories, and exploring relationships between them. These relationships had been defined and detailed during the previous stages, and formed the basis of development of an emergent theoretical framework within which the data could be understood. This stage of selective coding refers to the selection of the core category from the data, that central phenomenon that emerges from close analysis of the data, and around which all other categories are organised (Glaser & Strauss, 1967). Strauss and Corbin (1990) described the intention of selective coding to be the

identification of a "story line", that is, the naming of the central phenomenon or core category, with other categories placed in a relational frame around it, and then the combination of these written as a single theoretical account. During this final stage of the coding process, the focus was on using the relational and contextual properties which had been defined between categories and subcategories from the data, to conceptualise and articulate an overarching theoretical context within which to understand variations in mental health and wellbeing between the four communities considered.

At this stage of the data analysis process, it is important to consider not only the static relationships between categories and subcategories, but also the patterns observed in the way that the properties and dimensions of categories interact (Strauss & Corbin, 1990). The focus of analysis is on understanding the ways in which categories take shape depending on the conditions that give rise to them, and how this dynamic process builds on the "story line" or core category drawn from the data. Strauss and Corbin (1990) propose that it is through recognition of the complexities of these relationships that the analysis is able to move from the categorisation of specific instances or examples in the data, to developing a theoretical account of the data as a whole, which remains *grounded* in that which was actually observed.

2.6.2 Adjunctive procedures

As previously stated, the ultimate goal of a Grounded Theory approach is the eventual development of an account of the phenomenon of investigation that is *grounded* in the data collected, and is of some utility to other researchers in the field, either in the ongoing validation of the proposed theoretical account or in facilitating the generation of further research (Glaser & Strauss, 1967). One of the important interfaces between this eventual written theory and the ongoing data collection and analysis is the adjunctive procedures of memo writing and diagramming. These records, which are maintained from conception to

completion of the research process, contain the analytical thinking around the content and conception of categories, as in the case of memos (Glaser & Strauss, 1967), and the visual representations of the relationships that appear to exist between concepts and categories, as with diagrams (Strauss & Corbin, 1990). It is these procedures which essentially form the basis of the audit trail for the research project.

As discussed previously, both during and immediately following each interview, extensive notes were taken by the researcher, which allowed for an ongoing exploration and elaboration of emergent codes, and provided insight and direction into areas for further investigation and/or coding. This process of memo writing helped to facilitate and track the link between the ongoing analytical thinking around concepts and the data from which they were derived, by bringing raw material into direct examination and reflection (Charmaz, 2000). Appendix F shows examples of three de-identified memo excerpts from the current study, showing preliminary thematic analysis and data conceptualisation.

While memos were used to contain the written analysis pertaining to theoretical formulation, diagrams were used to provide visual representations of proposed or accepted relationships between concepts contained within this formulation (Strauss & Corbin, 1990). Again, as already mentioned, throughout the ongoing process of data collection and analysis in the current study, diagrams were used to represent and discuss the developing assertions around emerging relationships between categories, as well as to allow for consideration of additional hypotheses and gaps in the developing theoretical account (Glaser & Strauss, 1967). Appendices G and H show two examples of diagram-use in the current study to map and conceptualise complex and dynamic inter-relationships between emerging categories and subcategories.

2.7 Maintenance of Rigour

Irrespective of the paradigm or methodological approach employed by a researcher or research project, careful consideration should be given to the use of procedures designed to increase the overall quality of the research, enhance its reliability, and minimise the potential for bias or error, thereby ultimately strengthening validity and importance of its conclusions (Mays & Pope, 1995; Paley & Lilford, 2011). A number of procedures were utilised throughout the design and execution of the current study with the intention of maintaining rigour. While some of these procedures have been mentioned briefly where relevant throughout this Chapter, this section addresses them directly in addition to noting the use of other processes for ensuring rigour in this study.

The first point to mention is in regard to the sampling of towns and informants in the current study. While quantitative research designs call for large numbers of (ideally) randomly selected participants, qualitative research generally relies on smaller numbers of participants who have been purposively selected on some basis pertinent to the particular goals of the research. There are numerous sampling techniques employed within qualitative research, and there is at times ambiguity and disagreement around the merits and application of each (Barbour, 2001; Coyne, 1997). As the purpose of qualitative research is not to provide statistical generalisability, Mays and Pope (1995) note that participants are able to be identified for participation in the research because they "...either possess characteristics or live in circumstances relevant to the social phenomenon being studied" (p. 110). As discussed in sections 2.3.1.1 and 2.4 of this Chapter, both the sample towns, as well as the informants (MHPs), were selected on the basis of their relevance to the "social phenomenon" being explored in the current study, and as such, were thought likely to represent what Patton (1990) termed "information-rich" cases.

As the primary data source in many qualitative research projects, including the current study, is the data obtained through face-to-face interviews with informants, it has been identified that the quality of the research is largely reliant on the knowledge and skills of those conducting the interviews (Rusinova et al., 2009; Sofaer, 2002). This includes having sufficient background knowledge of the areas which are being explored, as well as being adequately trained in interviewing technique, in order to be sensitive to issues such as the informant's openness or legitimate authority on particular issues (Sofaer, 2002). In the current study, all face-to-face interviews with MHPs were conducted by the researcher. The researcher's background knowledge of the areas being considered during the interviews had been established through intensive engagement with the relevant research literature in the time preceding the commencement of the interviews. Further, the researcher had extensive interview training and experience, having completed six years of university psychology training, and being a clinical psychology doctoral candidate at the time of data collection, and was therefore considered to be adequately skilled to undertake the interviews for the current research project.

Two further points on interviews can be made with regard to the maintenance of rigour within the current study design. Firstly, the initial interview protocol was independently reviewed by two researchers who both had extensive research experience in the particular study area, and amendments and modifications were made based on their recommendations prior to the commencement of data collection. Secondly, all interviews were audio-recorded and verbatim orthographical transcription was completed for each interview, allowing for data analysis to be based on high quality raw data. Interview transcripts were also supplemented by detailed field notes taken by the researcher both during and immediately following each interview. This thorough and detailed documentation of the

content and context of each interview serves to enhance the reliability of the research (Mays & Pope, 1995).

The analysis of data in qualitative research is often cited as one of the more challenging aspects of the research design, and an area where concerted effort must be made to ensure rigorous practices in order to protect the quality of the research findings (Sofaer, 2002). Data analysis in the current study was conducted in a formalised and systematic way as per the guidelines provided by Grounded Theory, and as outlined in detail in section 2.6. Further to this, at multiple stages throughout the data analysis (and concurrent data collection) process, preliminary analysis and adjunctive materials such as memos, field notes and diagrams, were used to facilitate discussion and reflection of emerging concepts, categories and relationships with experienced independent researchers. This exercise was conducted in order to increase the thoroughness and reliability of the analysis process, and reduce the risk of bias stemming from having only a single researcher involved in the data analysis (Barbour, 2001; Mays & Pope, 1995; Sofaer, 2002).

The documentation of all of the above procedures for ensuring rigour within the research project, as well as various other processes of thinking, questioning, comparing and decision making undertaken by the researcher, essentially form the audit trail for the current study. The audit trail is said to comprise three major components of the research project: the raw data, which includes the transcribed interviews and field notes of the researcher, the early and developing coding of the raw data, which may be held in the form of written notes, diagrams or computer software, and finally the synthesis of the data which generally translates to the presentation of findings within a results chapter (Wolf, 2003). The audit trail represents the transparency of the research that was conducted; it allows for others to follow the research process, both in terms of the actions undertaken, and the critical thinking and decision making which directed these actions (Kuper, Lingard, & Levinson, 2008; Mays &

Pope, 2000). Examples of selected documentation from the audit trail for the current study are provided in Appendices F, G and H, and excerpts from the original interview transcripts are provided in the following Results Chapter. The audit trail is thought to represent a means by which qualitative researchers can attest to the rigour, quality, and trustworthiness of their findings (Wolf, 2003).

2.8 Ethical Considerations of the Study

Ethical issues exist in any research paradigm, at times creating tension between the use of the research to gain the greatest good for the greatest number, and protecting the rights of each individual participant. The protection of each participant in a research project is paramount, and avoiding harm to participants at every stage of the research, including through the application of relevant ethical principles, is a fundamental responsibility of any researcher (Orb, Eisenhauer, & Wynaden, 2001). In the context of the current study particular consideration was given to potential ethical issues which may arise specifically in relation to the use of in-depth interviewing, and the maintenance of informant confidentiality. Procedures were employed to minimise the risk from these factors.

In-depth interviews often probe for intimate and detailed descriptions of the informants' subjective experiences of their world or natural environment (Brinkmann & Kvale, 2005). It is expected that the interviewer be adequately cognisant of potentially sensitive issues or conflicts which are possible or likely to result from the content of their exploration, and the potential for that material to trigger various subjective experiences for the interviewee. While distress to research informants during the course of the interviews in the current study was deemed by the researcher to be unlikely, it was acknowledged that interviews may contain content that was potentially sensitive in nature. In response to this, the researcher sought to ensure symmetry in the interview topics discussed, such that interviews covered perceived protective as well as detrimental factors in mental health in

rural communities and as a result were balanced in their focus. In the unlikely circumstance that a research informant did become distressed during the interview, there were procedures in place to respond to and address the safety and wellbeing of the interviewee. At no stage during the research project was it necessary to employ these procedures.

The second issue of great importance in the context of the current study was the maintenance of interviewee confidentiality. Given the relatively small size of the towns included, it was noted that naming towns explicitly may result in indirect identification of individual informants, particularly in cases where there may only have been one general practitioner, for example, in the town, and thus towns were labelled as A, B, C, and D. Similarly to the labelling of the four towns, informants were attributed identification codes for the purpose of data analysis and presentation, which identified which town they were recruited from, but did not link them directly to the listed occupations of the informants from each town. Finally, in order to further protect the confidentiality of informants in this study, they were offered the opportunity to review the transcript of their interview and remove any information before it was used for analysis. Again no informant requested to do this.

In addition to the particular ethical issues addressed above, the current study employed practices and procedures in both the design and execution of all stages to ensure the application of basic ethical principles in the treatment of all informants. Finally, the requisite ethics approval (Appendix I) was received from the Monash University Standing Committee of Ethics in Research Involving Humans (SCERH), prior to the commencement of the project, and all activities were conducted in accordance with the committee's requirements.

2.9 Conclusion

This Chapter has described the specific features of the current study's paradigm and design, including description of the setting of the study, discussion of the processes and procedures employed for the selection of the towns of interest as well as a description of their general demographic features. This Chapter also detailed the recruitment processes, data collection and data analysis methods inherent in the application of a Grounded Theory approach, and how they applied in the current context. Finally, this Chapter concluded with a discussion of processes and procedures employed throughout the research process to ensure that rigour was maintained in all aspects of the study, before briefly considering the relevant ethical issues for this project. Having detailed the study design in this Chapter, the next Chapter reports on the findings from the completed data analysis process. Emergent themes and sub-themes will be described with reference to their proposed role in influencing the mental health and wellbeing of the residents in the rural communities selected.

Chapter 3: Results

3.1 Introduction

The previous Chapter provided an outline of the philosophical and methodological approach to the current study, as well as detailing the specific features of the study design and execution. This Chapter will present the results from the complete analysis of the interview data, in accordance with the principles of Grounded Theory as described in Chapter Two. As discussed, interview probes in the current study were constructed around a framework adapted from the work of both Macintyre and colleagues (Macintyre, 1997; Macintyre et al., 2002), and Judd et al. (2006), to facilitate an exploration of the potential role of *compositional*, *contextual* and *collective* community factors in mental health and wellbeing in these rural towns.

In order to maintain consistency with this approach, and provide a theoretical structure for the organisation, presentation and discussion of emergent themes, this section will employ these three constructs as a framework within which the emergent sub-themes are considered. Each theme will be described with reference to its proposed role in influencing the mental health and wellbeing of the residents in the rural communities selected. Supporting information in the form of de-identified quotes from informants will be included where appropriate, along with other relevant information obtained through publicly available documents relating to each town, as discussed in the previous section. In order to protect the anonymity of the informants, all informants are referred to throughout this Chapter by their identification code and town only, without linking them to their specific occupation. A graphical representation of the thematic matrix which resulted from the complete data analysis process is presented in Appendix J.

3.2 Compositional Community Factors

As discussed in the Chapter One, *compositional* factors refer to those specific characteristics of the individuals residing in a particular area or town (Judd et al., 2006; Macintyre, 1997; Macintyre et al., 2002). The *compositional* factors identified by informants when discussing issues which may impact on the mental health and wellbeing of residents clustered under two major sub-categories; (i) *population make-up and demographics*, and (ii) *mental health issues*, each of which will be discussed in turn with specific reference to individual towns. It is acknowledged that discussion of *mental health issues* could legitimately take place simply within a broader discussion of *population make-up and demographics*; however, the weight given to this specific issue by informants in the current study serves as justification for its independent consideration in this Chapter.

3.2.1 Population make-up and demographics

3.2.1.1 What the numbers say: ABS basic community profiles - 2001 census data

As noted in Chapter Two, the selected towns had populations of between 3000 and 4000 people, making them comparable with regard to population size. Similarly, each of the four towns had highly comparable remoteness classifications, irrespective of the classification system employed. The demographic data presented in Table 2, however, showed that the towns differed on various socio-economic variables. Town B had the highest percentage of household incomes in the highest quartile for 2001, followed by Town A, Town C, and then Town D. The latter not only had the lowest percentage of household incomes in the highest quartile, but also had the highest percentage of household incomes in the lowest quartile for 2001. The highest percentage of fully owned private homes in 2001 was in Town D, followed by Town C, Town A, with Town B having the lowest percentage.

Unemployment rates were also highest in Town D with the lowest levels of unemployment found in Town B.

3.2.1.2 What the people said: Perceptions of population make-up and demographics

The informants interviewed during the course of this study provided a rich account of their understanding of the demographic characteristics of the residents in their respective towns and how these served to shape or impact on, the observed levels of mental health and wellbeing in their communities. In discussing the make-up of their respective towns, they made reference to the various "types" of people who typically live there, with discussion often turning to observations of how this population group has changed or is changing, and the subsequent impact of this. While there were notable differences between each town's perceived demographic profile, the discourse of the informants around this issue revealed some commonalities and consistencies which warrant initial consideration.

One frequent comment of informants across all four of the towns was that the towns generally did not house a representative sample of the broader Australian population; rather, informants described what they perceived as fairly defined population groups and/or subgroups predominating in their town and were also cognisant of segments of the wider Australian population that were all but absent.

...there's a population of people that don't exist in this Shire... from eighteen to twenty-five, unless they have children, they don't exist in this Shire (a/003 – Town A).

This absence of certain population strata was particularly true with reference to cultural or ethnic diversity across the four towns. Informants in all towns described the

population as being very predominantly white, Anglo-Saxon with Catholic or Protestant religious affiliations.

...we're not a multicultural society, definitely... It's not like [multicultural Melbourne suburb] where you go and there's millions of different cultures congregating... It's not like that, it's very Anglo-Saxon... especially people that have been here for generations and generations you know, the kids don't have that exposure to different cultures, and that has an impact, I really think so (b/007 – Town B).

The second major point of commonality among the four towns was population and demographic change, specifically over the last two to three decades. There was often a real sense in informants' comments of the "old world" and the "new world" for their towns. What these "old" and "new" worlds consisted of differed in each town, and whether this change was experienced with feelings of loss or prosperity differed across informants, but this change and its impact was consistently cited as an important factor for the mental health and wellbeing of the town's residents, both "old" and "new".

...it's an old place, so they would see the juxtaposition of the old and the new part of [Town B] ... you can see now It's expanding and there's housing developments, and then you've got this sort of ancient main street with very old buildings on either side... so it gives you the impression there's very much been an older traditional community there and now it's becoming a place almost like an outer Northern suburb of Melbourne... (b/006 – Town B).

As noted above, it was often observed that while similar issues or themes were raised by informants across the four towns when discussing *population make-up* and *demographics*, the ways in which these issues impacted on the towns and their residents, as well as the

effects of changes in the make-up of the populations, varied with each town. The potential relationships between these factors and mental health factors were often complex and dynamic, and for this reason it is important to consider informants' views on the impact of *population* and *demographic* factors on the mental health and wellbeing of the each of the four towns independently.

3.2.1.2.1 Town A: Perceptions of population make-up and demographics

Consistent with all of the towns explored in the current study, informants in Town A made strong reference to the contrast between the "old world" demographics and those of the "new world" in the town. Historically, Town A had a strong, wealthy, predominantly sheep-farming community, which saw a large portion of people who, after high-school, stayed to both live and work on the land, typically handing down the family business from one generation to the next. As with many farming communities in Victoria, Town A has seen a growing inability to sustain a once-thriving farming community. This has impacted on local employment opportunities and subsequently, the number of young people who stay in the town to live and work after completing high-school.

...fifty years ago kids growing up went to the local high school... got a job on the land... got a job working for some farm related industry... these days none of that work exists (a/003 – Town A).

While the remnants of this farming community, termed by one informant in the town as "the protected remaining" (a/002), still exist in Town A, they are now contrasted with a new population of people who, particularly over the last twenty or so years, have been moving into the town in large part due to its housing affordability as compared with Melbourne. On the one hand, this influx has brought with it a considerable population of

young working families who live in Town A, but ironically many continue to commute to Melbourne for work.

...it's a youngish community... and they get a big proportion of people live here and work in Melbourne as opposed to... farmers and things so they don't travel to Melbourne as much (a/002 – Town A).

On the other hand, this recent shift in the demographic profile of Town A has resulted from an increase in development of public housing in certain areas of the town and as a result, there has been a rise in the number of people from lower socio-economic groups residing there. This has not only led to a change in the general make-up of the population of Town A, but has also, in the view of key informants, created something of a "class divide" within the town. Informants described that, in addition to particular geographic areas in the town being populated by certain socio-demographic groups, these geographic divisions were also evident at a social level with regard to the interactions of residents within the town.

...I think then for the youngsters moving in, the single mums, even the single dads... the communities that they are in, they're much more noisy, the houses are usually in a state of neglect, you know the landlords don't keep them up or the front gardens have got cars in them that are falling apart...almost like there's two divisions within the town geographically (a/004 –Town A).

3.2.1.2.2 Town B: Perceptions of population make-up and demographics

One informant from Town B described how the town initially got its start during the "gold diggings" (b/004), and noted how the very old architecture of the town reflects this early wealth and has contributed to its reputed affluence. Town B informants demonstrated a strong tendency to provide comparative references to neighbouring towns when describing

the population and demographic affluence of Town B, and used these towns as a point of reference for many social and cultural issues discussed throughout the interviews.

...I guess the best way to describe [Town B] is by contrasting with its two neighbours ... [Town B] is an older town. It's growing... fairly rapidly... but not quite at the same sort of rate... by contrast its population is typically more affluent I think (b/004 – Town B).

It became apparent that in the view of informants, this point of positive comparison had allowed Town B to maintain a reputation as being a highly affluent town; however, its growing and changing population is beginning to diminish the town's true capacity to support this.

...I think I've heard it said it's a really posh town... Look, it's probably more the reputation than the experience... I think what's happening is here's the reputation and here's the reality and because the northern suburbs are sort of pushing people out, the reputation's very different now from the reality (b/005 – Town B).

Similarly to Town A, Town B has seen a growing population of young commuter families who have taken up residence in the area due to the affordability of housing, and the ongoing development of housing estates in the area furthers this influx. In addition, informants reported a dramatic increase in the number of people with very limited financial means moving to the area and living in local caravan parks, highlighting the impact of this on the town's demographic profile.

You know the caravan parks are full... and people are buying into new estates because they're really affordable, compared to say, Melbourne housing... and a lot of

those people don't have a lot of money so, it's sort of bringing the degree of affluence down (b/005 - Town B).

Descriptions provided by informants indicated that these geographically-represented socio-economic divisions within Town B also played out as social divisions within the community. This was again noted with reference to another prominent demographic subgroup who attend the town's unique training facility which houses a number of international students. While described consistently as a very "white, Anglo-Saxon community", the town is also home to two or three hundred Asian students who board at the training facility. It was noted that these students are very much an independent group within the town, and are not well integrated into the community.

...you'd have all these Asian kids walking down the township and walking into town... it was kind of an unusual thing to have, you know, it's not something you would actually see in [Town B] and they weren't necessarily interacting, [the facility] was an entity to themselves... No, there didn't seem to be a lot of integration... but there seemed to be a lot of them (b/006 – Town B).

3.2.1.2.3 Town C: Perceptions of population make-up and demographics

Similar in some ways to Town A, Town C was very much established through the early settlement of farming families. There was enormous wealth brought to the town from these families, and as with Town B, this wealth is evident in the architecture and design of this now historic township. What appears to be unique about the population make-up of Town C, however, is that it has suffered somewhat less from the impact of drought than many other Victorian rural communities, and continues to be an active farming community, providing ongoing opportunities for local agricultural employment. This was certainly not

true for all farmers, but some of the early-settling farming families have had the financial stability to sustain their farms, and continue to work and live in this town, having been there now for many generations.

...Many of their properties are now divided and split up and sometimes they have disappeared altogether but... but there's still a number of properties in the immediate vicinity of the town that are owned and run by members of the original families....they're possibly protected a little bit more than the average farmer, because there's a fair wealth base for most of them (c/004 – Town C).

When considering the demographic profile of the town, both historic and current, informants reflected on the level of education typically attained by residents in Town C. As the town has had a long history of self-sustainability with regard to employment opportunities in agriculture and farming, the population has tended to be less formally educated, which has created something of a divide between established and new residents.

...there's not a high level of tertiary education... there was sort of less than ten people who had a tertiary degree... I'm really conscious when I leave [Town C], I change my manner... I become more articulate and more assertive ... and occasionally I find myself clicking into it here, and you see people blinking and ... [chuckles]...falling over backwards because... you don't use long words and you keep things jokey and matey and very practical. People aren't all that comfortable with big ideas (c/002 – Town C).

Despite the remaining "old wealth" in Town C, and the continued sustainability of at least some of the farming and agricultural businesses, the last two decades have seen an influx of residents moving to the town as a result of dramatically increased housing costs in

Melbourne relative to more rural areas. In addition, there has been the establishment of public housing areas which have further supported the growth of a lower socio-economic demographic within the area.

...It's changed somewhat over the years, there has been an influx probably in the last fifteen or more years of families of a lower socio-economic grouping, often fragmented families, which has meant an increased number of young adults and children, both with physical ailments and psychiatric problems... (c/004 – Town C).

3.2.1.2.4 Town D: Perceptions of population make-up and demographics

Throughout discussions with informants in Town D, it became apparent that while the demographic story in this town also comprised a shift from the "old to new world", these contrasting profiles did not follow the same pattern described in the previous towns of moving from a population of historic wealth to one with a greater proportion of residents with lower socio-economic standing. Historically, Town D has been an area where housing was extremely affordable, and there were only limited employment opportunities for people outside of the tourism trade. It typically comprised a small population of permanent residents, who were often on welfare or retirement benefits, and a highly seasonal group of holiday-makers on a tight budget.

...twenty years ago you could buy land for a thousand dollars, and people didn't, they couldn't give away blocks, no one wanted blocks... so it was really cheap and no-one even thought, why would you want to live here. So people that were on low income and on unemployment benefit or mental sickness benefits or whatever... they got blocks like for a thousand dollars twenty years ago, or thirty years ago, and got a little house really cheap and that was their chance of buying their own house, otherwise they couldn't buy one (d/002 – Town D).

The last two decades have seen a dramatic change in both the permanent and seasonal population of Town D. Informants reported that housing prices have risen to such a level that they are prohibitive for anyone without considerable wealth. In particular, informants noted a big influx of extremely successful and wealthy tradespeople with young families who have made the decision to relocate to the area, as well as a new wave of highly educated and successful professionals. As the population increases, so to do the opportunities for employment outside the traditional tourism trade, and this has furthered the growing population of wealthy and educated permanent residents, who are now contrasted with those who resided in the town before this change occurred.

...They've just got lots of money and they've thought 'Oh a holiday house at [Town D] would be nice!' and so they've given over 450,000 or whatever for a modest house or a lot more for a swishy house, so...they've got quite, I would say quite a wide range of demographic there now because they've still got the people who bought in very cheap and maybe are on pensions and now they are sitting on sort of 450,000 dollar properties, but they're still on a pension and don't have any money (d/004 – Town D).

This massive increase in affluence in Town D not only applies to new permanent residents, but has also been true for the seasonal holiday population. Informants described the extensive development which has been taking place within the town to not only accommodate the rapid population increase, but to also provide a new generation of holiday homes, even if these homes are unoccupied for many months of the year.

...nowadays a lot of the new places are those big ostentatious-y looking places...
whereas, the holiday homes in the past were more like two bedroom shack kind of
fibro thing...Something small and cheap looking, but now your holiday home, for a

proportion of people is probably going to be a mansion as big as what they might have had in Melbourne! (d/004 - Town D).

While the perceptions of the *population make-up* and *demographics* of each town discussed above are unique in aspects of their detail, all the towns studied appear to have seen dramatic changes over the last two decades. The result seems to be a scenario in which each town consists of some quite distinct population subgroups as a function of recency of residence within the area.

3.2.2 Mental health issues

The primary focus of the current study was the perceived impact of living in the towns identified, on the mental health and wellbeing of residents. Essentially the goal was to understand which perceived factors, if any, specific to life in these towns, are seen to facilitate or compromise the mental health of these communities. It is important to consider *mental health issues* from a purely demographic perspective also, independent of any impact of the town, and this was an issue frequently raised by informants when discussing their views on the demographic profile of their respective towns. There were particular consistencies between informants' reports across towns, with some additional issues raised that were unique to particular areas.

Based on reflections of their professional experience working in mental health within each of these four towns, a common perception of informants was that there were higher levels of mental health issues in the lower socio-economic subgroups within each town, or at least that there were a greater number of people from this demographic who present to services. These clients tended to present with mood disorders, psychoses and also behavioural disorders in younger clients. There were also a large number of fragmented family units.

...we certainly see a higher level of mental health problems in the group who have, of late moved into [Town C]... again often from less affordable areas and often families that are dysfunctional and often fragmented too... (c/004 – Town C).

Another major consistency between reports of informants was the issue of drug and alcohol use. In all four towns, alcohol and binge drinking was highlighted as a major issue, particularly in young people and often as part of a dual diagnosis. While alcohol was typically deemed the predominant problem drug, illicit drug use was also cited as a large problem, although the drugs themselves varied across the towns. Informants from the farming communities of Towns A and C noted that marijuana was the most common drug of abuse within their towns, whereas Town B's proximity to Melbourne meant that it contended with what one informant termed "...a lot of affluent drugs..." (b/005). As noted, drug abuse was commonly seen in the context of dual diagnosis, and was often thought to be an indicator of, or contributor to, other mental health issues.

...a lot of their presentation in [Town D] is associated with drugs. Drugs are either masking an underlying difficulty or they're self-medicating for whatever underlying difficulty or they come because of drug induced difficulties... anxiety, depression, psychosis because of amphetamine, alcohol, cannabis use (d/001 - Town D).

In considering *mental health issues* as a demographic construct, a pertinent feature of Town C was the mental health of the farmers. All informants from Town C made reference to the ongoing mental health concerns within the farming community, specifically depression and suicide in male farmers, phenomena they have both observed and treated. A positive observation, however, was that while they had experienced a number of farming suicides in the past, they had not seen any in the last five or six years. Similarly, when discussing suicide

within Town A, informants reported that at one time they had the highest rate of suicide among young people in Australia. As described in the previous Chapter, at the time of selection for the current study, Town A had only one reported suicide for the period from 2001 to 2004. In both Towns A and C, discussion moved to a consideration of what had changed within the towns to reduce these historically high suicide rates, and this will be discussed throughout the remainder of this Chapter.

...[Town A] at one time had the highest rate of youth suicide in the country; now it is significantly lower... clearly, there's been a change to youth suicide rates... exactly what that's attributable to I think it's multifactorial, I think the biggest thing it's attributable to is the fact that people actually sort of sat up and took notice of it (a/003 - Town A).

Suicide was also raised as a *mental health issue* in Town D; however, in contrast to Towns A and C, informants in Town D described a current and ongoing problem with suicide. While individual informants cited numerous occasions of suicide that they were aware of, either directly or indirectly, one informant highlighted that there was an impression within the town of a certain high-risk demographic group.

...there's this group of anecdotally consistent population that commit suicide [in Town D], and they tend to be around forty to sixty year old men... businessmen, and when their businesses go a bit funny, not working too well, and when their wives walk out on them, they don't tell anyone, and they kill themselves (d/001 – Town D).

Having discussed the *compositional* factors of each town as identified by the informants who work and often live in these towns, the next focus will be on those *contextual*

community factors which emerged from in-depth interviews regarding mental health and wellbeing in these four rural communities.

3.3 Contextual Community Factors

As outlined in Chapter One, *contextual* factors refer to the specific characteristics of the area or town, including physical and environmental features, availability of safe work and recreational areas, and the availability and accessibility of services (Judd et al., 2006). A number of *contextual* factors were identified by informants when discussing issues which may impact on the mental health and wellbeing of residents. The identified factors clustered under four major sub-categories; (i) *physical environment and climate*, (ii) *employment opportunities*, (iii) *availability of housing* and (iv) *mental health and other services*. As with the discussion of *compositional* factors, each of the *contextual* factors identified will be discussed in turn, with specific reference to individual towns; however, as a number of issues relating to employment and housing have already been considered in the previous section, only a focussed mention will be made here as relevant to *contextual* factors specifically.

3.3.1 Physical environment and climate

Discussion of the weather and other features unique to the physical environment of each town was common among informants interviewed for this study. These climatic and environmental features were perceived as impacting in ways that were either beneficial or detrimental to the mental health of residents, depending on their specific context and influence in each town. Further to this, environmental factors were perceived as impacting in differing ways on different people within each town, depending on their personal circumstances and individual needs. In most towns it was noted by informants that the

environment and/or climate of the town offered both "good" and "bad" aspects for the residents; however, this was not true for all, particularly in the case of Town B.

Cold and harsh winters were a commonly described feature of Towns A, B and D. For Town A, winter had historically represented a time of great fear for its residents as a result of a local "black spot" on the main access road, prior to the building of a freeway. This road was widely known for becoming very icy and extremely dangerous during the colder months, and a number of fatal road accidents have occurred over the years. The construction of the freeway has dramatically reduced this road toll, and it seemed that with this issue better managed, the cold winters are no longer anticipated with such apprehension by residents.

...It was a very busy road with a lot of road accidents... there's ice and cars slam into trees, even at slow speeds... it was a very winter scary place to people [sic]. A lot of people lived in considerable fear about that sort of notion, and just the whole prospect that I have to drive to work, I need to go down a dangerous road to go to work, and it was sort of inevitable that there would be four families every year who would get that call... (a/003 – Town A).

The impact of harsh weather for Town D was described by informants in terms of how it created a vast seasonal contrast within the town and how this pronounced seasonality affected both businesses and individual residents during the colder months. The extreme cold and reduced daylight hours of winter were reported to dramatically reduce the number of people out in the town and also the number of tourists, leading to the closure of many businesses during this time. In addition to this impact on tourism and business, the potentially detrimental impact on the mental health and wellbeing of full-time residents was also highlighted.

...I think the weather might affect them too, in the winter it's pretty cold and you just sort of stay indoors and hope you've got a good fire and heating and you wouldn't go out much and it's a bit isolating and you feel like there's no one out there to support you or you haven't got many friends... (d/002 – Town D).

Despite some of the perceived negative environmental and climatic features of Towns A and D, informants interviewed were also forthcoming about features which they saw as being not only unique to these areas (particularly when compared with Melbourne), but also greatly beneficial to the residents living within them. Informants from Town A spoke of the capacity for residents to have acres of land with gum trees and the opportunity to enjoy the fresh smell of eucalyptus from their homes. Similarly, informants from Town D spoke of the immense beauty of the beach and coast line, and the peacefulness of living so close to so much water. This stood in stark contrast to the reports of informants in Town B, which vividly described the impact of the cold and dark winters, but offered no positive descriptors of the *physical environment and climate* which they felt served to offset this.

[Town B]'s a very cold town, temperature wise... It's a freezing place in winter... if you believe about the link between weather conditions and psychology, I know in the depths of winter [the weather] definitely used to affect your behaviour, and [Town B] was labelled because of its weather... It was known for its bleak weather... like it wasn't a place that you'd want to live in because of the weather, and it can get very bleak (b/006 – Town B).

In contrast to the towns considered above, when discussing the *physical environment* and climate with informants of Town C, conversations tended to focus around the issue of water. Town C was reported to be unusual in that it is experiencing what was termed a

"green drought" (c/003). In essence, informants used this term to describe a situation whereby there is enough rain to keep the town looking wonderfully green and lush, and enough rain for people to maintain their gardens, but not enough for the farmers to be self-sustaining in caring for their livestock and maintaining their crops. The resulting impact of this environmental situation was described by informants as twofold. One the one hand, informants compared the benefits for the mental health and wellbeing of residents in Town C who could experience the beauty of the town's green landscape and who could still tend to their gardens, with residents of neighbouring towns where the drought had caused a far greater obvious devastation.

Well when you walk or drive through those really remote towns, and you just drive past house after house after house and I can remember these elderly women out tendering beautiful gardens... And now there are no gardens at the front of the house. So what do those people do who love gardening and it's part of their mental health? (c/003 – Town C).

On the other hand were the farmers. Despite the apparent greenery and aesthetic beauty of Town C, informants consistently reported that the impact of the ongoing drought in Victoria has been devastating for many of the local farming families. This environmental and climatic issue was considered by informants to be a major influence on the mental health and wellbeing of these members of the community.

...it's a farming community and with the drought there have been a lot of mental health issues for farmers... there's water, it's green... but some farmers have been incredibly depressed and their incomes have been slashed because there's just not enough grass to feed the cows... they don't have milk production the same way they did a few years ago... there's no hay, all the farmers were having to buy, you know

hay... they'd have bills in the tens, if not, hundreds of thousands of dollars (c/003 – Town C).

While informants in Town C made clear reference to the negative impact of the drought on the mental health and wellbeing of the farming community in the area, they indicated that natural events such as drought and bushfire, can serve to generate a sense of community that would perhaps otherwise not be present. This sentiment was echoed by informants in Town A, who reflected on the sense of community that was generated by the threat of bushfire in their town.

...the threat of fire and the knowing that you have to prepare... you work together... those 40 degree days, people perhaps are looking out for each other more along the street... neighbours will say "what are you doing today"...there is that sense especially where there is that sort of perceived threat that people would, even though they may not have a lot to do with each other under normal circumstances... there would be, I'm sure, people looking out for each other (a/006 – Town A).

3.3.2 Employment opportunities

As previously stated, general issues around employment have been considered in discussion of the particular *population make-up and demographics* of each town. This section will focus on the specific employment opportunities available to residents in each of the four towns studied. The proximity to Melbourne of both Town A and Town B was seen by informants as providing a viable option for many of the local residents to commute to the city for work. A further impact of their accessibility to Melbourne, is that both towns are reportedly able to attract a reasonable tourist population from Melbourne, either as a weekend get-away destination, or simply as a stop-off point en route to somewhere more distant. While

Town A has seen a marked decline in the availability of local farming and agricultural employment opportunities, informants describe a growing hospitality and tourism trade in the town, and a shift towards a "thriving café community" (a/003), which has supported a number of local residents to open small shops and cafés in town, further encouraging visitors to the area.

Similarly, informants from Town B reported that the area has seen "a proliferation of coffee shops and cafés" (b/004), resulting from the day-tourists from Melbourne, as well as housing a small number of high quality restaurants and widely renowned bakeries, again providing local employment opportunities. While this reported growth serves to increase the availability of local employment, further developments such as the opening of a large major supermarket and the possible introduction of a town bypass, carry with them the potential to undermine much of this local work and remain points of considerable contention among residents. Although not entirely unrelated to tourism, outside of the opportunities already mentioned, another frequent issue raised by informants was that the racing industry in Town B provides considerable opportunity for local residents to gain employment in the town, and any threat to this would be likely to mean a major impact on the local economy.

I'd say one in three of my clients are either involved or have been involved [in the racing industry]... and I think... if you looked at employment in the area you'd almost find that the racing industry would be the biggest employer (b/005 – Town B).

In contrast to the towns above, the distance from Melbourne of Towns C and D means that commuting to the city for work is not common. This results in a greater need for local employment opportunities either within the towns themselves, or in the surrounding areas. As discussed, the impact of the drought on Town C has reportedly not been as severe as in many

other Victorian rural communities, and the town continues to sustain a strong farming and agricultural industry. Informants described the historically integrated relationship between the local retail and farming industries, with the observation that often retailers have been stocked with local produce, and in turn have sold their goods to the people who work the land. Informants from Town C reflected on their impressions that the town's unemployment has never reached "desperate" levels and noted that the farms, particularly the dairy farms, continue to provide a number of local employment opportunities. While the many challenges of farming work were discussed, by and large, informants described Town C, with some support from local surrounding towns, as remaining predominantly "self-sufficient" (c/003) in terms of employment for residents.

In Town D, a vast portion of the local industry relies on the highly seasonal tourism trade. While informants spoke with great consistency about the tensions that exist between local residents and transient tourists, they also acknowledged that many local businesses, and also people with holiday rental properties in the town, have a financial dependency on this regular tourist influx. Outside of the tourism industry, informants report that employment opportunities in the town have historically been very limited due to the relatively small number of permanent residents and typically lower levels of affluence, often providing only poor or inconsistent salaries. With the recent increase in permanent population numbers and the shift in the population wealth, informants indicated their sense that opportunities for local business and therefore, local employment, have grown.

...there's more demands on real estate agents, more real estate agents, and ancillary health, so physios, psychologists, chiropractors... there's more solicitors who work in the area now. There's more business and those people can afford to start a business now because there's enough population to support them economically... (d/001 – Town D).

3.3.3 Availability of housing

Given the extensive discussion of housing in relation to both the historic and emerging *population make-up and demographics* of each of the four towns in the previous section, only a brief summary of informants' perceptions of housing availability will be presented here. Both Towns A and C have reportedly seen a general increase in housing prices over the last ten years or so, consistent with the national impact of inflation, and both maintain geographically defined areas of notable affluence, where housing is considered "expensive". However, compared with the rapidly rising price of housing in Melbourne, both towns offer very affordable housing options for people moving into certain parts of the areas, as well as providing public housing for residents with very limited financial means. Again, as mentioned earlier (see section 3.2.1.2.1), while this has provided availability of housing for a broader demographic profile, informants reported that the quality of this low-cost housing is not always of a high standard. Similarly, compared with Melbourne, housing prices in Town B are generally more affordable and informants described many of the recently developed housing estates as of a high quality; however, the at-capacity caravan parks were viewed less favourably.

what I've seen happen is all the caravan parks have filled up with people who basically can't afford to live down here, so you've got that sort of Government pensioner side and it's that I see as growing (b/005 – Town B)

Reports of the availability of housing in Town D painted a substantially different picture from that of the three towns described above. Housing prices have increased markedly over the last twenty or so years, and the option to purchase in the area is now limited to a highly affluent segment of the population. Further to this, informants noted that while many of the houses in Town D spend much of the year vacant, they remain off the property market,

kept as weekend or holiday homes and, without the financial capacity to build new houses, there are very few housing options left available to people who may be looking to move to the area.

...there is nowhere to rent, so if you want to live here, you know, everything is taken up. A block of land here now costs a hundred and sixty five thousand dollars, before you even put a house on it (d/003 - Town D).

3.3.4 Mental health and other services

When discussing factors which they felt may impact on the mental health and wellbeing of community members, informants in all four towns spoke at length and often with great passion about the availability and accessibility of *mental health and other services* within their respective towns. Given their standing as MHPs servicing these towns, informants were able to provide an authoritative account of many of the services available, as well as utilisation levels and obstacles observed for these services, particularly within the mental health field. While services are considered here to cluster within a single subcategory, in order to reflect the emphasis placed on this issue by informants during their interviews, and to account for the considerable variability between the four towns, specific service areas have been separated into four minor categories; each will be discussed in turn.

3.3.4.1 Mental health services

It was apparent that informants understood the state of the *mental health services* within their towns to be fundamental to the mental health and wellbeing of residents. Having ready access to high quality local services was often considered to be at the core of creating an environment which fostered mental health and positive community attitudes towards mental health and mental health issues. There was considerable variability between the four

towns with regard to available services, service quality and even processes around service access. In order to allow adequate scope for the rich accounts provided by informants, the reports of the *mental health services* of each of the four towns will be discussed independently.

3.3.4.1.1 Town A: Perceptions of mental health services

As previously stated, there had been a time within the last ten years when Town A had the highest rate of youth suicide in the country. The alarming figures sparked an active response by the Shire to implement targeted adolescent mental health initiatives. These included working with local GPs and local schools, as well as the appointment of youth officers within the Shire community mental health teams. It was noted by informants that health professionals in small communities generally have an idea of particular young people they should look out for. Community-based initiatives were also rolled out, including "youth lounge" (a/003) nights, where local cafes dedicate an evening to providing a place where young people can come and informally talk with nurses or other health professionals in a fun and socially welcoming space. Local GPs are also currently involved in a research project assessing the utility of text messaging as means of follow-up with adolescents. By all reports, as well as being evidenced by Town A's classification as a "low suicide rate" town for the purpose of selection into the current study, the town has seen a marked reduction in these rate of suicide over the last ten years.

For mental health issues in Town A, a first port of call was often the local GPs. While the medical centre was commended for its promotion of local mental health services, there were differing opinions on the quality of services provided by GPs for mental health issues, with some concerned about misdiagnosis of psychological disorders, as well as an over-prescription of medication, impeding the effectiveness of psychological interventions.

Regarding specific access to private psychological services, the medical centre employs two psychologists, as well as having two local psychiatrists practice from the clinic one day a week, all of whom are working at capacity. Outside the centre, there are two or three private psychologists in the town whose books are also full, mainly (as perceived by residents) through word of mouth referrals, some of whom continue to offer bulk billing for clients with limited financial means, following the introduction of the Better Access to Psychological Services Program (Better Access Program).

While relatively well serviced through the private sector, the understanding of informants was that public mental health services for Town A, which were reported to be extremely "good", are spread thinly. These services, including the public hospital and community mental health centre, with 24-hour on-call, are centralised in a nearby town less than fifteen kilometres away. As the services had no physical centre in Town A itself, informants questioned how familiar local residents would be with these services, but also reflected that privacy can be compromised when services are located in the heart of a small town. The community mental health service, which is staffed by only six mental health workers, functions as an integrated team to provide complete end-to-end case management for each client. Informants from this service described a very "real-world", re-integration focussed model of care, and spoke of working with clients actively within the community, from assessment through to follow-up. There was discussion of working with this model within a small community, while maintaining professional boundaries and a division between work and personal life; however, most informants felt that clients were generally fairly respectful of the boundaries, and that this environment can at times facilitate more holistic patient care.

...you have to accept it that we're all part of one community... I find that sometimes, therapeutically, I will take my client out and buy them a coffee (a/005 – Town A).

3.3.4.1.2 Town B: Perceptions of mental health services

Town B was described as unusual for a town of its size in that it has four privately practising psychologists physically located in the town. Despite doing no advertising for their services, it was reported that through word of mouth as well as GP referrals under the new Better Access Program, all are at capacity, some with their books closed to new referrals. The workload was noted as being particularly onerous for the one clinical psychologist practising in the town, who reportedly serves as an informal "24-hour triage" (b/006) for other local services, including the police and school principal, when they are confronted with serious mental health issues. Although having four local private psychologists provides residents with convenient access to these services, it was reported that being a small town means that there are a number of residents who choose to utilise services located out of town in order to minimise public knowledge of their engagement with a psychological service.

In contrast to this relative concentration of private psychology in the town, all of the public mental health services funded for the area are located in nearby towns without service centres in Town B. One apparent by-product of this has been that many local residents remain relatively unaware of the services available to them, and a constant complaint of informants from Town B was around the failure of these services to work actively to increase this awareness and promote their services within the community.

I'd really like to see public mental health more proactive in promoting their involvements and roles... and I just don't know how it happens that people can get so unwell without being noticed. People obviously aren't aware of their existence... I mean they don't put articles in the local paper and they don't turn out to mental health week that I'm aware of anyway... they're not proactive... (b/004 – Town B).

Informants from Town B consistently reflected on the challenge for local residents to access public mental health services, as they require people to travel out of town, which is particularly difficult for young people who do not drive, as public transport is very limited. There is a youth drug diversion officer as part of the drug and alcohol team in the local community health centre but, again, it was perceived that young people from Town B would find this service difficult to access. Adding to the difficulty accessing services, as with many of the towns in this study, the geographical area serviced by the public mental health services for Town B is vast, and this is said to result in "ridiculous" waiting periods for non-critical support, as well as delays of up to two hours for the 24-hour emergency response service. Even the local public hospital, which provides a number of in-house mental health services, including a crisis and assessment team, is not readily able to facilitate in-patient stays, and this would require transfer to a service even further away.

Again informants from Town B spoke about the challenges of maintaining professional boundaries for clinicians working, and often living in, the same small rural town. Informants reflected on the increased likelihood of seeing clients out in the community working in a rural area, and noted that this can generate some anxiety for both parties if not handled appropriately. Notwithstanding this, general opinion was that this issue needs to be understood within the rural context, and that appropriate professional boundaries may be defined in slightly different ways from metropolitan teachings.

...you always show respect and recognition for the person and if they choose to ignore that you're there, that's fine... But if you don't do that, and professional ethics would suggest that you don't... I think it upsets people... and causes distress. Yep, one of my big professional interests is... those ethical principles which have been developed from city based psychology organisations which simply don't fit into a rural setting (b/004 – Town B).

3.3.4.1.3 Town C: Perceptions of mental health services

Similar to factors described by informants in Town A, the devastating impact of the drought, and a number of local farmer suicides in the last ten years, have seen a focussed effort in Town C to promote awareness of mental health issues, particularly in the farming community, and attempts to optimise the provision of local mental health services. It was reported that the community mental health service located in the town has implemented a number of community education campaigns designed to increase understanding and awareness of mental health issues, as well as reducing their stigma. In addition to these local initiatives, informants reported that Town C has been involved in number of Government and other activities aimed at raising awareness of mental health issues. In the previous twelve months, there had been a Government-funded open-day at the local racecourse, providing an open forum for community members, and offering a range of services including financial counselling for farmers and presentations from mental health workers. It was also reported that there is a touring "drought bus" which travels to rural farming communities, including Town C, offering information and advice on numerous topics including mental health, as well as a number of mental health activities and initiatives which have been provided by the Dairy Farmers Association and the Rotary Club, often in conjunction with local providers.

One of the biggest steps towards improving the provision of *mental health services* in Town C in the last ten years has been the establishment of the community psychiatric service located centrally in Town C, which includes specialist services such as a dual diagnosis clinician. Respondents spoke extremely highly of the psychologists who work in this team, and the quality of services they provide, despite reportedly being consistently understaffed and managing enormous workloads, being informally on-call 24-hours a day by virtue of the fact that many of these mental health workers are also well known and respected members of the community.

...there's kind of issues in the town that are risk factors I guess for mental health issues, but... support services are set up around the town and in the town... excellent in comparison to other small rural towns (c/002 – Town C).

Discussions with informants indicated that there were generally three major avenues for people to access mental health services within Town C. Typically the GP was seen as the first port of call for people seeking help, and in the case of severe mental health issues, the GP would refer the individual to the community psychiatric service for an intake assessment, or to the emergency team at the hospital if after hours. An adult inpatient ward is located in a nearby town if hospitalisation is required, although young people would need to be hospitalised in Melbourne. Other than this, GPs would likely refer the individual to a private psychologist within the town, or the third option would be that the individual attend a counselling service at the local Government-funded "Aspire Group", which provides psychosocial rehabilitation and recovery services throughout the Shire. Beyond these traditional routes, the community psychiatric service described a completely open-door policy for community members to access mental health services, accepting walk-ins and taking referrals from anyone, including local vets and cattle stock agents.

...the message that we try and give is, "just ring us. If there's a problem ring us, it doesn't matter, we can just talk it through, you're much better to talk to someone about it"... so we've been very open about trying to make that a very much more open process, so people can walk in, people can go to the GP, the vet can refer them, their wife can refer them, whoever... (c/005 – Town C).

The integration between the public mental health services as well as the medical centre was noted to be a particular strength for Town C. Similarly, while there are no private

psychiatry services in the town, the public services provided through the hospital are reported to work well as part of the integrated local teams. Again demonstrating a general community attitude of integration, Town C was noted to have three active churches, with ministers who offer support to local residents, as well as being an additional source of referral to the local mental health teams as necessary.

3.3.4.1.4 Town D: Perceptions of mental health services

Throughout discussions with informants in Town D, the overwhelming report was that the *mental health services* for local residents are extremely limited, particularly for adults. There are some support services provided to young people through local schools, but the extent of these was thought to be around only one day per week where a guidance counsellor or social worker would visit the school, and essentially be left unable to manage the huge need for targeted services.

...the schools were getting kids cutting themselves and wanting to kill themselves and major mental illness situations and they couldn't refer them and these were student welfare coordinators... they don't have mental health training... and then the psychologist or the social worker, who's only got one half a day a fortnight or whatever in a school, is trying to do that stuff but they haven't got time to do it (d/002 – Town D).

In Town D there are reported to be two privately practising psychologists who generate most of their clientele through word of mouth, and recently through GP referral under the Better Access Program. This said, it was reported that while some of the local GPs refer appropriately to specialised services, others seem to either opt to manage mental health issues themselves, or demonstrate a bias toward referring to "their own mob to sustain their

business but not because of indicative clinical need" (d/001). Outside of the private providers, residents of Town D seeking mental health services are limited to the local GP unless they are able to undertake significant travel. The public mental health centre funded to service Town D is located around two hours' drive from the town itself. There is reportedly a service within an hour's drive from Town D; however, this falls under a different Shire and as a result is not available to Town D residents. Despite a large number of services apparently available to residents of Town D, they were reported to be under-utilised either as a result of a lack of awareness of their existence, or due to prohibitive distance to access them.

...there's services available for people [in Town D], but they've got to go to [large town], which is ridiculous, and they won't go, so they just go without that service. Yet that service is funded to cover people in [Town D] (d/002 – Town D).

3.3.4.2 Other health and safety services

Outside of focussed mental health services, the availability and accessibility of *other health and safety services* was considered by informants to be an important factor in the overall health and wellbeing of the residents of each town. These services also have indirect implications for their mental health through the provision of additional support and a sense of comfort in knowing that they were able to have their broader health needs met in a timely and efficient manner. As with many of the services discussed in this section, there were often marked discrepancies reported in the availability, accessibility and quality of health and safety services between the four towns considered; specifically, informants from Towns A and C provided a far more favourable account of the service structure for residents in their towns than did informants from Towns B and D.

One of the factors noted by informants in Town A was that the sheer number of services located in the town itself was unusual for a town of its size. They have a large

medical practice which was described as "the hub of the town" (a/004), and a central point for residents to access a great deal of information about other local services. The medical centre also reportedly provides funding for additional services such as dieticians and exercise psychologists, and informants spoke about the excellent cross-communication which exists between medical, psychological and police services in Town A, facilitating a move toward a more holistic and needs-based community care model.

...the difference here is that you get to know the police personally, you get to know the town and clients, and they'll ring you up and say to you 'oh, we just picked up so and so'... you go out there and... see what the high risk issue is... then look at the supports they have... and you run it by the psychiatrist and you get it over and done with so you can make a decision what's gonna happen, are they going to be admitted or are they going to go home, or do they need to be kept in the police station... (a/005 – Town A).

Further reinforcing this, it was noted that the area community health service which had recently opened a site in Town A provided residents with access to a number of specialised health services and supports, as well as the recent opening of a large home for elderly residents, which has built on the existing community-based services such as meals-on-wheels and home visits. Other services highlighted by informants from Town A, included the two childcare facilities, as well as the local public hospital located less than 15 minutes from the heart of town.

Informants from Town C also spoke of the importance of the large centrally located medical practice in the town and the quality of the local GPs as a first point of contact for local residents across a range of issues, including mental health. Echoing the sentiments of Town A informants, the importance of high levels of communication between local health

service providers in Town C was emphasised, with reflection on how they have worked to build and strengthen these lines of communication.

...there's a really good cross filtering in the health care system... people need to get on and need to make it work really well. We've spent a lot of time trying to cultivate that and I think it works well... I could go and ring the GP... or you could ring the maternal child health nurse, you can ring the hospital... so we are all the same... it's the same services, health provision amongst all the services (c/005 – Town C).

In addition to the services of the medical practice, Town C houses a public hospital which provides residents with ready access to both standard day, and emergency services. Linked with the hospital, maternal and child health was seen as a particular strength of the health care service reported in Town C. It was noted that there has been a "rural maternity initiative" (c/005) which has introduced a more personalised approach to postpartum care, with midwives maintaining regular contact with women once they have left the hospital, and acting as a single case worker for the management of any required follow-up services.

The contribution of volunteer-driven services was also a point of consideration during discussion with informants around *other health and safety services* available to residents in Town C. Further to the availability of more traditional daycare facilities, it was noted that a family support centre, run and serviced by the St. Vincent de Paul Society (a large church-based charity organisation), exists in the town as well as a number of community-based services for the elderly, including meals-on-wheels and a second-hand store which donates its profits to partially fund one of the local aged-care hostel accommodation centres.

As with Town C, Town B was also described by informants as being "unique" in that the local regional public hospital was located in the town. Somewhat unusually, the hospital is reputed as having a strong obstetrics service, which was noted by informants as now being

particularly rare for a rural hospital. Outside of obstetrics, there were diverging reports from informants of the quality of service provision in the hospital. While some described generally well received services, others noted that the hospital was small and very limited in terms of allied health services. The medical centre at the hospital provides residents with ongoing access to GPs; however, outside of this, services were seen as scarce, and it was reported that patients were frequently transferred to larger hospitals elsewhere, where services were more extensive.

The sense in Town B was that the local police service and the communication between police and other health providers, was "fairly good". Police were described as having a "tendency to treat gently and humanly if they can..." (b/004), and there was little dissatisfaction reported with this service. In contrast to this, throughout discussions with informants in Town B, it became apparent that a major concern for the service structure supporting local residents was the fragmented nature of service provision within the Shire.

...there is a bit of a fragmentation because not all the services are in the one town, you have to travel, so there's a big reliance on transport, having your own transport, because there's no public or very limited public transport.... you have to have a car to get to the station... (b/007 - Town B).

This fragmentation of services was described by informants as "interrupt[ing] that sense of togetherness or welcoming" (b/007), which was an issue highlighted again with reference to the physical accessibility of many of the local buildings. These very old and very beautiful buildings, which in many ways serve to define the town and its heritage, were portrayed as being highly inaccessible for elderly people, people with disabilities, and parents with prams. While it was reported that there are discussions underway to improve these levels of accessibility, albeit in the face of opposition from a fairly conservative and reluctant

council, the current situation was perceived as one which failed to convey a sense of true inclusiveness to all residents of Town B.

The story in Town D was different. Respondents indicated that in the six month period prior to conducting interviews with informants in Town D, the community had been severely shaken by the closure of the local public hospital. Informants in this town made frequent reference to the impact that this closure had on not only the practical availability of local health services, but also the sense of community within the town itself. Informants reported that there had been a large community protest, but that ultimately a lack of Government funding had led to the unsustainability of the service. At the time of interviews, a bulk-billing medical centre was being built in the town; however, this had not yet opened and the only medical centre required upfront payment to access services. Further to this, the closure of the hospital meant that the nearest emergency services were in excess of 35km from Town D, and even these services were reportedly not able to provide adequate care for very serious emergency cases, and in these instances patients were transferred via helicopter to much larger (and much more distant) facilities.

...the hospital was created by the community for the community [Long pause] and I think it's one of the most important things for small communities... it becomes the centre point, the nucleus of a community because everybody gets sick. It hurts that community spirit, there's a lot of people out there that are scared now, and they're going to an overloaded medical service to try and get reassurance that they're not going to die tragically (d/003 - Town D).

Adding considerable pressure to the already limited health and safety services available to the permanent residents of Town D, it was reported by informants that the seasonal influx of tourists and holiday makers is not met with an appropriately scaled

increase in service providers. The perceived impact of this is that the availability and accessibility of medical and other services, notably including police services, is even further reduced during peak season, leaving both residents and tourists alike feeling unsupported and at times unsafe.

...there's hardly any police and then those police have to deal with all the tourists coming up in those peak periods. So... if there's parties happening well what's the use of ringing the police... all the young people come up from Melbourne and everywhere and bring drugs and the hospitals are aware of it and the nurses have told us they get inundated with all these people overdosing... all the doctors in the hospitals have to look after people from Melbourne or wherever and they're not paid for that (d/002 – Town D).

3.3.4.3 Transport services

The transport infrastructure in each town, and the practical utility of these services in providing efficient means for residents to access health, leisure and other activities, was a frequently raised issue among informants in each of the four towns. In many cases, informants conveyed a sense that public transport was seen to represent a sort of freedom, the absence of which has the potential to leave residents feeling trapped and isolated, particularly in the case of young people who do not yet drive. In many instances, informants separated discussion around transport into the ease of access to and from Melbourne, and the ease with which other neighbouring towns could be accessed, noting that these accessibility levels impacted differently on different population strata depending on their particular needs.

Towns A and C were reported to be fortunate in that both have a regional train station located in the centre of the township which is highly accessible to local residents. This service provides residents from Town C with ready access not only to Melbourne, but also to

the large neighbouring towns which have similar infrastructure in place. This was considered to be particularly important, as the distance from Melbourne means that many of the services and activities that residents from Town C are looking to access are located in these nearby areas and not just Melbourne itself. Town A also has a central train station, but informants reported that the infrastructure of the surrounding towns is such that this service only provides residents with ready access to Melbourne, and accessing local services remains somewhat of a challenge.

...it's about access to our services and I think the challenge in rural areas is about how you access those services... [the railway] is the only public transport we have, so there are issues about access to services that are in other towns in the Shire because there's no public transport to access them... it's easy enough for people to get to [Town A], and to get out of [Town A], but not to get somewhere else (a/003 – Town A).

By most accounts, Towns B and D were considered to be fairly limited in transport availability and access to local and city-based services. While Town B does have a local train station, it is located four kilometres outside of the central township, making it more difficult for people to access. Further to this, the actual utility of this transport service was described as being quite restricted as a result of both practical and financial constraints.

...leisure activities... or extra-curricular activities that [youth] might have, they have to rely on parents or on being driven everywhere... even just going out on weekends or whatever, that's very limited and it's money as well... getting a V Line train, because they're country fares... so going to the city, and that's a good hour trip, and then you've got to work out how you're going to get home and if there's a train available because really the last train is nine thirty on a Saturday night or Sunday

night... that would restrict your work possibilities too, as a young person wanting to find part time work, if you can't find it locally, where do you go? Do you have other options? It's not like you could try the next suburb and jump on a bus or tram (b/007 – Town B)

The relative importance of people's perceptions of the availability of services was particularly evident in discussions with informants from Town D. While there was consensus that public transport was generally limited, there were notable inconsistencies in reports of actual services provided. In keeping with the town's highly seasonal profile, public bus services are bolstered during peak tourist and event times to facilitate the greatly increased number of people in the area; however, most informants reported that for permanent residents, accessing nearby towns on a day-to-day basis is difficult. Some were of the opinion that there had been an improvement in transport services over recent years, but others reported that a lack of awareness of publicly available services has impeded their sustainability and resulted in their closure.

...there's a bus that goes for elderly people who go and do their shopping for an hour in [nearby town], and then it comes back but... no public transport... they tried to start a new bus service and but I don't think it was advertised enough, there is a massive demand, but people don't know about it, so they didn't use it and then the private bus company pulled out (d/002 – Town D).

3.3.4.4 Youth services

One point of commonality between the four towns considered in the current study was that informants reflected on the challenge for rural communities to provide sufficient local services for young people across the full spectrum of their educational, employment, health

and leisure needs. The issue of local employment opportunities, as well as the impact of transport infrastructure, specifically for youth accessing a range of services and leisure activities, has been considered above within the broader discussions of these factors. Beyond the issues of employment and transport, interviews with informants in each town explored other ways in which their town was seen to perform well or fall short in providing local services targeted specifically at their young people.

Informants in Town A acknowledged that local older adolescents, in particular, are fairly limited in terms of leisure activities available to them in the town. Outside of hosting their own parties at home, social outlets for young people in Town A were typically thought to be confined to the local pubs. Reports from informants indicated that limited social outlets, coupled with the high accessibility of regional public transport, means that many young people from the town travel to Melbourne for much of their social activity, particularly on the weekends.

Despite these acknowledged deficiencies in providing avenues for social engagements, the medical practice in Town A has reportedly made a concerted effort since the early 1990s to focus actively on the physical and mental health of local adolescents. The clinic is a private billing clinic; however, no out-of-pocket charge is required by any adolescent who presents alone to the clinic seeking treatment. Further to this, for the last three or four years, the medical centre has also been sponsoring a free basketball competition for local youth as part of their ongoing commitment to supporting the local community.

Additional *youth services* noted in Town A included some particularly high quality sporting arenas which are available for a broad range of sporting activities, as well as the development of children's parks resulting from fund raising efforts of local community groups. The quality of the local primary school was also highlighted, although not for its focus on academia, but rather for its apparent level of support and care provided to students.

I wasn't so much interested in the kind of educational facilities in the sense of how many, what size was the library... but just the kind of more caring atmosphere, the more connectiveness with their environment. I kind of was aware of that resilience stuff and I wanted them to have an environment that they felt connected within and part of... if they forgot their lunch, the principal would buy them lunch... so there was never that feeling that they were by themselves... (a/006 – Town A).

Throughout interviews with informants in Town B, and specifically discussion around the availability and quality of *youth services*, what emerged was a sense that particular segments of the local youth population were well serviced, while others had access to very little, depending on their skills and interests. The first point of consideration was that there is currently no public high school in Town B. Those young people who are unable to attend the private secondary college, either for financial reasons or due to waiting lists, are required to travel to nearby towns for the duration of their secondary school education. This was thought by some informants to impact on how connected these young people feel to their local community.

Even for those in the local secondary college, informants indicated that particularly historically, some students would be better catered for than others, as the school is renowned for its sporting excellence, but not for strong academic performance. Having been exclusively a boys school until around the late 1980s, informants described a "culture of misogyny almost, with a very much a male culture" (b/006). The notoriety of the football team and football coach in particular, were seen as central to the identity of the town, and the school had tended to minimise the focus on academic achievement for those who excelled athletically. The introduction of girls to the school was considered to be a move towards addressing this and reprioritising sport and academia within the school; however, school

sporting events reportedly continue to draw large crowds of local residents to spectate and are considered something to be taken very seriously by the community.

Further to the sporting focus of the school, the local racing industry helps to facilitate young people who are interested in horses and horse riding, and informants also reported that a local skate park had been opened in the last couple of years. Outside of the sporting arena, it was reported that services specifically for youth within Town B were scarce. Informants noted that the town hosts the Shire "Battle of the Bands" competition for young people once a year, but otherwise it was generally felt that the social outlets for youth mainly centered around one of the local pubs, and "leisure boredom" was thought to contribute to some antisocial behaviour at times.

I think there's probably a leisure boredom, I don't know if that results in crime, although in some circumstances it probably does because kids don't really have any other outlet apart from the skate park. Big deal, if you're not into skating and if you're not into team sports, if you're not into horses, what do you do? (b/007 – Town B).

Town C was described as being fairly typical of rural towns, in that it has a number of services and activities for young children, but little to sustain youth past primary-school age. Informants recounted numerous child-focussed services including mothers groups, child-care and kindergarten facilities, community-based programs such as "kinder-gym" as well as recreational activity groups including dancing, karate, judo and Pilates. While Town C does have its own public high school, it was described as being "not an academic school at all" (c/002), and many of the local children attend secondary schools outside of town, including a large number who actually board at the secondary school in a large rural centre more than one hundred kilometres away. Upon completing school, informants estimated that only around

ten to twenty percent of local young people would stay in Town C to seek employment in local trades, while the majority would move away in order to commence tertiary education.

For both younger children and post-school age youth who remain in the area, Town C was described in similar terms to Town B, in that the core of the youth leisure services is sport, although the town also has a skate park and reportedly participates in a highly successful youth music festival each year. Informants were able to name an extensive range of sporting activities that young people participate in, but it was noted that the real life-blood of the community is the football and netball teams, both of which were described as being quite "political" and having a far reaching impact on the town's social fabric.

...the community revolves around football... that is another thing that people in small towns bond over...It's the local football community and there's a hierarchy involved in the local football club... where your position is in the local football club, that also defines who you are in the small town (c/003 - Town C).

One of the major challenges identified by informants in Town D around *youth services* was the enormous waiting lists they encounter for activities relating to young children particularly, apparently stemming from the failure of the service infrastructure to be scaled to meet the dramatic increase in population. It was reported that securing a place in the local kindergarten requires children to be on a list by the time they are one or two years old, and similarly, the local church has recently begun a mothers' group which has been inundated with participants and is unable to accommodate everyone who wishes to attend.

For secondary-school aged children, informants noted that there is a private school just out of town which charges considerable fees, or the local state school which, while described as being a "very good school", is over 40km away from Town D itself. Consistent with the other towns in this study, young people are required to move away in order to attend

trade school or complete a tertiary education. Also consistent with many of the reports from informants across the other three towns, sporting activities were highlighted as providing both an expansive opportunity for positive social and leisure activities for young people in the area, as well as having the potential to be somewhat tainted with socially isolating undertones based on whether individuals were accepted as part of the team or excluded from it.

Footy has a big following [in Town D] and there's a strong sense of if you're with [Town D] you play for the [Town D] football club... so there's tensions about families who have played for other areas (d/001 – Town D).

The beach and surf culture was seen by most informants as a major source of leisure activities for young people in Town D. Further to this, the seasonal activities and festivals run in Town D were reported to provide a wealth of activities for local youth during these times. That noted, it was also reported that many of the local youth actually withdraw from their usual social activities during these times, particularly visiting the local pub, due to a fear of physical clashes with tourist youth groups. Hence, while these tourist activities provide some level of youth leisure services, they remain seasonal and potentially high-risk, and the message from informants was still that the town required additional services and activities for young local people in order to prevent them from "walk[ing] the streets" (d/003) because they have nothing else to do.

The preceding sections have explored the perceptions of informants of a variety of *compositional* and *contextual* factors pertinent to each of their respective towns. These have included issues relating to the individuals who reside in the towns, as well as issues emerging from the social and physical structures that exist in these towns. The last section in this Chapter will consider *collective community factors*.

3.4 Collective Community Factors

The final point of consideration in this Chapter is the *collective* community factors raised by informants during the course of this study. *Collective* factors move away from the individuals and the physical particulars, and refer to the broader community within each town and their shared culture and history (Judd et al., 2006). Numerous *collective* factors emerged through interviews with informants around perceived mental health and wellbeing of residents, and these clustered under two major sub-categories; (i) *town identity* and (ii) *values and behaviours*. Again, each of the *collective* factors identified will be discussed with reference to each of the four towns as relevant.

3.4.1 Identity of the town

All of the towns considered in this study are quite old, thus each has a rich social and architectural history which has served to shape and define them in many ways. These historic identities were often highlighted by informants as being influential in drawing residents seeking a particular lifestyle; however, in many cases they were felt to be coming under threat by ongoing expansion and development. Just as with reports of the *population make up* and demographics of each town, there was a sense from informants that for some, these town identities are also shifting, moving to embody aspects of both the "old world" and the "new".

The history of Town A was recounted as having once been a stop-off point for bushrangers during the early settlement years en route to gold territory. The location of the town has strong ties to prominent Victorian landmarks, some even immortalised in literature, and this has generated a steady flow of tourism to and through the town, both historically and contemporarily. Partly to service the tourist population but also simply a mark of its general affluence, Town A is renowned for its numerous markets and festivals, and was even reported by one informant to now have "more cafés per head of population than any place in the

country" (a/003). The other notable point regarding the location of Town A, specifically its relatively short distance from Melbourne, is that it is known for offering a lifestyle that allows residents to experience both the "hustle and bustle" of the city, and the quiet of the country.

While ongoing population growth and the associated infrastructure developments are reported to be changing the "feel" of the town to an extent, with some reported fears that the expansion of Melbourne over the next thirty years will see Town A become an outer suburb of the city, most informants agreed that, at least for now, the town has continued to retain an old-fashioned feel and a focus on local community. The town was described as offering its residents open space and clean air, and moving at a slower pace than a suburban area.

...but one of the things about [Town A] is that it's got a very strong hamlet feel to it and that's one of the things that we've always liked... it's very much community sort of orientated... as in sort of township so it's focussed, set upon itself as a township (a/003 – from Town A).

Town B is reported to be one of the oldest inland towns in Victoria. Historically one of the more affluent towns within the region, Town B is famed for, and proud of, its beautiful heritage buildings, dating back to the gold-rush era, which continue to convey a sense of the town as being an old traditional community. Noted to be indicative of its early settling heritage, Town B continues to host a widely popular cultural festival, as well as being renowned for its regular antique fair. In addition to these cultural events, Town B has firmly established itself in professional sporting circles, known for housing a school that has produced an almost unrivalled number of professional sports people in certain fields.

One consistent observation in discussions with informants in Town B, was that the identity of the town appeared to remain largely defined through comparisons. Frequent

references were made to crime rates in Town B being lower than those of nearby towns, or Town B being "more affluent" than nearby towns, using these other areas as a point of reference to portray Town B in a positive light. While informants reported that twenty years ago people would move to Town B for the country lifestyle, there was a sense that the town was no longer seen as a place that people would want to live, except, once again, in comparison to other towns in the area.

...many people refer to [Town B] as, 'if I had to pick a town in the Shire I'd pick

[Town B] because it doesn't have you know the kind... [nearby town] has more of the

[other nearby town] connotation... the kind of stigma that it has... (b/007 – Town B).

It was evident that despite many changes resulting from progress, modernisation and the profound impact of the drought, the identity of Town C remains firmly rooted in being a farming community. Originally a service town for the wool industry, Town C is reported to have been settled, pre gold-rush, by three large squatting families. The extremely grand appearance of the town, in terms of its architecture and design, is attributed to the wealth invested by these original families, and this impressive presence is only furthered by the town's beautiful green landscape. The perpetuation of the town's historic identity is thought to be facilitated through its obvious historical landmarks, but also the remaining presence of descendants of these original settling families.

...it's one of the Victorian country towns that was very largely settled by English,

Scottish and Irish people... so I guess it has a somewhat peculiar English flavour. I

think there's a fair accent on heritage and this includes things like the [local
landmarks], all the obvious visible things... but also many of the original settler

families are still existing in the community... I think, with colonisation of countries by

British, there was always an inclination to preserve and carry on British traditions, whether they were suitable for adaptation to the new locality or not... (c/004 – Town C).

This historic town is perceived as being steeped in tradition both in its appearance and in its culture. One observation made by an informant in Town C, was that the local stores will sell only small numbers of the "The Age" newspaper, while the local paper will be sold in large volumes. A fundamental feature of the town's identity is that it is described as being very "insular" (c/002), its focus is very local, and this was thought to contribute to the strength of the local community.

The identity of Town D, as described by informants in the area, differed in a number of ways from the previously discussed towns. In appearance, thought to mimic an old English coastal town, it has historically been a "sleepy seaside town" sought out for its beautiful natural environment, its peacefulness and its surf. Informants reflected on the tradition of people spending their weekends doing "DIY" renovations on their small fibro shack holiday homes, and the surfing lifestyle was described as being at the very core of the town.

...so the mentality is that lifestyle and surfing and all that is... more important... I know a plumber... and he's only young, about twenty three, he only works two days a week and I said 'why don't you work more, can't you get any more work?', he goes 'yeah, but what for, I've got enough money', he just surfs all the time... a good thing or a bad thing, that's the way it is... everyone knows, the builders, the people building their house, the owners soon realise, 'oh, the surfs up, can't expect much' (d/002 – Town D).

Another major point of difference in the identity of Town D, is that it has always been, and continues to be, a highly seasonal town with a substantial tourism industry. The town is renowned for holding large festivals and events during the summer, and is now a popular destination for young people during "Schoolies Week⁴". For a long time there was a small core of permanent residents, and a large transient population of holiday makers and tourists. For the most part, informants described that for permanent residents, Town D had always had a very "small town feel", where everyone locally knew everyone else's name, and they distanced themselves from the seasonal visitors. It was noted by some informants with a sense of loss that the increasing number of people assuming permanent residence there and the resultant expansion and development, seems to be changing the feel of the town, and threatening the lifestyle and identity that initially drew many people to it.

...there's the people who argue that the very thing that people are coming down for, you know the character, the geography, the flora and the fauna is being destroyed $(d/001 - from\ Town\ D)$.

3.4.2 Values and behaviours

In seeking to understand the *values and behaviours* which permeate the four towns of interest in the current study, and the ways in which these may impact on the mental health and wellbeing of residents in these towns, it is important to respect the context within which information was obtained. Informants' accounts of the *values and behaviours* which shape their towns provided a rich, complex and dynamic portrayal of the social fabric of these communities. While there were sometimes marked similarities as well as differences which emerged in the *values and behaviours* identified between towns, in some instances the same

⁴ 'Schoolies Week' is a three-week graduation festival for students who have completed their final year of high school. Many coastal areas around Australia provide organised entertainment and activities during this time.

was true for those identified within a single town. Further to this, it became apparent during analysis of the interview data, that the same single factor could represent either a positive or a negative feature of the town, depending on its perceived impact on the individual informant. With full appreciation of the intricate and multifaceted nature of this material, an account of the perceptions of the informants interviewed for the study follows. In order to provide structure for presenting a large amount of information, and to facilitate understanding, the *values and behaviours* identified have been grouped into four minor categories: (i) *community norms and values*, (ii) *social cohesion*, (iii) *attitudes towards mental illness*, and (iv) *perceptions of crime and* safety. Each is considered in turn.

3.4.2.1 Community norms and values

When asked to reflect on those *community norms and values* which were evident and influential in their respective towns, informants were generally able to provide clear accounts from both their observations and their personal experiences. As noted above, in many instances these "pseudo-prescriptive", that is generally understood but unspoken, social codes were seen to both facilitate and detract from the mental health and wellbeing of local residents, as a function of individual circumstances and personal characteristics. As the picture painted by informants of each town's *community norms and values* was highly individualised, they warrant independent discussion below.

3.4.2.1.1 Town A: Perceptions of community norms and values

Town A was described as having a particular focus on supporting the developmental needs of its children and young people. It was described as a town that provides children with an opportunity to "embrace and be embraced in the community" (a/004) and scope to express themselves, however, they choose. It was common practice in the town for parents to

work together in an informal car pool, to ensure that children were able to get to and from school when their parents were unable to transport them for any reason. It was with notable pride that informants reported that children in Town A seem to grow up at a slower rate than young people living in the city, firstly by virtue of the fact that they are not exposed to so much so early, and secondly that they are surrounded by consistent community support.

...fourteen year old kids don't hang around the shops after eight o'clock at night because people would notice them and say 'Oh... do you want me to give you a lift home?' (a/003 – Town A).

For people in the community, the town maintains what was described by one informant as a "village mentality" (a/004). Residents are typically on a first name basis with shop owners, and if a local resident was to forget their wallet at lunch time, there would be no question about them simply dropping the money in at a later time. The value placed on this sense of community is demonstrated again through high levels of local volunteerism and community support for fundraising, as well as consistently strong turn-outs at local community events, markets and festivals. These events were seen as an opportunity for community social engagement, as well as a chance to show support for local institutions. The value of community was again thought to be expressed in Town A, with specific regard to the way that the community works together in the face of bushfire risk. Informants recalled how the community pulled together during a recent fire season, checking on people and minding children as necessary.

Informants spoke of the common practice in the town for people to stop and chat on the bike paths, or even stop on the road in their cars to say hello to other local residents.

While this was generally thought to be a positive thing, it was also noted that there is a degree of local gossip that comes with living in a small community. So the downside of this apparent

community strength and support was a sense that everyone knows what is happening in others' lives, whether they want them to or not, and this was seen to impact on peoples' personal space.

You could buy a thousand acres up here and run around without your clothes on and no one will see you but yet they will notice if you sit in your car or they will notice some other habit you have in terms of what you purchase or what you do... there's no sense that it's a judgemental community but, you know, not blind (a/003 – Town A).

Even with its history of affluence, informants reflected on the fact that Town A does not position itself to residents as a materialistic town. It is not known for excessive consumption or outlandish "splashing about" of money, and it was noted, albeit with some humour, that you do not need to get dressed up to go to the supermarket. While traditional rural communities were generally thought by informants to be fairly reticent, the value that residents place in the character of the town has seen them championing for its protection in the face of population growth and infrastructure development.

3.4.2.1.2 Town B: Perceptions of community norms and values

In Town B there was seen to be a core of people with strong ties to the heritage of the town and the preservation of its original character. For this portion of the community, enormous value was said to be placed on the maintenance of the historic nature of the town, and it was reported that these "[Town B]eans"(b/005) would fight to defend the ancient buildings from development. The community norms and values championed by these traditional, and reportedly conservative, community members were said to reflect universal values around the importance of family and community. Although it was acknowledged that this is becoming increasingly difficult to sustain in the face of population growth and change,

reports from informants were that there remains an expectation that new members to the area show due respect to these established residents.

...there's expectation [sic] that you do show that respect and that sensitivity to people who've been here for a longer time than you so it's a balance. But you know at the same time... I think they want [Town B] to grow and they want it to have more services and to have more opportunities but I think they're just wary of how people do that and how they come across (b/007 – Town B).

In describing the *community norms and values* observed in Town B, there was a sense that the town's conservative and traditional roots can perpetuate attitudes and policies that are seen as somewhat "behind the times". The town was described as having the expectations of a traditional country town, including a compliance with water restrictions and the like, with little or no focus on diversity. Specifically, informants felt that the Shire Council was very backward with its policy development, and until very recently was reportedly the only Shire in Victoria without a Disability Action Plan in place. Similarly, the town was described as being divided in its views towards young people, some valuing their contribution to the community more broadly, others with more traditional views around young people in a community remaining "seen but not heard".

Conversation with informants around those things which were valued in in Town B included frequent reference to the importance of sport in the town, both for spectators and players, and specifically the sporting accolades associated with the local school. While the school is now reported to have a "no tolerance policy" (b/004) for students who are underperforming academically, it has traditionally been known for privileging sporting prowess over academic achievement, and remains closely connected to its network of "old boys". Further, despite active changes within the schools of neighbouring towns, informants

report that Town B remains guarded against the introduction of preventative programs and early intervention initiatives targeted at youth educational and behavioural problems, within the local education system.

As with Town A, informants in Town B commented that there remains a sense of a "small country town" in its feel. Particularly historically, residents of the town were there because they had made the conscious decision to live in a regional area in preference to living in the city. It was felt that attitudes were typically more "laid back" than those in the city, with greater emphasis on just letting things go and an attitude of "she'll be right" (b/004). Again, consistent with reports from Town A, this small town culture was seen to lend itself to an environment where everyone knows everyone else and their business. Reportedly this has been found to be particularly difficult to manage for a number of the local school teachers, and they have consequently made the decision to take up appointments elsewhere, due to the discomfort they felt with living and working in the same community. Continued population growth in the town is perceived to reduce the impact of this small community feel; however, for some, including some staff at the school, this change fundamentally undermines those very things they value within the town itself.

...[school staff member... he just didn't know people like he used to know them... he would know most of the families of the kids in his school when he first started there 'cause it was a much smaller school. Whereas now they're coming and going, you know, it just seems sometimes they just arrive on his door step 'Oh, we've just shifted from so and so and we want a school for our kids' (b/006 – from Town B).

3.4.2.1.3 Town C: Perceptions of community norms and values

A consistent report from informants in Town C was that the *community norms and* values which penetrate the community, show clear evidence of their origins in an old,

conservative and traditional farming community. It was observed during interviews with these informants that social codes or expectations were often described differently from those described by informants from Towns A and B. The seemed overt, articulated and prescriptive. It was generally expected that residents would be heterosexual, get married and have children. Mothers would stay home with the children as the primary caregiver, while the father should go out to work. It was expected that people would school their children locally, that they would mow their lawns and keep their houses looking nice and, of paramount importance, that residents would actively contribute to the community either through working locally or through engagement in volunteer activities.

...there's often an expectation to participate in certain activities... that are community oriented, or church community oriented... sometimes it comes in the form of direct requests and other times it comes in a more subtle, 'this is happening on this date and time – just if you're interested'... but I think that's general of most local communities because... without the community support often things don't get done... if we didn't have volunteers there wouldn't be a fire brigade for instance... church grounds wouldn't be kept or school grounds wouldn't be... you know the old working bees, it's the community who makes those things happen (c/003 – Town C).

Again tied closely to being a farming community, there was an emphasis in Town C on working hard and keeping a "stiff upper lip" (c/005) about things. The farmers in particular were described as working 24-hours a day, seven days a week, often going unseen for weeks at a time during calving or hay-cutting seasons. As accessing any form of support in a rural town had historically been difficult, there exists a lingering sense of the importance of self-reliance and stoicism across all aspects of life, including both mental and physical health.

...we take the med students through here... and I remember an intern saying to me once, they had been told when they were coming on rural rotations if a dairy farmer turns up in ED with chest pains, make sure you drop everything because they have probably already had their infarct by the time they get there... (c/005 – Town C).

With fairly well defined *community norms and values*, informants described the community in Town C as having a "rich social fabric" (c/002). While there was reportedly a sense that local residents were sometimes uncomfortable with so called "big ideas", and there was certainly an expectation that people did not "big note" themselves. It was also observed that the community actively celebrates the achievements of its young people, particularly around sport, which is considered to be at the very heart of the town.

By virtue of being a small town, it was again noted in Town C that people tend to take an interest in what is going on in other people's lives. There is a sense that "people talk", and that can be either positive or damaging to people depending the circumstances. However, despite this, informants felt that within Town C there is an equal expectation that the community will rally to support local people and protect the character of the town. The drought was cited as having had a strengthening impact on the local sense of community, with people sharing the experience and working to support each other, and similarly all sectors of the community have recently been seen to come together to rally for the protection of some of their historic flora, because they value and take pride in the history and beauty of the town.

3.4.2.1.4 Town D: Perceptions of community norms and values

Town D was also described as having a fairly conservative set of core *community norms and values*. There is reported to be a very traditional church-going crowd in the town,

and informants described that there is a sense of "tall poppy syndrome" (d/001) among the local residents, and a general wariness of success and wealth. While the community conveys an expectation that people will not portray themselves in too favourable a fashion, it was also noted that there remains an undertone within Town D that people should get on with things, and that acknowledging any difficulties denotes a weakness in their character.

...there's still a bit of that conservative, 'if you've got difficulties that reflects a weakness in character and we should stay away from you'. There's a bit of that sort of judgemental stuff going on, there's not a strong sense of if somebody's got some difficulties, help them, it's more wariness. There's a sense of ... that thing of being OK and getting along and doing alright makes you OK. Not doing that means that there's something wrong with you (d/001 – Town D).

The importance of lifestyle over wealth and the connection to the environment were also highlighted by informants in Town D as being central to the community, particularly historically. For a long time there is reported to have been a relatively influential group of "greenies⁵" (d/002) residing in the town who actively lobby for the environment and against much of the development. Many of the "locals", not confined to this "green" portion of the town's population, are described as being anti-development, and are seen to rally together in protest around certain proposed changes to their town. These values of lifestyle and environment were also discussed in the context of tourism. Informants conveyed a sense that local residents in Town D feel "almost personally" violated when people from outside the community come in with little value for what the town represents to the locals, and "abuse it". This was thought to be behind much of the locals versus tourists tension.

⁵ The term 'greenie' is a colloquial name given to conservationists (Delbridge & Bernard, 2000) which is typically associated with radical political views and/or behaviours.

Consistent with all of the towns discussed, Town D was described as being a place where everyone knows each other's business, and "everyone talks". Informants from the town made joking reference to needing to ensure you leave at least an hour and a half to do the grocery shopping, because it takes that long to talk to everyone you will see at the store. Although informants did recount stories of people having made the decision to move away from Town D as a result of these "constant whisperings", by most accounts the coffee shop gossip was generally thought to be accepted by most, albeit not necessarily appreciated, as part and parcel of living in a small rural community. With this said, it was not always thought to be an entirely negative attribute of the community, and informants described the "flip side" of the lack of privacy, as the community also being there when someone experiences a tragedy.

...When there's a tragedy, it affects everybody and everybody gets behind... cos everybody feels it, everybody knows each other, we mightn't live in others' pockets but everybody feels the tragedy and everybody feels the happiness (d/003 – Town D).

3.4.2.2 Social cohesion

A number of issues surfaced during discussions with informants around levels of *social cohesion* in each of the four towns. There were reflections around experiences of new residents looking to join these communities, as well as those of people passing through. Through their accounts, informants often provided insights into social hierarchies observed, as well as both the subtle and sometimes overt, divisions and tensions that exist in these local communities. The differences in the reports of *social cohesion* between the four towns were marked; however, it should be noted that variability in reports within towns also occurred.

Given the intricacies and particular issues which emerged in each town, each will again be considered independently.

3.4.2.2.1 Town A: Perceptions of social cohesion

The sense from informants from Town A was that this is not the sort of town where you need to have resided for fifty years in order to be considered a "local". While it was acknowledged that different people would likely have different experiences, for the most part, it was reported that the community is welcoming to new residents, and one psychologist recalled that her neighbours actually brought her a casserole when she first moved to the area. It was described as being a supportive community with people willing to help out when they know someone is in trouble, keeping an eye out for them and providing informal "counselling" at the post office or supermarket. This was thought to be particularly evident with regard to children, and specific instances were provided where the community had rallied financially, practically and emotionally to support local children who have experienced adversities in their lives. While these extreme examples were rare, the general support for young people was seen as part of daily life in Town A.

...my kids will often find people walk them home from the station, even though they're perfectly capable of walking home by themselves, but they're like, 'oh, I'll just walk with you'... sort of look out for people (a/003 – Town A).

Generally considered a friendly and welcoming town, there do seem to be some social groups thought by some to be harder to join than others, but while these groups did not typically socialise with each other, there did not seem to be any overt conflict. One informant described a degree of naïve racism in some of the older farmers as "spill-over from the old farming" (a/002) communities, but again this was not thought to be a major concern in the

town. One group within the town for whom it was thought by informants that levels of *social cohesion* were low, was the newer residents living in public housing. Informants reported some undertones of local "snobbery" toward these newer, less affluent residents, but further to this, the general impressions of informants (all outsiders to this subgroup) were that there is actually considerable conflict, and very little in the way of support provided to each other within this subgroup.

A final point to note in Town A is that informants did reflect on a sort of division between local residents and people identified as being "from Melbourne". While tongue-incheek comments were made about the "Bloody Melbournites" (a/002) who come to the town on the weekends, there is considered to be more of a separation than any animosity, although in some instances it is those from Melbourne who are thought to be the less friendly

...I think a family of [professionals] that moved in and they don't even say 'boo' to anyone... you wave and they don't even look you know and you go 'oh they're from Melbourne, what do you expect' (a/002 – Town A)

3.4.2.2.2 Town B: Perceptions of social cohesion

A frequent remark from informants in Town B, was that there is a great deal of variability in people's experiences when they come to the town, some reportedly feeling very welcomed into the community, others finding it difficult to establish strong social connections. Reports from informants were that while people in Town B want the town to grow and prosper, there is general sense of "cautiousness" (b/007) around people coming from outside of the community trying to make changes, or suggesting new ways for things to be done. If tested, this wariness can turn to resentment at times, making it difficult for new people to be involved in community initiatives.

Unlike Town A, informants from Town B indicated that people in the town are generally not considered to be local until they have been there for ten or twenty years. While this was not reported to necessarily detract from the feeling of welcome for newcomers moving to the area, it was noted this is a relatively "insular" (b/006) group, and that it can be difficult for new people to fully integrate and contribute proactively in certain facets of the community, in the face of long standing traditions and social hierarchies.

...there's been families there... that've got roads named after them and things like that... So, there are families that have been there for ages and those families are working in a lot of the local areas and local places and so I think there are sort of niches, there's sort of groups of people that kind of stick together and to try and break into that, particularly in community groups... is fairly difficult, because they're established and they're the people that have been around for so long and if you're a new person.. 'well, you're just a newcomer and you come here with all these new ideas' (b/007 – Town B).

Again demonstrating the varied experience that people have of the levels of *social cohesion* in Town B, some informants described the scene of people chatting in the street on a Saturday morning, whereas others made specific reference to the town as being unlike your "average country town" (b/005) where people wave and stop to say "hello". Despite these inconsistencies, there was general agreement in informant accounts that the town has the potential to be isolating for people who, for whatever reason, cannot or do not work actively to get out and develop connections within the community. It was thought that those locals who commute to Melbourne for work would find this sort of community integration more difficult than those who work locally, simply by virtue of them spending the majority of their time away from the town, and not having the opportunity for local *ad hoc* social interactions.

Discussion of the levels of *social cohesion* within the local schools was also raised by informants. Furthering the notion of variability within the town on this issue, while sport was identified as an avenue for people to develop social connections, this too was multifaceted. The importance of the high school football team means that being a good footballer, even for young people not local to the town, provides an almost immediate access to, and acceptance from the community. On the other side of this, however, for young people who are new to the school and who do not want to be involved in sport, informants agreed that it would be very difficult for them to establish themselves within the community.

3.4.2.2.3 Town C: Perceptions of social cohesion

It became apparent that in order to appreciate the context within which *social cohesion* was to be understood in Town C, it was important to first understand and recognise the profound distinction between being accepted and welcomed by the community, and being considered to be a local in that community. With descendants of many of the original settling families still living in the town today, to be a local in Town C requires that your family has been living there for multiple generations. Informants described the way in which traditional farming towns develop a sort of social hierarchy around longevity, and the "close knit" (c/002) core of the community in Town C was thought to be at the top.

...here there are a few families... who were the original settlers in this area... and... my experience is that... they're very well respected and ... they are probably placed quite high up on that hierarchy because they are from the original... stock ($c/003 - Town\ C$).

The impact of this social structure on levels of *social cohesion* and the experiences of residents living in this community was dynamic and fluid. Overwhelmingly, informants

indicated that established locals in the community have a rich social network of supports around them that they can draw on and feel deeply connected to. There is enormous family support and other people will rally to provide support in the face of tragedy; informants gave the example of people bringing soup to a family who had lost a child. However, while this was seen as an asset and generally something thought of as protective, informants also discussed the potential risks and challenges of this. These residents have no option of anonymity or an ability to make a change or start something a fresh. They are known and their families are known, and there is a long history associated with them in everything they do within the community. Similarly, while the extensive family support provided in this community for locals is generally a positive thing, there are noted risks in this too.

...if you're a local person you have really extensive family support so, if you're not functioning well, there's a reasonable chance that you will have family to support you. The down side of that is that if your family is a severely dysfunctional family, you never get away from them, and if you're functioning poorly, they very often exacerbate the problem (c/002 - Town C).

Contrasting with the experiences of the established locals is that of those residents living in Town C, perhaps even for many years, who are still not considered a local. It was generally reported that Town C is a friendly, warm and welcoming place to live, although pre-established social groups tend to keep to themselves, and it takes a concerted effort on behalf of newcomers if they want to become truly integrated within the social community. Having children was seen as a way for people to make local connections, as was playing sport or having a particular skill that could contribute to the community in a positive way. While these things were seen as helpful, there was a sense that in many cases they result in a

very warm, but only a surface-level of connectedness to the community, and can still leave people feeling very isolated when they truly need support.

Despite these opportunities for involvement, there was still recognition from informants that it is difficult for people to move to the town and infiltrate the established community structures. Informants spoke of many new residents finding other groups of "non-locals" within the community where they could fit in and make connections, and this was certainly seen as becoming increasingly viable as the town continues to grow and become more diversified.

3.4.2.2.4 Town D: Perceptions of social cohesion

From a broad community perspective, by most accounts the levels of *social cohesion* in Town D were thought to be low. It was observed that there is very little sense of togetherness as a community, perhaps with the exception of children, and instead the social fabric of the town consists of highly independent, highly segregated social groups commonly termed "cliques". Rather than reflecting subtle undertones of social differentiation, these cliques were reported to be overt and understood within the community, and were able to be clearly defined and identified by informants. In discussions with informants who identified themselves as part of a clique as well as those who did not, the reports were consistent in that it was reported that it is very difficult for people to break into these established groups.

... You can either fit in here or you can't... most the people who live here are all from all different walks of life, but they opt to live here... Well we're pretty, we're pretty antisocial ... It's cliquey, whatever they call cliquey (d/003 – Town D).

The perceived impact of this highly segregated social structure was very much dependent on whether people identified themselves with one of these groups or not. It was

reported that being in a clique provides people with a strong sense of belonging and social support within the community. It was even noted that these social connections sometimes play out between local businesses, with a focus on keeping business within the group.

...the cliques are very protective... even businesses for example in terms of who they refer to for other businesses, they'll refer within their own clique despite the needs of the client, the client could benefit from the skills of another professional or trades person or whoever, outside of that business circle, but they don't do it that way... they self-perpetuate their own security and they stick together, there's a strong sense of loyalty in that sense (d/001 – Town D).

For those outside of these cliques, Town D was described as being very isolating. Informants spoke of the damaging ways in which these "exclusive groups" impact on particular people on the periphery, and went as far as to call the behaviour "social bullying" (d/001). Not only does this impact on the personal lives of these residents, but as noted above, these social hierarchies play out in business too. It was understood that there have been occasions where people have been treated poorly within their place of work, but have believed themselves to be entirely without recourse, as to register a complaint would require them to report one member of a clique to another.

Similar to Towns B and C, there was a perceived divide in Town D between the newcomers and the locals. Requiring people to have lived in the town for more than thirty years, the locals in Town D are generally thought to represent the people who had moved to the town when it was very affordable, and there is a general sense that they feel a strong degree of ownership of the Town, with respect to both new residents and tourists. Again, assimilating into this core group was described as being difficult in Town D, and informants

reported that new people to the town looking to do so, essentially undertake a process of initiation.

...If you can fit in, I think you'll be accepted, but that's a part of fulfilling the role of the apprentice, you know, that of the student, that you are seen and not heard, and that you do all the stuff that they define as that passage of rights and that you don't rise above your station and that you work up the credibility to then be allowed to be heard and to be given some power, once you join the club... (d/001-Town D).

One final point of social tension which emerged during discussions with informants in Town D, was that which exists between the local residents and the seasonal tourist population. There is certainly a portion of the local population that is seen to quite happily accept the influx of tourists, as well as the local business people who benefit from their trade and use of accommodation, but for others there is reportedly considerable hostility felt toward these outsiders. There is the feeling that many of these seasonal visitors come into the town with no regard for the local population, they are reported to party late, get into fights with local residents and treat the local environment poorly, e.g., throwing rubbish out of car windows. For some residents, the tourist season is anticipated with dread of not being able to move around town easily, and even with a degree of fear for the violence that often accompanies the season.

...some people are full-on terrorists rather than tourists. So there's a real sense that the tourists are kind of misusing the space. I don't think they think all tourists are but they would feel that 'this is our place' and I guess they've just got to hibernate until this period's over and 'then I can come out'... (d/002 - Town D).

3.4.2.3 Attitudes towards mental illness

In addition to those *values and behaviours* already considered above, informants considered their impressions of the community *attitudes towards mental illness* in each of their respective towns. While particular nuances were described and variations emerged between the ways each town viewed and responded to mental illness, and mentally ill people in their community, there were a number of points of consistency raised by informants between towns which shall be considered first. For all informants, there was a general contention that mental illness remains an issue that people in general, including people in their towns, remain poorly educated about. It was thought that this lack of awareness was a driving force behind much of the ongoing stigma and prejudice around mental illness and help-seeking, again seen throughout the general population.

A further point of consensus was informants reporting that the dramatically increased coverage of mental health issues in the media has been a positive influence in increasing awareness, promoting acceptance and encouraging help-seeking. It was felt that in their own work as MHPs in these towns, they have seen a notable shift in the levels of understanding and acceptance of mental health issues, as well as an increase in people's ability and desire to ask for help and support, both from the community and from the services.

While these reports were common across all four towns, as stated, differences also existed. Informants from Town A reported that it was only around thirteen years ago, during the period of deinstitutionalisation, that two residential care units were opened in Town A to house the patients who had been discharged from a decommissioned psychiatric facility. At this time residents of the town took to the streets with placards protesting and stating that they "don't want mad people walking up and down the streets" (a/003). This was no longer seen to be a concern for residents of the town, in fact it was thought to be unlikely that people would even be aware of who was living in these units and who was not.

Informants were instead of the impression that the community had adopted an attitude that people who are unwell need help, rather than that they should "just stop being crazy". There were observed to be some people in the towns who were known to the communities and known to be unwell, and there is a general tolerance and acceptance of their unusual behaviours. While there may be some reluctance to directly approach someone who was overtly unwell, people would often make contact with local services in order to secure the appropriate support for these people.

Consistent with many of the issues discussed with informants in Town B, there were conflicting reports from these informants on the community *attitudes towards mental illness*. One informant described a sense in Town B of "oh we're still relatively untouched by all of this" (b/006), whereas others were of the opinion that there was a great deal of fear within the community around mental illness, and that this had been observed specifically in the way in which the school had responded to instances of mental ill health among students. In contrast to these reports, there were informants from Town B who conveyed the opinion that while stigma still existed around mental illness, there was also a general level of acceptance within the community.

...my next door neighbour who's got paranoid schiz [sic] and... she talks to herself... as she's going along the street and... she can be very difficult and sometimes she's not very clean and she's regarded with a little bit of amusement, she's regarded with a bit of sadness and concern, I mean there is a bit of a stigma about her, but... she's not an outcast from the wider community, she has a role, she's the lady who walks along the street talking... (b/004 – Town B).

In Town C there reportedly remains an attitude in the farming community that you don't talk about your emotions and mental health, that you remain stoic and strong, "a man's

got to be a man" (c/002). Despite lingering reluctance from some parts of the community to engage with services, factors such as the drought have brought farming mental health issues to the fore and targeted farming mental health initiatives seem to be increasing the acceptability of help-seeking in these communities. These initiatives are also reported to have raised awareness of farming-specific risks, and responses to them. "So and so's really distraught, let's make sure he doesn't have any guns in the house" (c/002).

In contrast to their farming counterparts, who are renowned for seeking help very late and only when they were very unwell, informants noted that there was far less stigma associated with help-seeking in the newer, less affluent community in the town. From a more broad community perspective, the sense from informants was that stigma around mental health issues was not generally a concern, perhaps with the exception of more severe and confronting psychotic presentations or in the case of postnatal depression, where women were thought to impose this stigma upon themselves. Similar to Towns A and B, there was an acceptance within Town C of local people who were known to be unwell, and the community was reported to look out for them.

...there's another thing that's important in rural communities, whilst there are very narrow expectations of how somebody will behave to fit in, that's also balanced by a level of acceptance of eccentric behaviour, some of which is just eccentric, it's blatantly you know psychotic, but that will be tolerated... actually on the weekend I saw the film "Lars and the Real Girl" which is about a northern, I think its Minnesota, northern US small town, where a very reclusive young man orders a blow up doll and presents her to the family and the community as a real girl and initially the community recoils in shock and horror but accommodates that... that could almost happen here, I think (c/002 – Town C).

Town D was described as maintaining a level of stigmatisation in the general community attitudes towards mental illness. Informants reported that there was still a considerable lack of awareness within the community about mental illness, and that this seemed to perpetuate a level of fear. In keeping with some of the other values and behaviours described by informants in Town D, it seems that there is still an undertone within the community that mental ill health reflects a weakness of character, and that seeking help is shameful. It was even asserted by one informant in Town D that mentally unwell people in the town should take more personal responsibility for the way their behaviour impacts on others in the community, and should not simply lay blame on others for their social exclusion.

While overt and physically violent discrimination against people was not cited as common in Town D, it was acknowledged that people would, through their body language, covertly avoid others who they knew to be mentally ill, and that these individuals would not be invited to join their cliques. There was even a sense that local GPs are generally reluctant to engage in services with mentally unwell patients. As with all the towns discussed, there were known identities within Town D who would engage in unusual behaviours, and were generally just accepted for how they were; however, it was clarified that this community response was "accepting more that supportive, if that's a different thing" (d/004).

3.4.2.4 Perceptions of crime and safety

While there were variations in informants' perceptions of local crime levels as well as their reported feelings of safety, both between and within the four towns, by and large the informants described their understanding that these towns are generally safer places to live than somewhere like Melbourne, and were typically seen to have lower crime rates.

Informants in both Towns A and C indicated that there was no real sense within the

community of a particularly dangerous youth culture, although in both towns it was noted that there were small pockets of young people who had been involved in local robberies of homes and stores. Town A was described as generally being a safe place, where parents felt comfortable for their young children to walk around, with very low instances of violence reported in the community. It was disclosed that a woman had been murdered in the town around five years ago; however, this was experienced by the community as a profound deviation from their usual expectations of safety.

Again, Town C was reported to have somewhat of a "rat bag culture" (c/003) with a segment of local young people being involved in a recent wave of petty crimes and a public drug bust which took place in the carpark of the supermarket, but they were not seen as posing any major threat to personal safety. Within an historic context, informants in Town C felt that there had been a long unspoken history of sexual and physical abuse perpetrated against women, often within their homes. For many years the town had been without a female medical practitioner and had very few supports available for these women, meaning that these crimes were typically unreported. With considerable changes to local health services and supports, it was believed that there had been a significant decrease in crimes of this sort, and they were no longer thought to pose major community threats.

Reports from informants from Towns B and D, were that there is a considerable amount of antisocial behaviour associated with the local youth culture in these towns. From a comparative perspective, Town B was thought to be at the less severe end than the surrounding towns that have notoriously high crime rates; however, there was an acknowledgement of a growing number of local social problems. Close proximity to Melbourne was highlighted as a risk factor of outsiders coming into the town and stealing or destroying property but crimes were perpetrated by local residents too. Informants reported being aware of instances of theft, vandalism, and even drink-spiking as well as a number of

assaults and general "recklessness" (b/007) resulting from binge drinking and local pub culture. Outside of youth crime, domestic violence was reported as being widely prevalent and possibly the major crime and safety issue for the community currently.

On the one hand, Town D was described as a "great place" to bring up children, and as the sort of place where people do not lock their houses or their cars, but there was a general awareness of certain aspects of the town and the community which were best avoided, particularly at specific times. Informants reported that the town sees a number of very serious assaults around the pubs during the weekends, and that the levels of assaults increase dramatically during events or the peak tourist season. By most accounts it seems that the fights occurring are between local youth and "outsiders" (d/001) rather than between locals. Opportunistic crime was also noted to be an issue for Town D, with many homes remaining empty for extended periods, there being many cases of home burglary and property damage, again which seem to increase during peak tourism times.

3.5 Conclusion

With the structural framework provided by the three constructs, *compositional*, *contextual* and *collective* factors (Judd et al., 2006; Macintyre, 1997; Macintyre et al., 2002), this Chapter has presented the findings from the analysis of interviews with MPHs in the four rural communities selected in this study. Under each of the three constructs noted above, emergent themes from the interviews were described with reference to their proposed role in influencing the mental health and wellbeing of the residents of these communities. These themes and sub-themes were illustrated by the use of de-identified quotes from informants where relevant and appropriate.

The next Chapter will address the stated aims and questions of the current study: namely whether identified themes in the current study can be conceptualised within the

framework adapted from the work of Macintyre and colleagues (Macintyre, 1997; Macintyre et al., 2002), and whether differences in perceived *compositional*, *contextual* and *collective* community factors between the four towns are able to offer an insight into the differences in the rates of suicide between them. It will discuss the way in which these findings may be interpreted and will consider the development of a theoretical framework within which the emergent themes can be understood in relation to rural mental health. Finally, Chapter Four will note some of the strengths and limitations of the current study, and propose avenues for further exploration based on the current findings.

Chapter 4: Discussion

4.1 Introduction

The previous Chapter presented an in-depth description of the findings which emerged from analysis of interview data, as detailed in Chapter Two. Using the three major constructs of the framework outlined by Macintyre and colleagues (Macintyre, 1997; Macintyre et al., 2002) as a structure for the presentation of the results, Chapter Three described the themes and sub-themes which emerged during interviews with the MPHs in this study in relation to perceived mental health and wellbeing within their respective communities. Based on analysis, the two major compositional themes identified were population make-up and demographics and mental health issues. The four major contextual themes identified were physical environment and climate, employment opportunities, availability of housing, and mental health and other services. Within the last major thematic category, four additional sub-categories were identified: (i) mental health services, (ii) other health and safety services, (iii) transport services, and (iv) youth services. In the final collective construct, analysis identified two major themes, namely identity of the town and values and behaviours. Again, the second of these categories revealed a further four subcategories: (i) community norms and values, (ii) social cohesion, (iii) attitudes towards mental illness, and (iv) perceptions of crime and safety. Each theme was supported with example quotes from the informants in this study.

In light of the research findings, this Chapter considers the stated aims and research questions of the current study; namely whether identified themes in the current study can be appropriately conceptualised within the framework adapted from Macintyre and colleagues (Macintyre, 1997; Macintyre et al., 2002), and whether differences in perceived *compositional*, *contextual* and *collective* community factors between the four towns are able

to build on our understanding of the recorded differences in rates of suicide between the four towns studied, and what the impact of "place" may be in these communities. Further to this, and in light of these questions, this Chapter progresses past the descriptive account of the research findings provided in the previous Chapter, and considers how these findings may be interpreted in a more holistic way. In accordance with the goals of Grounded Theory analysis (Glaser & Strauss, 1967; Strauss & Corbin, 1990), this Chapter proposes a theoretical framework within which the emergent themes identified can be understood in relation to rural mental health. Finally this Chapter highlights some of the limitations and strengths of the current study, and identifies areas for further exploration based on the outcomes and implications of the current research findings.

4.2 Macintyre's Framework: A Good Fit for Rural Mental Health?

As previously stated, this study employed a Grounded Theory approach to gathering information on factors perceived by rural MHPs to be important to the mental health and wellbeing of local residents in the four rural Victorian towns which were selected.

Accordingly, the first aim of this study was to use this information to evaluate whether these identified factors could be appropriately conceptualised within the framework provided by Macintyre and colleagues for geographic variations in health (Macintyre, 1997; Macintyre et al., 2002), and adapted by Judd et al. (2006a) to be specific to geographic variations in suicide. Given the limited theoretical and empirical research using this framework in the context of rural mental health, rather than using it to pre-define factors thought likely to impact on mental health and wellbeing in these communities, it was important to provide scope within the research design for new or previously unidentified aspects to emerge, and then consider whether the model could accommodate them. Essentially, the intention was to

assess the "real world" applicability of the constructs in this model in capturing factors perceived as important for rural mental health.

In the absence of pre-determined categories, the themes which emerged in the current study were largely consistent with the factors which have been proposed in the existing framework; both in relation to general physical and mental health and also specifically to suicide (Judd et al., 2006a; Macintyre, 1997; Macintyre et al., 2002). Analysis of the information gathered from informants in the current study did not identify any novel categories of factors thought to be important for rural mental health and wellbeing in the four rural communities studied, outside of those already proposed. Given this, it was unsurprising then that variables identified in the current study were able to be mapped under the broad constructs of *compositional*, *contextual*, and *collective*, factors. It seemed then, at least in a preliminary and fairly rudimentary sense, the identified factors from this study could be successfully conceptualised within the frameworks proposed by Macintyre and colleagues (Macintyre, 1997; Macintyre et al., 2002) and Judd et al. (2006a).

With all of the factors identified in the current study accounted for by the existing theoretical model, attention was then given to whether there were any gaps in the themes emerging from this research; when compared with the existing propositions. An interesting observation was that informants in this study did not specifically identify individual *ethnicity* (*migrant or indigenous*) or *familiarity with firearms* as factors impacting on mental health and wellbeing in their communities, as had been proposed by Judd et al. (2006a) in relation to suicide. In considering possible explanations for this absence, it is important to recognise the particular context of this research setting. All four towns were described by informants as being very limited with respect to cultural diversity. Informants across the four towns, including Town B, which housed an international training facility, described the population of their town as being very much a white, Anglo-Saxon demographic. The result of this may

be that MPHs in the four towns selected have less exposure to ethnically diverse groups, and as such are less inclined to associate this individual-level factor with mental health and wellbeing.

The lack of emphasis by informants in the current study on the importance of familiarity with firearms also warrants some comment. The first point that must be acknowledged is that while elevated rates of suicide in rural areas were the impetus and context for the current study, the focus of informant interviews was on factors perceived to influence mental health and wellbeing in rural communities, rather than suicide *per se*. The second point to note, is that while firearm suicide is generally higher in rural areas (Dudley et al., 1998a, b; Page & Fragar, 2002), it is also more commonly associated with farmers or those employed in the agricultural sector (Klieve, Sveticic, & De Leo, 2009; Sarma & Kola, 2010; Skegg et al., 2010). Of the four towns included in this study, the only one which would be considered to have an active farming community would be Town C, and it was noted by one informant in Town C that residents are becoming increasing cognisant of farming-specific risks, including access to firearms. As such, the finding that familiarity with firearms was not a major theme identified in the current study, may be indicative of the fact that three of the four rural towns sampled were not farming communities, and reinforces the importance of recognising the heterogeneity that exists within "rural Victoria".

The framework outlined by Macintyre and colleagues (Macintyre, 1997; Macintyre et al., 2002) was able to provide an adequate structure for conceptualising the major themes identified in the current study, and these themes were discussed in the previous Chapter in the context of each of the three constructs independently. Notwithstanding this, the dynamic relationship between these constructs in the context of rural mental health must be stressed. Thematic analysis revealed a considerable degree of overlap between these three constructs (as shown in Appendix H), with many major themes identified in the current study being

conceptually a potentially good fit with two or more constructs. The interdependence of these constructs was considered in the original proposition of the model (Macintyre et al., 1993), and both Macintyre et al. (2002) and others have recognised this overlap (Judd et al., 2006a) and have questioned the practical utility in separating the three constructs (Aiach & Baumann, 2011). Based on the findings of the current study, it is argued that, at least conceptually, the three constructs do seem to represent three different aspects of the impact of "place" on health, but that the dynamic relationship between constructs is two-fold; firstly, different factors within each construct impact in different, even opposite, ways on different people depending on their individual characteristics or circumstances, and secondly, changes within one construct, over time, can create changes in the remaining two, and as such these are not static constructs.

To illustrate the first point, Town B was described as having a very good private school, sporting and equestrian grounds (contextual). This was thought likely to be a positive feature for the mental health and wellbeing of more affluent and athletic young people (compositional), but isolating and exclusive for less affluent or less sports-oriented young people (compositional). Thus the same contextual factor could be either protective or detrimental for mental health and wellbeing, depending on the compositional factors of the individual. Similarly, it difficult to talk about the number of unemployed people within a town (compositional) without giving consideration to the levels of available employment within the town (contextual), or accessible transportation (contextual) to access employment outside of town. Demonstrating the second way in which the three constructs are dynamic, in Town D, a marked increase in affluent residents moving to the area (compositional), has resulted in a dramatic increase in the demand for and therefore price of housing (contextual). Again, in Town C, the impact of climatic features which have resulted in prolonged drought (contextual), have seen the community rally to support one another, and increased the overall

sense of social connectedness (collective). In fact, in all four towns there was a sense that the changes in the demographics of the local population (compositional), were leading to changes in both infrastructure and employment opportunities in the town (contextual), as well as the overall level of social cohesion between residents (collective). Thus, while it is agreed that the impact of each of these three levels of explanation can only be understood in a relational way between them, failure to consider them as distinct parts of a larger puzzle loses important information about the pathways through which "place" may impact on mental health and wellbeing, and possible target points for mental health initiatives.

Having considered the utility of this framework in the context of the current study, it is important to recognise that while the three constructs outlined by Macintyre's model; compositional, contextual, and collective, do appear to provide an adequate framework within which factors perceived to be important for mental health and wellbeing in rural communities can be categorised, this framework is not, in and of itself, fully explanatory. For example, as previously indicated by Macintyre and colleagues (Macintyre et al., 1993), stating that employment opportunities or social cohesion are important for mental health and wellbeing in rural communities does not provide an explanation as to why or how this factor has its effect, and does not predict or explain geographic variability in mental health and wellbeing per se. It is important to look at the dynamic way in which the variables within each construct interact within rural communities, and whether, in this dynamic sense, they are able to account for the variations in mental health and ultimately, contribute to an understanding of differences in rates of suicide between them.

4.3 Understanding the Difference: Compositional, Contextual and Collective Factors

As discussed, the framework provided appeared to offer a means for conceptualising and categorising the factors identified by informants in the current study as potentially

important for mental health and wellbeing in rural communities. the second aim of this study was to consider whether there were patterns of variation between the four towns selected in *compositional*, *contextual*, and *collective* factors, which provided some insight into possible differences in the mental health and wellbeing of residents in these communities, and ultimately why the rates of suicide were "high" in Towns B and D and "low" in Towns A and C. With full recognition of the dynamic relationship between these constructs, in order to remain consistent with the discussions to this point, and to provide a coherent structure, this section explores the explanatory contribution of each of the three constructs separately.

4.3.1 Compositional factors

Given the extensive body of literature suggesting an inverse relationship between socio-economic disadvantage, and mental ill-health and/or suicide (Brenner, 1979; Burnley, 1995; Cantor & Slater, 1997; Cantor et al., 1995; Gunnell et al., 1995; Neumayer, 2003; Li et al., 2011; Pirkis et al., 2000; Wainwright & Surtees, 2004), it seemed plausible to consider that differences in the socio-demographic profiles between the four towns may be related to disparate mental health outcomes. It is of note that in this study, the observed differences in these socio-economic variables (Table 2) did not appear to provide an explanation for differences in the recorded rates of suicide for these towns. Town B, which was classified in this study as having a "high" rate of suicide, had the greatest proportion of household incomes in the highest quartile, the lowest proportion of household incomes in the lowest rates of unemployment. Similarly, Town D, also classified as having a "high" suicide rate, had the greatest proportion of fully owned private homes of the four towns, but shared the equal highest levels of employment with Town C, which was classified here as having a "low" suicide rate.

These findings are consistent with previous research demonstrating elevated rates of suicide in rural areas after controlling for individual socio-demographic status (Morrell et al., 1999; Page et al., 2007). However, in considering these apparent inconsistencies, it is important to re-visit the previously discussed limitations of statistical population data in capturing the lived experience of the individual (Macintyre et al., 2002). According to the informants, all of the towns considered in this study comprised differing socio-economic subgroups within their population. Given this, providing aggregate data relating to socio-economic standing not only fails to account for this variation, but could actually misrepresent the socio-economic situations represented in the town altogether.

A point that warrants consideration in light of these reported population sub-groups, is the considerable body of literature which suggests that, independent of the sociodemographic level of the individual or the area, the impact of income inequality and relative deprivation within a community is associated with poorer physical and mental health and wellbeing (Layte, 2011; Pickett, James, & Wilkinson, 2006; Weich & Lewis, 1998; Wilkinson & Pickett, 2007). In informants' accounts of their perceptions of the demographic changes in their respective towns, they consistently referred to a shift from the "old world" to the "new world" with respect to socio-economic status of residents. This raises the question as to the potential role of income inequality (rather than individual income) within the four towns in this study, and the impact of this on mental health outcomes. This issue also serves to highlight the highly dynamic and interrelated nature of the three conceptual constructs in Macintyre and colleagues (Macintyre, 1997; Macintyre et al., 2002) model; these different sub-groups represent differences in the *compositional* features of the towns, the income inequality between them is a *contextual* feature of the area, and the way in which this disparity is thought to impact on mental health, is through its impact on the levels of social

integration and cohesion (Layte, 2011), which describe a *collective* attribute of the town in question, and as such will be explored further, later in this section.

Finally, in relation to *compositional* factors, as discussed in Chapter One, the relationship between mental illness (Brent et al., 1996; Conwell et al., 2002; Henriksson et al., 1993; Shaffer et al., 1996; Vajda & Steinbeck, 2000; Valentiner et al., 2002), substance abuse (Fleischmann et al., 2005; Thompson et al., 2005; Rossow & Amundsen, 1995) and suicidal behaviour is well established. In the four towns included in the current study, informants were consistent in their perceptions that the prevalence of serious mental health issues appeared higher among the lower socio-demographic sections of the population, and informants in all four towns reported high levels of alcohol use, particularly among young people, as well as issues with illicit drugs in their respective towns. The commonality between these accounts of mental ill health and substance abuse across the four towns provided little insight into possible explanations for the differences in rates of suicide. There was, however, one notable point of difference between the towns which is particularly relevant in the context of the current study. Informants from both Towns A and C, which were classified as having "low" rates of suicide at the time of the current study, reported that suicide rates had historically been high in these towns. It was because of this that a number of initiatives were undertaken in order to improve community services (contextual) and raise awareness of mental health issues within the community (collective), which, as will be discussed in turn, may contribute to an understanding of why these patterns are now reversed.

When viewed as static issues the *compositional* factors identified by informants, and supplemented by government population and area data, did not appear to diverge in consistent patterns that could account for the different rates of suicide recorded across the four towns in this current study. What did become apparent was that these factors are dynamic and changing, and are engaged in an interactive relationship with factors at both the

contextual and collective level, which may be important for mental health outcomes and suicide rates in each of the four towns considered.

4.3.2 Contextual factors

As discussed in relation to the *compositional* make-up of each town, the populations of the four towns in the current study appeared to be changing. Research has indicated that, outside of individual level socio-economic disadvantage, living in an area with a declining population independently and negatively impacts on mental health and wellbeing (Fraser et al., 2005). Seemingly in contrast to this, Towns B and D (both with "high" rates of suicide) had the highest rates of population growth of the four towns, and the only town in the current study experiencing a decline in population was Town C, which was classified as having a "low" rate of suicide. Consistent with the study by Fraser et al. (2005), informants' accounts of the changing populations of the towns included in this study suggested that there was not a homogeneous shift in the socio-demographic profile of the towns; however, the pattern of population change between the four towns still does little to account for observed differences in rates of suicide. While Towns A and B reported an increase in lower socio-demographic population cohorts (generally associated with poorer mental health outcomes), Town D's population growth was attributed by informants to an increase in highly affluent residents.

Understanding this apparent anomaly in Town D directs attention to research on the complex and multifaceted impact of population growth in rural communities on both contextual and collective features of these towns. At a contextual level, the influx of a higher socio-demographic group of people to rural areas is associated with the creation of a range of opportunities for the local community, through the demand for new and increased service infrastructure, changing requirements for land use, increased expenditure within the local economy, and the generation of employment opportunities in local industry and housing

development (Paquette & Domon, 2003; Stockdale, Findlay, & Short, 2000). While this has positive effects on the local economy, it can also impact on established residents by reducing the availability and increasing the price of housing, with locals losing out to more affluent newcomers in their bid to purchase real estate (Jones & Tonts, 2003; Stockdale et al., 2000). This was highlighted by informants in Town D as a major issue for mental health and wellbeing. This contrasts with changes in Town B, with increased housing affordability and an influx of people from lower socio-economic backgrounds, and suggests the relationship between population change, housing affordability and mental health outcomes in rural communities is complex, and not accounted for by single explanatory mechanisms.

In a similar fashion, the somewhat interrelated *compositional* and *contextual* patterns of availability, accessibility and type of employment did not appear to differentiate between the four towns in the current study. As discussed in Chapter One, the association between suicide and farming or agricultural work has been well documented (Andersen et al., 2010; Browning et al, 2008; Das, 2011; Page & Fragar, 2002), yet Town C (classified as having a "low" suicide rate) was the only one of the four towns described as maintaining an active farming industry. Again, commuting for work has been associated with negative effects on both physical and psychological wellbeing (Novaco, Kliewer, & Broquet, 1991; Stokels, Pelltier, & Fielding, 1996), and this was described by informants as a common feature in both Town A ("low" suicide rate) and Town B ("high" suicide rate). Again the findings from the current study suggest the impact of these features of rural towns on the mental health and wellbeing of residents is not a simple or linear relationship.

Two further *contextual* factors raised by informants as being important to mental health and wellbeing which, again, did not seem to vary in an explanatory way between the four towns in this study, were the physical environment and climate, and the availability of youth services. With regard to the former, consistent with literature attesting to the physical

and mental health benefits of contact with the natural environment and the physical beauty of one's surrounds (Maller, Townsend, Pryor, Brown, & St Leger, 2006; Wainer & Chesters, 2000), the country or coastal landscape was cited as promoting wellbeing by informants in Towns A and D particularly, while in contrast, the weather and climate in Town B was consistently described as a negative feature of the town and as being thought to be detrimental for the mental health of some residents. In relation to youth services, while some variation was apparent, informants from all towns spoke of the difficulty in providing for young people, especially adolescents, in a small rural town. Outside of sporting activities, informants reported that there was little for young people to do in all four towns, and suggested that this was likely to increase leisure boredom, which has been directly and indirectly associated with various aspects of self-esteem, satisfaction with life and deviant behaviour (Gordon & Caltabiano, 1996; Iso-Ahola & Wiessinger, 1987; 1990).

Where *contextual* factors in the current study did seem to differentiate between the towns classified as having a "high" suicide rate and those classified as having "low" in the current study, was in the provision of mental health, general health, safety, and transport services. The availability and accessibility of services in rural areas is an issue that has received considerable attention in the research literature on rural mental health (Aisbett et al., 2007; Caldwell et al., 2004b; Fiske et al., 2005; Judd, 2006d; Murray et al., 2004; 2005; Nicholson, 2008; Paslow & Jorm, 2000), and was discussed in detail in Chapter One. Consistent with this, informants in all four towns indicated that they felt this was fundamental to the mental health and wellbeing of local residents, though the towns differed in their actual level of service provision. As mentioned earlier in this Chapter, Towns A and C both implemented focussed mental health initiatives in response to their historically high rates of youth and farmer suicide respectively. Further to these targeted activities, informants in these towns reported that local private and public mental health services were accessible and of a

high standard, as were the local GPs in managing mental health issues. This contrasted with informant accounts of mental health services in Towns B and D. While both towns offered private psychological services, albeit very limited in Town D, public services were described as being very difficult to access, poorly advertised, or as having prohibitive delays for acute services.

In addition to specific mental health services, informants noted that having ready access to health and safety services provided residents with a sense of comfort in knowing that timely assistance was available if needed. As with mental health services, informants from Towns A and C provided a much more favourable account of the local health and safety services than did those from Towns B and D. While generally described as providing greater availability and accessibility of quality allied health and safety services, a particularly notable point of difference for Towns A and C was the level of service integration reported by informants, with excellent communication between psychiatric, medical and police service departments. Service integration has been identified as an issue of particular importance for rural mental health in communities contending with the challenges of limited services (Bird, Lambert, Hartley, Beeson, & Coburn, 1998; Gale, Shaw, Hartley, & Loux, 2010; Smalley et al., 2010), and this was a perceived weakness of the service provision within Towns B and D according to informants. Further to this, informants in Town D also commented on recent closure of the local hospital, as well as the inadequate scalability of both health and police services to the seasonal influx of tourists, leaving the town even more poorly serviced in general and during peak tourist seasons.

Finally, accessible public transport in rural communities has been identified both in the literature and also by informants in the current study, as playing an important role in the mental health and wellbeing of residents through providing accessibility to services (Aisbett et al., 2007; Green & McDonald, 1996; Human & Wasem, 1991), as well as access to leisure

activities (Gordon & Caltabiano, 1996), particularly for adolescents. Informants reflected that, for many residents, public transport represents a sense of freedom and a reduction in the sense of isolation associated with living in a small rural town. Both Towns A and C were reported to have central train stations which provided easy access to Melbourne, and also to neighbouring towns in the case of Town C. Contrasting this, public transport in Towns B and D were reported to be both limited and difficult to access. This was an important *contextual* factor which may contribute to the understanding of differential mental health outcomes between the four towns considered in this study.

Numerous *contextual* factors were identified by informants in the current study as being important for mental health and wellbeing, although not all of these factors showed explanatory patterns of differentiation as a function of whether towns were classified as having "high" or "low" rates of suicide. Reported and documented population change, as well as reported employment opportunities, availability of housing, features of the physical environment and the provision of youth services, did little to account for the differences in suicide rates between the four towns. In contrast to this, the "high" and "low" suicide rate towns were clearly set apart by their provision of mental health services, other health and safety services and public transport services. Though these selected *contextual* factors appeared to be important for mental health and wellbeing in their own right in the context of this study, it was also observed that the importance of these factors lay in how they interacted with, and impacted on, *collective* factors within each of these communities.

4.3.3 Collective factors

Somewhat in contrast to the *compositional* and *contextual* constructs discussed above, in the current study informants' descriptions of *collective* community factors were generally consistent in differentiating in expected ways between "high" and "low" suicide rate towns.

All four towns were described as having long and rich economic and social histories, which in many instances were still evident in their architecture and cultural activities, and all four towns described an ongoing change from the "old world" to the "new world". Despite these similarities, there were important differences in the descriptions of the *collective* factors in the four towns which appear to provide an insight into the possible impact of these four "places" on the mental health of residents. This noted, in many instances informants articulated the "double edged sword" nature of these factors, and as such, it is important to consider these in conjunction with factors relating to each individual.

Informants from all four towns in the current study described the towns as having fairly conservative and traditional community values. The presence of pseudo-prescriptive social codes was identified, and in keeping with the research literature, it was noted that this can at times create challenges for both new and old residents in negotiating social norms, and maintaining a sense of freedom or autonomy (Harvey, 2007; Nicholson, 2008). Interestingly, the traditional "rural values" of stoicism and self-reliance (Alston, 2010; Elliott-Schmidt & Strong, 1997; Fuller et al., 2000; Judd et al., 2006b) were described most prominently by informants in Town C ("low" suicide rate) and Town D ("high" suicide rate). What was apparent, however, was that for Town C, discussion of these values seemed to reflect an emphasis on the strength and functionality in stoicism (Alston, 2010), the ability to "carry on" in the face of adversity. In contrast, the emphasis of informants in Town D when discussing the value of stoicism, was predominantly directed towards the intolerance of weakness. It seemed, in the current study, that the impact of agrarian values on mental health and wellbeing was shaped by the context in which these values were articulated, as well as their inter-relationships with other community factors.

Where the four towns in the current study diverged again, was on the value placed on community, which is often thought to characterise rural areas (Gething, 1997; Weinert &

Long, 1987). Both Towns A and C were described by informants as having a very strong sense of community, and seeing involvement with community activity or action as something of considerable importance. This was not to say that these towns did not have social hierarchies or divisions, but above and beyond these was the sense of the value in the town and the community as a whole. Informants also noted that the shared experience of natural disasters such as bushfire and drought had further strengthened this collective sense of community in these towns, a finding which is consistent with those of other studies (Sartore et al., 2008). The value in community for these towns was contrasted with Towns B and D. Informants in these towns also described social groups and hierarchies, but unlike Towns A and C, there was little in the way of an overarching sense of the community as a whole. There was certainly value placed on particular features of these towns, such as the heritage buildings in Town A, or the protection of the environment in Town D, but the community itself did not seem to be viewed with the same degree of consideration reported in the other towns, and this was also found to be reflected in the level of social cohesion reported between these four communities.

As evidenced by the results presented in Chapter Three, the social dynamics in each of the four communities in the current study were reported to be complex, intricate and varied. However, even in the face of this complexity, there appeared to be important aspects which build on the understanding of the different mental health outcomes of the four towns. The mental health benefits of a strong sense of community and good social support networks are well documented (Berry & Walsh, 2010; Chavis & Newbrough, 1986; Stain et al., 2008), but so too are the risks that they can be exclusive and isolating (Gething, 1997; Nicholson, 2008). As already discussed, the changing *compositional* make up of these rural communities was reported to be creating somewhat of an "old" versus "new" social divide, although there

were important differences in how this was thought to impact on mental health and wellbeing in each town, as a function of the way this was managed or conceptualised.

For all towns except Town A, there was a sense that being a local took many years or even generations of living in the town; where the towns differed was in the reported experience of what it meant to be a "non-local", and how this impacted on mental health and wellbeing. Informants in Towns B and D (both "high" suicide) reported that general levels of social cohesion within these communities were low. Established social hierarchies or "cliques" were well defined and exclusive, and while providing high levels of support for those in one of these established groups, they were thought to be extremely poorly integrated within the community as a whole, and overtly isolating for "outsiders".

It was particularly interesting in the context of the current study, that informants from Towns A and C (both "low" suicide rates) also described social hierarchies and groups which are difficult to "break in" to, however there was a sense that these groups are more integrated into the community and, on the whole, these towns were thought to be welcoming of newcomers. An important distinction was made in reference to Town C, that there is a difference between being welcomed and being a local. While it was recognised that being a non-local in this community may result in more difficulty infiltrating the social fabric at a very deep level, this social standing did not seem to carry the same degree of negative connotation observed in Towns B and D. It appeared that for these towns, there was a greater sense of threat among "old" residents that this change may undermine the culture and way of life that they value as part of their town (Curry et al., 2001; Jones & Tonts, 2003). In the context of the current study, it seemed that an overall sense of community impacted on levels of social cohesion and community integration in a way that was protective of the mental health of residents, even in the face of defined social hierarchies. The absence of this sense of community appeared to result in deeply negative impacts of these exclusive social groups for

those outside them. This finding provides important information about the mechanisms by which these "places" impact on mental health and wellbeing.

As with both community values and levels of social cohesion, the observed variation in reported community attitudes towards mental illness between the four towns in this study provided further insight into possible factors contributing to their differing rates of suicide. Informants in all towns indicated that they felt that mental illness remains a poorly understood and stigmatised phenomenon in general, as well as in their respective towns. The investment in mental health by both professionals and community groups in Towns A and C not only saw increased local services (contextual), but was reported to also have been influential in changing community attitudes, raising awareness of mental illness and mental health issues, including the specific risks associated with rural communities, and increasing help-seeking. These communities had proactive attitudes toward promoting mental health, and had worked to actively increase the visibility of this issue within these communities. They were described as supportive and inclusive, noting that community members will seek help from services for local residents they know to be unwell.

Contrasting with this, informants in Town B identified the community as being relatively ignorant about mental health issues, and both Towns B and D were described as viewing mental illness in the typically "rural way" (Fuller et al., 2000; Jones et al., in press; Komiti et al., 2006), i.e., with fear, stigma, and shame, and while local "identities" were reportedly accepted, they were not supported by the community. Further to these reports, the language used by the MHPs themselves during interviews in these towns spoke to a more prejudiced view of mental illness. One MHP in Town B described a local resident as having "paranoid schiz", and a MHP in Town D asserted that people with mental health issues should take more responsibility for their social isolation, raising the question of the impact of these prejudiced and somewhat victim-blaming attitudes of mental health professionals on the

members of the local community (Jorm, Korten, Jacomb, Christensen, & Henderson, 1999). The profound differences in community attitudes towards mental illness between those towns classified as having "high" and those as having "low" rates of suicide in the current study, indicate that this is an important *collective* factor in rural communities, which may have serious implications on the mental health and wellbeing of the residents of these communities.

The final *collective* factor identified by informants in this study, which again diverged in expected ways between the four rural communities in this study, was the perceived levels of crime and safety in each town. While informants from Towns A and C ("low" suicide rate) indicated that there was very little crime or fear for personal safety, Towns B and D ("high" suicide rate) were reported to have considerable antisocial youth behaviour, and serious assaults in the case of Town D. This point reiterates the complex and dynamic relationship between each of the three major constructs discussed. There are many ways in which the directional relationship between these perceived levels of crime, and mental health outcomes could take shape, involving all three of the major constructs discussed throughout this Chapter. With this acknowledged, all of the *collective* factors identified by informants in the current study as being important for mental health and wellbeing seemed to provide explanatory patterns of differentiation associated with whether towns were classified as having "high" or "low" rates of suicide. These findings suggest that mental health and wellbeing in rural communities is impacted by the sense of community, levels of social cohesion and integration, community attitudes towards mental illness and mental health, and perceptions of local crime and safety, and that this impact varies as a function of the interrelationships of variables at both the *compositional* and *contextual* levels.

Within the four rural towns included in this study, patterns of variation in both contextual and collective community variables did provide insight into possible differences in

the mental health and wellbeing of residents in these communities, and contributed important information towards developing an understanding of differences in their rates of suicide. When considered in isolation, *compositional* variables identified by informants did not account for differential mental health outcomes between the four towns; however, it was evident that these constructs are highly dynamic in their nature, and the impact of *contextual* and *collective* community variables will probably vary as a function of individual characteristics. These findings also contribute qualitative support to the growing literature demonstrating that "place" has an impact on peoples' physical and mental health and wellbeing that is independent of their individual socio-demographic profile (Morrell et al., 1999; Page et al., 2007; Pickett & Perl, 2001). These observed patterns also further the contention that, while substantial overlap and inter-relationship exists between the *compositional*, *contextual* and *collective* constructs, the failure to consider them as related but distinct would remove the capacity to understand the multi-directional way in which they impact on each other, which could be invaluable in consideration of mental health promotion and/or intervention.

Having considered the research aims and questions of this study, it has been argued in this Chapter that, in the current context, the model proposed by Macintyre and colleagues (Macintyre, 1997; Macintyre et al., 2002) provides a framework within which variables relating to mental health in rural communities can be conceptualised, and that many of these variables provide relevant insight into observed variations in mental health outcomes, as indicated by rates of suicide across the four towns included in the current study. With this as the foundation, the next stage is to propose a broader theoretical framework which facilitates an understanding of the mechanisms by which these constructs shape peoples' mental health experience as a function of their "place".

4.4 An Emerging Theory: Putting the Pieces Together

As discussed in Chapter Two, a Grounded Theory approach is often employed by qualitative researchers in instances where current theory to explain a particular phenomenon is either lacking or deemed to be of little practical utility (Martin & Turner, 1986), as is arguably the case for rural mental health, wellbeing and suicide (Fraser et al., 2002). Given this, the ultimate goal of research using a Grounded Theory approach is the generation of a theoretical account of the phenomenon of interest, which is closely linked to, and inductively derived from, the data collected during the research process (Glaser & Strauss, 1967; Strauss & Corbin, 1990). Grounded Theory research seeks to create a "story line", whereby a central and overarching concept is identified as the fundamental theoretical explanation for what has been observed, and other thematic categories are placed in a relational way along this story line (Strauss & Corbin 1990). Having articulated the major thematic categories in the previous Chapter, this section now considers a possible story line.

In seeking to build a theoretical account of the ways in which *compositional*, *contextual* and *collective* factors impact on mental health in rural communities, inconsistency and lack of explanatory contribution can be as informative as their opposites. In this study, these inconsistencies, coupled with the dynamic and fluid relationships between categories and sub-categories, all indicated that these factors do not independently impact on mental health and wellbeing *per se*, but do so through some underlying mechanism(s). Based on analysis of, and reflection on, the data obtained in the current study, it is proposed that the underlying mechanism shaping mental health outcomes in rural communities is connectedness, and that the impact of "place" on mental health is fundamentally exerted through the influence of identified factors which build on or impede one's overall level of connectedness. It is beyond the scope of the current discussion to consider the entire body of literature on connectedness, however this section highlights some of the consistent findings in

relation to connectedness and mental health and considers some of the inconsistencies and challenges in the way the concept is defined. Finally, this section moves to exploring the role of connectedness as the theoretical framework within which the current findings regarding variations in rural mental health across the four sample towns can be understood.

The body of theoretical and empirical literature on the concept of connectedness is both complicated and extensive; however, reviews of the research findings suggest strong evidence for a consistent relationship between higher levels of connectedness and more positive mental health outcomes and increased psychological wellbeing (Berry & Shipley, 2009; Townsend & McWhirter, 2005). As previously mentioned in Chapter One, connectedness has been associated with both a decreased risk of suicide (De Leo et al., 2002; Motto & Bostrom, 2001), and a decreased risk of suicide attempt in young people (Borowsky et al., 1999; Nisbet, 1996). Levels of connectedness among adults have been positively associated with levels of mental health (Gething, 1997; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000; Scott & Roberto, 1987; Wainer & Chesters, 2000), as well as reduced anxiety and greater self-esteem in women (Lee & Robins, 1998). Further to this, connectedness at both a personal and school level has been associated with more positive outcomes for adolescents with respect to substance abuse, mental health and wellbeing, and academic performance (Bond et al., 2007; McLaughlin & Clark, 2010).

Despite the consistency of the research findings on connectedness and mental health outcomes, there is very little consistency in the way in which connectedness is conceptualised, operationalised, and measured in this body of literature. The importance of this definition is in how it articulates what the likely antecedents, impediments and outcomes of connectedness may be, as it is through understanding these that the impact of "place" on connectedness may be better understood. In arguing for the conceptual distinction between connectedness and belonging, Crisp (2010) defines connectedness as

...relating more to participation in societal organisations or social networks... it is possible to be connected but not feel any of the emotional attachment which is associated with belonging... [it can be increased by] increasing the numbers of people they know and/or the number of organisations with which they meaningfully relate (pp. 124-125).

While this definition lends itself to being more easily operationalised and therefore measured, it does not encapsulate the intricate and multidimensional nature of this construct. It fails to account for the dynamic interplay between self and other, the aspect of what has been termed "connectedness to the self", the enduring impact of established patterns of connectedness, its spiritual aspects, or the broader psycho-social and emotional aspects of connectedness, which have all been described by both theorists and researchers in this field (Hill, 2006; Pesut, 2003; Townsend & McWhirter, 2005). All of these dimensions of connectedness are important for understanding the role of "place" in mental health within rural communities, and as such a more comprehensive account is required. In describing the construct of connectedness as well as the way in which it is formed, Lee and Robins (1998) provided the following definition:

...social experiences are gradually organized into cognitive representations of the self-in-relation-to other. Social connectedness reflects this internal sense of belonging and is defined as the subjective awareness of being in close relationship with the social world. The experience of interpersonal closeness in the social world includes proximal and distal relationships with family, friends, peers, acquaintances, strangers, community, and society (p. 338).

This is a dynamic construct which develops and evolves over time in a relational way with multiple internal and external experiences of the individual (Hill, 2006). Connectedness promotes mental health and wellbeing, and is important in the development of a sense of self, which is understood in an interconnected way with the psychosocial environment in which one is engaged. What is also important to recognise, is that by virtue of the way in which connectedness interacts with individual factors relating to socio-demographics, such as culture and gender, each individual will vary in both their need for connectedness, and the avenues by which they attain it (Townsend & McWhirter, 2005). With this conceptualisation of connectedness articulated, this section now considers how this construct may provide a theoretical account of the dynamic way in which variations in *compositional*, *contextual*, and *collective* factors between the rural communities in the current study contribute to differential mental health outcomes and rates of suicide.

As has been discussed throughout this paper, the *compositional* make up of a town is derived from large numbers of individuals who are likely to differ on numerous personality (Beck et al., 1990; Brezo et al., 2006; Kingsbury et al., 1999; Martin et al., 2005; O'Boyle & Brandon, 1998) and socio-demographic factors (Brenner, 1979; Burnley, 1995; Cantor & Slater, 1997; Cantor et al., 1995; Gunnell et al., 1995; Neumayer, 2003; Li et al., 2011; Pirkis et al., 2000; Wainwright & Surtees, 2004), which have been associated with differential mental health outcomes. Within this proposed theoretical framework, it is contended that these individual variables are important determinants in creating individual differences in both the need or desire for social connectedness, as well as the skills and ability necessary to attain it. In relation to the former, being of non-western cultural and ethnic background (Daneshpour, 1998) as well as being female (Lang-Takac & Osterweil, 1992), have been associated with an increased desire for social connectedness, and thus greater psychological discomfort in its absence.

Having the skills to develop connectedness is also a *compositional* factor which will vary between individuals. Social connectedness is a dynamic process which, on the one hand, develops as a product of people's cultural and social experiences, and on the other, serves to shape subsequent experiences through the creation of an internalised worldview of ones' place in relation to the social world (Hill, 2006; Pesut, 2003). It has been found that having high levels of self-reported social connectedness is associated with a greater capacity to seek out and engage in further opportunities for social relationships, which in turn strengthens this sense of connectedness. In contrast, a low sense of connectedness is associated with more difficulty in engaging in opportunities for social contact, again furthering the lack of connectedness (Lee & Robins, 1998). In the context of rural mental health, and specifically the impact of "place" within the framework outlined by Macintyre and colleagues (Macintyre, 1997; Macintyre et al., 2002), it is suggested that pre-existing difference in individual levels of sense of connectedness form an important feature of the *compositional* make-up of a town. The impact of contextual and collective level variables on mental health and wellbeing, will result from dynamic interaction between these individual characteristics, and specific features of "place"; with certain aspects being more important for some people than others.

Within this theoretical framework, *contextual* features of a town can be understood as the real or perceived infrastructure through which people can access, or feel a sense of, connectedness. As highlighted above, the specific infrastructure that people need in order to feel connected is likely to vary as a function of their individual characteristics and circumstances, and as such the impact of "place" on mental health will vary for different people in different places. A connection to nature and the "land" has been associated with increased wellbeing (Mayer & Frantz, 2004; Wainer & Chesters, 2000), and is a fundamental aspect of the sense of connectedness for some individuals and cultures (Hill, 2006). The

ability to "put down roots" in terms of having a secure home is an extremely important part of one's sense of connectedness and identity (Copeland & Young, 2007; Hulse & Saugeres, 2008; Singleton & McKenzie, 2008), and as such, the availability and affordability of housing within an area will impact differently on individual connectedness, and therefore mental health, in relation to socioeconomic circumstances.

In addition to housing, local infrastructure which facilitates opportunities for social contact and interaction, such as recreational and leisure areas, is thought to increase levels of connectedness (Copeland & Young, 2007), particularly for individuals who desire and are able to engage in these opportunities. Finally, transport infrastructure is paramount in that it facilitates connectedness through providing a means of accessing services and social activities, and again will hold relative importance as a function of individual needs and circumstances (Poole, 1997; Raje, 2007; Wainer & Chesters, 2000). Transportation also highlights the significance of perceptions in creating as sense of connectedness. Specifically within the current study, informants reflected on the importance of accessible public transport as well as accessible health and other services, not only in their actual functional utility, but in providing residents with a psychological sense of comfort and freedom in knowing that they were not isolated (due to available transport) and that help was available (through health services), should they choose to utilise these *contextual* features of their town; this is likely to again contribute to an overall sense of connectedness (and hence wellbeing) for these residents.

Of the three constructs outlined by Macintyre and colleagues (Macintyre, 1997; Macintyre et al., 2002), the impact of *collective* factors on mental health and wellbeing through their effect of sense of connectedness probably has the strongest face validity. This aligns with the findings of the current study, that perceived differences in the *collective* features of the four rural towns were the most consistent in differentiating between those

towns classified as having "high" rates of suicide and those as having "low" rates. As previously discussed, social capital, social support and social cohesion have all been linked to better mental health outcomes (Berry & Walsh, 2010; Nicholson, 2008; Smith et al., 2008); although not always in consistent ways for all people or groups (Stain et al., 2008). While these constructs relate strongly to connectedness, they are distinct from it, and within this proposed theoretical framework, it is anticipated that these community factors will impact on connectedness in complex ways. For instance, it has been noted that social capital is able to be self-reinforcing when it serves to increase the levels of connectedness within a community or group (Pretty & Ward, 2001). In this way, rural communities which facilitate involvement in common activities among residents are likely to be able to build on levels of social capital and connectedness in cyclical ways.

A theoretical framework for understanding the impact of *collective* features of rural communities on mental health may also provide insight into the differential impacts of the limitations to freedom and autonomy imposed by some close social networks (Harvey, 2007; Nicholson, 2008). Greater levels of connectedness (which as discussed will be influenced by a number of factors), are associated with an increased sense of individual empowerment (Peterson & Hughey, 2004; Speer, Jackson, & Peterson, 2001), personal resources and sense of identity (Lee & Robins, 1998). It is suggested here that individuals who have a more established sense of connectedness will therefore be better able to negotiate the challenges of close social networks in a rural community. In doing so, they will maximise the benefits of these networks while tempering the potential harms, and thus experience better mental health outcomes. A final point on connectedness in relation to *collective* community variables is in perceptions of safety. Perhaps unsurprisingly, lower levels of perceived safety within one's environment are associated with decreased levels of connectedness (Hulse & Saugeres, 2008;

Whitlock, 2007), and as such are likely to be related to poorer mental health outcomes, again consistent with the findings of this study.

This proposed theoretical framework highlights the importance of factors relating to individuals, as well as factors relating to the "places" in which they live, and points to the highly dynamic relationship between them. It is acknowledged that further exploration is required in order to clarify and more clearly articulate the complex and dynamic nature of the inter-relationships contended in this section. Notwithstanding this, through the application of a *ground up* approach to the current study, this preliminary discussion serves to build on existing theoretical frameworks aimed at explaining the underlying ways in which *compositional*, *contextual*, and *collective* community factors impact on mental health and wellbeing in small rural communities. Thus, it is proposed here that *connectedness* may be the fundamental mechanism by which *compositional*, *contextual*, and *collective* community factors impact on mental health and wellbeing in small rural communities.

4.5 Limitations and Strengths of the Current Study

In considering the implications of the findings of the current study, it is important to note some of the limitations and strengths of this study's research design and execution. As it is not the goal of qualitative research to provide broadly generalisable conclusions, it is noted that the findings in the current study may not be directly applicable to people and groups outside of this research context (Boyd et al., 2007, Johnson, McDonnell, O'Connell, & Glynn, 2011). This issue may be magnified by the relatively small number of informants across the four towns (Bambling et al., 2007). A further limitation of the current study was that it was essentially cross-sectional. Given that the impacts of *compositional*, *contextual*, and *collective* community variables on mental health and wellbeing within rural communities are likely to exert changing influences over time, it has been suggested that longitudinal

research provides a useful insight into observed outcome differentials (Macintyre et al., 2002). This noted, the qualitative nature of the current study allowed for rich informant accounts of historic as well as current issues, which may serve to temper some of the restrictions of a cross-sectional design.

There were also a number of strengths in the current study, which serve to strengthen the confidence in the current findings. The first is that this research explored all three construct levels in the model proposed by Macintyre and colleagues (Macintyre, 1997; Macintyre et al., 2002), rather than focusing only on one. This not only allowed for examination of the model's utility in the field of rural mental health, but importantly, provided insight into the dynamic relationships and possible mechanisms through which these factors may impact on mental health and wellbeing. This would not have been possible if only one construct was considered. The sample of both the rural towns and the informants selected in the current study represented a highly relevant and therefore "information-rich" sample in relation to the issues of interest (Mays & Pope, 1995; Patton, 1990). Not only were rural MHPs thought to represent a well-informed group on matters of rural mental health (c.f. Wainer & Chesters, 2000 recruitment of rural GPs), but they were also often residents of the towns selected, affording them a more personal perspective as well. Further to this, the current study employed a small level of analysis; by looking at four rural towns of between 3000 and 4000 people, with towns selected based on their recorded rates of suicide, it was possible to gather data about perceived within-rural differences concerning factors pertinent to mental health and wellbeing, while respecting the heterogeneity of these small rural communities (Difty & Gibson, 2010; Fraser et al., 2002).

In addition to these procedures, throughout the entire design and execution of the current study, every effort was made to ensure rigour in the research, as discussed in detail in Chapter Two, which represents a considerable strength of this current study. Further to the

strength of using semi-structured interviews with a focussed sample (Johnson et al., 2011), the current study was strengthened by the input of multiple researchers in ensuring consensus around data analysis and coding (Barbour, 2001; Freeman & Sweeny, 2001; Mays & Pope, 1995; Sofaer, 2002), as well as maintaining a comprehensive audit trail throughout the research process (Wolf, 2003). Finally, in the presentation and discussion of the research findings from the current study, there was a deliberate separation between the results; namely the direct data analysis of transcripts from interviews with informants (presented in Chapter Three), and the interpretation of these results and their theoretical implications (presented in this Chapter). This separation helps to maintains the integrity of the data, and minimise the potential for researcher bias, in making clear the distinction between the data itself and the interpretation of the implications of that data (Mays & Pope, 1995).

4.6 Avenues for Further Research

The results of the current study lend support to the application of the model proposed by Macintyre and colleagues (Macintyre, 1997; Macintyre et al., 2002) and adapted by Judd et al. (2006a) in providing a framework for categorising factors which may contribute to an explanation of geographic variations in mental health and suicide within rural communities. As the qualitative approach utilised in the research limits the ability to generalise these findings to people and communities outside of those included in this study, it is suggested that further research into the applicability of this model be undertaken in other, more diverse rural communities. As not all of the factors identified in this study appeared to differentiate between the towns with "high" rates of suicide and those with "low" rates, further research may look to clarify the relative importance of each of the features identified in predicting mental health outcomes for different areas and communities. Adding to this, as the current research focussed on the perceptions of mental health professionals in rural communities,

future researchers should seek to compare and contrast the current findings with findings from an exploration of the perceptions of other community members.

As the area of rural mental health remains relatively poorly understood and operationalised, it is contended that both qualitative and quantitative approaches should be employed in ongoing research investigating different aspects which may be important to mental health outcomes in rural communities, and that these include both cross-sectional as well as longitudinal programs. It is suggested that, at least initially, these research projects continue to focus on small levels of analysis in order to capture and manage the level of heterogeneity within and between rural communities. Qualitative research is likely to play an important ongoing role in generating hypotheses around features of different rural communities which impact on the general health and wellbeing experience of residents. This research will allow for a more informed focus on potentially important areas, as well as providing a foundation from which to build operationalised definitions of important constructs in this research field. With an appropriate language for conceptualising rural mental health developed through these qualitative studies, quantitative research programs may be utilised both as a means of triangulating the qualitative findings, and also to conduct cross-section and longitudinal empirical investigations of the operationalised constructs. Not only would this allow for the research to become more generalisable in some instances, but it would also facilitate longitudinal monitoring and evaluation of targeted programs for addressing rural mental health issues in general, and levels of suicide in particular.

Finally, it is important that research continue to emphasise a focus on building a solid theoretical framework for understanding the unique aspects of rural mental health. Based on the current study, connectedness seems to present a promising theoretical conceptualisation of the ways in which features of "place" may impact on mental health. Further research is required in order to test the applicability of this theoretical approach across numerous diverse

rural settings and communities both within Australia and internationally. It is also suggested that research efforts include the ongoing generation (perhaps through Grounded Theory) and investigation of alternative theoretical frameworks, such that a rich and well informed account may be developed, and applied to the important task of developing initiatives to improve mental health, and decrease rates of suicide in rural communities.

4.7 Conclusion

The rates of suicide for particular population groups in certain rural areas of Australia are alarmingly and disproportionately high (Dudley et al., 1997; 1998a). These observations have led to a dramatic increase in both political and research attention into the factors which may be contributing to these tragic findings. Despite being well-documented, understanding of these disparate rates of suicide, and issues relating to mental health and wellbeing in rural and remote communities remains limited (Bourke et al., 2010; Fraser et al., 2002; Judd et al., 2006a; Kelly et al., 2010a; Smith et al., 2008). The research in this field to date has revealed a number of important issues, including the need to recognise the heterogeneity that exists within and between rural communities, and the need to focus on the impact of "place" over location per se, in understanding the mental health experience of residents of small rural communities. In a recent resurgence of interest in geographic variations in health and wellbeing, Macintyre and colleagues (Macintyre, 1997; Macintyre et al., 2002), proposed three levels of variables for explaining the way in which features of "place" contribute to health outcomes: compositional, contextual, and collective. This model was later adapted by Judd et al. (2006a), in a proposed framework for understanding the impact of "place" on suicide rates in rural communities.

The current qualitative study sought to explore the applicability and predictive value of this model in understanding the impact of "place" on mental health in four rural Victorian

communities; two with "high" rates of suicide and two with "low" rates. Interviews were conducted with mental health professionals in each of these towns in order to gain perspectives from the front line of rural mental health. The diversity apparent within and between each community reiterated the importance of recognising rural communities as being heterogeneous, and the need for small-scale qualitative analysis in order to access information that is not easily amenable to quantitative enquiry. The findings from this study suggest that factors thought to impact on mental health within rural communities are able to be adequately captured within the constructs of *compositional*, *contextual*, and *collective* community variables. In the current instance, *contextual* and *collective* factors particularly, provided important insight into the diverging mental health pictures between these four communities. Consideration of the mechanisms by which these factors are thought to impact on mental health outcomes led to the proposal of a theoretical enhancement to the existing model, which emphasises the importance of connectedness.

The current study adds a modest but valuable contribution to the body of literature on rural mental health and elevated rates of suicide in rural communities; however, there is much more work to be done and areas for further research have been suggested. In the context of much uncertainty and inconsistency, it is known that the issue of rural mental health and suicide is extremely complex. It is likely that the mental health of residents in rural communities will be influenced by the dynamic combination of factors which are both generic to the broader population, and specific to those living in rural areas. Ultimately, the cause of any one instance of suicide is likely to be unique to that individual, and reflect numerous interacting facets of that person's life. While this uniqueness is recognised, as is the heterogeneity of rural areas, the widely reported elevated rates of suicide in rural Australia insist that rural mental health remain at the forefront of both theoretical and

empirical research, in order to inform intervention and policy development, and ensure that rurality is a positive determinant of health.

References

- Agerbo, E., Nordentoft, M., & Mortensen, P. B. (2002). Familial, psychiatric, and socioeconomic risk factors for suicide in young people: Nested case-control study. *British Medical Journal*, 325, 74-77.
- Aiach, P., & Baumann, M. (2011). An assessment of the geographical approach to health inequality. *Critical Public Health*, *21*, 63-69.
- Aisbett, D. L., Boyd, C. P., Francis, K. J., Newnham, K., & Newnham, K. (2007).

 Understanding barriers to mental health service utilization for adolescents in rural

 Australia. *Rural and Remote Health*, 7, 624 (online). Retrieved August 12, 2011, from http://www.rrh.org.au
- Alston, M. (2010). Rural male suicide in Australia. Social Science & Medicine, 74, 515-522.
- American Psychiatric Association (APA). (1987). *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed., revised). Washington, DC: Author.
- American Psychiatric Association (APA). (2000). *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text revision). Washington, DC: Author.
- Andersen, K., Hawgood, J., Klieve, H., Kolves, K., & De Leo, D. (2010). Suicide in selected occupations in Queensland: evidence from the state suicide register. *Australian and New Zealand Journal of Psychiatry*, 44, 243-249.
- Andres, A. R., Collings, S., & Qin, P. (2010). Sex-specific impact of socio-economic factors on suicide risk: a population-based case-control study in Denmark. *European Journal of Public Health*, 20, 265-270.
- Andrews, G., Hall, W., Teeson, M., & Henderson, S. (1999). *The national survey of mental health and wellbeing: The mental health of Australians*. Canberra: Mental Health Branch, Commonwealth Department of Health and Aged Care.

- Auchincloss, A. H., & Diez-Roux, A. V. (2008). A new tool for epidemiology: The usefulness of dynamic-agent models in understanding place effects on health. *American Journal of Epidemiology, 168*, 1-8.
- Australian Bureau of Statistics (ABS). (n.d.). *Remoteness Structure*. Retrieved November, 16, 2010, from:

http://www.abs.gov.au/websitedbs/D3310114.nsf/home/remoteness+structure

- Australian Bureau of Statistics (ABS). (2001a). 1244.0 Information Paper: ABS Views on Remoteness. Retrieved January 5, 2008, from:

 http://www.abs.gov.au/ALISSTATS/abs@nsf/DetailsPage/1244_020012OpenDocum
 - http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/1244.02001?OpenDocume nt
- Australian Bureau of Statistics (ABS). (2001b). 1216.0 Australian Standard Geographical

 Classification (ASGC) 2001. Retrieved November 16, 2010, from:

 http://www.abs.gov.au/AUSSTATS/abs@.nsf/66f306f503e529a5ca25697e0017661f/

 A3658D8F0AD7A9B6CA256AD4007F1C42?opendocument
- Australian Bureau of Statistis (ABS). (2003). *ASGC Remoteness Classification: Purpose and Use (Census Paper No. 03/01)*. Retrieved November 16, 2010, from: http://www.abs.gov.au/websitedbs/D3110122.nsf/4a255eef008309e44a255eef00061e 57/f9c96fb635cce780ca256d420005dc02/\$FILE/Remoteness_Paper_text_final.pdf
- Australian Bureau of Statistis (ABS). (2005). 1216.0 Australian Standard Geographical

 Classification (ASGC) Electronic Publication, 2005. Retrieved November 16, 2010,

 from:
 - http://www.abs.gov.au/AUSSTATS/abs@.nsf/lookup/0D204FD3DCD90564CA256F 19001303A?opendocument
- Australian Bureau of Statistics (ABS). (2006a). *Causes of death, Australia, 2004*. Canberra: ABS. [Cat. No. 3303.0]. Retrieved June 1, 2006, from

- http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/68D51845F3970A92CA257 13000705D3A/\$File/33030 2004.pdf
- Australian Bureau of Statistics (ABS). (2006b). *Suicides, Australia, 1994-2004*. Canberra:

 ABS. [Cat. No. 3309.0]. Retrieved June 1, 2006, from

 http://www.ausstats.abs.gov.au/Ausstats/subscriber.nsf/0/FF573FA817DC3C84CA25

 713000705C19/\$File/33090_1994%20to%202004.pdf
- Australian Bureau of Statistis (ABS). (2009). 2001 Census of Population and Housing –

 Product Brief Census on the Internet. Retrieved November 20, 2010 from:

 http://www.abs.gov.au/Websitedbs/D3110124.NSF/f5c7b8fb229cf017ca256973001fe

 cec/4a32eafde0b01b7aca256b600016f070!OpenDocument#Basic%20Community
- Australian Bureau of Statistics (ABS). (2011). Causes of death, Australia, 2009. Canberra:

 ABS [Cat. No. 3303.0]. Retrieved August 17, 2011, from

 http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/83A6580246688CEBCA257

 8840012A073/\$File/33030_2009.pdf
- Australian Institute of Health and Welfare (AIHW). (n.d.). *RRMA Classification*. Retrieved January 5, 2008, from: http://www.aihw.gov.au/ruralhealth/methodology/rrma.cfm
- Australian Institute of Health and Welfare (AIHW). (2004). Rural, regional and remote health: a guide to remoteness classifications. AIHW cat.no. PHE 53.

 Canberra: AIHW. Retrieved January 5, 2008, from:

 http://www.aihw.gov.au/publications/index.cfm/title/9993.
- Australian Institute of Health and Welfare (AIHW). (2008). Rural, regional and remote health: indicators of health system performance. Rural Health Series no. 10.

 Canberra: AIHW. [Cat. no. PHE 103.].
- Australian Institute of Health and Welfare (AIHW). (2010). *Australia's health 2010*. *Australia's health series no. 12*. Canberra: AIHW. [Cat. no. AUS 122]. Retrieved

- August 17, 2011, from http://www.aihw.gov.au/publication-detail/?id=6442468376&tab=2
- Ayyash-Abdo, H. (2002). Adolescent suicide: An ecological approach. *Psychology in the Schools*, *39*, 459-475.
- Bambling, M., Kavanagh, D., Lewis, G., King, R., King, D., Sturk, H., et al. (2007).

 Challenges faced by general practitioners and allied mental health services in providing mental health services in rural Queensland. *Australian Journal of Rural Health*, 15, 126-130.
- Barbour, R. S. (2001). Checklists for improving rigour in qualitative research: A case of the tail wagging the dog? *BMJ*, 322, 1115-1117.
- Baum, F., MacDougall, C., & Smith, D. (2006). Participatory action research. *Journal of Epidemiology and Community Health*, 60, 854-857.
- Baume, P. J. M., & Clinton, M. E. (1997). Social and cultural patterns of suicide in young people in rural Australia. *Australian Journal of Rural Health*, *5*, 115-120.
- Beautrais, A. L. (1999). Risk factors for suicide and attempted suicide among young people.

 In National Youth Suicide Prevention Strategy Setting the evidence-based research agenda for Australia (A literature review) (pp. 113-278). Canberra: Department of Health and Aged Care, Commonwealth of Australia.
- Beautrais, A. L., Joyce, P. R., & Mulder, R. T. (1999). Personality traits and cognitive styles as risk factors for serious suicide attempts among young people. *Suicide and Life Threatening Behavior*, 29, 37-47.
- Beck, A. T., Brown, G., Berchick, R. J., Stewart, B. L., & Steer, R. A. (1990). Relationship between hopelessness and ultimate suicide: A replication with psychiatric outpatients.

 The American Journal of Psychiatry, 147, 190-195.

- Berk, M., Dodd, S., & Henry, M. (2006). The effect of macroeconomic variables on suicide.

 *Psychological Medicine, 36, 181-189.
- Berry, H. L., Hogan, A., Owen, J., Rickwood, D., & Fragar, L. (2011). Climate change and farmers' mental health: Risks and responses. *Asia-Pacific Journal of Public Health* (23), 119S-132S.
- Berry, H., & Shipley, M. (2009). Longing to Belong: Personal Social Capital and

 Psychological Distress in an Australian Coastal Region. Canberra, Australia:

 Commonwealth of Australia.
- Berry, H. L., & Walsh, J. A. (2010). Social capital and health in Australia: An overview from the Household Income and Labour Dynamics in Australia Survey. *Social Science & Medicine*, 70, 588-596.
- Bird, D. C., Lambert, D., Hartley, D., Beeson, P. G., & Coburn, A. F. (1998). Rural models for integrating primary care and mental health services. *Administration and Policy in Mental Health*, 25, 287-308.
- Bond, L., Butler, H., Thomas, L., Carlin, J., Glover, S., Bowes, G., et al. (2007). Social and school connectedness in early secondary school as predictors of late teenage substance use, mental health, and academic outcomes. *Journal of Adolescent Health*, 40, 357.e9-357.18.
- Borowsky, I. W., Ireland, M., & Resnick, M. D. (2001). Adolescent suicide attempts: Risks and protectors. *Pediatrics*, *107*, 485-493.
- Borowsky, I. W., Resnick, M. D., Ireland, M., & Blum, R. W. (1999). Suicide attempts among American Indian and Alaska native youth. *Archives of Pediatrics and Adolescent Medicine*, 153, 573-580.
- Bourke, L. (2003). Toward understanding youth suicide in an Australian rural community. Social Science & Medicine, 57, 2355-2365.

- Bourke, L., Humphreys, J. S., Wakerman, J., & Taylor, J. (2010). Charting the future course of rural health and remote health in Australia: Why we need theory. *Australian Journal of Rural Health*, 18, 54-58.
- Boyd, C., Francis, K., Aisbett, D., Newnhm, K., Sewell, J., Dawes, G., et al. (2007).

 Australian rural adolescents' experiences of accessing psychological help for a mental health problem. *Australian Journal of Rural Health*, *15*, 1996-200.
- Brenner, H. H. (1979). Mortality and the national economy: A review, and the experience of England and Wales, 1939-76. *The Lancet*, 15, 568-573.
- Brent, D. A., Baugher, M., Bridge, J., Chen, T., & Chiappetta, L. (1999). Age- and sexrelated risk factors for adolescent suicide. *Journal of the American Academy of Child* and Adolescent Psychiatry, 38, 1497-1505.
- Brent, D. A., Bridge, J., Johnson, B. A., & Connolly, J. (1996). Suicidal behavior runs in families: A controlled family study of adolescent suicide victims. *Archives of General Psychiatry*, 53, 1145-1152.
- Brent, D. A., Perper, J. A., Moritz, G., Allman, C., Friend, A., Roth, C., et al. (1993).

 Psychiatric risk factors for adolescent suicide: A case-control study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 32, 521-529.
- Brezo, J., Paris, J., & Turecki, G. (2006). Personality traits as correlates of suicidal ideation, suicide attempts, and suicide completions: A systematic review. *Acta Psychiatrica Scandinavica*. 113, 180-206.
- Bridge, J. A., Goldstein, T. R., & Brent, D. A. (2006). Adolescent suicide and suicidal behaviour. *Journal of Child Psychology and Psychiatry*, 47, 372-394.
- Brinkmann, S., & Kvale, S. (2005). Confronting the ethics of qualitative research. *Journal of Constructivist Psychology*, 18, 157-181.

- Brown, W. J., Young, A. F., & Byles, J. E. (1997). Tyranny of distance? The health of midaged women living in five geographical areas of Australia. *Australian Journal of Rural Health*, 7, 148-154.
- Browning, S. R., Westneat, S. C., & McKnight, R. H. (2008). Suicide among farmers in three Southeastern states, 1990-1998. *Journal of Agricultural Safety and Health*, 14, 461-472.
- Burnley, I. H. (1995). Socioeconomic and spatial differences in mortality and means of committing suicide in New South Wales, Australia, 1985-1991. *Social Science & Medicine*, 41, 687-698.
- Burrows, S., Auger, N., Gamache, P., St-Laurent, D., & Hamel, D. (2011). Influence of social and material individual and area deprivation on suicide mortality among 2.7 million Canadians: A prospective study. *BMC Public Health*, 11:577. Retrieved August 17, 2011, from: http://www.biomedcentral.com/content/pdf/1471-2458-11-577.pdf
- Butterworth, P., Rodgers, B., & Jorm, A. F. (2006). Examining geographical and household variation in mental health in Australia. *Australian and New Zealand Journal of Psychiatry*, 40, 491-497.
- Caldwell, T. M., Jorm, A. F., & Dear, K. B. G. (2004a). Suicide and mental health in rural, remote and metropolitan areas in Australia. *The Medical Journal of Australia*, 181, S10-S14.
- Caldwell, T. M., Jorm, A. F., Knox, S., Braddock, D., Dear, K. B., & Britt, H. (2004b).

 General practice encounters for psychological problems in rural, remote and metropolitan areas in Australia. *Australian and New Zealand Journal of Psychiatry*, 38, 774-780.
- Cantor, C. H., & Coory, M. (1993). Is there a rural suicide problem? *Australian Journal of Public Health*, 17, 382-384.

- Cantor, C. H., & Neulinger, K. (2000). The epidemiology of suicide and attempted suicide among young Australians. *Australian and New Zealand Journal of Psychiatry*, 34, 370-387.
- Cantor, C. H., Neulinger, K., & De Leo, D. (1999). Australian suicide trends 1964-1997: Youth and beyond? *The Medical Journal of Australia*, 171, 137-141.
- Cantor, C. H., & Slater, P. J. (1997). A regional profile of suicide in Queensland. *Australian* and New Zealand Journal of Public Health, 21, 181-186.
- Cantor, C. H., Slater, P. J., & Najman, J. M. (1995). Socioeconomic indicies and suicide rate in Queensland. *Australian Journal of Public Health*, *19*, 417-420.
- Carr, L. T. (1994). The strengths and weaknesses of quantitative and qualitative research:

 What method for nursing? *Journal of Advanced Nursing*, 20, 716-721.
- Charmaz, K. (2003). Grounded Theory: Objectivist and constructivist methods. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies of Qualitative Inquiry* (2nd ed., pp. 249-291). Thousand Oaks, CA: Sage Publications.
- Charmaz, K. (2006). Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis. Thousands Oaks: Sage.
- Chavis, D. M. & Newbrough, J. R. (1986). The meaning of "community" in community psychology. *Journal of Community Psychology*, *4*, 335-340.
- Conwell, Y., Duberstein, P. R., & Caine, E. D. (2002). Risk factors for suicide in later life. *Biological Psychiatry*, 52, 193-204.
- Copeland, K. J., & Young, A. M. (2007). Health and social impact assessment of the South East Queensland Regional Plan (2005–2026). *New South Wales Public Health Bulletin*, 18, 177-179.
- Corbin, J., & Strauss, A. (1990). Grounded Theory research: Procedures, canons, and evaluation criteria. *Qualitative Sociology*, *13*, 3-21.

- Coyne, I. T. (1997). Sampling in qualitative research. Purposeful and theoretical sampling merging or clear boundaries. *Journal of Advanced Nursing*, 26, 623-630.
- Crisp, B. R. (2010). Belonging, connectedness and social exclusion. *Journal of Social Inclusion*, 1, 123-132.
- Cummins, S., Curtis, S., Diez-Roux, A. V., & Macintyre, S. (2007). Understanding and representing 'place' in health research: A relational approach. *Social Science & Medicine*, 65, 1825-1838.
- Curry, G., Koczberski, G., & Selwood, J. (2001). Cashing out, cashing in: Rural change on the south coast of Western Australia. *Australian Geographer*, *32*, 109-124.
- Das, A. (2011). Farmers' suicide in India: Implications for public mental health. *International Journal of Social Psychiatry*, 57, 21-29.
- Delbridge, A., & Bernard, J. R. L. (Eds.). (2000). *The Macquarie Concise Dictionary* (3rd Ed.). Sydney: The Macquarie Library.
- De Leo, D., Buono, M. D., & Dwyer, J. (2002). Suicide among the elderly: the long-term impact of telephone support and assessment intervention in Northern Italy. *British Journal of Psychiatry*, 181, 226-229.
- Denzin, N. K., & Lincoln, Y. S. (2005). Introduction: The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage Handbook of Qualitative Research* (3rd ed., pp. 1-32). Thousand Oaks, CA: Sage Publications.
- Department of Health & Aged Care (DHAC). (2001). Measuring Remoteness:

 Accessibility/Remoteness Index of Australia (ARIA), Revised Edition, Occasional

 Papers: New Series No. 14. Canberra: GISCA.
- Department of Planning and Community Development (DPCD). (2010). *Towns in Time*.

 Retrieved November 20, 2010, from: http://www.dpcd.vic.gov.au/home/publications-and-research/urban-and-regional-research/towns-in-time

- Department of Primary Industries and Energy and Department of Human Services and Health. (1994). *Rural, remote and metropolitan areas classification: 1991 Census edition.* Canberra, Australian Government Publishing Service.
- DiCicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview. *Medical Education*, 40, 314-321.
- Dudley, M. J., Kelk, N. J., Florio, T. M., Howard, J. P., & Waters, B. G. H. (1998a). Suicide among young Australians, 1964-1993: An interstate comparison of metropolitan and rural trends. *The Medical Journal of Australia*, 169, 77-80.
- Dudley, M., Kelk, N., Florio, T., Howard, J., Waters, B., Haski, C., et al. (1997). Suicide among young rural Australians 1964-1993: A comparison with metropolitan trends. Social Psychiatry and Psychiatric Epidemiology, 32, 251-260.
- Dudley, M., Kelk, N., Florio, T., Waters, B., Howard, J., & Taylor, D. (1998b). Coroners' records of rural and non-rural cases of youth suicide in New South Wales. *Australian and New Zealand Journal of Psychiatry*, 32, 242-251.
- Dudley, M., Waters, B., Kelk, N., & Howard, J. (1992). Youth suicide in New South Wales: Urban-rural trends. *The Medical Journal of Australia*, *156*, 83-88.
- Dufty, R., & Gibson, C. (2010). Shifting welfare, shifting people: rural development, housing and population mobility in Australia. In P. Milbourne (Ed.), Welfare Reform in Rural Places: Comparative Perspectives (Research in Rural Sociology and Development, Volume 15) (pp. 173-197). Emerald Group Publishing Limited.
- Durkheim, E. (1897/1951). *Suicide: A study in sociology*: Translated by J. A. Spaulding and G. Simpson. Edited with an introduction by G. Simpson. New York: Free Press.
- Elgar, F. J., Arlett, C., & Groves, R. (2003). Stress, coping, and behavioural problems among rural and urban adolescents. *Journal of Adolescence*, 26, 574-585,

- Elliott-Schmidt, R., & Strong, J. (1997). The concept of well-being in a rural setting:

 Understanding health and illness. *Australian Journal of Rural Health*, 5, 59-63.
- Fergusson, D. M., & Lynskey, M. T. (1995). Childhood circumstances, adolescent adjustment, and suicide attempts in a New Zealand birth cohort. *Journal of the American Academy of Child and Adolescent Psychiatry*, 34, 612-622.
- Fiske, A., Gatz, M., & Hannell, E. (2005). Rural suicide rates and availability of health care providers. *Journal of Community Psychology*, *33*(5), 537-543.
- Fleischmann, A., Beautrais, A., Bertolote, J. M., & Belfer, M. (2005). Completed suicide and psychiatric diagnosis in young people: A critical examination of the evidence.

 *American Journal of Orthopsychiatry, 75, 676-683.
- Fragar, L., Stain, H. J., Perkins ,D., Kelly, B., Fuller, J., Coleman, C., et al. (2010). Distress among rural residents: Does employment and occupation make a difference?

 Australian Journal of Rural Health, 18, 25-31.
- Fraser, C., Jackson, H., Judd, F., Komiti, A., Robins, G., Murray, G., et al. (2005). Changing places: the impact of rural restructuring on mental health in Australia. *Health & Place*, 11, 157-171.
- Fraser, C., Judd, F., Jackson, H., Murray, G., Humphreys, J., & Hodgins, G. A. (2002). Does one size really fit all? Why the mental health of rural Australian's requires further research. *Australian Journal of Rural Health*, *10*, 288-295.
- Freeman, A. C., & Sweeney, K. (2001). Why general practitioners do not implement evidence: qualitative study. *BMJ*, 323 (online), doi: 10.1136/bmj.323.7321.1100.
- Fullagar, S. (2003). Wasted lives: The social dynamics of shame and youth suicide. *Journal of Sociology*, *39*, 291-307.

- Fuller, J., Edwards, J., Procter, N., & Moss, J. (2000). How definitions of mental health problems can influence help seeking in rural and remote communities. *Australian Journal of Rural Health*, 8, 148-153.
- Gale, J. A., Shaw, B., Hartley, D., & Loux, S. (2010). The provision of mental health services by rural health clinics, Working Paper 23. Maine Rural Health Research Center. Retrieved August 20, 2011, from: http://muskie.usm.maine.edu/Publications/rural/WP43/Rural-Health-Clinics-Mental-Health-Services.pdf
- Gallagher, A. G., & Sheehy, N. P. (1994). Suicide in rural communities. *Journal of Community and Applied Social Psychology*, 4, 145-155.
- Gething, L. (1997). Sources of double disadvantage for people with disabilities living in remote and rural areas of New South Wales, Australia. *Disability and Society*, *12*, 513-531.
- Glaser, B. & Strauss, A. (1967). The Discovery of Grounded Theory: Strategies for Oualitative Research. New York: Aldine.
- Goldney, R. D. (2006). Suicide in Australia: Some good news. *Medical Journal of Australia*, 185, 304.
- Gordon, W. R., & Caltabiano, M. L. (1996). Urban-rural differences in adolescent selfesteem, leisure boredom, and sensation-seeking as predictors of leisure-time usage and satisfaction. *Adolescence*, *31*, 883-901.
- Gould, M. S., Fisher, P., Parides, M., Flory, M., & Shaffer, D. (1996). Psychosocial risk factors for child and adolescent completed suicide. *Archives of General Psychiatry*, 53, 1155-1162.

- Gould, M. S., Shaffer, D., Fisher, P., & Garfinkle, R. (1998). Separation/divorce and child and adolescent completed suicide. *Journal of the American Academy of Child and Adolescent Psychiatry*, 37, 155-162.
- Green, R., & McDonald, J. (1996). Transport for young people in a rural area. *Youth Studies Australia*, 15, 38-42.
- Greiner, K. A., Li, C., Kawachi, I., Hunt, D. C., & Ahluwalia, J. S. (2004). The relationships of social participation and community ratings to health and health behaviours in areas with high and low population density. *Social Science & Medicine*, *59*, 2303-2312.
- Gunnell, D. J., Peters, T. J., Kammerling, R. M., & Brooks, J. (1995). Relation between parasuicide, suicide, psychiatric admissions, and socioeconomic deprivation. *British Medical Journal*, 311, 226-230.
- Hall, W. D., Mant, A., Mitchell, P. B., Rendle, V. A., Hickie, I. B., & McManus, P. (2003).Association between antidepressant prescribing and suicide in Australia, 1991-2000:Trend analysis. *British Medical Journal*, 326, 1008-1011.
- Hart, G. L., Larson, E. H., & Lishner, D. M. (2005). Rural definitions for health policy and research. *American Journal of Public Health*, *95*, 1149-1155.
- Harvey, D. J. (2007). Understanding Australian rural women's ways of achieving health and wellbeing A metasynthesis of the literature. *Rural and Remote Health*, 7, 823 (online). Retrieved August 12, 2011, from http://www.rrh.org.au
- Hawton, K., Appleby, L., Platt, S., Foster, T., Cooper, J., Malmber, A., et al. (1998). The psychological autopsy approach to studying suicide: A review of methodological issues. *Journal of Affective Disorders*, 50, 269-276.
- Health Workforce Queensland (n.d.). *RRMA/Town Search*. Retrieved January 5, 2008, from: http://www.healthworkforce.com.au/main_rrma.asp

- Helliwell, J. F. (2004). Well-being and social capital: Does suicide pose a puzzle? NBER Working Paper 10896. Cambridge: National Bureau of Economic Research.
- Henriksson, M. M., Aro, H. M., Marttunen, M. J., Heikkinen, M. E., Isometsä, E. T., Kuoppasalmi, K. I., et al. (1993). Mental disorders and comorbidity in suicide. *The American Journal of Psychiatry*, *150*, 935-940.
- Hill, D. L. (2006). Sense of belonging as connectedness, American Indian worldview, and mental health. *Archives of Psychiatric Nursing*, 20, 210-216.
- Hirvikoski, T., & Jokinen, J. (in press). Personality traits in attempted and completed suicide. *European Psychiatry (2011), doi:10.1016/j.eurpsy.2011.04.004 (published early online).*
- Horesh, N., Rolnick, T., Iancu, I., Dannon, P., Lepkifker, E., Apter, A, et al. (1996). Coping styles and suicide risk. *Acta Psychiatrica Scandinavica*, *93*, 489-493.
- Hugo, G. (1994). The turnaround in Australia: Some first observations from the 1994 census.

 *Australian Geographer, 25, 1-17.
- Hulse, K., & Saugeres, L. (2008). *Housing Insecurity and Precarious Living: an Australian Exploration [AHURI final report no. 124]*. Australian Housing and Urban Research Institute, Melbourne.
- Human, J., & Wasem, H. (1991). Rural mental health in America. *American Psychologist*, 46, 232-239.
- Iso-Ahola, S. E., & Wiessinger, E. (1987). Leisure and boredom. *Journal of Social and Clinical Psychology*, *5*, 356-364.
- Iso-Ahola, S. E., & Wiessinger, E. (1990). Perceptions of boredom in leisure:

 Conceptualization, reliability and validity of the Leisure Boredom Scale. *Journal of Leisure Research*, 22, 1-17.

- Jackson, H., Judd, F., Komiti, A., Fraser, C., Murray, G., Robins, G., et al. (2007). Mental health problems in rural contexts: What are the barriers to seeking help from professional providers? *Australian Psychologist*, 42, 147-160.
- Johnson, I. R., McDonnell, C., O'Connell, A. M., & Glynn, L. G. (2011). Patient perspectives on health, health needs, and health care services in a rural Irish community: A qualitative study. *Rural and Remote Health*, *11*, *1659* (online), Retrieved August 12, 2011, from: http://www.rrh.org.au
- Jones, A. R., Cook, T. M., & Wang, J. (in press). Rural-urban differences in stigma against depression and agreement with health professionals about treatment. *Journal of Affective Disorders* (2011), doi:10.1016/j.jad.2011.05.013 (published early online).
- Jones, R., & Tonts, M. (2003). Transition and diversity in rural housing provision. *Australian Geographer*, 34, 47-59.
- Jorm, A. F., Korten, A. E., Jacomb, P. A., Christensen, H., & Henderson, S. (1999). Attitudes towards people with a mental disorder: A survey of the Australian public and health professionals. *Australian and New Zealand Journal of Psychiatry*, *33*, 77-83.
- Josepho, S. A., & Plutchik, R. (1994). Stress, coping, and suicide reisk in psychiatric inpatients. *Suicide and Life Threatening Behavior*, 24, 48-57.
- Judd, F. (2006d). Progressing the agenda for rural mental health research. *Rural and Remote Health*, 6, 615 (online). Retrieved August 12, 2011, from http://www.rrh.org.au
- Judd, F., Cooper, A-M., Fraser, C., & Davis, J. (2006a). Rural suicide people or place effects? *Australian and New Zealand Journal of Psychiatry*, 40, 208-216.
- Judd, F., Jackson, H., Fraser, C., Murry, G., Robins, G., & Komiti, A. (2006c).Understanding suicide in Australian farmers. Social Psychiatry and Psychiatric Epidemiology, 41, 1-10.

- Judd, F., Jackson, H., Komiti, A., Bell, R. & Fraser, C. (2010). The profile of suicide: changing or changeable? Social Psychiatry and Psychiatric Epidemiology (online), doi:10.1007/s00127-010-0306-z.
- Judd, F., Jackson, H., Komiti, A., Murray, G., Fraser, C., Grieve, A., et al. (2006b). Help-seeking by rural residents for mental health problems: The importance of agrarian values. *Australian and New Zealand Journal of Psychiatry*, 40, 769-776.
- Judd, F. K., Jackson, H. J., Komiti, A., Murray, G., Hodgins, G., & Fraser, C. (2002). High prevalence disorders in urban and rural communities. *Australian and New Zealand Journal of Psychiatry*, 36, 104-113.
- Kelly, B. D., Davoren, M., Mhaolain, A. N., Breen, E. G., & Casey, P. (2009). Social capital and suicide in 11 European countries: An ecological analysis. *Social Psychiatry and Psychiatric Epidemiology*, 44, 971-997.
- Kelly, B. J., Lewin, T. J., Stain, H., Coleman, C., Fitzgerald, M., Perkins, D., et al. (2010b).
 Determinants of mental health and well-being within rural and remote communities.
 Social Psychiatry and Psychiatric Epidemiology (online), doi:10.1007/s00127-010-0305-0.
- Kelly, B. J., Stain, H. J., Coleman, C., Perkins, D., Fragar, L., Fuller, J., et al. (2010a).Mental health and well-being within rural communities: The Australian Rural MentalHealth Study. *Australian Journal of Rural Health*, 18, 16-24.
- Kim, D. (2008). Blues from the neighborhood? Neighborhood characteristics and depression. *Epidemiological Reviews*, 30, 101-117.
- King, N. (1994b). The qualitative research interview. In C. Cassell & G. Symon (Eds.),

 Qualitative methods in organisational research: A practical guide. London: Sage.

- Klieve, H., Sveticic, J., & De Leo, D. (2009). Who uses firearms as a means of suicide? A population study exploring firearm accessibility and method choice. *BMC Medicine*, 7:52, (online), doi:10.1186/1741-7015-7-52.
- Komiti, A., Judd, F., & Jackson, H. (2006). The influence of stigma and attitudes on seeking help from a GP for mental health problems: A rural context. *Social Psychiatry and Psychiatric Epidemiology*, 41, 738-745.
- Kopp, M., Szekely, A., & Bagi, M. (2009). The Hungarian alliance against depression: Strengthening social capital in the intervention region. *Injury Prevention*, 16, A232.
- Kovess-Masfety, V., Alonso, J., de Graaf, R., & Demyttenaere, K. (2005). A European approach to rural-urban differences in mental health: The ESEMeD 2000 comparative study. *Canadian Journal of Psychiatry*, *50*, 926-936.
- Kposowa, A. J. (2000). Marital status and suicide in the National Longitudinal Mortality Study. *Journal of Epidemiology and Community Health*, *54*, 254-261.
- Krupinski, J., Tiller, J. W., Burrows, G. D., & Hallenstein, H. (1994). Youth suicide in Victoria: A retrospective study. *The Medical Journal of Australia*, 160, 113-116.
- Kullberg, A., Timpka, T., Svensson, T., Karlsson, N., & Lindqvist, K. (2010). Does the perceived neighborhood reputation contribute to neighborhood differences in social trust and residential wellbeing? *Journal of Community Psychology*, 38, 591-606.
- Kuper, A., Lingard, L., & Levinson, W. (2008). Critically appraising qualitative research. *BMJ*, 337, 687-692.
- Lapadat, J. C. & Lindsay, A. C. (1999). Transcription in research and practice: From standardization of technique to interpretive positionings. *Qualitative Inquiry*, *5*, 64-86.

- Large, M. M., & Nielssen, O. B. (2010). Suicide in Australia: meta-analysis of rates and methods of suicide between 1988 and 2007. *The Medical Journal of Australia*, 192, 432-437.
- Layte, R. (2011). The association between income inequality and mental health: Testing status anxiety, social capital, and neo-materialistic explanations. *European Sociological Review (advanced access online), doi: 10.1093/esr/jcr012*.
- Lee, R. M., & Robbins, S. B. (1998). The relationship between social connectedness and anxiety, self-esteem, and social identity. *Journal of Counseling Psychology*, 45, 338-345.
- Leenaars, A. (1996). Suicide: A multidimensional malaise. Suicide and Life Threatening Behavior, 26, 221-236.
- Leenaars, A., Cantor, C., Connolly, J., EchoHawk, M., Gailiene, D., Xiong He, Z., et al. (2000). Controlling the environment to prevent suicide: International perspectives. Canadian Journal of Psychiatry, 45, 639-644.
- Li, Z., Page, A., Martin, G., & Taylor, R. (2011). Attributable risk of psychiatric and socioeconomic factors for suicide from individual-level, population-based studies: A systematic review. *Social Science & Medicine*, 72, 608-616.
- Lincoln, Y. S., & Cannella, G. S. (2004). Dangerous discourses: Methodological conservatism and governmental regimes of truth. *Qualitative Inquiry*, 10, 5-14.
- Luoma, J. B., & Pearson, J. L. (2002). Suicide and marital status in the United States, 1991-1996: Is widowhood a risk factor? *American Journal of Public Health*, 92, 1518-1522.
- Lynskey, M., Degenhardt, L., & Hall, W. (2000). Cohort trends in youth suicide in Australia 1964-1997. *Australian and New Zealand Journal of Psychiatry*, *34*, 408-412.
- Macintyre, S. (1997). What are spatial effects and how can we measure them? In A. Dale (Ed.), *Exploiting national survey data: the role of locality and spatial effects (CCSR*

- Occasional Paper 12) (pp. 1-17). Manchester: Faculty of Economic and Social Studies, University of Manchester.
- Macintyre, S., Ellaway, A., & Cummins, S. (2002). Place effects on health: How can we conceptualise, operationalise, and measure them? *Social Science & Medicine*, *55*, 125-139.
- Macintyre, S., Maciver, S., & Sooman, A. (1993). Area, class and health: Should we be focusing on places or people? *Journal of Social Policy*, 22, 213-234.
- Magliano, L., Fiorillo, A., Malangone, C., De Rosa, C., & Maj. M. (2006). Social network in long-term diseases: A comparative study in relatives of persons with schizophrenia and physical illnesses versus a sample from the general population. *Social Science & Medicine*, 62, 1392–1402.
- Mair, C., Diez-Roux, A. V., & Galea, S. (2008). Are neighbourhood characteristics associated with depressive symptoms? A review of evidence. *Journal of Epidemiology and Community Health*, 62, 940-946.
- Maller, C., Townsend, M., Pryor, A., Brown, P., & St Leger, L. (2006). Healthy nature healthy people: 'Contact with nature' as an upstream promotion intervention for populations. *Health Promotion International*, 21, 45-54
- Malone, K. M., Oquendo, M. A., Haas, G. L., Ellis, S. P., Shuhua, L., & Mann, J. J. (2000).

 Protective factors against suicidal acts in major depression: Reasons for living.

 American Psychiatric Association, 157, 1084-1088.
- Martin, G., Richardson, A. S., Bergen, H. A., Roeger, L., & Allison, S. (2005). Perceived academic performance, self-esteem and locus of control as indicators of need for assessment of adolescent suicide risk: Implications for teachers. *Journal of Adolescence*, 28, 75-87.

- Martin, P. Y. & Turner, B. A. (1986). Grounded theory and organisational research. *Journal of Applied Behavioral Science*, 22, 141-157.
- Mathers, C. (1994). Health differentials among adult Australians aged 25-64 years. *Health Monitoring Series*. [Cat. no. AIHW 329]. Canberra: AIHW.
- Mayer, F. S., & Frantz, C. M. (2004). The connectedness to nature scale: A measure of individuals' feeling in community with nature. *Journal of Environmental Psychology*, 24, 503-515.
- Mays, N., & Pope, C. (1995). Qualitative research: rigour and qualitative research. *BMJ*, 311, 109-112.
- Mays, N., & Pope, C. (2000). Assessing quality in qualitative research. BMJ, 320, 50-52.
- McGrail, M. R. & Humphreys, J. S. (2009). Geographical classifications to guide rural health policy in Australia. *Australia and New Zealand Health Policy*, *6* (28). Retrieved February 13, 2011, from: http://www.anzhealthpolicy.com/content/pdf/1743-8462-6-28.pdf
- McIntosh, J. L., Santos, J. F., Hubbard, R. W., & Overholser, J. C. (1994). *Elder suicide:**Research, theory, and treatment. Washington, DC: American Psychological Association.
- McKenzie, F. (1994). Population decline in non-metropolitan Australia: Impacts and policy implications. *Urban Policy and Research*, *12*, 253-263.
- McLaughlin, C., & Clark, B. (2010). Relational matters: A review of the impact of school experience on mental health in early adolescence. *Educational & Child Psychology*, 27, 91-103.
- McManus, P., & Pritchard, B. (2000). Geography and the Emergence of rural and regional Australia. *Australian Geographer*, *31*, 383-391.

- McPhedran, S. & Baker, J. (2008). Recent Australian suicide trends for males and females at the national level: Has the rate of decline differed? *Health Policy*, 87, 350-358.
- Mohnen, S. M., Groenewegen, P. P., Volke, B., & Flap, H. (2011). Neighborhood social capital and individual health. *Social Science & Medicine*, 72, 660-667.
- Morrell, S., Taylor, R., Slaytor, E., & Ford, P. (1999). Urban and rural suicide differentials in migrants and the Australian-born, New South Wales, Australia 1985-1994. *Social Science & Medicine*, 49, 81-91.
- Motto, J. A., & Bostrom, A. G. (2001). A randomized controlled trial of postcrisis suicide prevention. *Psychiatric Services*, *52*, 828-833.
- Murray, G., Judd, F., Jackson, H., Fraser, C., Komiti, A., Hodgins, G., et al. (2004). Rurality and mental health: The role of accessibility. *Australian and New Zealand Journal of Psychiatry*, 38, 629-634.
- Murray, G., Judd, F., Jackson, H., Fraser, C., Komiti, A., Hodgins, G., et al. (2005). The five factor model and accessibility/remoteness: Novel evidence for person–environment interaction. *Personality and Individual Differences*, *39*, 715–725
- Murray, G., Judd, F., Jackson, H., Fraser, C., Komiti, A., Pattison, P., et al. (2008). Big boys don't cry: An investigation of stoicism and its mental health outcomes. *Personality and Individual Differences*, 44, 1369-1381.
- National key centre for the social applications of geographical information systems

 (GISCA). (2000). ARIA vs RRMA: a comparison of the ARIA and RRMA

 methodologies for measuring remoteness in Australia. Retrieved January 6, 2008,

 from:http://www.gisca.adelaide.edu.au/web_aria/Rural_Health/aria_rrma/ARIA_RR

 MA.html
- Neuman, W. L. (2000). Social Research Methods: Qualitative and Quantitative Approaches (4th ed.). Boston: Allyn & Bacon.

- Neumayer, E. (2003). Are socioeconomic factors valid determinants of suicide? Controlling for national cultures of suicide with fixed-effects estimation. *Cross-Cultural Research*, *37*, 307-329.
- Nevid, J. S., Rathus, S. A., & Greene, B. (2003). *Abnormal psychology in a changing world* (5th ed.). New Jersey: Prentice Hall.
- Ni Laoir, C. (2001). A matter of life and death? Men, masculinities and staying 'behind' in rural Ireland. *Sociologia Ruralis*, *41*, 220-236.
- Nicholson, L. A. (2008). Rural mental health. *Advances in Psychiatric Treatment*, 14, 302-311.
- Nisbet, P. A. (1996). Protective factors for suicidal black females. *Suicide and Life Threatening Behavior*, 26, 325-341.
- Nordstrom, P., Asberg, M., Aberg-Wistedt, A., & Nordin, C. (1995b). Attempted suicide predicts suicide risk in mood disorders. *Acta Psychiatrica Scandinavica*, 92, 345-350.
- Nordstrom, P., Samuelsson, M., & Asberg, M. (1995a) Survival analysis of suicide risk after attempted suicide. *Acta Psychiatrica Scandinavica*, *91*, 336-340.
- Novaco, R. W., Kliewer, W., & Broquet, A. (1991). Home environmental consequences of commute travel impedance. *American Journal of Community Psychology*, 19, 881-909.
- O'Boyle, M., & Brandon, E. A. A. (1998). Suicide attempts, substance abuse, and personality. *Journal of Substance Abuse Treatment*, 15, 353-356.
- Orb, A., Eisenhauer, L. & Wynaden, D. (2001). Ethics in Qualitative Research. *Journal of Nursing Scholarship*, 33, 93–96.
- Page, A. N., & Fragar, L. J. (2002). Suicide in Australian farming, 1988-1997. Australian and New Zealand Journal of Psychiatry, 36, 81-85.

- Page, A., Morrell, S., Taylor, R., Dudley, M., & Carter, G. (2007). Further increases in rural suicide in young Australian adults: Secular trends, 1979-2003. *Social Science and Medicine*, 65, 442-453.
- Page, A., Taylor, R., & Martin, G. (2010). Recent declines in Australian male suicide are real, not artefactual. *Australian and New Zealand Journal of Psychiatry*, 44, 358-363.
- Paley, J., & Lilford, R. (2011). Qualitative methods: An alternative view. BMJ, 343, 956-958.
- Paquette, S., & Domon, G. (2003). Changing ruralities, changing landscapes: exploring social recomposition using a multi-scale approach. *Journal of Rural Studies*, 19, 425-444.
- Paslow, R. A. & Jorm, A. F. (2000). Who uses mental health services in Australia? An analysis of date from the National Survey of Mental Health and Wellbeing. *Australian and New Zealand Journal of Psychiatry*, 34, 997-1008.
- Patton, M. Q. (1990). Qualitative Evaluation and Research Methods (2nd ed.). London: Sage.
- Pesut, B. (2003). Developing spirituality in the curriculum: World views, intrapersonal connectedness, interpersonal connectedness. *Nursing Education Perspectives*, 24, 290-294.
- Peterson, N. A., & Hughey, J. (2004). Social cohesion and intrapersonal empowerment: Gender as a moderator. *Health Education Research*, 19, 533-542.
- Phillips, M. R., Li, X., & Zhang, Y. (2002). Suicide rates in China, 1995-99. *Lancet*, 359, 835-40.
- Pickett, K. E., James, O. W., & Wilkinson, R. G. (2006). Income inequality and the prevalence of mental illness: A preliminary international analysis. *Journal of Epidemiology and Community Health*, 60, 646-647.
- Pickett, K. E., & Pearl, M. (2001). Multilevel analyses of neighbourhood socioeconomic context and health outcomes: A critical review. *Journal of Epidemiology and Community Health*, 55, 111-122.

- Pirkis, J., Burgess, P. M., Dunt, D. R. (2000). Suicidal ideation and suicide attempts among Australian adults. *Crisis*, *21*, 16-25.
- Poland, B. D. (1995). Transcription quality as an aspect of rigor in qualitative research. *Qualitative Inquiry, 1*, 290-310.
- Poole, D. L. (1997). Building community capacity to promote social and public health: Challenges for Universities. *Health & Social Work*, 22, 163-170.
- Pope, C. & Mays, N. (1995). Qualitative Research: Reaching the parts other methods cannot reach: an introduction to qualitative methods in health and health services research.

 BMJ, 311, 42-45.
- Popple, F. van., & Day, L. H. (1996). A test of Durkheim's theory of suicide without committing the "ecological fallacy". *American Sociological Review*, 61, 500-507.
- Pretty, J., & Ward, H. (2001). Social capital and the environment. *World Development*, 29, 209-227.
- Qin, P., & Mortensen, P. B. (2003). The impact of parental status on the risk of completed suicide. *Archives of General Psychiatry*, 60, 797-802.
- Raje, F. (2007). Using Q methodology to develop more perceptive insights on transport and social inclusion. *Transport Policy*, *14*, 467-477.
- Rehkopf, D. H., & Buka, S. L. (2006). The association between suicide and the socioeconomic characteristics of geographical areas: A systematic review. *Psychological Medicine*, *36*, 145-157.
- Reis, G. T., Sheldon, K. M., Gable, S. L., Roscoe, J., & Ryan, R. M. (2000). Daily well-being: The role of autonomy, competence, and relatedness. *Personality and Social Psychology Bulletin*, 26, 419-435.
- Richardson, F. C., & Fowers, B. J. (1998). Interpretive social science: An overview.

 *American Behavioral Scientist, 41, 465-495.

- Riva, M., Bambra, C., Curtis, S., & Gauvin, L. (2010). Collective resources or local social inequalities? Examining the social determinants of mental health in rural areas.

 European Journal of Public Health, 21, 197-203.
- Robson, C. (2002). *Real World Research: A Resource for Social Scientists and Practitioner- Researchers*. (2nd ed.). USA: Wiley-Blackwell.
- Romans, S. E., Walton, V. A., Herbison, G. P., & Mullen, P. E. (2005). Social networks and psychiatric morbidity in New Zealand women. *Australian and New Zealand Journal of Psychiatry*, 26, 485-492.
- Rossow, I, & Amundsen, A. (1995). Alcohol abuse and suicide: A 40-year prospective study of Norwegian conscripts. *Addiction*, *90*, 685-691.
- Rusinova, K., Pochard, F., Kentish-Barnes, N., Chaize, M., & Azoulay, E. (2009). Qualitative research: Adding drive and dimension to clinical research. *Critical Care Medicine*, *37*, S140-S146.
- Sankaranarayanan, A., Carter, G., & Lewin, T. (2010). Rural-urban differences in suicide rates for current patients of a public mental health service in Australia. *Suicide and Life-Threatening Behavior*, 40, 376-382.
- Sarma, K., & Kola, S. (2010). Firearm suicide decedents in the Republic of Ireland, 1980–2005. *Public Health*, 124, 278-283.
- Satore, G., Kelly, B., Stain, H. J., Albrecht, G., & Higginbotham, N. (2008). Control, uncertainty, and expectations for the future: A qualitative study of the impact of drought on a rural Australian community. *Rural and Remote Health*, 8, 950 (online). Retrieved August 12, 2011, from http://www.rrh.org.au
- Scott, J. P., & Roberto, K. A. (1987). Informal supports of older adults: A rural-urban comparison. *Family Relations*, *36*, 444-499.

- Secker, J., Armstrong, C., & Hill, M. (1999). Young people's understanding of mental illness. *Health Education and Research: Theory and Practice*, *14*, 729-739.
- Shaffer, D., Gould, M. S., Fisher, P., Trautman, P., Moreau, D., Kleinman, M., et al. (1996).

 Psychiatric Diagnosis in Child and Adolescent Suicide. *Archives of General Psychiatry*, *53*, 339-348.
- Singh, G. K., & Siahpush, M. (2002). Increasing rural-urban gradients in US suicide mortality, 1970-1997. *American Journal of Public Health*, 92, 1161-1167.
- Singleton, H., & McKenzie, F. H. (2008). The re-branding imperative for the Western

 Australian Pilbara region: Status quo to transformative cultural interpretations of local housing and settlement for a competitive geo-regional identity. *Place Branding and Public Diplomacy*, 4, 8-28.
- Skegg, K., Firth, H., Gray, A., & Cox, B. (2010). Suicide by occupation: does access to means increase the risk? *Australian and New Zealand Journal of Psychiatry*, 44, 429-434.
- Smalley, K. B., Yancey, C. T., Warren, J. C., Naufel, K., Ryan, R., & Pugh, J. L. (2010).
 Rural mental health and psychological treatment: A review for practitioners. *Journal of Clinical Psychology*, 66, 479-489.
- Smith, K. B., Humphreys, J. S., & Wilson, G. A. (2008). Addressing the health disadvantage of rural populations: How does epidemiological evidence inform rural health policies and research? *Australian Journal of Rural Health*, *16*, 56–66.
- Snowdown, J. (1997). Suicide rates and methods in different age groups: Australian data and perceptions. *International Journal of Geriatric Psychiatry*, 12, 253-258.
- Snowdown, J., & Hunt, G. E. (2002). Age, period and cohort effects of suicide rates in Australia, 1919-1999. *Acta Psychiatrica Scandinavica*, 105, 265-270.

- Socco, P., Marietta, P., Tonietto, M., Buono, M. D., & De Le, D. (2000). The role of psychopathology and suicidal intent in predicting suicide risk: A longitudinal study. *Psychopathology*, 33, 143-150.
- Sofaer, S. (2002). Qualitative research methods. *International Journal for Quality in Health Care*, 14, 329-336.
- Speer, P. W., Jackson, C. B., & Peterson, A. N. (2001). The relationship between social cohesion and empowerment: Support and new implications for theory. *Health Education & Behavior*, 28, 716 732.
- Stafford, M., & Marmot, M. (2003). Neighbourhood deprivation and health: Does it affect us all equally? *International Journal of Epidemiology*, 32, 357-366.
- Stain, H. J., Kelly, B. K., Lewin, T. J., Higginbotham, N., Beard, J. R., & Hourihan, F. (2008). Social networks and mental health among a farming population. *Social Psychiatry and Psychiatric Epidemiology*, 43, 843-849.
- Stockard, J., & O'Brien, R. M. (2002). Cohort effects on suicide rates: International variations. *American Sociological Review*, 67, 854-872.
- Stockdale, A., Findlay, A., & Short, D. (2000). The repopulation of rural Scotland:

 Opportunity and threat. *Journal of Rural Studies*, 16, 243-257.
- Stokols, D., Pelletier, K. R., & Fielding, J. E. (1996). The ecology of work and health:

 Research and policy direction for the promotion of employee health. *Health Education and Behavior*, 23, 137-158.
- Storer, S. (2007). Land cries out. On Silver Skies [CD]. Australia: EMI Music Australia.
- Strauss, A. & Corbin, J. (1990). Basics of Qualitative Research: Grounded Theory

 Procedures and Techniques. California: Sage Publications.
- Tartaro, C., & Lester, D. (2005). An application of Durkheim's theory of suicide to prison suicide rates in the United States. *Death Studies*, 29, 413-422.

- Taylor, R., Page, A., Morrell, S., Harrison, J., & Carter, G. (2005a). Social and psychiatric influences on urban-rural differentials in Australian suicides. Suicide & Life-Threatening Behavior, 35, 277-289.
- Taylor, R., Page, A., Morrell, S., Harrison, J., & Carter, G. (2005b). Mental health and socio-economic variations in Australian suicide. *Social Science and Medicine*, *61*, 1551–1559.
- Thompson, E. A., Mazza, J. J., Herting, J. R., Randell, B. P., & Eggert, L. L. (2005). The mediating roles of anxiety, depression, and hopelessness on adolescent suicidal behaviour. *Suicide and Life Threatening Behaviour*, *35*, 14-34.
- Tiet, Q. Q., Finney, J. W., & Moos, R. H. (2006). Recent sexual abuse, physical abuse and suicide attempts among male veterans seeking psychiatric treatment. *Psychiatric Services*, *57*, 107–113,
- Tonts, M. (1999). Some recent trends in Australian regional economic development policy. *Regional Studies*, 33, 581-586.
- Townsend, K. C., & McWhirter, B. T. (2005). Connectedness: A review of the literature with implications for counseling, assessment, and research. *Journal of Counseling and Development*, 83, 191-202.
- Vajda, J., & Steinbeck, K. (2000). Factors associated with repeat suicide attempts among adolescents. *Australian and New Zealand Journal of Psychiatry*, 34, 437-445.
- Valentiner, D. P., Gutierrez, P. M., & Blacker, D. (2002). Anxiety measures and their relationship to adolescent suicidal ideation and behaviour. *Anxiety Disorders*, 16, 11-32.
- Victorian Government Department of Sustainability and Environment (VGDSE) (2007).

 Towns in Time 2001 Analysis: Population Change in Victoria's Towns and Rural

 Areas. Incorporating the study of small towns in Victoria revisited. [Data Sheets:

- Large Towns]. Retrieved January 5, 2008, from:
- http://www.dpi.vic.gov.au/DSE/dsenres.nsf/LinkView/E05D934749B13CE2CA256D 3B0005539F5D8F38B915AF5AA1CA256D1A0022BDE9
- Wagstaff, G. F., & Rowledge, A. M. (1995). Stoicism: it's relation to gender, attitudes towards poverty, and reactions to emotive material. *The Journal of Social Psychology*, 135, 181-184.
- Wainer, J., & Chesters, J. (2000). Rural mental health: Neither romanticism nor despair.

 Australian Journal of Rural Health, 8, 141-147.
- Wainwright, N. W., & Surtees, P. G. (2004). Area and individual circumstances and mood disorder prevalence. *British Journal of Psychiatry*, 185, 227-232.
- Weich, S., & Lewis, G. (1998). Material standard of living, social class, and the prevalence of common mental disorders in Great Britain. *Journal of Epidemiology and Community Health*, 52, 8-14.
- Weich, S., Twigg, L., & Lewis, G. (2006). Rural/non-rural differences in rates of common mental disorders in Britain: Prospective multilevel cohort study. *British Journal of Psychiatry*, 188, 51-57.
- Weinert, C. & Long, K. (1987). Understanding the health care needs of rural families. *Family Relations*, *36*, 450-455.
- Whitlock, J. (2007). The role of adults, public space, and power in adolescent community connectedness. *Journal of Community Psychology*, *35*, 499-518.
- Wilkinson, D., & Gunnell, D. (2000). Youth suicide trends in Australian metropolitan and non-metropolitan areas, 1988-1997. *Australian and New Zealand Journal of Psychiatry*, 34, 822-828.
- Wilkinson, R. G., & Pickett, K. E. (2007). The problem of relative deprivation: Why some societies do better than others. *Social Science & Medicine*, *65*, 1965-1978.

- Wolf, Z. R. (2003). Exploring the audit trail for qualitative investigations. *Nurse Educator*, 28, 175-178.
- World Health Organisation (WHO). (2004). Suicide huge but preventable public health problem, say WHO. Retrieved August 13, 2011, from http://www.who.int/mediacentre/news/releases/2004/pr61/en
- World Health Organisation (WHO). (2010). *Mental health: Strengthening our Response,*[fact sheet 220]. Retrieved August 13, 2011, from:

 http://www.who.int/mediacentre/factsheets/fs220/en/
- World Health Organisation (WHO). (2011). Suicide rates per 100 000 by country, year and sex (Table). Retrieved August 19, 2011, from http://www.who.int/mental_health/prevention/suicide_rates/en/index.html
- Wrigley, S., Jackson, H., Judd, F., & Komiti, A. (2005). Role of stigma and attitudes toward help-seeking from a general practitioner from mental health problems in a rural town.

 Australian and New Zealand Journal of Psychiatry, 39, 514-521.
- Yang, B., Lester, D., & Yang, C-H. (1992). Sociological and economic theories of suicide: A comparison of the U.S.A. AND Taiwan. *Social Science and Medicine*, *34*, 333-3
- Yip, P. S. F., Callanan, C., & Yuen, H. P. (2000). Urban/rural and gender differentials in suicide rates: East and West. *Journal of Affective Disorders*, *57*, 99-106.

Appendices

Appendix A

Area categories for each of the RRMA, ARIA, and ASGC classification systems

Rural, Remote and Metropolitan Areas (RRMA) classification system⁶

Zone	Code	Category
Metropolitan zone	etropolitan zone M1 (1) Capital cities	
	M2 (2)	Other metropolitan centres (urban centre population > 100,000)
Rural zone	R1 (3)	Large rural centres (urban centre population 25,000-99,999)
	R2 (4)	Small rural centres (urban centre population 10,000-24,999)
	R3 (5)	Other rural areas (urban centre population < 10,000)
Remote zone	Rem1 (6)	Remote centres (urban centre population > 4,999)
	Rem2 (7)	Other remote areas (urban centre population < 5,000)

Accessibility Remoteness Index of Australia (ARIA) Categories⁷

Category	Score range
Highly Accessible	0.00 - 1.84
Accessible	>1.84 - 3.51
Moderately Accessible	>3.51 - 5.80
Remote	>5.80 - 9.08
Very Remote	>9.08 - 12.00

$Australian\ Standard\ Geographical\ Classification\ (ASGC)\ Remoteness\ Areas^8$

Remoteness Area	ARIA+ range
Major Cities of Australia	0-0.2
Inner Regional Australia	>0.2 and ≤ 2.4
Outer Regional Australia	$>$ 2.4 and \leq 5.92
Remote Australia	$>$ 5.92 and \leq 10.53
Very Remote Australia	>10.53
Migratory	Off-shore, migratory and shipping CCDs

⁶ Adapted from GISCA (2000)

⁷ Adapted from GISCA (2000)

⁸ Adapted from ABS (n.d.)

Appendix B

Search strategies and criteria for building initial database of MHPs

- 1. The "Find a Psychologist" facility provided by Beyond Blue
 - a. The service was accessed online at beyondblue.com
 - b. The search specifications were:
 - i. Service area (each of the four towns was searched independently),
 - ii. Clinical Psychologist
- 2. The "Find a Psychologist" facility provided by the Australian Psychological Society
 - a. The service was accessed online at aps.com
 - b. The search specifications were:
 - i. Within a 25km radius of the specified town
 - ii. Psychologists whose areas of expertise were
 - 1. Adult populations
 - 2. Depression and/or mental illness
- 3. Listings in the Yellow Pages
 - a. Accessed online at <u>yellowpages.au</u>
 - b. Search terms were:
 - i. Counseling
 - 1. Psychology
 - 2. Marriage, family, and personal
 - ii. Mental health
 - 1. Psychology
 - 2. psychotherapy
 - iii. Psychology
 - iv. Psychiatry
 - v. General Practitioners
 - c. The search specifications were:
 - i. Within a 25km radius of the specified town or servicing the area
- 4. Snowballing methods
 - a. Personal communications between the researcher and colleagues who were aware of practitioners servicing the areas of interest
 - b. On multiple occasions MHPs who were contacted by the researcher would provide contact details of other professionals servicing the area who may be interested

Appendix C

Template of the Recruitment letter sent to Mental Health Professionals

[Insert Date]

Jessica Collins Department of Psychology Monash University

[Insert Name]
[Insert Address]

[Insert Name],

My name Jessica Collins, I am a Provisional Psychologist and I am currently completing a Doctor of Psychology in Clinical Psychology at Monash University. As part of my candidature, I am conducting a research project under the supervision of Dr. Pamela Snow from Monash University (School of Psychology, Psychiatry, and Psychological Medicine, Lister House, Bendigo) and Professor Fiona Judd from the Royal Women's Hospital.

I will be writing a research thesis based on this project, titled "Compositional, Contextual and Collective Community Factors in Mental Health and Wellbeing in Australian Rural Communities".

Through my research I aim to gain an understanding of the factors that key community members perceive to be important in mental health and wellbeing in Australian rural communities. This information may be useful in directing attention towards factors that appear to foster mental health and reduce mental ill health and suicide in rural Australians.

I am seeking to recruit mental health professionals working in or servicing [Insert Town], to participate in face-to-face, audio taped semi-structured interviews, of about one hour duration with me. For the purpose of this research, the "experts" are the people who live and work in rural communities.

Your participation would be greatly appreciated.

If you are interested in participating in this project or would like further information, please complete the attached return slip and mail it to me at the address below, in the <u>reply paid envelope provided</u>. You may also contact me via email at <u>Jessica.Collins@med.monash.edu.au</u> if you have any queries.

Jessica Collins (DPsych Clinical) c/o Department of Psychology Psychology General Office Room 405, Building 17 Monash University Clayton Campus, 3800

If you are not the most appropriate person to receive this information it would be greatly appreciated if you could forward it on to a better suited recipient. Similarly if you are aware of other mental health professionals servicing [Town] who may also be interested, please forward this information on to them.

Thanking you in anticipation of your support Jessica Collins BBSc (Hons.) Doctor of Psychology (Clinical) Candidate





Return Slip for the research project:

COMPOSITIONAL, CONTEXTUAL AND COLLECTIVE COMMUNITY FACTORS IN MENTAL HEALTH AND WELLBEING IN AUSTRALIAN RURAL COMMUNITIES.

I would like to (please tick all that apply):						
appress my interest in participating in the above titled research project						
obtain more information about the above titled research project						
I consent to Jessica Collins contacting me on the following contact details to arrange this.						
Name						
Address						
Suburb						
Postcode						
Phone	Home:	Work:	Mobile:			
Email						
•	-					
(Signed)		_ Date:				

Appendix D

Template of Explanatory Statement and Consent form for Mental Health Professionals





[Insert Date]

Explanatory Statement for Mental Health Professionals of [insert town name]

Title:

COMPOSITIONAL, CONTEXTUAL AND COLLECTIVE COMMUNITY FACTORS IN MENTAL HEALTH AND WELLBEING IN AUSTRALIAN RURAL COMMUNITIES.

IMPORTANT NOTE: Distress, due to recent life events may occur (unbeknown to the researcher); if so, please discontinue reading about the following research.

This information sheet is for you to keep.

My name Jessica Collins, I am a Probationary Psychologist and I am currently completing a Doctor of Psychology in Clinical Psychology at Monash University. As part of my candidature, I am conducting a research project under the supervision of Dr. Pamela Snow from Monash University (School of Psychology, Psychiatry, and Psychological Medicine, Lister House, Bendigo) and Professor Fiona Judd from the University of Melbourne. Based on this research project I will be writing a thesis which is the equivalent of a short book.

Existing research has found that there are considerable differences in peoples' health and well being, including rates of suicide, across rural Australian communities. Through my research I aim to gain an understanding of the factors that key community members perceive to be important in mental health and wellbeing in Australian rural communities. This information may be useful in directing attention towards factors that appear to foster mental health and reduce mental ill health and suicide in rural Australians.

I am seeking to recruit participants from a variety of rural towns based on features including their size and rate of suicide. I am looking to recruit mental health professionals working in rural communities as I regard the "experts" to be people who work in these communities. Mental health professionals of [insert town name] may be made aware of the study through a letter received in the mail, word of mouth and local media releases, and potential participants will be invited to contact me to take part in the study.

The study involves one-to-one, audio taped semi-structured interviews, of about one hour duration with me. Interviews will cover topics such as what it is like to live in [insert town name], how do people get along, what is important to the people of [insert town name], and issues around mental health and mental illness in [insert town name].

While it is not anticipated that participants will suffer any discomfort or distress as a result of participating in this study, it is possible that there may be discussion of sensitive issues during the interviews which are distressing to some participants as a result of life experiences unbeknown to me. Should you become distressed at any point, the interview will be discontinued and appropriate support would be provided to you through debriefing with myself, referral to relevant counselling services and/or other support services necessary to ensure your safety and wellbeing.

Participating in any study is voluntary and you are under no obligation to take part. Participants may withdraw from the interviews at any time or avoid answering any questions which are felt too intrusive. If you do consent to participate, you may withdraw your data within four weeks of the interview. You may also view the transcript of your interview before it is used for analysis purposes if you so wish. As a registered medical practitioner, Professor Fiona Judd is included in the mandatory reporting legislation.

While information obtained from these interviews will be presented in a thesis and may be published in a report and in relevant professional journals and at conferences, no individual or town will be identified, and pseudonyms and other disguising tools will be used where necessary. This means that indirect identification of participants will not be possible.

Data will be stored in accordance with University regulations and will be kept on University premises at Lister House, Bendigo in a locked cupboard/filing cabinet for 5 years before being destroyed.

If you agree to participate and would like to be informed of the research findings, please tell me at the time of your interview so that I can collect contact details from you.

If you would like to contact the researchers about any aspect of this study, please contact the Chief Investigator:	Should you have any complaint concerning the manner in which this research (<i>project insert project number</i>) is conducted, please do not hesitate to contact the Monash University Standing Committee on Ethics in Research Involving Humans:
Dr. Pamela Snow Monash University Lister House PO Box 666 Bendigo, 3552 Tel: +61 3 5400 9006 Email: Pamela.Snow@med.monash.edu.au) or Jessica Collins, e-mail: Jessica.Collins@med.monash.edu.au	Human Ethics Officer Standing Committee on Ethics in Research Involving Humans (SCERH) Building 3D Research Office Monash University VIC 3800 Tel: +61 3 9905 2052 Fax: +61 3 9905 1420 Email: scerh@adm.monash.edu.au

Thank you for your participation.

Jessica Collins BBSc (Hons.)



Consent Form for Mental Health Professionals of [insert town name] to Participate in the Research Project:

COMPOSITIONAL, CONTEXTUAL AND COLLECTIVE COMMUNITY FACTORS IN MENTAL HEALTH AND WELLBEING IN AUSTRALIAN RURAL COMMUNITIES.



Support Services and Further Information:

If you need to talk to someone straight away you can make an <u>emergency appointment</u> with your <u>local doctor</u> (General Practitioner) or contact your local or public hospital. You can find a GP in your area who has had extra training in mental health by looking at the *Beyondblue* Find a Doctor List.

If you would like to find out what mental health services are available in your area call Lifeline's <u>Just Ask</u> information line on 1300 13 11 14 (Monday to Friday 9am to 5pm EST).

Other support services you can contact include:

LifeLine

Phone: 131 114

http://www.lifeline.org.au/

Suicide Helpline

Phone: 1300 651 251

http://www.suicidehelpline.org.au/

beyondblue

Information phone line: 1300 22 4636

http://www.beyondblue.org.au/

Mensline

Phone: 1300 789 978

Appendix E

Interview probes for semi-structured face-to-face interviews with respondents

Please note that the following interview probes are a guide only to the topics I am planning to cover. This is an iterative process and as such each interview will be informed by those which have preceded it, and I may want to incorporate these issues into future interviews. Further to this, in order to identify unexpected information, general probes will be offered but then there will be flexibility in the interviews to allow the respondent to take the interview to new but relevant territory. Each broad probe is followed by a number of examples of "sub" probes that will be used in an effort to draw out an interviewee if need be.

- 1. I'm interested to know about the culture of your town. By that I mean
 - a. What would a newcomer notice about the town that sets it apart in terms of its "feel"?
 - i. Do you think that everybody mixes with one another, or are there certain groups/subcultures in the town? Please describe?
 - ii. Do you think that people in the town are generally welcoming of outsiders? Could you give any examples?
 - iii. How does the community in general view young people?
 - iv. When people are in need, do others generally help out?
 - b. Are there any important historical events that have shaped the town's collective psyche?
 - c. What kind of things make it different from the culture of a city town or other rural towns?
 - d. How does the culture of the town impact on men and women differently?
 - i. Have you lived in other towns (or even a city)? How did things vary to your current locale?
 - e. Do you think that the culture of the town impacts on men and women differently? If so, in what ways?
 - i. Are there any general expectations for men in the town? What are they?
 - i. Are there any general expectations for women in the town? What are they?
- 2. What sorts of values or behaviours are considered to be important in your town, for example, behaving in a certain way in public, having certain material goods. contributing to community?
 - a. Are there things in your town that people generally should or should not do or believe
 - b. Are there things that are important to your town that are different to other towns

- 3. I am interested in how you would rate the level of social capital in your town, what I mean by that is
 - a. Are there many events organized for the whole town, or for different age groups?
 - i. Does the whole town attend these?
 - ii. Are there particular groups who don't attend?
 - b. What sort of relationship do you think the people in the town have with each other on the whole
 - c. How do you perceive the levels of volunteering in the community?
 - d. How safe do you and your family feel here?
 - i. What is the perception about levels of crime?
 - e. Do you think there are any divisions in the town
 - i. Maybe new or old residents
 - ii. People of different ethnicity
- 4. Tell me about your town's reputation
 - a. What do people who have lived in the town a long time tend to think of when they think of your town
 - b. What about people who have visited
 - c. What do you or did you tend to think of
 - d. What are the things you hear about your town when you visit other places?
- 5. Tell me about community attitudes towards mental health and mental illness
 - a. Do you think people with mental illness feel comfortable with others knowing?
 - b. Do you know of anyone/can you think of someone you have worked with, who has experienced mental illness? Could you describe their experiences regarding how other people or the community responded to them?
 - i. What kind of things make your town different from other towns in relation to attitudes to mental illness
 - ii. What services are established in your town to respond to the needs of people with mental illness
- 6. What do you think the experience of being mentally unwell would be like for someone in your town?
 - a. Would people be encouraged or discouraged to seek help
 - b. Where would people seek help from
 - c. How would other members of the town relate to someone they know was mentally unwell
- 7. Is there anything else about your town that you think is either helpful or unhelpful in promoting mental health and wellbeing in the community?

Appendix F

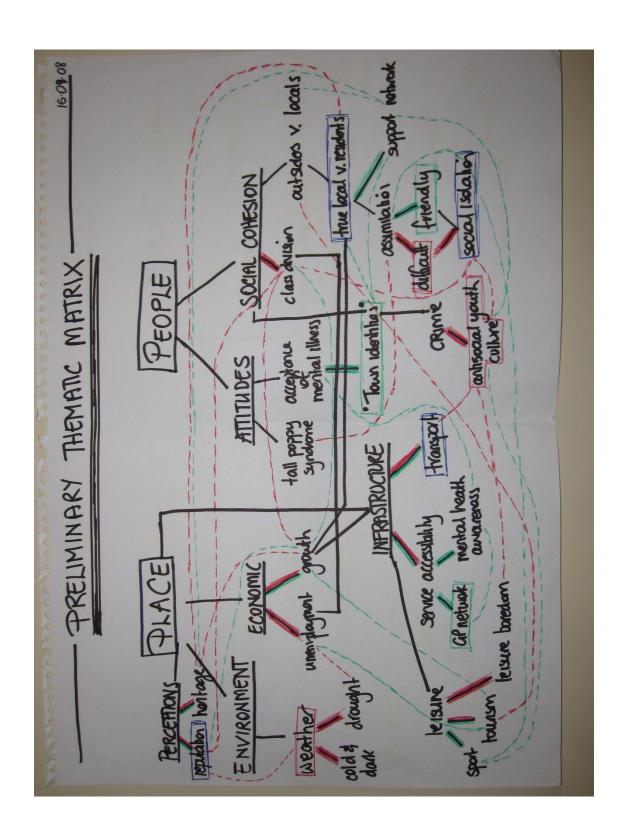
Examples of memo excerpts showing preliminary thematic analysis and data conceptualisation

Common theres emerging from the 3 internews to date
include theirs like: commuter population -> family strain,
generally as a supportive & community
tocussed town, 'Village culture' where purpose tooks
and a strong community invaluement is contacting
the tay of other. His a gomen no large
10 the object of the constant
to the class diviscons.
William Court States
talked at great length about the reasons
she made the decision to move to She also referred to the "Village atmosphere", she felt
she made the decision to move to She also referred to the "Village atmosphere", she felt that it would be a good place to raise a family
she made the decision to move to She also referred to the "Village atmosphere", she felt that It would be a good place to raise a family because it had a more conno atmosphere was
she made the decision to move to She also referred to the "Village atmosphere", she felt

was somewhat contraductory in her descriptions of
the culture of the town. She stated on more than one
occassion that the size of the town meant that it
was not too big that people are anenymous, but not
too small that it is "clicky". She said it was a very
snerdly and warm town. However, lake noted the
phenomenon also discussed by in which it takes
multiple geneations of family hanny tweed in the
town to be considered a "local". That said, people who
moved to the town whon they were young do not fit into
either local or rewbie of Struggle to get in socially.

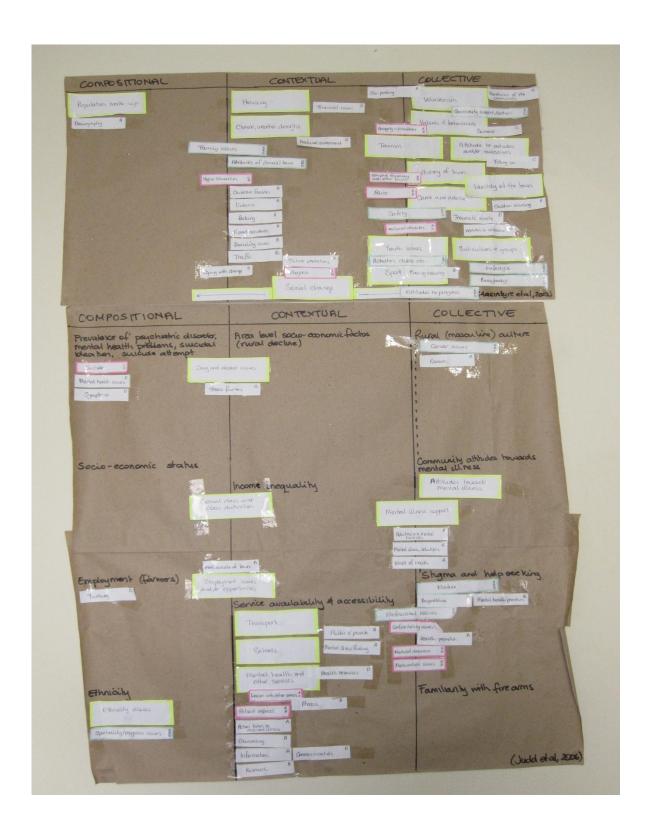
Method to rewbie of a merorchy in the town
with the originally farming families at the top.

Appendix GDiagram showing preliminary thematic analysis and conceptualisation



Appendix H

Diagram showing preliminary mapping of categories and inter-related sub-categories



Appendix I

Copy of ethics approval notice from Monash University SCERH



Standing Committee on Ethio sin Recearch involving Human's (SCERH) Research O tilde Dr Pamela Show Department of School of Psychology, Psychiatry and Psychological Mediblie Faculty of Mediche , Nursing and Heath Schness Bendigo Campus

27 Julie 2007

CF07/1523 - 2007/0428: Compositional, contestual and collective community factors in mental ireal trand wellbeing in Australian rural communities

Thank you for the lint im attor proutded in relation to the about project. The items requiring attention have been resolved to the satisfaction of the Standing Committee on Ethics in Research Involving Himans & CERH). Accordingly, this research project is approved to proceed.

Term | ofapproval

1. This project is appround for five years from the date of this letter and this appround is only unlid while tyou

hold a position at Monash University.

It is the responsibility of the Chief investigator to ensure that all information that it pending (such as permission is theirs from organisations) is to wanted to SCERH, if not do ne already. Research ican not begin atany organisation until SCERH receives a letter of permission from that organisation. You will the n

e or be a letter from SCERH confirming that we have received a letter from each organisation.

3. It is the responsibility of the Chief investigator to ensure that all huestigators are aware of the terms of approval and to ensure the project is conducted as approved by SCERH.

4. You should notify SCERH immediately of any serious or unexpected advises entects on participants or unto essee necents affecting the ethical acceptability of the project.

5. The Explanatory Statement must be on Monash University letterine ad and the Monash University complaints other project.

oblase mastcoù bala your project aam be r.

Amendments to the approved project. Changes to any aspect of the project require the submission of a Request for Amendment form to SCERH and must not begin without written approximation. SCERH. Substantial usurations may require a new application.

7. Ruture correspondence: Please quote the project number and project title above in any further.

соптемров de в се

Annual reports: Continued appropriation tills project is dependent on the sytumission of an Annual Report.
Please provide the Committee with an Annual Report <u>determined by the date or your letter or approval.</u>

 A rail report: A Final Reports to vidibe prouted at the conclusion of the project. SCER His to vidibe notified. If the project is discontinued before the expected date of completion.

10. Morniforing: Projects may be subject to an analytic rany other form of monitoring by SC ERH at any time.

11. Referition and inbrage of data: The Chief huestigator is responsible for the storage and retention of original data pertaining to a project for a minimum period of flue years.

All forms can be accessed at our website https://www.monash.edu.au/research@thbs/human/hdex.html

We wish you well with your research.

Dir Souhe ir Houssam I

Executive Officer, Human Research Ethics (on behalf of SCERH)

Co: Prof Floria Judd, Miss Jessica Collins,

Postal - Mansah Unwersiy, Vic 2000, Australa Bulding SE, Room IIII, Cayton Campus, Walington Road, Cayton Falighore: 1819 2005 YSD Secombil 1819 2005 1420 Famal seah (<mark>Codim manash adulus.</mark> Www.manash adulusaan chialle calbuman in desthimi ABN 12 277 814 012 CR COS Provider P00000C

Appendix J

Thematic matrix from completed data analysis

Themes and sub-themes under Compositional, Contextual, and Collective constructs

Compositional	Contextual	Collective
Population make-up & demographics	Physical environment & climate	Identity of the town
Mental health issues	Employment opportunities	Values & behaviours
	Availability of housing	Community norms & values
	Mental health & other services	Social cohesion
	Mental health services	Attitudes towards mental illness
	Other health & safety services	Perceptions of crime & safety
	Transport services	
	Youth services	