THE BARRIERS AND FACILITATORS OF FARMER MENTAL HEALTH HELP-SEEKING: A MIXED METHODS APPROACH

A Thesis submitted by

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Abstract

Farming as an occupation has many inherent stressors, and farmers demonstrate suicide rates twice that of the general population (Arnautovska, McPhedran, & De Leo, 2014). There are also reports that indicate farmers may show fewer help-seeking behaviours, although research to date has failed to uncover clear reasons for this (Brew, Inder, Allen, Thomas, & Kelly, 2016). If mental health help-seeking behaviours, such as seeking mental health support from health professionals, occurs promptly, then negative consequences may be minimised. There is an urgent need to identify factors specific to farmers that prevent and promote mental health help-seeking. To address this problem a two-phase program of research using mixed methods was conducted. The first phase was qualitative, using semi-structured interviews and thematic analysis as per Braun and Clarke's (2006) recommendations to explore farmer mental health help-seeking with three samples: farmers, farmers' partners, and General Practitioners (GPs). From the analysis, three superordinate themes were reported as part of Phase 1: 'Farming life', 'Services', and 'Personal factors'. Farming life encompassed 'Lifestyle and culture', 'Farming priorities', and 'The challenges of farming life' themes. The services superordinate theme was comprised of three themes: 'How the service is delivered', 'Services are provided within a complex system', and 'Emerging technologies: The users, practitioners, and systems'. Lastly, personal factors included the themes of 'Mental health literacy', 'Stigma of mental illness and help-seeking', 'Support, the partners' role in help-seeking' and 'The intersectionality between being a farmer, age, and gender'. The Phase 1 findings provided the basis for Phase 2 hypotheses generation. In Phase 2, correlational analyses and logistic regression demonstrated which of the factors identified in Phase 1 had bivariate and predictive relationships with intentions to

seek mental health help. Further, the farmers' intentions for seeking mental health help from a GP and a mental health professional were considered separately. With respect to intentions to seek mental health help from a GP, many factors demonstrated a bivariate relationship, and together these factors accounted for a large amount of the variance. One factor, comfort with mental health services, was a key predictor. There was a different pattern of relationships for intentions to seek help from a mental health professional, but many factors also demonstrated a bivariate relationship. Together, the factors accounted for a large amount of the variance in intentions to seek help from a mental health professional, and two factors were key predictors: comfort with mental health services and psychological openness. The findings from this research advance knowledge in a number of ways. Firstly, this research provides an understanding of the barriers and facilitators farmers experience with respect to mental health help-seeking. Additionally, Phase 2 provides information regarding the strength of these factors' influence on farmer help-seeking intentions, and the importance of considering each health profession separately, because intentions to seek help from each were related to, and predicted by, different groups of factors. While further research is still needed, given the emerging state of the literature, this research has utility and highlights the complexity of preventive and promotive factors impacting on farmer mental health help-seeking.

Certification of Thesis

This thesis is entirely the work of Caitlin Vayro except where otherwise acknowledged. The work is original and has not previously been submitted for any other award, except where acknowledged.

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Student and supervisor's signatures of endorsement are held at the University.

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List of Conference Presentations

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Abbreviations

ABS: Australian Bureau of Statistics.

AHSQ: Actual Help-Seeking Questionnaire

AIHW: Australian Institute of Health and Welfare

ARIA+: Accessibility/Remoteness Index of Australia

ASGC: Australian Standard Geographic Classification

ATSPPHS/-SF: Attitudes Toward Seeking Professional Psychological Help Scale/ - Short Form

BDD: Beliefs about Devaluation-Discrimination scale

CBT: Cognitive Behaviour Therapy

DALY: Disability-Adjusted Life Years

eMHprac: e-mental health in practice

FIML: Full Information Maximum Likelihood

FTE: Full-Time Equivalent

GHSQ: General Help-Seeking Questionnaire

GHQ-12: General Health Questionnaire-12

GP: General Practitioner

HBM: Health Belief Model

IASMHS: Inventory of Attitudes Toward Seeking Mental Health Services

K10: Kessler Psychological Distress Scale

KMO: Kaiser-Meyer-Olkin test of sampling adequacy

MHLS: Mental Health Literacy Scale

OR: Odds Ratio

RAPG: Rural Attitudes Towards GPs

RULS: Robust Unweighted Least Squares

SSOMI: Self-Stigma of Mental Illness scale

SSOSH: Self-Stigma of Seeking Help scale

SSRPH: Stigma Scale for Receiving Psychological Help

SSSS: Sources of Social Support Scale

TPB: Theory of Planned Behaviour

WUSS: Wollongong University Stoicism Scale

Chapter 1: Background

Farmers and farming communities are the backbone of the Australian society. They are responsible for feeding and clothing people both in Australia and internationally, as well as contributing $58.1 billion to the Australian economy (National Farmers Federation, 2017). Unfortunately, recent research shows that farmers face significant and chronic stressors, experience heightened risk of mental health problems, and demonstrate a higher rate of suicide than the general population (Arnautovska, McPhedran, & De Leo, 2014; Schirmer, Peel, & Mylek, 2015). Exacerbating these issues is the finding that farmers, as a population, are reluctant to access mental health services for assistance, meaning many suffer in silence (Kent & Alston, 2008). The reasons why farmers do not seek help for mental health has not yet been examined scientifically, despite the important health benefits that could come from reducing the barriers to care for this group. The overall aim of this research is to explore the barriers and facilitators of mental health help-seeking in Australian farming populations. This research uses an exploratory, mixed methods approach to understand farmer mental health help-seeking, first through a large qualitative study with multiple participant samples, and second, through a subsequent quantitative study to measure the relative impact of the identified barriers and facilitators in broader farming populations. Chapter 1 provides an overview of the research problem and context including the aims and objectives of this research. Furthermore, it describes the methodological approaches adopted in this thesis, and outlines the structure of the thesis.

Farmers as a Population

Given that farms tend to be located in non-metropolitan areas, farmers are considered a subset of the rural and remote population (Queensland Government

Department of Agriculture, Fisheries, and Forestry, 2014). That is, rural and remote populations encompass most farmers, as well as other sub-populations from other industries. This means that there are likely to be similarities between farmers and the overarching rural and remote populations, particularly with respect to place-based characteristics. However, there are also likely to be differences given the specific context of farming work and lifestyle. Therefore, it is important to focus specifically on farmers to best understand their mental health help-seeking.

This research is, for the most part, focused on farmers from the state of Queensland, in Australia. In Queensland, there are 55,400 farmers working on 18,153 farms, encompassed in the 304,200 farmers nationally working on 85,681 Australian farms, based on 2015-2016 data (Australian Bureau of Statistics [ABS], 2017; National Farmers Federation, 2017). Queensland's Department of Agriculture, Fisheries, and Forestry (2014) reported that approximately 85% of the landmass in Queensland is used for primary production purposes. Further, the ABS (2017) reported that approximately 50% of Australian land is used for agricultural purposes. As such, primary production is a major contributor to Queensland commodity exports, worth close to $9 billion per annum (Queensland Government Department of Agriculture, Fisheries, and Forestry, 2014). In 2015, the gross value of Australian agriculture was $58.1 billion (National Farmers Federation, 2017). Seventy-seven percent of Australian primary production outputs were exported, which were worth $44.8 billion to the economy. Farmers not only contribute to Australian exports and the economy, but they also feed and provide the materials to clothe the nation.

Various definitions and descriptions of farmers have appeared in the literature, with some describing this population as farm managers and labourers (Arnautovska et al., 2014), members of the farming community (Booth, Briscoe, &

Powell, 2000) or distinguishing between types of farmers such as dairy and broadacre farmers (Brumby, Willder, & Martin, 2009). Other research has used self-report data to understand the many types of farming in Australia. For example, Schirmer et al.'s (2015) 2014 Regional Wellbeing Survey Farmers and Agriculture research report identified beef graziers, cotton farmers, cropping farmers (grain and oilseed), dairy farmers, fruit and vegetable growers, intensive livestock farmers (chicken and pig farmers as well as beef feedlots), mixed farmers (engaged in multiple types of farming), rice farmers, sheep graziers, sheep-beef graziers, and wine grape growers, all as different types of farmers. There are also individuals who own non-commercial farms, known as hobby farms, which are largely for enjoyment and not relied upon for income. For the purpose of this research, farmers are defined as individuals who self-identify as farmers or primary producers (incl. graziers). That is, those who identify their main occupation as primary production. As such, hobby farmers are excluded. This broad definition has been chosen to allow for the greatest possible inclusion while still targeting a focused farming population.

The above-mentioned report by Schirmer et al. (2015) is frequently referred to throughout this thesis and is based on the data collected from farmers as part of the Regional Wellbeing Survey, which targets adults living in rural and regional Australia. The survey focuses on wellbeing in a broad sense, including examination of factors that may have an impact on wellbeing, such as physical and mental health, the agriculture industry, their farm, their community, and the environment. The data was collected using both online and paper-based platforms, with the majority of farmers completing paper surveys. Many recruitment methods were used such as flyers in letterboxes, social media and traditional media promotion. Farmers were oversampled by using a stratified random sample (by region and farming type) from

a farmer specific database. The findings of this regional wellbeing survey provide useful information regarding regional context and potential factors relevant to mental health help-seeking, and are discussed throughout this thesis.

The report by Schirmer et al. (2015) indicated that stereotypically, a farmer is generally assumed to be a middle-aged or older man who works and lives on the farm with their wife, who also works both on and off the farm. However, farmers are a diverse group, and many farmers do not fit this stereotype. A noteworthy minority of farmers (28.4%) are female, 20% are under are 40 years of age, and half are under 55 years of age (ABS, 2012; Schirmer et al., 2015). According to the comprehensive report by Schirmer et al. (2015), the majority of farmers lived on their farms, with only 22.5% living elsewhere. Those who lived off the farm often lived in a nearby town or on another rural property. While the majority of farmers managed a single property, 20.8% of farmers managed two properties, and 23.8% managed three or more properties (Schirmer et al., 2015). The majority of farm businesses were structured as family partnerships (50.4%), however, many were also family trusts (19.7%), sole traders (17%), or public or private companies (many also family owned; 12.9%). These findings highlight that farming is a profession that is often embedded within families.

Farmers as a group appear to face many stressors. Many farmers work long hours, with 50% working 49 hours or more per week (ABS, 2012). These long working hours have been suggested to increase as a farmer's financial position declines (Schirmer et al., 2015). Further, in Schirmer and colleagues' (2015) report, 27.5% of farmers were classed as having poor financial wellbeing, with self-reported income described to be 'very poor', 'poor', or 'just getting along'. In addition, farmers reported that they had experienced extreme weather events including

drought (75%), heatwaves (64%), severe storms (52%), flood (46%), unusual cold snaps (40%), a bushfire (35%), and a cyclone (8%), which impacted their livelihood. Drought, in particular, can have an enduring impact on a farmer's financial position and was most commonly experienced by farmers from Queensland and New South Wales. These data suggest there may be differences in farmers' experiences depending on location, that could in turn lead to differences in their wellbeing (Schirmer, Berry, & O'Brien, 2013; Schirmer et al., 2015).

Farmers experience a wide range of pressures and potential stressors. Most notably, weather events, as multiple types of primary production rely heavily on rainfall. Queensland's and Australia's rainfall are extremely variable by world standards, in both the short and long-term (King et al., 2014; Queensland Government Department of Agriculture, Fisheries, and Forestry, 2014). Since 2011, Queensland has experienced widespread drought conditions with 87.5% of the state officially classified as in drought in March 2017, down to 58.1% in October 2018 (Queensland Government Department of Agriculture, and Fisheries, 2018; Queensland Government Department of the Premier and Cabinet, 2017). The drought has had a large impact on farming outputs, affecting the farming business, which has a range of implications for farmers themselves (Queensland Government Department of Agriculture, Fisheries, and Forestry, 2014).

As is evident above, farming in Australia is complex and multifaceted. There are many types of farmers in Australia, who play a vital role in the Australian economy. There are many challenges, and pressures that farmers face due to their occupation, such as drought and financial strain. It has been demonstrated that these challenges play a role in determining the mental health of farmers (Hossain, Eley, Coutts, & Gorman, 2008).

Mental Health and Wellbeing of Farmers

Although often considered interchangeable, wellbeing and mental health are defined as distinct constructs (Keyes, 2002). Wellbeing, as conceptualised by Schirmer et al. (2015) based on the definition from the World Health Organisation (2013), refers to a broad concept encompassing an individual's health and relationships, as well as other higher-order factors such as having a safe, secure, and fair society. This higher-order concept is important and encompasses mental health, but it is not the central focus of the current research, although due to the lack of literature some findings regarding wellbeing are presented. The focus of this research is on the narrower concept of mental ill health. In line with Keyes (2002), this research considers mental ill health more broadly then any specific diagnoses to encompass a global state of an individual from flourishing mentally through to languishing or despair. As such, the poor mental health end of the continuum is likely to often coincide with mental illness. Several mental illnesses share a common indicator; non-specific distress (Kessler et al., 2002). As such, increasing levels of distress are likely to indicate a decline into poor mental health. Poor mental health, even in the absence of diagnosable mental illness, can have detrimental impacts on an individual (Slade et al., 2009), and thus is important to examine.

An Australian national survey conducted in 2007, reported that in the previous 12 months 20% of the general population experienced a mental illness, with a lifetime prevalence of 45% (Australian Government Department of Health and Ageing, 2013; Slade et al., 2009). Further, the proportion of the total disease burden accounted for by mental and substance use disorders was 12% and this equates to 542,554 Disability-Adjusted Life Years (DALY), which is the number of healthy life years lost (Australian Institute of Health and Welfare [AIHW], 2016). Mental and

substance use disorders also accounted for the most substantial proportion of the non-fatal burden of disease at 24% (AIHW, 2016). The total burden of mental and substance use disorders has also increased 13% between 2003 and 2011 (AIHW, 2016). The burden of disease from mental illness is especially concerning when the cost is considered. The ABS (2009) estimates that the annual cost of poor mental health, including loss of labour force participation and productivity, is $20 billion. Thus, the impact of poor mental health on individuals and society is immense.

The evidence suggests that farmers may be particularly vulnerable to mental health problems (Brew et al., 2016), although there are very few statistics available that report rates of mental disorders in this group. There is, however, research examining wellbeing, psychological distress, and suicide that highlight the generally poorer mental health status of farmers compared to the Australian population.

Overall wellbeing. Given the sparse evidence on mental health difficulties among farmers, it is worthwhile drawing from wellbeing research. There is evidence to suggest that farmers as a group experience generally poorer wellbeing than rural populations (Brew et al., 2016). Farmer wellbeing is influenced by many diverse factors including (but not limited to) their relationships, standard of living, community, geographic isolation, the agricultural economy, and drought (Hossain et al., 2008; Schirmer et al., 2015). In a dedicated analysis of farmers' wellbeing, Schirmer et al. (2015) reported that poorer farmer wellbeing was associated with unfavourable economic conditions in their respective markets and financial difficulties. Certain types of farmers, such as wine grape growers, fruit and vegetable growers, and cotton growers, were more likely to experience poorer wellbeing (Schirmer et al., 2015).

Psychological distress. Schirmer et al. (2015) identified that of the 3,710 farmer participants, almost half (48.7%) reported experiencing mild to high distress (Kessler Psychological Distress Scale [K10]; Kessler et al., 2002), including 20.8% classed as high to very high distress. This is substantially higher than the 11.7% of the general population who experience high or very high levels of psychological distress, also measured with the K10 (ABS, 2015; Kessler et al., 2002). Interestingly, there is some variation in distress across farmers from different states of Australia. Consistent with Schirmer's findings, Fennell, Kettler, Skaczkowski, and Turnbull (2012) reported that South Australian farmers also showed high distress. Farmers and rural people from New South Wales and Victoria, on the other hand, showed rates of distress lower than the Australian farmer average (Judd, Jackson, Fraser, et al., 2006). These state-based disparities may be due to a range of conditions specific to the locations when the research was undertaken. To further examine variations in distress, Schirmer et al. (2015) explored distress levels among different types of farmers. They found that Queensland farmers, younger farmers, cropping farmers, fruit and vegetable growers, wine grape growers, and cotton farmers reported the highest levels of distress. Distress was also significantly higher in the farmers experiencing financial losses or high levels of financial stress. Thus, as a group, the evidence shows that farmers experience substantial stressors and are at risk of heightened levels of distress.

Suicide. In addition to distress, suicide is also a critical and public issue among Australian farmers. Arnautovska et al. (2014) found that Queensland farmers of all ages, both male and female, were almost twice as likely to complete suicide compared to non-farmers. In the period 2000-2009, 2.6% of all Queensland suicide deaths were farmers (28.9/100,000 farmers compared to 14.2/100,000 non-farmer

population; Arnautovska et al., 2014). Furthermore, the suicide rate is higher in farming men than non-farming men living in rural areas, indicating that the increase in incidence is solely not explained by geographical location (Page, Morrell, Taylor, Dudley, & Carter, 2007; Perceval, Fuller, & Holley, 2011). Considering the combined non-metropolitan Queensland suicide rate is 15.3 per 100,000 individuals (Hazell, Dalton, Caton, & Perkins, 2017), this demonstrates that farmers are at heightened risk compared to both non-farmers, and other rural and remote residents. Importantly, these findings also point to subtle differences between farmer and other rural populations, and thereby support the treatment of farmers as a distinct group.

Although the research above demonstrates higher levels of distress and suicide in farming groups, it is also important to consider that farmer mental health is a complex issue and that suicide and mental ill health may not always be related. For example, Judd, Jackson, Fraser, et al. (2006) undertook a large mixed methods study to understand suicide in farmers from Victoria and New South Wales and unexpectedly found that farmers showed better mental health than rural residents, with slightly lower distress and disability. The authors interpreted this to mean that the heightened rate of suicide in farmers might not be attributable to higher rates of mental illness. The authors instead suggested that there might be factors that specifically apply to farmers and contribute to their increased suicide risk, while not necessarily leading to poorer mental health. While these inferences are sound, location effects must be considered, because as reported above, farmers from these states demonstrated lower distress than the average Australian farmer (Judd, Jackson, Fraser, et al., 2006). Thus, it is clear that farmer mental health is complex and contextual farming factors are important. It is also clear that any attempts to improve

outcomes in the farming population cannot focus solely on diagnosed mental health problems or suicide alone.

As demonstrated above, farmers as a group appear to be at risk of experiencing higher distress (except Victoria and New South Wales), poorer wellbeing, and higher rates of suicide than non-farming populations. It is therefore particularly concerning that help-seeking in farming populations is also poor (Brew et al., 2016; Roy, Tremblay, Oliffe, Jbilou, & Robertson, 2013). That is, when faced with stressors or distress, farmers as a group are very unlikely to seek help. This makes it more likely that their mental health will worsen and become progressively more burdensome, increasing the risk of negative outcomes including suicide. Thus, it is imperative to understand help-seeking for mental ill health in farming populations.

Mental Health Help-seeking

It is well established that mental health difficulties can be minimised and managed through appropriate and timely help-seeking (de Diego-Adelino et al., 2010; Ogrodniczuk & Oliffe, 2010). Effective treatments exist that can assist an individual to manage or overcome their difficulties; however, these can only work if appropriate help is sought out. Unfortunately, farmers as a group are known to show low levels of help-seeking, both generally for health conditions, and specifically for mental health (Brew et al., 2016). Thus, this is a critical area for investigation, to determine why members of a group at elevated risk of adverse mental health outcomes are unlikely to seek assistance. Seeking assistance could dramatically reduce the burden of poor mental health in this group.

Farmer help-seeking is not only uncommon but also poorly understood, with research tending to focus on help-seeking for suicide only (Roy et al., 2013).

Qualitative and quantitative research with farmers has indicated that help-seeking in farmers is low (Brew et al., 2016; Roy, Tremblay, & Robertson, 2014). In their quantitative research, Brew et al. (2016) found that only 9% of their farmer sample had visited a mental health professional (i.e., GPs, psychiatrists, psychologists, drug and alcohol counsellors.) for a mental health concern in the prior year compared to 16% of the rural sample. Additionally, the small percentage of farmers seeking help is concerning given that Schirmer et al. (2015) highlighted that 20.8% of their sample had high to very high distress.

Further, the farmers averaged only 1.46 visits to the GP over the same time period (Brew et al., 2016), which is low compared to the average of 4.03 visits per year for all New South Wales residents over the same period of study (Australian Government Department of Human Services, 2018). Similarly, with respect to personal support services, Schirmer et al. (2015) found that only 5% of farmers reported using services like Lifeline or Beyondblue. It is important to note that the farmers who reported using such support services also reported poorer wellbeing (Schirmer et al., 2015), which may reflect a tendency to seek help only when things reach a critical point, given that the rate of farmers experiencing high levels of distress is four times greater than those using support services. It is also interesting to note that the farmers that used these personal support services reported them to be helpful. Thus, farmers appear only to seek help (if at all) when mental health problems become severe. Given the relatively low rates of help-seeking demonstrated by this group, along with the evidence demonstrating farmers' poor mental health and increased risk of suicide, it is crucial to understand their reasons for failing to seek help in order to potentially improve farmer help-seeking. In order to do this, it is first necessary to define and understand the benefits of help-seeking.

Benefits of help-seeking. Research has demonstrated the importance of help-seeking in preventing the further deterioration of an individual's mental health and wellbeing (de Diego-Adelino et al., 2010; Ogrodniczuk & Oliffe, 2010). While some individuals may recover without intervention (e.g., 32% over 6 months from depression, as reported in a meta-analysis), this spontaneous remission rate lowers for those that present with more severe mental disorders (Whiteford et al., 2013). For those who do not spontaneously recover, research has shown that the individuals who had a shorter duration of untreated mental illness before seeking help had a higher rate of sustained response. That is, those who sought help within eight weeks of episode onset (and engaged in treatment) were close to four times more likely to have an enduring positive response to treatment. A delay in seeking help for a mental health condition could mean that treatment is longer in duration or less effective (de Diego-Adelino et al., 2010; Ogrodniczuk & Oliffe, 2010). Therefore, early intervention is vital. If help-seeking occurs at an early stage then support and prevention to build resilience and the ability to cope may be sufficient (Gerrig, Zimbardo, Campbell, Cummings, & Wilkes, 2008).

In addition to individual-level benefits, there are also many societal-level benefits of seeking help. For example, help-seeking, particularly when in the earlier stages of poor mental health, can reduce the associated DALY, which would in turn reduce the immense monetary loss ($20 billion). From this, it can be inferred that the improvement in functioning associated with seeking professional help translates to meaningful contributions to society. That is, individuals will be able to participate in activities such as family life, social interaction, and employment. Another benefit of seeking help is that this provides the opportunity for prevention of future issues

because coping skills can be taught. Therefore, there are multiple benefits that stem from seeking help.

What does help-seeking encompass? Mental health help-seeking, in the context of this research, refers to the intentions and behaviours of an individual towards accessing professional support to assist with feelings of distress or mental health issues (Rickwood & Thomas, 2012). Throughout this thesis, mental health help-seeking is referred to as help-seeking. When referring to other forms of help-seeking the type is specified such as general help-seeking, physical health help-seeking, or informal help-seeking as necessary. Distress (rather than mental illness) was chosen as the focal precursor to help-seeking to highlight the importance of early intervention. Further, this allows the exploration of the barriers and facilitators of farmer help-seeking in the context of distress, that is, before poor mental health becomes severe.

There are many sources from which an individual could seek help. These include friends and family who make up more informal sources of help, as well as professionals who comprise formal sources of help and are the target of this research. Professional support for mental health is typically sought through general practitioners and mental health professionals (psychologists, psychiatrists, and counsellors). One key source of help are GPs, particularly for those living in rural areas (Collins, Winefield, Ward, & Turnbull, 2009). This is likely due to the fewer specialist professionals found in non-metropolitan locations. Importantly, GPs may not be adequately trained to recognise or treat mental health issues (Collins et al., 2009), and often are required to refer on to specialists such as psychologists, counsellors, and psychiatrists who are additional key sources of help.

Help-seeking intentions, attitudes, and behaviours. It is important to acknowledge that help-seeking is often measured using three constructs, help-seeking behaviour, help-seeking intentions, and help-seeking attitudes (Clement et al., 2015). Help-seeking attitudes reflect an individual's beliefs about help-seeking as well as their willingness to seek help (Gulliver, Griffiths, Christensen, & Brewer, 2012). Help-seeking intentions refer to plans to seek help should the need arise (Cusack, Deane, Wilson, & Ciarrochi, 2006). Help-seeking behaviour refers to taking action to obtain advice, support, or treatment, which can be informal from non-professionals or formal from professionals (Rickwood & Thomas, 2012). In line with many theories of behaviour, such as Ajzen's (1991) theory of planned behaviour, the temporal order of these constructs is such that attitudes precede intentions, which in turn, precede behaviour. However, it must be acknowledged that attitudes, as well as intentions to an extent, are not always strong predictors of help-seeking behaviour (Rickwood, Deane, Wilson, & Ciarrochi, 2005; Taylor-Rodgers & Batterham, 2014). For example, Gulliver et al. (2012) demonstrated in their systematic review that interventions were successful at improving participant's attitudes or intentions (as well as willingness and beliefs). However, when the interventions targeted behaviour, only one of the three included studies demonstrated a significant, albeit small, change in behaviour. Importantly, the studies that included measures of both intentions and behaviour found that while the former was often improved by the intervention, the latter was not.

Thus, there appears to be a complex interplay between attitudes, intentions, and actual help-seeking behaviours, likely also influenced by a range of other factors such as the nature of the mental health problems experienced. For example, when distress or other difficulties are not present, it is expected that farmers would not

actively seek help. However, it would be important to understand what factors might influence their intentions to seek help, should the need arise. The current research focuses on all farmers, not just those with elevated levels of distress. That is, it aims to examine the factors influencing farmers' intention to seek help at all levels of distress. At this exploratory stage of the research it is most prudent to examine farmers as a broader group, given the complex farming context, the evidence that shows suicide can occur within the absence of distress, and the reluctance of farmers to come forward generally. For this reason, it is more prudent to examine help-seeking intentions rather than help-seeking behaviours in response to distress. By doing so, the aim is to obtain a better understanding of help-seeking from the farmer's perspective, in order to understand why people may not be seeking help.

Summary of the Research Problem

Farmers are an integral part of Australian culture, contributing substantially to its social and economic fabric. Farmers are unique due to the combination of factors relating to their culture, working conditions (e.g., hours), volatile environmental events, reliance on external forces such as weather for business outcomes, as well as their often-remote locales. This represents a very challenging set of circumstances requiring coping resources to deal with many stressors. As is also clear from the evidence reviewed in this chapter, farmers are a group at elevated risk of experiencing distress, mental health problems, and suicide. Unfortunately, despite the prevalence of a large range of stressors and high rates of mental health difficulties, farmers are simply not seeking or receiving the help they need to manage their stressors, distress, and mental health. Thus, there is an urgent need for research to understand the reasons for this, and to identify factors that prevent farmers from seeking help, as well as those factors that might promote help-seeking. Identification

of these factors can support the development of interventions or strategies to help farmers and farming communities seek help when needed. Such interventions have the potential to reduce the burden of farming stressors and mental ill health among farmers and their families.

Theoretical Perspectives Relevant to Understanding Help-Seeking

To shed light on help-seeking behaviour, many theoretical models of behaviour were considered in guiding this research. Importantly, given the preliminary and exploratory nature of this research, a largely inductive approach was taken. This is in line with recommendations from Boyatzis (1998), because employing a specific theoretical model would restrict the types and depth of variables explored and analysed. Therefore, taking a specific theoretical stance for this research would likely result in overlooking factors that may be of importance in farmer help-seeking. This would in turn limit the overall scope of the current research (Willig, 2013). That is, an inductive exploratory approach is critical to maximising the likelihood of identifying as many barriers and facilitators of farmer help-seeking as possible. Thus, the studies in this program of research and the variables examined were informed by relevant theoretical models, but a specific model was not tested.

The behaviour theories deemed to be of greatest relevance to this research included Ajzen's (1991) theory of planned behaviour (TPB) and Rosenstock's (1966) health belief model (HBM). Both models have been applied to help-seeking in other populations. However, their specificity may limit the exploration of farmer help-seeking. As such, the information processing model of help-seeking by Vogel, Wester, Larson, and Wade (2006) is also explained, as a framework that is more

suited to the aims of this research because it details the steps involved in seeking help.

Theory of planned behaviour. The TPB is a model of behavioural decision-making based on social cognition (Ajzen, 1991). The TPB is designed to predict behaviour, by explaining an individual's decision-making reasoning through the specific model constructs: attitudes, subjective norms, and perceived behavioural control (See Figure 1.; Ajzen, 1991).

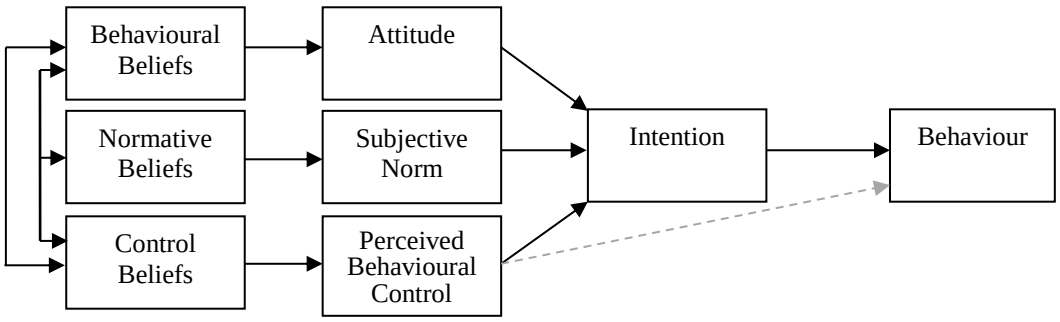

Figure 1. Ajzen's (1991) theory of planned behaviour.

The attitudes construct encompasses the multitude of judgements an individual makes regarding the positive or negative valence of behaviour across domains (Ajzen, 1991). Positive attitudes toward a behaviour generally increase an individual's intention to engage in the behaviour, while negative attitudes result in the opposite (Ajzen, 1991). Applying this to help-seeking, if a farmer were to have positive attitudes toward help-seeking then they would be more likely to have positive intentions to seek help, with negative attitudes reducing the likelihood.

Subjective norms refer to an individual's perceptions of social pressure, from important people or groups they identify with, regarding whether to engage in a given behaviour (Ajzen, 1991; K. M. White, Smith, Terry, Greenslade, & McKimmie, 2009). Similar to attitudes, positive subjective norms generally increase

an individual's behavioural intentions, and negative subjective norms have the opposite effect (Ajzen, 1991). As such, if important referent groups such as family or other farmers demonstrate norms that encourage help-seeking, this increases the likelihood that a farmer will intend to seek help. The opposite is also true, and norms that discourage help-seeking will reduce the likelihood of a farmer seeking help.

Perceived behavioural control represents the control an individual perceives themselves having over the target behaviour, including the perceived ease or difficulty of engaging in the behaviour (Ajzen, 1991). Perceived behavioural control reflects an individual's past experiences as well as any anticipated difficulties associated with the target behaviour. Individuals who perceive higher control over a behaviour are theorised to hold greater intentions to perform said act. Farmers who perceive high control and anticipate minimal difficulties would, therefore, be more likely to intend to seek help while those who believe they have low perceived control or perceive many barriers would be less likely to intend to engage in help-seeking. The TPB model asserts that attitudes, subjective norms and perceived behavioural control work together to predict intentions toward a behaviour, with intentions and perceived behavioural control predicting behaviour (Ajzen, 1991). Applying the TPB conceptualisation to this research, farmer attitudes, subjective norms and perceived behavioural control would predict their help-seeking intentions, and these intentions and their perceived behavioural control would predict their help-seeking behaviour.

The predictive utility of the TPB has been demonstrated for a range of health behaviours. For example, a meta-analysis by McEachan, Conner, Taylor, and Lawton (2011) found that a large amount of the variance in intentions (44.3%) and moderate to large amount of variance in behaviour (19.3%; incl. physical activity, safe sex, diet, health-risk behaviour, detection [e.g., breast self-examination;

Rothman & Salovey, 1997], and abstinence from smoking and binge drinking) were accounted for by attitudes, subjective norms, and perceived behavioural control.

Nonetheless, the TPB model has its limitations as well. For example, the TPB claims that the model's constructs of attitudes, subjective norms, perceived behavioural control, and intentions mediate all other factors that may influence behaviour (Ajzen, 1985, 1991). This is known as the sufficiency hypothesis, because it is claimed that the TPB constructs are sufficient to explain intentions and behaviour (Ajzen, 1985). What this hypothesis suggests is that any environmental, biological, economic, social, medical, and cultural influences are encompassed within the four predictor variables of the TPB. However, in addition to the TPB constructs, many other factors such as age, environmental features, and mental health, have been shown to predict behaviour, even when the TPB constructs are controlled for (Sniehotta et al., 2013). As such, this somewhat counters the sufficiency hypothesis and suggests that other factors also have a role in understanding behaviour (Sniehotta, Presseau, & Araujo-Soares, 2015). Moreover, many other constructs such as self-identity, anticipated regret, and planning have been shown to predict behaviour, more so than the TPB constructs (Graham-Rowe, Jessop, & Sparks, 2015; Pakpour & Sniehotta, 2012). If the sufficiency hypothesis is adhered too, especially in light of the minimal research on the topic of farmer help-seeking, then only barriers and facilitators that come under the four model constructs would be explored. This would unnecessarily limit the research, especially considering there is the potential for currently unknown variables to have a role in this behaviour. Research focusing on similar groups or topics has demonstrated multiple demographic, environmental, social, and cultural factors that may impact help-seeking. These include age, issues with access to services, gender, and distress

levels that may impact on help-seeking (Brumby, Chandrasekara, McCoombe, Kremer, & Lewandowski, 2011; Jackson et al., 2007; M. White & Casey, 2017). However, the factors specific to farmers are currently unknown and thus must be identified through qualitative and exploratory research.

Health belief model. When considering the types of constructs likely to influence help-seeking, we can also draw from the HBM, which provides a belief-based understanding of why people engage in health behaviours (Rosenstock, 1966). The HBM asserts that an individual's beliefs about the threat of illness and expectations of treatment are key variables that influence their decisions about whether to engage in health behaviours (Rosenstock, 1966). The beliefs described by the model are encompassed in the constructs of perceived seriousness of symptoms, perceived susceptibility to the target health problem, perceived benefits of taking action, barriers to taking action, and cues to action (Rosenstock, 1966). These constructs are proposed to influence health behaviours based on the premise that either motivation or concern is necessary for action. In turn, perceptions of the environment also influence whether the behaviour occurs (See Figure 2; Rosenstock, 1966).

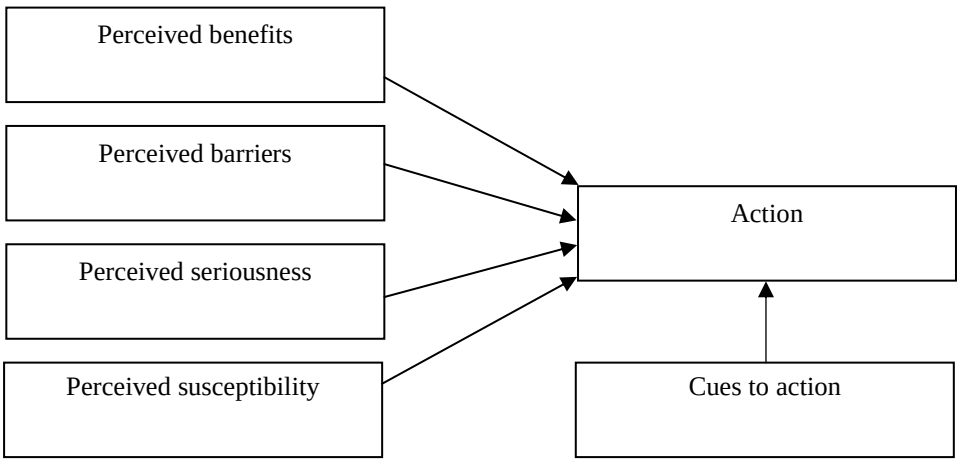

Figure 2. Rosenstock's (1966) health belief model.

The constructs are defined below. The perceived seriousness construct refers to the degree of difficulty an individual perceives they will face as well as the associated emotions, if they were to experience the target health problem (Rosenstock, 1966). This construct focuses on how much the illness would negatively impact upon a person if they were to experience it. Perceived susceptibility, on the other hand, refers to an individual's perceived belief about how likely they are to experience the health problem (Rosenstock, 1966). Perceived benefits of taking action refers to the consideration individuals give to the subjective efficacy and availability of known options to reduce threat and susceptibility to the target health problem (Rosenstock, 1966). That is, how beneficial a person views the available treatments and support for the illness. The perceived barriers to taking action construct comprises any factors that a person believes might prevent them from taking action (Rosenstock, 1966). This is where the negative aspects of the behaviour are considered, such as how inconvenient, costly, and unpleasant it is for the person. Lastly, cues to action represent the factors that lead to the instigation of, or trigger, the health behaviour (Rosenstock, 1966). These include internal or external prompts to engage in the health behaviour. Thus, the HBM provides an overview of the different areas in which various factors might promote or cue, inhibit or impede behaviour.

The HBM has been used to examine a wide variety of health behaviour such as drug taking, testing for Tuberculosis, using a continuous positive airway pressure machine, dental care, quitting smoking, attending a health program, having a mammogram, having a cervical smear test, condom usage, influenza vaccination, as well as calcium intake and exercise. However, Carpenter's (2010) meta-analysis found that there is insufficient empirical support for using the HBM to explain such

health behaviours. This conclusion was based on weak relationships between the HBM constructs, particularly perceived severity and perceived susceptibility, and a range of health behaviours, as well as the poor predictive power of the model overall, compared to other theoretical models of behaviour. The effect sizes (correlations) found in the meta-analysis indicate that the relationships between the HBM constructs and behaviour are only small to moderate; .15 for perceived severity, .05 for perceived susceptibility, .27 for perceived benefits and .30 for perceived barriers (Carpenter, 2010). This suggests that the HBM is not optimal for understanding health behaviour decision-making.

The HBM has also been examined with respect to help-seeking. P. J. O'Connor, Martin, Weeks, and Ong (2014) found that 25% of the variance in adolescent mental health help-seeking was accounted for by the HBM in conjunction with four psychosocial variables (including the two most influential factors; extraversion and social support). However, only two of the HBM constructs, perceived benefits and perceived barriers, were significant predictors of help-seeking, accounting for small proportions of the variance in help-seeking at 5% and 2%, respectively. Given that the explained variance includes a portion accounted for by the four psychosocial variables, this indicates that the HBM's predictive utility is less than the total 25%. Moreover, while the HBM with the four additional variables accounts for a large amount of the variance in help-seeking intentions, there is still much to be explained. This is critical because socio-cultural factors such as stoicism and stigma are not conceptualised within the HBM, but possibly impact farmers' decision making with respect to help-seeking (Judd, Jackson, Fraser, et al., 2006; Kennedy, Maple, McKay, & Brumby, 2014). Given the above evidence, the HBM is

not flexible enough to provide a comprehensive understanding of farmer help-seeking, although components of the model can be used to inform this research.

Summary. The current research aims to uncover the potential barriers and facilitators to farmer help-seeking, and the most relevant HBM constructs are likely the perceived barriers and the perceived benefits (which is a narrower construct but may act as a type of facilitator). These are the model constructs that have shown most predictive utility in general, and specifically for help-seeking. The other constructs, based on the individual's state of readiness to act (Rosenstock, 1966), have demonstrated minimal impact (sr^2 = .00 and r = .05 – .15; Carpenter, 2010; P. J. O'Connor et al., 2014). While the perceived barriers and the perceived benefits constructs are most relevant and predictive generally, these have not been explored in the context of farmer help-seeking. Thus, some preliminary exploratory work is necessary to understand what factors might be at play, without being restricted to the HBM or TPB model. Confining the exploration to the model constructs may have excluded other potentially powerful predictors, including objective considerations (e.g., work hours), which are not included in either model. Indeed, both the HBM and TPB are limited because they focus on subjective perceived constructs. Therefore, the HBM and TPB were used to help inform the exploration, but not to prescribe the factors examined. The evidence relating specifically to farmer help-seeking is still in its infancy and not yet at a stage where theoretical models can be tested in this context and population.

Information processing model of help-seeking. To facilitate a thorough understanding of the potential factors associated with help-seeking in farmers, the process and stages of seeking help also need to be understood. Vogel, Wester, et al. (2006) propose an information processing model of help-seeking that includes four

steps, which are presented below in Figure 3. Each of these steps represents a stage of help-seeking within which factors might inhibit or promote a person's help-seeking efforts. This practical process provides a framework for understanding help-seeking through a staged approach. The benefit of using this model is that it does not prescribe what factors act upon each step; instead the model acknowledges individual differences, meaning it is more flexible than a theory of behaviour. This model itself provides flexibility by acknowledging that individuals may not experience these stages in order, or at all. Indeed, individuals may not process the information but instead react habitually to their experiences. However, there is a tendency that individuals will encounter at least some of the stages in this process while they need help.

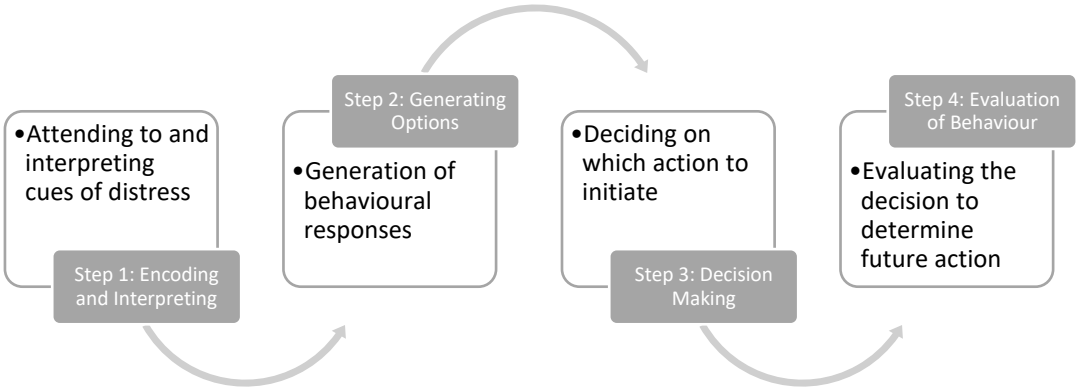

Figure 3. Vogel, Wester, et al.'s (2006) Information processing model of help-seeking.

Step 1: Encoding and interpreting. The information processing model of help-seeking proposes that the first step of help-seeking involves the person attending to and interpreting internal and external cues of distress (Vogel, Wester, et al., 2006). This means the person needs to recognise any symptoms they are experiencing, and then associate it with a cause. The authors also suggest that accurate identification of distress might depend on the personal significance a person

places on their symptoms. The subjectivity of symptoms means that a person could attribute them to many things. A person needs to attend to, and recognise their symptoms as well as understand what the symptoms mean including their origin (Jorm et al., 1997; Vogel, Wester, et al., 2006). Due to the components needed for this step, there are many pitfalls that can occur during encoding and interpretation. For example, a person could be unaware of, ignore, or misunderstand their symptoms. They could consider the wrong symptoms, or they could associate the symptom with the incorrect source. People may not process the information but instead respond by automatically making interpretations, which could be maladaptive. The potential pitfalls suggest that the encoding and interpretation of cues of distress relies on a person's experiences, beliefs, and attitudes as well as their knowledge and awareness of mental health (that is, mental health literacy). Thus, this step cannot be completed unless the individual is able to recognise their cues of distress and interpret these as important, and associate this with poor mental health.

Step 2: Generating options. The cues identified in step 1 then feed into the second step, which encompasses the generation of behavioural responses, typically categorised as action or inaction (Vogel, Wester, et al., 2006). A person generates behavioural options considering their goals, as well as their interpretation of their symptoms. That is, a person thinks of possible solutions to address their interpretation of the symptoms or problem. In addition to misspecification of symptoms, issues can also arise if an individual is unable to generate adaptive solutions. If an individual has associated their symptoms with something other than mental health, then the solutions generated are unlikely to be helpful. For example, a person may (mis)understand their symptoms to mean they are tired and, in turn, generate solutions that involve eating large amounts of food to alleviate fatigue. In

addition to the above issues, help-seeking may not be considered as a viable option for reasons such as poor awareness and knowledge of mental health services as well as unsupportive community and cultural norms (Fuller, Edwards, Procter, & Moss, 2000; Vogel, Wester, et al., 2006). People produce different potential solutions to address their issues, which appear to be impacted by multiple internal and external factors.

Step 3: Decision making. The model proposes that the third step involves an individual deciding on which of the solutions, generated in step 2, to initiate (Vogel, Wester, et al., 2006). This decision is made by an individual considering a variety of factors encompassing positive, and negative, expectations, if they enact each option. However, the consideration may also be based on insufficient or incorrect information, which could lead to help not being sought. Nonetheless, individuals judge if the overall outcome of the chosen action would be positive or not, given the benefits, as well as the resources needed, perceived negative repercussions, and costs of help-seeking (Roy et al., 2013; Vogel, Wester, et al., 2006). This dynamic process creates the potential for impact by many factors. Specifically, individuals often lack knowledge of the efficacy of, and therapeutic process within mental health services, paired with the common overestimation of the negative repercussions. This suggests that having mental health knowledge can promote help-seeking. Nonetheless, it is not just knowledge that is important because the way an individual perceives a specific practitioner may also be considered in their decision making (Komiti, Judd, & Jackson, 2006). Further, the perceived negative repercussions can manifest across domains including personal and socio-cultural (Collins et al., 2009; Vogel, Wester, et al., 2006). For example, a person may expect to experience identity conflicts or discrimination if they sought help, due to stigma or not conforming to social and

cultural norms. Thus, help-seeking will only proceed if it is the 'action' behaviour triggered, through a person recognising that, given their circumstances, help-seeking has more benefits than negative repercussions (Vogel, Wester, et al, 2006).

Step 4: Evaluation of behaviour. The final step of the model involves the individual evaluating the outcome of their decided action to inform future action. This step highlights that help-seeking is not often the first course of action an individual undertakes. At this step, individuals judge if their chosen solution is sufficient by determining if the symptoms have been alleviated. It is possible that a solution is considered by the individual to be sufficient enough that further action is not needed, even if the symptoms are still present. It is also possible that an individual may not evaluate their action, whether due to misinterpretation, avoidance, deferral of responsibility, or other reasons. Given that help-seeking is often not the first choice in general or specifically for farmers (Komiti et al., 2006; Roy, Tremblay, Robertson, & Houle, 2017; Sweeney & Kisely, 2003), if the initial action the individual took is not evaluated then it may not lead to future help-seeking. On the other hand, if help-seeking does occur then this evaluation is still important, because other factors, such as the effectiveness, and cost with respect to resources, may have an impact on how the outcome is perceived. This continued evaluation has implications for treatment adherence. Thus, this step may lead to help-seeking if the initial, non-help-seeking, course of action was unsuccessful, and if help-seeking occurs, the evaluation may impact ongoing treatment.

Vogel, Wester, et al.'s (2006) information processing model of help-seeking is dynamic, recognising people may not complete each stage in order, or at all. Further, they may not engage with each step fully, by only giving cursory consideration at each step. Nonetheless, each step of this model introduces the

potential for factors to inhibit and promote help-seeking. The process at each step of the model also provides insight into the types of factors that might be important to examine in the context of farmer help-seeking. In addition to this model of help-seeking, which shows where problems might become apparent, the scarce literature that does exist in rural and farming populations can also inform the development of this research.

Thus, this research applies an inductive approach to exploring the barriers and facilitators associated with help-seeking in farmers, using the information processing model of help-seeking as a framework (Vogel, Wester, et al., 2006). It does so utilising an exploratory mixed methods approach, which first identifies potential factors of interest via qualitative research and second examines the utility of these factors in a quantitative study (Creswell & Plano Clark, 2011).

Research Objectives

There are two main objectives of this research, which align with the methodological phases of this thesis. First, through an in-depth qualitative phase of research, this thesis explores potential factors that may act as barriers to, or facilitators of, help-seeking in farmers, as reported by three separate informant groups; farmers, their partners, and rural GPs. Second, through a subsequent quantitative phase of research, a cross-sectional survey based on the findings of the qualitative phase was created, which provided a quantitative measure of the relative impact of the identified factors in a broader sample of farmers.

Mixed Methods Research Approach

The decision to utilise a mixed methods approach to this overall program of research was driven by the current status of the literature and the lack of a comprehensive understanding of help-seeking in farming populations. Mixed

methods research involves the use of both qualitative and quantitative research methods in an integrated manner to answer a research question (Creswell, 2014; Creswell & Plano Clark, 2011). The approach of using mixed methods has become more commonplace over the past 30 – 40 years (Creswell & Plano Clark, 2011). It has been proposed that such designs are beneficial when the use of one type of data is insufficient to answer a research question (Creswell & Plano Clark, 2011; Teddlie & Tashakkori, 2009). Qualitative research is able to provide context, explanations, and understanding as well as allow the discovery of important concepts to be tested or alterations needed for established models, but due to the small sample sizes, is not generalisable (Kelle, 2006). Thus, it provides particular value in this body of research, which involves the discovery of factors related to help-seeking within a specific and unresearched context. Quantitative research, on the other hand, can facilitate understanding at a group or population level, as well as corroborate and generalise findings, but it is not able to provide deep and nuanced understandings of context and culture (Kelle, 2006). For this reason, it can be asserted that quality mixed methods research can lead to more rich, contextualised, nuanced, and (potentially) generalisable findings than either approach in isolation (Kelle, 2006; Plano Clark, 2017; Teddlie & Tashakkori, 2009). In this instance, an initial qualitative phase allowed us to identify the potential barriers and facilitators of farmer help-seeking in a way that is contextualised and nuanced, whereas the subsequent quantitative phase assisted in establishing the impact of the factors and a degree of generalisability for the findings.

Current mixed methods research approach. The approach that is employed in this thesis is the exploratory sequential mixed methods approach. This method begins with qualitative research that is analysed and informs the direction of

the subsequent quantitative phase of the research (Creswell, 2014). When a topic area has limited previous research or knowledge, then qualitative exploration is beneficial, and often necessary, because it provides contextualisation, understanding, and direction for quantitative research (Creswell, 2014; Creswell & Plano Clark, 2011; Tashakkori & Teddlie, 1998). Given the nature of qualitative research and the small sample sizes employed, such exploratory findings are then required to be tested in broader groups to demonstrate the magnitude of any effects as well as indicate whether the findings are potentially generalisable (Creswell, 2014; Creswell & Plano Clark, 2011; Teddlie & Tashakkori, 2009). This is the purpose of exploratory sequential mixed methods approach. There is currently minimal research specifically focused on the barriers and facilitators of farmers' help-seeking. Thus, taking an exploratory mixed methods approach first allows an in-depth understanding of the context and factors and then allows a more precise examination of the direction and magnitude of the relationships between said factors and farmer help-seeking. In the present research, the qualitative component of this exploratory mixed methods research is encompassed within phase 1 of the research (3 qualitative samples/superordinate themes), which then informs Phase 2 (a cross-sectional survey). The phases of research are presented graphically in Figure 4 and described in more detail below.

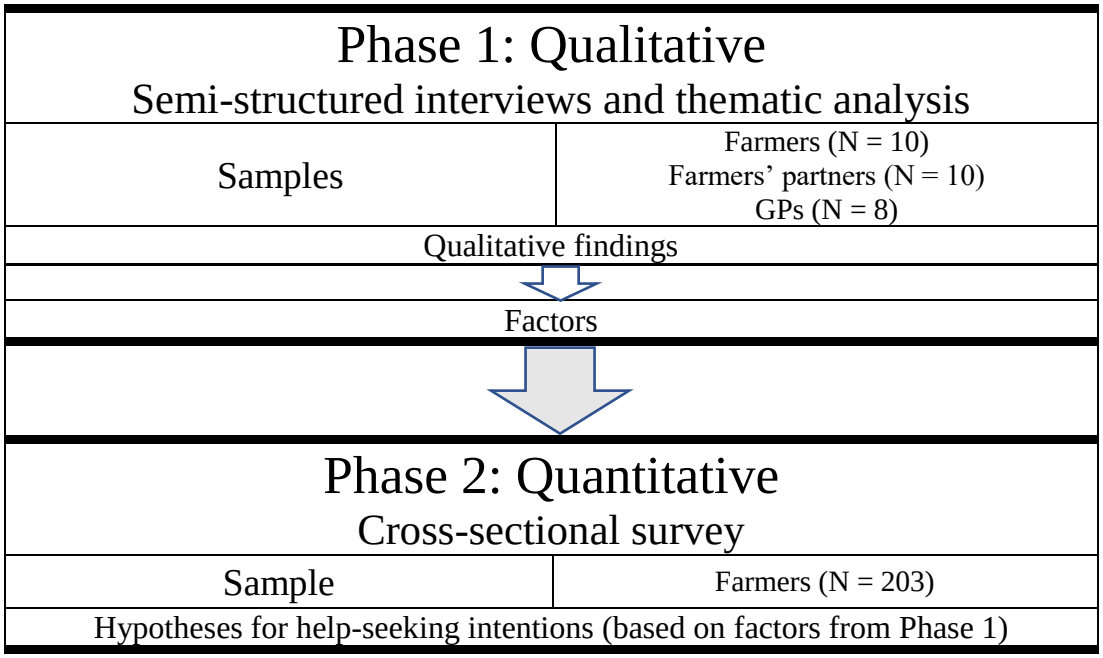

Figure 4. Summary of research, without findings

Mixed methods interpretation. Using an exploratory sequential mixed methods design means that the data is integrated because the quantitative research is testing the factors elicited in the qualitative findings (Creswell, 2014; Tashakkori & Teddlie, 1998). Kelle (2006) asserts that integrating data from mixed methods research provides mutual validation of the findings and a more comprehensive understanding of the topic under investigation. Due to the sequential nature of this mixed methods research, the qualitative findings from Phase 1 were interpreted to inform the quantitative survey used in Phase 2. Following the data collection, the interpretation of the quantitative data was completed, separately at first. Then, the qualitative and quantitative findings were integrated. This late-stage integration is common for sequential mixed methods because it acknowledges the differences between the analyses and brought them together when appropriate (Mayoh & Onwuegbuzie, 2015). When integrating the Phase 1 and Phase 2 interpretations, it is expected that the mixed methods approach will enhance the findings (Feilzer, 2009). That is, the qualitative research may explain the quantitative results, and vice versa.

Although, it is also possible that there will be discrepancies between the qualitative and quantitative findings, which are useful and meaningful, and can illuminate important details that are not discoverable by either method alone. This highlights a benefit of mixed methods research to find possible inconsistencies, which will be explicitly noted and discussed (Feilzer, 2009; Reams & Twale, 2008; Teddlie & Tashakkori, 2009).

Overview of the Research Phases

Phase 1 of this research encompasses a large qualitative thematic analysis (Braun & Clarke, 2006) exploring the barriers and facilitators of help-seeking in farmers. Specifically, qualitative data were collected from three separate samples, farmers, farmers' partners and GPs, to examine perceptions of barriers and facilitators of farmer help-seeking. The findings are reported thematically to allow consideration of the perspectives across samples. The findings of Phase 1 were used to inform the development of Phase 2, which was a quantitative, cross-sectional survey-based study targeted towards a larger sample of farmers. As such, the barriers, and facilitators gleaned from Phase 1 were tested in Phase 2 with a wider farming sample to determine if the factors were statistically robust and to what degree. See Figure 4.

Thesis Structure

The following provides an overview of the thesis structure according to chapters. First, Chapter 1 has provided the background to the research problem, theoretical perspectives guiding this research, as well as introducing the research objectives and methodological approach utilised in this thesis. Following this, Chapter 2 provides a literature review outlining the existing research examining the factors associated with help-seeking in farming and other populations. Following

this, Phase 1 of the research is presented in Chapters 3 to 6. Specifically, Chapter 3 outlines the methodological approach for Phase 1 of this research, namely the methodology utilised in the qualitative study of three samples. Chapters 4, 5 and 6 each report on the findings of Phase 1 of the research, organised thematically, rather than via participant group. Each of these chapters contain a brief background literature specific to the theme discussed in that chapter. Following this, Chapter 7 and 8 present Phase 2 of the research. Specifically, Chapter 7 provides literature pertinent to the understanding of the quantitative study, by discussing the constructs elicited in Phase 1. Chapters 1 to 7 inform the generation of the hypothesis presented and examined in Chapter 8 (See Figure 4). Additionally, Chapter 8 describes the results of the quantitative study examining the relationships (including predictive) between the factors identified in Phase 1 and farmer help-seeking. Finally, Chapter 9 provides the overall discussion of the research findings, including the integration of qualitative and quantitative results. Further, Chapter 9 also reports on applications of the findings, the strengths, weaknesses and contributions of the research, and recommendations for future research.

Chapter 2: Literature Review

The previous chapter highlighted the need to better understand help-seeking in farmers, including the identification of factors that might prevent or promote help-seeking for mental health difficulties. While the theoretical models described in Chapter 1 can guide the exploration of potential factors, it was evident that as a novel area of research, it is also vital to be informed by the available empirical evidence. Currently, there is a general paucity of research examining help-seeking in farmers, for both physical and mental health related concerns. At this stage, it is unclear whether barriers to help-seeking exist on the part of the farmer, or on the part of the healthcare providers in reaching farming communities or, more likely, a combination of both. This chapter presents a discussion of the previous empirical research that has examined factors associated with help-seeking in order to better understand help-seeking and further inform the studies in this thesis. Specifically, it presents a summary of the research that examines potential barriers and facilitators of help-seeking in both rural and farmer populations, as well as a comparison of these two groups. Given the limited evidence on these issues, this chapter then also draws from health help-seeking research with other related populations (i.e., males and suicidal individuals) to glean further information on factors that may be important to farmer help-seeking.

The Literature Review Process

Given the lack of research specific to farmers and help-seeking (for distress or mental illness), the included literature was drawn from research on the topic of help-seeking (attitudes, intentions and behaviour) with both rural and farming populations. Many databases, including Scopus, Psychinfo, and Sage, as well as Google Scholar, were used to search for literature. The search terms included

‘farmer’, ‘mental health help-seeking’, ‘Australia’, ‘care-seeking’, ‘rural’, ‘remote’, ‘non-metropolitan’, ‘primary producer’ and ‘agricultur*’. The eligibility criteria stated that the research had to focus on help-seeking, whether attitudes, intention or behaviour, and on non-metropolitan Australians or farmers. The participants of the included studies were also over 18 years of age. There was no criterium concerning publication date, but only empirical research and reviews were included. The abstracts were viewed, and if they did not fit the above criteria, they were not included for review. The references of the reviewed papers were also examined for other potentially relevant articles, which were then retrieved and judged against the criteria. Once the 12 articles meeting the criteria were reviewed the decision was made to also include a systematic review on physical and mental health help-seeking in males because the majority of farmers are male. Additionally, given the noted issue with suicide in farmers, a recent review of help-seeking for suicidality was also reviewed.

Factors Associated with Help-Seeking in Rural Populations

There is a developing body of research examining barriers and facilitators to help-seeking among rural and remote populations that provides insight potentially relevant to farmers. As discussed in Chapter 1, farmers typically live and work in rural and remote communities and share distinct environmental, social, and economic characteristics with members of these communities. It must be recognised that while these communities are each unique, there are some commonalities. Thus, it is likely that findings from rural and remote populations will have some applicability to farming populations. The following provides a summary of Australian research examining help-seeking in rural populations.

Collins et al. (2009) completed an interview-based qualitative study with 16 rurally living individuals to investigate the perceived barriers to help-seeking for rural South Australians. The first theme identified as a key perceived barrier was stigma; the participants reported not wanting to be associated with mental illness. The participants also highlighted that the availability and accessibility of services were poor, which in turn presents as a barrier. A culture that values self-reliance was also reported to be ingrained in the community, and if help was needed, then family and friends were identified as the preferred source. Another theme identified was a lack of psychological mindedness, a construct encompassing the recognition of the efficacy of engaging with emotions and problems to promote change. Psychological mindedness was poor among the sample, and it was reported that people in the community are reluctant to talk about mental health. Further, those individuals who do talk about mental health were considered eccentric. Poor awareness of mental health was also reported to act as a barrier to help being sought, due to a lack of knowledge about mental health as well as support services. Issues with GPs were also raised, including poor availability and staff turnover, and these factors meant referral pathways may not be clear. This research highlighted the complexity of factors that may influence help-seeking in rural populations.

Wrigley, Jackson, Judd, and Komiti (2005) conducted a cross-sectional survey study examining factors such as perceived stigma and attitudes toward help-seeking in rural Victorians. The authors found that, based on the Wald statistic, only the perceived helpfulness of GPs directly predicted participant comfort with seeking help for a mental health issue from a GP ($OR = 0.09$). However, in this study, positive help-seeking attitudes were predicted by lower perceived stigma as well as lower support for the attribution that depression is a weakness of character. Thus,

indirectly, stigma and mental health attributions may also be important factors. The findings of this study indicate that several factors may predict attitudes towards help-seeking, but willingness to seek help was predicted by proximal factors related to the practitioner from whom help was to be sought.

Similarly, Komiti et al. (2006) investigated the impact of attitudinal factors, particularly stigma, on help-seeking from a GP among rural Victorians, using a retrospective cross-sectional survey. The logistic regression model was significant, indicating that disorder diagnosis, distress, physical dysfunction, gender, age, education, household income, marital status, beliefs about GP helpfulness, attitudes towards help-seeking, and perceived stigma together predicted 33.2% (Nagelkerke R^2) of the total variance in help-seeking from a GP. Further, the authors found that having greater physical dysfunction and holding positive attitudes towards professional psychological help were significant unique predictors of likelihood to seek mental health help from a GP, but the effect was minor. Additionally, having a mental disorder diagnosis and high psychological distress were moderate predictors of the likelihood to seek mental health help from a GP. Holding a belief that GPs can help with mental health issues was a strong independent predictor of the likelihood to seek mental health help from a GP. This study, along with that of Wrigley et al. (2005), highlights the importance of the attitudes and perceptions about the practitioner from whom help is sought. Thus, the results of these studies suggest that negative perceptions relating to the helpfulness of GPs in assisting with mental health problems, or attitudes that reflect negative views of help-seeking, may very well act as barriers to care for rural populations.

In another cross-sectional survey study by this group, with participants sampled from a large sample recruited for a rural mental health survey, Judd,

Jackson, Komiti, et al. (2006) examined the impact of stoicism, self-efficacy, and perceived stigma, on help-seeking among residents of rural New South Wales and Victoria. The shared variance of physical dysfunction, distress, gender, age, education, marital status, stoicism, perceived stigma, attitudes towards help-seeking, self-efficacy and an interaction between gender and stoicism predicted help-seeking from a GP. Further, help-seeking from a GP or mental health professional was independently negatively predicted by participants' dispositional stoicism (before the interaction term was added), and general self-efficacy, as well as positively predicted by distress, and the effects were small. Unsurprisingly, those with higher distress were more likely to seek help, possibly due to a greater need and cues to action. Further, a greater likelihood of seeking help was evident for participants who demonstrated lower levels of stoicism and lower general self-efficacy. This means that the individuals who are more emotionally invested, expressive, vocal and mobile (as opposed to stoic), as well as those that view themselves as less capable of dealing with general demands, were more likely to seek help. These results may have particular relevance for farmers, who are typically characterised as stoic in nature (Hossain et al., 2008).

One key study that provides insight regarding factors associated with help-seeking and service use in non-metropolitan populations is Perkins et al.'s (2013) large longitudinal survey. In this study of help-seeking and service-use in rural and remote New South Wales, the authors uncovered a complex range of factors linked to help-seeking behaviour. For example, those who perceived themselves as less financially prosperous were more than twice as likely to have sought help (Perkins et al., 2013). Also, the divorced, separated, or never married individuals were slightly more likely to have sought help. There was also an approximately five-fold increase

in the likelihood of seeking help if the participants self-reported ‘poor’ or ‘fair’ overall mental health (rated poor to excellent), or a score of psychological distress 25 and above (using the K10 with higher scores indicating greater distress; Kessler et al., 2002), or if they had experienced five or more recent adverse life events (Perkins et al., 2013). Therefore, the results suggest that the greater number of stressors experienced, along with higher levels of distress increase the likelihood of a rural person seeking help, which may be due to the greater ease of encoding and interpreting symptoms as requiring help when they are more substantial. A subset of participants were also asked to rate factors that may have prevented or delayed their help-seeking. The most frequently endorsed reasons reported were the time taken to get an appointment, travel distance, limited choices, and cost (Perkins et al., 2013). Interestingly, Perkins et al. (2013) also found that geographic rurality/remoteness did not influence help-seeking, despite sampling from inner regional, outer regional, remote, and very remote areas of New South Wales, using the Australian Standard Geographic Classification (ASGC; AIHW, 2004). Also noteworthy was that help-seeking from a professional was unrelated to participant age or gender (Perkins et al., 2013).

In summary, the existing research on rural and remote populations has highlighted several factors that might act as barriers to help-seeking in this population. Specifically, characteristics of the individual such as psychological mindedness, attitudes towards help-seeking, stigma, self-reliance, stoicism, self-efficacy, mental health awareness and knowledge were implicated along with characteristics of the health service systems such as availability of services, access to services, and GP helpfulness. While these studies were conducted in general rural and remote populations, it is possible that these barriers are also relevant to farmers,

who reside in such locations. However, the extent to which these results from rural populations are actually relevant for farmers remains unknown, as discussed below.

Comparisons Between Rural and Farmer Populations

Due to the lack of research specific to farmers, this thesis often uses results derived from rural and remote samples to shed light on potential factors associated with help-seeking. Although farmers can be considered a subset of a more general non-metropolitan population, and they are likely to share similarities, there are some distinct differences between these two groups, which mean findings need to be interpreted cautiously. Further, consideration must also be given to when the research was conducted, with many of the previously reported studies being conducted over 10 years ago, although some are more recent. In terms of similarities between rural and farming populations, both are likely to be geographically isolated and subject to the same decline in health workforce numbers with increasing remoteness (Australian Government Department of Health and Ageing, 2008). That is, both groups are likely to experience barriers related to access and availability of mental health services. Culture is another key factor that may be similar across farmers and rural people more generally. For example, both farmers and rural populations have been shown to demonstrate high levels of self-reliance and stoicism, demonstrated by the preference to deal with their own problems, as well as heightened emotional control, while emotional involvement and expression are deficient (Collins et al., 2009; Elliott-Schmidt & Strong, 1997; Hossain et al., 2008; Wagstaff & Rowledge, 1995). Despite the similarities between rural and farming contexts, there is evidence to suggest that there are also unique differences or amplification of possible help-seeking-related barriers among farmers (Brew et al., 2016; Fuller et al., 2000; Judd, Jackson, Fraser, et al., 2006).

A recent longitudinal survey study (Brew et al., 2016) using data from a large Australian rural mental health research program (N = 1184) provides some evidence for the distinctiveness of farmers compared to rural people. Additionally, these data provide quantitative evidence relating to farmer help-seeking barriers; although, it does not extend to analyses of the relationships between the measured barriers and help-seeking. The results showed that farmers were slightly less likely to visit a GP. There were three categories of barriers considered, attitudinal (e.g., stigma, self-management, privacy), structural (e.g., travel cost, travel distance, transport, service cost, availability) and time-related (e.g., time away from work, caring for others). Farmers endorsed attitudinal barriers the most, followed by structural barriers then time barriers, with the average strength of the barriers approximately 2, 1.6, and 1.4 (of possible 1-5), respectively. Additionally, when broken down to the item level, the most common barrier reported by farmers was the preference for self-management. Brew et al. (2016) did not find differences between farmers and rural residents with respect to their rates of endorsement of the help-seeking barriers measured, but there was a trend that suggested farmers were more likely to experience greater structural barriers. The authors suggested this trend was possibly due to a greater percentage of the farmers endorsing that distance and transport costs were too great to seek help for their mental health. Brew et al. also recognised that the analyses were underpowered, which may have affected the findings. Brew et al.'s research highlights that there are potential differences in help-seeking behaviour between farmer and general rural populations and while they found no statistical differences between the groups with respect to the barriers, there were suggestive trends. However, the quantitative nature of Brew et al.'s research also does not allow the discovery of additional barriers that potentially differentiate between the help-seeking of farmers and rural residents. This

means it is unclear why farmers seek help less than rural residents even though there are some similarities in the barriers experienced. Also, the nature of the relationships between these factors and farmer help-seeking similarly remain unclear.

Contrary to Brew et al. (2016), another recent quantitative study by Hull, Fennell, Vallury, Jones, and Dollman (2017) comparing attitudinal barriers to help-seeking for farmers and rural non-farmers (N = 124, farmers n = 45, non-farmers n = 78) did find differences between the samples. The research with South Australians examined stoicism, stigma, and self-reliance, which may represent counter-points of help-seeking. Self-reliance and need for control were slightly more pronounced in farmers than in farm residents (who do not work on the farm) and rural residents. When Hull et al. examined item-level responses, farmers also endorsed that they find it difficult to understand their doctor/health professional significantly more often than rural residents (24.4% compared to 15.3%). These findings indicate that farmers' help-seeking behaviour is potentially different to that of rural populations, and there may be some differences in the barriers each group experience. Therefore, there is a need to explore barriers (and facilitators) in-depth to understand the nature of these effects in shaping farmer help-seeking.

In addition to demonstrating differences between farmers and rural people, this study by Hull et al. (2017) also provides information about farmers' endorsement of help-seeking barriers. The results of the study indicate that approximately 35% of farmers endorsed that they do not know how to talk about mental health, and that they prefer to seek help from their friends and family. Further, 13.3% of the farmers stated they did not trust their doctor. While this research indicates some clear attitudinal barriers to care, it must be interpreted with caution. The sample size was small, and it is possible these results will not generalise

to other farmer groups. Also, the survey used to measure barriers to help-seeking was designed and validated for use with university students, and although it was adapted for farmers, it may not have had the necessary sensitivity to the farming context. As such, this indicated potential barriers to help-seeking, but does not demonstrate the strength of the relationships between these factors and help-seeking.

These two research studies illustrate some differences between farmers and rural residents, despite limitations that may mask the nuances between these groups. These studies also provide a starting point with respect to barriers to farmer help-seeking, by reporting on the percentages, or average strength of endorsement of different perceived barriers. The following section extends this by providing an overview of the evidence directly relating to help-seeking among farmers.

Factors Associated with Help-Seeking in Farmers

Aside from the two quantitative studies reported above, the research that has focused on farmers' help-seeking is qualitative. In one review of the literature relating to farmer mental health more generally, Fraser et al. (2005) indicated that remoteness, stigma, visibility, stoicism, and self-reliance were all factors that might impact help-seeking, but these were not discussed in depth. However, this review aimed to provide an overview of farmer mental health and an exploration of the barriers to help-seeking was not a focus of the review. The scarce qualitative literature is summarised below.

Staniford, Dollard, and Guerin (2009) conducted a qualitative interview study with 16 drought-stricken South Australian citrus farmers. In this study, participants were interviewed regarding the factors that influence their help-seeking. Thematic analysis identified five themes encompassing 15 sub-themes that were influential in farmers' help-seeking (Staniford et al., 2009). Identified themes included self-

reliance, social image, lack of knowledge, perceptions of health professionals' efficacy, and restrictive lifestyle (Staniford et al., 2009). The self-reliance theme, endorsed 14 times, encompassed the notion that farmers think they are responsible for their own problems, they do not want to upset their family, they class themselves as able to cope and that seeking help is giving up. Social image included five subthemes: that mental illness equates to insanity, men do not seek help, avoidance of others finding out, embarrassment admitting to mental health problems, and no one else needs to seek help, which were endorsed a total of 12 times. The farmers also lacked knowledge with respect to recognising a problem and what help is available, which was raised eight times. There was also the perception, shared in six instances, that health practitioners may not provide effective assistance because they are not farmers themselves and they cannot solve farmers' practical problems. The restrictive lifestyle refers to the geographical isolation of rural and remote areas, as well as the lack of anonymity, which was endorsed four times. Exploring the barriers to help-seeking was a secondary aim of this research and because of this, the barriers were not discussed in depth, instead, merely frequency of endorsement was provided. This limits the understanding of how the factors may act as barriers to help-seeking. Further, Staniford et al.'s study was completed several years ago, and since then great effort has been extended toward implementing the fourth and fifth national mental health plans Australia-wide to target mental health literacy and stigma amongst other factors (Commonwealth of Australia, 2009, 2017). Indeed, there is evidence that mental health literacy in the general Australian population has improved (Reavley & Jorm, 2012). This means it is prudent to re-examine the reported factors, particularly among farmers in the context of help-seeking.

Additionally, this research was confined to South Australian citrus growers and may not be representative of all types of farmers, particularly those from other locations.

Another relevant qualitative study by Roy et al. (2014) explored help-seeking in Canadian farmers using a qualitative thematic analysis, which highlighted several barriers to help-seeking. These included geographic isolation, finances, acceptability, stigma, confidentiality, self-reliance, pride, male gender roles, and a lack of knowledge of services. That is, the travel time and distance were seen as making help-seeking harder, as was the cost, especially when the stressor was also financial. The acceptability of help-seeking for farmers includes consideration of stigma, particularly due to a 'farmer mentality', meaning that seeking help indicates mental illness. Confidentiality was another key issue raised as a barrier. Farmers' self-reliance and pride also impacted how acceptable they deemed help-seeking. For example, the stereotype of farmers as self-reliant means they were compelled to demonstrate this trait and, as such, they consider help-seeking contrary to this image. In addition, farmers' pride, attached to male gender roles, may prevent help-seeking due to incongruence between help-seeking and their self-perceptions. Farmers' knowledge of mental health services was also reportedly lacking, which likely influences help-seeking because they need to know what to do, what service provider to use, and what outcomes to expect.

This research by Roy et al. (2014) also generated new findings that suggest farmers' help-seeking might be preceded or facilitated by a crisis, prior help-seeking, and pressure from a loved one. A crisis may trigger the need to seek help, especially if severe. The farmers who had previously sought help also reported more positive views of the benefits of help-seeking. Pressure from a loved one was also reported as one factor that may facilitate help being sought with the primary aim of avoiding any

negative repercussions on the family or social unit. While this research can be used to infer the barriers and facilitators of farmers' help-seeking, it targets a different population of farmers, based in Canada, and may lack relevance within the Australian context. Specifically, there could be differences in government policies, culture, geography, and climate of these countries that mean barriers to help-seeking may not be directly comparable. Further, Roy et al. used a masculinity framework with male farmers, which does not provide insight into help-seeking of female farmers, who are included in the current research.

A final study by Judd, Jackson, Fraser, et al. (2006) included mixed methods research examining suicide in Australian farmers, with barriers to help-seeking addressed in the qualitative component. The authors reported three themes as important to farmer help-seeking: the preference to seek help from family and friends, poor access to mental health services and providers, as well as limited acceptability of services and stigma toward mental illness. Specifically, farmers reported that they were reluctant to acknowledge or seek help when the problem was related to mental health, although they may seek help for practical issues (e.g., financial support) to address their stressors. They also reported stigma as having a role in their reluctance to acknowledge mental health issues and seek help. The culture of farming communities and the demands of family farming were also believed to impact farmer help-seeking, with little time available for seeking support. However, identifying and understanding these barriers were not the primary aim of this study, and thus, these barriers were not examined in depth.

Overall, the qualitative research examining farmer help-seeking has provided important insights; however, it is preliminary, conducted in specific contexts (e.g., suicide) or did not explore these factors in depth. Subsequently, there is much that is

not well understood, particularly with respect to factors that may facilitate help-seeking. From the existing qualitative research, several factors have been identified as worthy of further examination as barriers to help-seeking. Some of these factors overlap with factors identified in rural populations to impact help-seeking, but other factors such as attitudes towards seeking psychological help, psychological mindedness, stoicism, self-efficacy, mental health awareness and knowledge, and availability of services did not emerge in research with farmers. On the other hand, there are factors that may be unique to farmer help-seeking such as the restrictive lifestyle and the farmer mentality. In addition to this, pressure from family members to seek help was highlighted as one potential facilitator of farmer help-seeking (Roy et al., 2014).

There were no facilitators reported or identified in the research with rural populations because there is a tendency to focus only on barriers in the help-seeking literature generally, which has been noted previously by Gulliver, Griffiths, and Christensen (2010). The findings from these qualitative studies with farmers can guide the current research, but further research is required to better understand farmer help-seeking in the Australian context. With respect to the quantitative studies, the nature and strength of factors relating to, or predicting, farmer help-seeking have not yet been determined. Moreover, there is an absence of research examining factors that may promote farmer help-seeking, which will be crucial to the development of any interventions.

Factors Associated with Health Help-Seeking in Other Related Populations

Given the scarcity of research examining rural and farming populations, it is also helpful to draw from other help-seeking literature. Given a large majority of farmers are male, and that males might be less likely to seek help for mental health

concerns, understanding reasons for not seeking care in this group may be beneficial in explaining farmer help-seeking. Further, given that farmers are at heightened risk of suicide, understanding why help is not sought for suicide may also provide relevant insights.

Male health help-seeking. A systematic literature review of physical and mental health help-seeking by males ($N_{studies}$ = 41), following preferred reporting items for systematic reviews and meta-analyses guidelines, concluded that there was sufficient evidence to suggest that four factors were impactful (Yousaf, Grunfeld, & Hunter, 2013). These include communication and rapport with health professionals, emotional control/guarded vulnerability, minimising symptoms, and experiencing negative affect (e.g., embarrassment and anxiety) related to health service use. Poor help-seeking was also associated with being younger, less educated, and never having married. The review also considered other factors, but there was less evidence of the impact of these on help-seeking for both physical and mental health problems. These include health literacy, lack of time/full-time employment (incl., home duties, retired, and training), and the cost of services. It is important to note that this review, while focused on males, was not specific to farmers or mental health, so other factors may be operating in the farming context.

Help-seeking for suicidality. Broad inferences could also be drawn from research focusing on help-seeking for suicidal ideation. Hom, Stanley, and Joiner's (2015) review (N = 146), while not a systematic literature review, did report the search keywords, databases and criteria for inclusion. The study identified many factors that played a role in preventing help-seeking for suicidal ideation. These included refusing or rejecting help, lack of perceived need, preference for self-

management, geographical convenience, availability of care, beliefs about treatment effectiveness, fear of hospitalisation, mistrust of providers, stigma, and being a male.

The review also identified factors that may facilitate help-seeking for suicidality such as mental health literacy, positive attitudes, family and friend support, and prior service use (Hom et al., 2015). Considering that distress and suicide ideation are associated (Handley et al., 2012), the barriers and facilitators of help-seeking may be similar for each. However, there are also possible differences in the manifestation of the barriers and facilitators that must be considered because distress is a less severe stage of poor mental health.

These studies on help-seeking in other related populations or for related problems highlight factors, in addition to the potential barriers and facilitators of help-seeking drawn from research with rural and farming populations, that may be influential to farmer help-seeking. The evidence reviewed suggests several help-seeking barriers and facilitators that converge across populations, and also highlighted novel factors.

Summary of Constructs from the Help-Seeking Literature

Overall, there is still a great need for research on farmer help-seeking due to many knowledge gaps. The state of the literature does not allow for firm conclusions to be drawn with respect to what factors act as barriers and facilitators of farmers' help-seeking. Whilst the literature reviewed in this chapter provides an indication of some of the potential factors that may be at play, these need to be thoroughly explored in farming populations to understand their effects comprehensively (e.g., as a barrier or facilitator), their relevance in wider farming populations, and their relative importance to help-seeking. These factors include psychological mindedness, attitudes towards help-seeking, stigma, self-reliance, stoicism,

emotional control/guarded vulnerability, minimising symptoms, experiencing negative affect, lack of percieved need, preference for self-management, self-efficacy, mental health awareness and knowledge (literacy), availability of services, access to services, geographical convenience, cost of services, GP helpfulness, communication and rapport with health professionals, beliefs about treatment effectiveness, fear of hospitalisation, mistrust of providers, prior service use, refusing or rejecting help, restrictive lifestyle, farmer mentality, pressure from family members, family and friend support, age, education, and relationship status. This research contributes to knowledge by addressing these gaps in the literature with respect to the barriers and facilitators of farmer help-seeking.

Phase 1

Chapter 3: Phase 1 Methodology

The previous chapters summarised the literature relating to the potential factors that might act as barriers or facilitators to help-seeking among farmers as well as the theoretical perspective and overarching methodological approach employed in this program of research. This chapter provides an in-depth discussion of the qualitative research methodology utilised in Phase 1 of the research, which forms the basis of the three following qualitative chapters. Given the similarity in methods across samples and for brevity, the methods employed in the three qualitative studies are reported only in Chapter 3. Following this methodology chapter, the findings of the three qualitative studies are reported thematically across the three participant samples, rather than according to participant group alone.

Phase 1 Aims and Objectives

The aim of Phase 1 was to identify and understand, through a series of qualitative studies, the potential factors that are perceived by farmers, family members, and health professionals to act as barriers or facilitators to help-seeking. Phase 1 of the research (including the forthcoming findings) is depicted below in Figure 5.

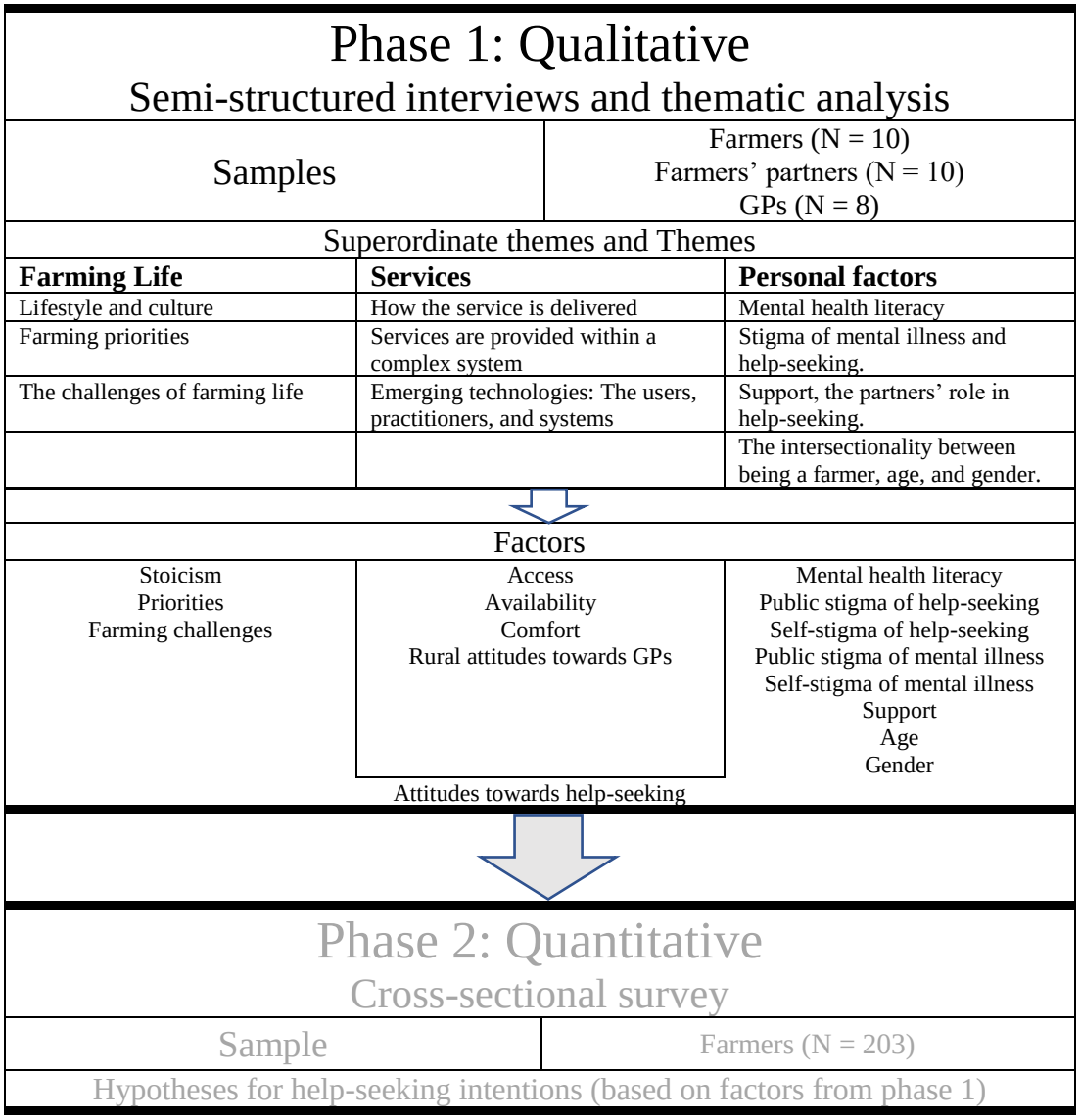

Figure 5. Summary of research, emphasising Phase 1.

Phase 1 Qualitative Methodology

The research question for Phase 1 was 'What are the barriers and facilitators of help-seeking in farmers as identified by farmers, their partners, and GPs'. There are many qualitative methodologies that are currently in use to address these types of questions and each differs in goals, epistemology, and ontology. As previously highlighted, the current research takes an inductive approach; it relies on reports from individuals in the dataset to determine the factors that influence farmers' help-seeking (Landridge & Hagger-Johnson, 2009). Despite the inductive approach and the choice not to test a specific theoretical model, the qualitative approach employed

was designed and underpinned by qualitative assumptions known as the epistemology and ontology. Epistemology refers to the theory of knowledge that is applied recognising that each theory understands knowledge and truth differently (Braun & Clarke, 2013; Howitt & Cramer, 2011). Ontology refers to the assumptions made about the relationship between humans, including their interpretations, and the world, which shapes understanding of the world (Braun & Clarke, 2013).

The epistemology employed makes explicit the theory of knowledge upon which the research is based (Braun & Clarke, 2013). It dictates what is classed as knowledge that is valid and true, and by exclusion, what is not (Braun & Clarke, 2013). As such, epistemology influences the research questions asked, as well as impacting how the data is interpreted (Braun & Clarke, 2013). There are various epistemological approaches that can be employed including a realist position, which asserts that there is one truth that is obtainable, and a relativist position that argues that there are multiple truths because knowledge is based on perspectives (Willig, 2013). This research uses a phenomenological epistemology, which asserts that experience is constructed because it is the product of interpretation, but it is real to the individual experiencing it (Howitt & Cramer, 2011; Willig, 2013). A phenomenological approach is suitable for this research because the aim is to understand the barriers and facilitators of farmers' help-seeking as experienced by the informants. This approach recognises that farmers' help-seeking is constructed by their interpretations of the associated experiences, while remaining real to the individual.

Ontology refers to how the world is viewed, that is, the relationship between the world itself and human understanding and interpretations of the world (Braun & Clarke, 2013). As such, a critical realism ontology asserts that the experiences of

individuals provide the basis of knowledge, which being socially constructed is not fully accessible (Braun & Clarke, 2013; Willig, 2013). This means that knowledge is created by individuals within cultures who have a vast variety of experiences and beliefs, which shapes individual interpretations; therefore, an unbiased knowledge is not possible (Braun & Clarke, 2013). For example, in this research, farmers, farmers' partners, and GPs' experiences provide the basis of knowledge on farmer help-seeking, which is unavoidably shaped by them as individuals.

Based on these epistemological and ontological assumptions, the participants interpret their experiences associated with help-seeking, which are real to them. These experiences provide the basis of knowledge, which is not an unbiased truth. Rather, the reports of the experiences are the accessible version of the truth. Thus, a phenomenological qualitative approach is employed in this research.

The nature of qualitative research does not lend itself to having the quality judged in the same manner as quantitative research. Nevertheless, there are methods by which to judge the quality of qualitative research. Two well-known techniques to improve the quality are member checking, and triangulation (Willig, 2013), both of which were implemented in this research. Member checking is a process of taking the analysis findings to participants and getting their feedback on how accurately their responses have been interpreted and reported (Creswell & Plano Clark, 2011). As for triangulation, Braun and Clarke (2013) define it as the inclusion of more than one method of data collection or the inclusion of more than one source of data to explore a phenomenon. Willig (2013) argues that doing so provides multiple perspectives on a phenomenon with the aim of increasing understanding. Braun and Clarke (2013) also highlight that triangulation provides richness, and can strengthen analytical claims. The use of multiple analysts also provides rigour to the research by

reducing bias in the content and insights due to discussion it affords (Berends & Johnston, 2005).

Phase 1 participants. This research used three samples: Queensland farmers, farmers' partners (hereon referred to as partners), and GPs (i.e., primary medical practitioners). Based on Morse's (2000) recommendations, the aim was to recruit six to 10 participants for each sample, with saturation appraised as part of this. Understanding farmer help-seeking requires consideration of the farming context and potential informants who could offer valuable information. Farmers themselves are important primary informants and can provide valuable insights into this issue. However, farmers and their mental health are not isolated from their family context, and therefore, partners are also likely to play a role in their help-seeking and provide insight into their help-seeking behaviours. Thus, the partner of a farmer, who is predominantly female in Australia (ABS, 2012), appears likely to play a critical role in any health help-seeking decisions and may provide additional information beneficial to understanding farmer help-seeking (or lack of). Further, as a key service provider in regional areas, GPs are also generally the first point of professional help chosen by farmers (Kavalidou, McPhedran, & De Leo, 2015), including for mental health problems (Perkins et al., 2013). For this reason, their insights into farmer help-seeking are likely to be valuable. The three samples were deliberately selected in order to understand experiences from multiple perspectives and also to increase the methodological rigour of the work (Willig, 2013). Considering potential barriers and facilitators of help-seeking from the perspective of these three different informant groups is likely to provide a well-rounded and comprehensive understanding of help-seeking in farmers.

Farmers. Farmers were required to be over the age of 18 years with primary production as their occupation (i.e., not inclusive of hobby farms) to be included in this research. The 10 farmer participants, seven male and three female, ranged in age from 43 to 70 years (M = 57.00, SD = 9.09). The participants resided in Queensland, and the Accessibility/Remoteness Index of Australia (ARIA+) classification system was used to categorise farmers according to their living/working location (Hugo Centre for Migration and Population Research, 2011). Location was categorised into five groups: metropolitan, inner regional (n = 2), outer regional (n = 1), remote (n = 2), and very remote (n = 5). See Table 1 for de-identified participant information. The below tables (1, 2, and 3) provide additional contextual information about each of the participants that is applicable to the findings reported in chapters 4, 5, and 6.

Partners. Partners were required to be in a relationship with a farmer meeting the aforementioned criteria. The 10 partners were females ranging in age between 29 and 64 years (M = 45.10, SD = 11.29) years. Based on the ARIA+, the living/working location of the partners was classed as inner regional (n = 1), outer regional (n = 2), remote (n = 2) and very remote (n = 5). See Table 2 for further information about the partner participants.

Table 1

Details of the farmer participants.

Pseudonym	Gender	Age	ARIA+	Farm type
George	Male	70	Very remote	Sheep, cattle and goats
Greg	Male	54	Very remote	Sheep and cattle
Madge	Female	43	Remote	Pawpaw and cattle
Michael	Male	53	Outer regional	Avocados, limes and cattle
Mitchell	Male	63	Inner regional	Grains
Rob	Male	54	Very remote	Cattle
Rosemary	Female	67	Remote	Cattle and crops
Rudy	Male	65	Very remote	Sheep and cattle
Steve	Male	56	Very remote	Cattle
Tuppie	Female	45	Inner regional	Cattle stud

Table 2

Details of the partner participants.

Pseudonym	Gender	Age	ARIA+	Farm type
Abigail	Female	48	Very remote	Cattle
Albert	Female	56	Outer regional	Cattle
Anna	Female	45	Inner regional	Cattle, pigs and sheep
Beth	Female	64	Remote	Cattle and sheep
Harriet	Female	47	Very remote	Cattle and sheep
JA	Female	29	Remote	Cattle and crops
Kate	Female	30	Very remote	Cattle
Kathy	Female	52	Very remote	Cattle and sheep
NW	Female	46	Very remote	Cattle
Susan	Female	34	Outer regional	Sugar cane

GPs. Eight GPs, including five females and three males, were included whose regular patients comprised of farmers. The GPs serviced a range of areas based on the ARIA+ including metropolitan (*n* = 1), inner regional (*n* = 1), outer regional (*n* = 3), remote (*n* = 2), and very remote (*n* = 1). The age of the GPs was not collected because it was considered irrelevant to their professional opinions. Further information about the GPs is provided in Table 3. The participant-chosen pseudonym (or occasionally initials) and sample (farmer, partner, or GP) are reported after each quote.

Table 3

Details of the GP participants.

Pseudonym	Gender	ARIA+	Farming in their district
Amy	Female	Inner Regional	Cattle, sheep and pineapples
Anthony	Male	Very remote	Cattle and sheep
Ben	Male	Outer regional	Cattle, sheep, wine grapes, and horticulture
Jacob	Male	Metropolitan	Cattle, dairy, and crops
Jane	Female	Remote	Cotton and crops
Mary	Female	Outer regional	Cattle, cotton and crops
Melissa	Female	Remote	Cattle, cotton, crops and sheep
Vanessa	Female	Outer regional	Cattle and crops

Every effort was extended to ensure that there were no relationships within the participant pool to prevent the potential influence of relationship dynamics. That is, the partners in this sample were not the partners of the farmers sampled. This decision was made to minimise any disclosures by participants of relationship issues that are outside the focus of this study (DeVito, 2009). Further, this decision also protects the privacy of the individuals within the relationship.

Phase 1 recruitment. Ethics approval was received from the University of Southern Queensland (approval number: H16REA004; see Appendix A for letter of approval) before the research commenced. Potential participants were invited to express their interest in participating in a semi-structured interview through techniques such as snowballing/word of mouth (sending via email to personal and professional networks and asking recipients to participate if eligible, and send it to other people they know who may be able to participate), advertising on social media platforms (e.g., Facebook posts), and key industry bodies' newsletters and events (e.g., AgForce newsletter or Rural Doctors Association Queensland conference). Through these methods, a small description of the research was shared with an invitation extended to express interest through an online survey link. Participants who expressed interest and provided contact details were followed-up with a phone call, and all participants were sent a detailed information package (see Appendix B for farmer information package), informing them about the research including the $20 prepaid Visa incentive. If the participants were willing to continue, consent was obtained and an interview was organised at a time, and location (if applicable), of their choosing.

Phase 1 data collection. Semi-structured interviews are a well-validated method of data collection for thematic analysis (Braun & Clarke, 2013). Semi-structured interviews have scripted questions, but there is scope to explore issues that are raised by the participants (Willig, 2013). Semi-structured interviews paired with thematic analysis were used in Phase 1 due to the flexibility this affords both in the interviewing and the analysis stages. The participants were offered the choice of a phone, video conference (using the Zoom application; Zoom Video Communications, Inc., 2018), or face-to-face interview. The majority of participants

(n = 26) opted for phone interviews, however two farmers opted for face-to-face interviews. The participants were encouraged to choose somewhere quiet and private to complete the interview. All of the participants gave their informed consent, which could be done electronically when registering their interest, by signing a paper form, or verbally at the beginning of the interview. All interviews were conducted by the candidate. All interviews were audio recorded and transcribed verbatim. Recruitment of participants continued until no new information was elicited, suggesting saturation had occurred (Marshall, Cardon, Poddar, & Fontenot, 2013).

The interview questions were created following the recommendations made by Braun and Clarke (2013), and informed by the relevant help-seeking literature (see Appendix C for farmer interview questions). To get to know the participants, the interview commenced with a series of demographic questions relating to age, gender, and place of residence. Following this, as recommended by Braun and Clarke (2013), a specific initial open question was asked ("Can you tell me about farming life?"). This was then followed by a script of open questions including "What sort of things should farmers seek help with/for?" and "What would prevent a farmer from seeking help regarding mental health?" At the conclusion of the interview, a final scripted question was asked based on Braun and Clarke's (2013) recommendations ("Is there any other things you think would influence whether a farmer sought help or not?").

Following the recommendations for active listening outlined by Ivey, Ivey, and Zalaquett (2010) encouragers (e.g., "mmm", "yeah", "mhmm".) were used liberally throughout the interview, as well as paraphrasing and summarising to ensure an accurate understanding and to encourage correction if necessary. There were 33 hours and 34 minutes of interview time with individual interviews ranging

in duration from 29 minutes 38 seconds to 170 minutes 50 seconds. The average interview time was 71 minutes 55 seconds.

The participants in this study were able to engage with their transcripts and provide corrections. Only one participant, a farmer, provided a revised transcript, which was used instead of the original transcript. After the analysis was completed, participants were provided with a brief summary of the study findings and were invited to contact the research team if they would like to discuss anything or provide feedback on these findings. None of the participants chose to discuss or provide feedback on the analysis.

Phase 1 analysis. The method of thematic analysis devised by Braun and Clarke (2006) guided the analysis of the data. For the thematic analysis process, each sample was initially treated as distinct. To start this process, the data were coded by two individuals separately, one manually (supervisor; Associate Professor Charlotte Brownlow), one using NVivo software (candidate; Caitlin Vayro; Version 11; QSR International Pty Ltd., 2016). Each participant's transcript was coded individually, without reference to others in their sample, or the entire data set. These codes were then categorised into themes manually. The themes were categorised individually within each of the three samples. Both the themes and codes were compared with the transcripts to ensure they provide an accurate representation of the data. Once the coding and categorising had occurred for each participant sample, the resulting themes were compared across the three samples individually by each coder. There was a large degree of thematic convergence between the themes reported by the three samples. During the writing process undertaken by the candidate, the themes were refined; that is, they were removed or integrated into other themes if they were not compelling or if they fitted better into the context of another theme. The quotes

used to provide evidence of the themes were chosen based on their ability to illustrate the points encapsulated by the relevant theme. That is, the most succinct and clear quotes that illustrated the points were chosen, which is a method endorsed by Braun and Clarke (2013). Throughout the analysis process, any discrepancies were discussed between the two coders until collaboratively resolved.

Reporting of Phase 1 findings. Due to the strong thematic convergence between the three samples, the decision was made to present the data thematically, as opposed to organising it by sample, which would have produced a great deal of repetitiveness. Presenting the findings thematically permits greater exploration of the data, including convergent and divergent perspectives among samples, which can allow a greater depth of understanding. This was especially the case because there were common themes that spanned the three samples. If the data were presented according to the sample, then each chapter would report similar themes and findings, but the ability to analyse the nuances would be severely limited. Thus, to ensure a rich analysis that considers multiple perspectives of farmers' help-seeking, the data was reported thematically. The main superordinate themes identified are reported in the following three chapters, which includes background literature, the findings, and a discussion of these findings. The superordinate themes identified across all three samples and discussed in the following chapters are "farming life", "services", and "personal factors".

While the three superordinate themes are presented separately for clarity, the themes and factors encompassed within are likely to be linked and complex. Additionally, each theme, or subtheme is likely to relate to or affect other sub/themes. See Figure 6 below.

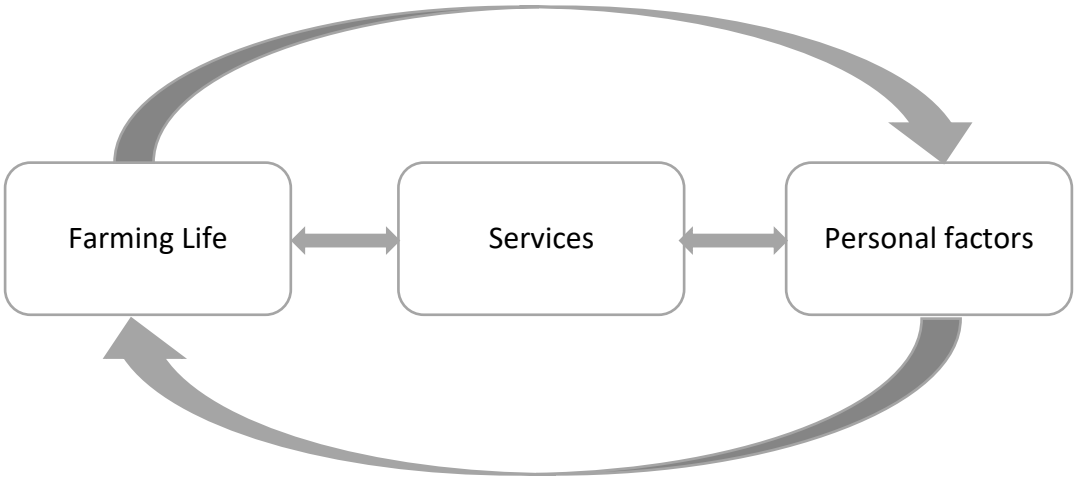

Figure 6. Graphic representation of the interrelated and complementary nature of the themes from Phase 1.

For example, the farming life superordinate theme reports on the stoicism that is a defining feature of farmer culture, which may affect stigma that is reported as a personal factor. It is important to note that the themes are considered equal, without ranking, as categories focusing on similar constructs to organise the presentation and interpretation of the data. The general discussion (Chapter 9) highlights the complementary nature and the complexity of the themes and subthemes, while also integrating the findings from Phase 2.

Chapter 4: Phase 1 - Farming Life

The previous chapter has provided the methodology for Phase 1, which includes the research reported in Chapter 4. The current chapter encompasses the first identified superordinate theme: farming life, which explores the barriers and facilitators of farmer help-seeking associated with life as a farmer (See Figure 5 and Figure 6). The three themes discussed include the lifestyle and culture of farming, farming priorities, and the challenges faced as part of farming life. These themes are then discussed to locate them within the broader literature as well as provide inferences that can be drawn based on the findings.

Background

Previous research (discussed in Chapter 1 and 2) supports the examination of farming life factors in conjunction with help-seeking for health issues and in rural populations generally (Collins et al., 2009; Elliott-Schmidt & Strong, 1997; Hossain et al., 2008; Schirmer et al., 2015; Wagstaff & Rowledge, 1995). For example, cultures that endorse help-avoidant attitudes have been observed in rural communities (Collins et al., 2009). This is evidenced in culturally endorsed attitudes that consider needing help as a sign of weakness (Collins et al., 2009). Further, stoicism (the rejection, minimisation and control of emotions; Wagstaff & Rowledge, 1995) and self-reliance are characteristics that are highly valued in rural cultures (Alston, 2012; Fuller et al., 2000; Judd, Jackson, Komiti, et al., 2006) and may be particularly relevant to help-seeking. It is possible that stoicism and self-reliance are further amplified in farming culture specifically (Hull et al., 2017), and that they may lead to less help-seeking. Such evidence highlights ways that culture as a core part of farming life may impact help-seeking, although this has not been directly examined.

In addition to cultural influences, help-seeking among farmers may also be influenced by practical factors associated with farming life. For example, farmers are likely to experience competing demands on their time and resources, and these require them to prioritise based on the degree of urgency of a given task (e.g., repairing a broken fence). This prioritisation potentially extends to decisions about seeking help for health concerns, considering evidence that health is generally not a priority for farmers (Mercer-Grant, Brumby, Hatherell, & Harper, 2011). Additionally, the long hours that farmers work have been documented by a number of researchers (Brumby, Willder, & Martin, 2010; Collins et al., 2009; Mercer-Grant et al., 2011), and has been suggested to influence help-seeking (Kolves, Milner, McKay, & De Leo, 2012), although this has not been directly examined. When viewed as a competing time-intensive demand (invariably, the amount of time needed for travel and attending the appointment is non-trivial), help-seeking itself may serve to exacerbate prioritisation challenges. Thus, there may be complex relationships between help-seeking, time and resource availability, and prioritisation and this requires further investigation.

A farming life superordinate theme was identified across all three participant samples, with farmers, partners, and GPs all identifying aspects of farming life that they perceived to affect help-seeking. The findings across samples are reported below.

Findings

Three themes relating to farming life were identified (see Table 4) and appear complex and intertwined in their relationship to help-seeking. These aspects of farming life were important to participants and were referred to by all three

participant groups. Tables 1, 2, and 3 provide pertinent information about the participants, to contextualise the findings reported below.

Table 4

Themes developed across the three participant samples.

Theme	Summary
Lifestyle and culture	Farming is a lifestyle and culture, which is ingrained in farmers' identity. Traits such as toughness and independence are valued, which are antithetical to farmers seeking help in order to manage others' impressions.
Farming priorities	Farmers are time-poor, and the time commitment needed to seek help is a barrier to care. Further, priorities are important in help-seeking. Help-seeking is not a priority for farmers, but farming work does offer flexibility. Therefore, if help-seeking were prioritised, it could occur.
The challenges of farming life	There are many challenges to farming, with most involving a financial component/consequence. Financial volatility can cause distress and may create the need for farmers to seek help as well as prevent help-seeking by making care prohibitively expensive.

Theme 1: Lifestyle and Culture

The lifestyle and culture of farming were reported by farmers, farmers' partners, and GPs as crucial to understanding how and why farmers engage in specific behaviours, including help-seeking. The farmers gave a variety of views to explain their occupation, lifestyle, and culture (including cultural identity), with farmers' partners and GPs also providing corroborating commentary. Specifically, the notion that the occupation of farming is seen as more than a source of employment was common across the three participant groups, for example, "It's really a whole lifestyle, like it's not just an occupation it's a whole lifestyle." (JA, Partner). Thus, farming life would affect all aspects of farmers' behaviour, including help-seeking, due to its central role and importance in shaping their lives. This notion is important as it is likely to link to other factors such as determination of priorities, as discussed below.

The culture and identity of farming life affects help-seeking in several ways. The ideas shared by the participant groups were consistent, including the importance (and perceived cultural expectation) of farmers being strong and independent. For example, farming "requires you to be quite resilient and quite independent" (Abigail, Partner) and

> [Farmers are a] bit of a strong group, you know, so you don't really ask for help even though you probably need it and it's probably welcomed but. I don't know, pretty staunch sort of mob. (Madge, Farmer).

A GP (Ben) expanded on the importance of culture and identity in farmers, highlighting a loss of identity when experiencing hardships that has implications for the business or familial and romantic relationships. This is especially the case when farms have been succeeded through family ties and are often run by families. Ben also notes how these cultural identity issues can impact farmers' mental health.

> There's a sense of loss or grief associated with (. . .) a loss of family or a loss of direction, loss of value or worth associated with their identity (. . .) as farmers I suppose. Then (. . .) emotional factors can be very high and of course over a long period of time that can lend itself to, direction to developing a (. . .) depressive type (. . .) episode. (Ben, GP).

These data suggest that farmers internalise parts of farming culture that then form part of their identity, including characteristics such as self-reliance, independence, and resilience, and these attributes are largely antithetical to help-seeking. Impression management may also be used to assert their identity, and this may involve a lack of help-seeking. For example, Melissa (a GP) suggests:

> They like to be seen as tough, and that's how they're raised. They've just got to be tough; you just deal with things (. . . .) They are not a culture that seeks help, and that's featured in their personalities. (Melissa, GP).

This was a view that was also shared by some of the partners. For example, Kate indicated that these sorts of traits might prevent them from seeking help for their mental health.

> Yeah overcoming that hurdle that says, "I'm tough I don't need to see anyone..." Overcoming that is probably, really, the first step that they would need to take. (Kate, Partner).

In summary, farmers class their occupation as broad and more of a lifestyle than merely a job. Farming culture is ingrained in farmers' identity, with traits such as toughness and independence being highly valued, and this may prevent help-seeking as a way to manage others' impressions. The farming lifestyle may also affect farmers' time management and choices.

Theme 2: Farming Priorities

Farmers, partners, and GPs all consistently cited the time-consuming nature of farming as a defining feature of farming life that may influence help-seeking behaviours. Examples of how the time-consuming nature of farming work (including its seasonal nature) acts as a barrier to help-seeking are provided by Susan (a partner).

> Well, especially [in] season, they're very busy. You've got farmers working 17-hour days, so there's just technically no time. I mean that's their most stressful period as well, so it's definitely a time factor. (Susan, Partner).

Many GPs highlighted that in addition to the obvious time restrictions of farming, the perception of time by the farmers is particularly important, especially when responding to stressors.

> I think a lot of them foresee that they're just too busy, you know. I think when they're, when times are stressed (. . .), they actually think that they need to keep working to keep the bank at bay and to keep their, to improve their mood and to stop thinking about the things that are worrying them. (Anthony, GP).

Farming is clearly time intensive, but partners and GPs also highlighted the need to consider the substantial amount of time involved in seeking help (for an individual session as well as over time). Farmers and their partners further elaborated on issues around time investment.

> If you're looking at like where we are, it's a day trip one way to get to a social worker or a psychiatrist or something, it'd be at least a day's trip one

> way and a day back, so it's a fair wedge of time taken out of a week. (NW, Partner).
>
> In terms of being able to see them repeatedly for a problem; would be multiple consultations to fix, they're very reluctant to do so because it involves a lot of travel time and so their health care suffers because of that. (Amy, GP).

These quotes express the compounding issue of help-seeking itself often being very time-consuming. This means that farming and help-seeking are competing for the limited resource of time and this highlights the importance of priorities in farming populations.

With heavy time constraints due to work and travel, the decision by farmers to seek help requires that they prioritise their mental health. The difficulty in addressing competing priorities and the adverse effect of under-prioritising help-seeking was identified by all participant groups. It was clear from the farmers that they had many daily tasks, and working was the highest priority, even if it was apparent that other things needed attention.

> I've got an appointment to see the stupid doctor (. . .), I've got to get the fruit out, and I've got to get the cows in (. . .), I'm too busy. (Madge, Farmer).
>
> Their health is not a priority like compared to say someone who even, someone who lives closer to the medical centre. If they live in town and they work at a bank or something, they feel much more, they're much more likely to present earlier than someone who lives far away and who can't get, who feels that they can't get away to have something addressed because there is stuff that needs to be done on the farm. (Jane, GP).

Although working is typically a farmer's highest priority, it was also indicated by the farmers, partners, and GPs that, with planning, time could usually be organised for help-seeking.

> If they really needed help and they really felt like they were able to get help they would most likely make time to do something like that. To go into town and see someone or ring someone. (Kate, Partner).
>
> I think there is very few times where a farmer can't plan to have some time off to go and get help if he wants it. It might be inconvenient (. . .), and it may require getting someone on to look after the place for a few days (. . .)

> Surely, they can find time to go and seek mental health if they really wanted to. (Rudy, Farmer).

As such, the farmers reported a range of views about priorities, the importance of working, and help-seeking and indicated that there could be occasions under which help-seeking might be prioritised. However, highlighting the possibility does not mean that this prioritisation occurs. Thus, the notion of being just too busy is more complicated and must account for the varying prioritisation of tasks (e.g., bank, cattle sales, and produce processors), personal factors, and level of distress.

In summary, the extensive time commitment required for farm work can serve as a barrier to help-seeking, especially considering the time-consuming nature of help-seeking related behaviours. However, there is also flexibility in farming, which implies that being busy may be an excuse used to justify not seeking help in the context of competing demands. Some farmers were more open to the idea of being flexible in prioritising help-seeking. Along with being time-poor, farmers must navigate many other occupation-linked challenges, and these can also influence help-seeking.

Theme 3: The Challenges of Farming Life

Farming life necessitates the negotiation of many challenges, many of which affect business directly or indirectly and were highlighted as also potentially affecting farmer mental health, as well as help-seeking. That is, farmers' distress levels may increase in light of facing these challenges, which in turn may increase their need to seek help. Many of the challenges farmers experience contain a financial component. Farming presents a great deal of financial volatility for farmers and this acts as a direct stressor as well as placing constraints on help-seeking. For example, farmers' finances can be impacted by many things such as "Pricing, that's out of your control." (Michael, Farmer). Further, legislation and political changes

can also have an impact on finances as seen during “The live export ban where prices for cattle were very poor.” (Rob, Farmer). Another powerful and unpredictable stressor, with financial implications, is the weather, which was highlighted by all informant groups. “If you have a bad season it reflects in your income, and it has (. . .) a toll, emotionally.” (Anna, Partner). Clearly, these challenges can increase farmers’ distress levels. These farming-related challenges have implications not only for farmers’ distress levels and an increased likelihood of needing help due to declining mental health but also further compound the demands on their resources, such as time and finances.

Financial and business challenges have an impact on farmers’ ability to seek help when needed. All of the samples reported that many farmers face a “significant amount of debt with no foreseeable income coming in, in the near future.” (Mary, GP). The state of a farmer’s financial situation has implication for their help-seeking, due to the costs associated with accessing professional support. There were mixed reports from farmers and partners regarding how their financial situation would influence farmers’ help-seeking. Some reported that difficulties with seeking help were due to an inability to leave the farm, as there are no employees (due to the financial constraints) to complete tasks.

> A lot of them don’t have any employees, so there’s no labour support so, you know, you have to do the job at home before you can, sort of, leave the farm, so that makes it difficult at time to get away. And that again is, you know, something that, that is driven by finance. (Anna, Partner).

Another perspective shared was that the costs (including indirect costs such as fuel for transport) of seeking help would be a barrier.

> I guess a lot of —because counselling does cost money, it's a little bit hard for farmers sometimes too—it's easier to say it's too expensive. I'll cover my own, trying to be self-reliant and that sort of thing. (Mitchell, Farmer).

The evidence above shows that farmers' finances affect their help-seeking in various ways. However, on this matter, there was some divergence between informant groups, which indicated that farmers may be lacking mental health literacy and not be aware of the free mental health services available. Specifically, some (though not all) GPs reported that there are services that can be accessed without cost to patients, highlighting the benefit of GPs inclusion in this research; although, they only referred to the cost of the service itself and not associated expenses (e.g., travelling to the service, loss of labour).

> With just the way that the farm is going at the moment and they mightn't be able to afford care, and I think that's why our service is a good back up in that there is no out of pocket cost for farmers. (Ben, GP).

While travel cost and time are important considerations, the farmers did indicate that they at least somewhat regularly frequent a town, which would afford opportunities to seek help if needed, and in turn may help reduce the travel burden. Therefore, the cost of care itself, as well as the indirect costs, can serve as a barrier to farmers seeking help. Notwithstanding, this is a complex issue given many services may not have upfront costs, but the indirect expenses raised (e.g., travel and replacement labour) may still prove prohibitive.

In summary, challenges associated with farming life are many and varied, and can lead farmers' distress to increase and mental health to decline. Farmers' capacity to seek help when needed is also affected by some of these challenges. This is especially the case if the challenges have a financial impact, which could lead to farmers having insufficient resources to access mental health care. It is imperative to understand these farming life challenges in order to address the challenging context farmers' experience and remove the associated impediments to help-seeking.

Discussion

In this qualitative study, across three samples, the first superordinate theme identified was farming life. This chapter sought to gain insight into the barriers and facilitators of help-seeking that stem from farming life by examining the input across all three samples. Farming life factors refer to aspects of the farming lifestyle such as identity and culture, resource pressures (time and finance), and the farming-related challenges.

This superordinate theme demonstrated firstly, that culture and lifestyle are a defining feature of farming life and secondly, that these exert a powerful influence on help-seeking. The majority of information on this theme was shared by farmers' partners and GPs, with the farmers often less clear and direct with respect to their input on the topic of culture and identity. Constructs such as culture and lifestyle, are abstract and can resist direct personal reflection (Gerrig et al., 2008; Qureshi, 2005). Further, reluctance to discuss these issues may be another manifestation of their tendency for practicality as well as impression management. Despite the lack of articulation on the farmers' part, the theme was consistently highlighted by all informant groups, which shows that it is likely a key factor.

Farming is classed as a lifestyle with an associated culture and strong identity. Their identity is described using terms such as strong, self-reliant, resilient, and independent and these characteristics were reported to be internalised expectations, and thus characteristic for farmers. These characteristics were also reported by farmers, partners and GPs as acting to prevent help-seeking from occurring. The strength of the farming culture and associated internalisation is consistent with the findings of Roy et al. (2017) that agrarian social norms influence farmers' behaviours toward stress-reduction. The cultural characteristics of farming

promote behaviours such as ignoring mental health issues, which in turn prevents help-seeking. These findings suggest that culture has a role in farmers' help-seeking decision-making and warrants further examination.

The second theme identified concerned the influence of competing priorities and being time-poor. Respondents expressed how time-intensive farming life is, especially when trying to increase productivity to ease financial stressors. This is not conducive to help-seeking, as much of the available time is being used for farming duties. Help-seeking can also require substantial time commitments by way of travel to and from appointments. This can be hundreds of kilometres, although the burden of travel does vary. As such, farmers' prioritisation seems to be based on a complex interaction of considerations, which include farming duties and travel time amongst them. It was clear that these two competing time-intensive tasks—working and seeking help—create a prioritisation conflict. Considering the previously mentioned culture of farming, the finding that farmers prioritise work rather than help-seeking is unsurprising. Nonetheless, the participants demonstrated awareness that farming is flexible and time can be managed to allow time off the farm, which could be used to seek help. Although, specific and clear circumstances of what would warrant help-seeking being prioritised were not offered. There is the potential that this flexibility in conjunction with time management may act as a facilitator of help-seeking in farmers. Other studies attest to the time-consuming nature of both farming and help-seeking, including the finding that time commitments can prevent help-seeking (Brumby et al., 2010; Collins et al., 2009; Handley, Kay-Lambkin, Inder, Lewin, et al., 2014). The strong culture of farming supports the demonstrated prioritisation of work over help-seeking; a finding that is also supported by Mercer-Grant et al. (2011). The current findings show that time constraints may prevent farmers from

seeking help and continuing mental health treatment, especially when travel time, and other situational factors, are considered. In light of these time constraints, priorities become critical in driving decisions around help-seeking with those that prioritise mental health better able to seek help, especially if time is managed well.

A third theme reported by participants represented the challenges of farming life. Work demands and finances are highly volatile parts of farming life, and farmers often have limited capacity to influence them. This theme also involved other external factors that influence both farmers' level of distress and help-seeking such as the weather and the political and economic climate. There was disagreement among participants with respect to the influence of farmers' finances on their help-seeking. Some participants reported that financial difficulties could lead to the inability to afford labour support or to pay for the expenses associated with help-seeking, while others indicated that this influence might be exaggerated and they believed there is likely to be very few farmers who are unable to afford some form of help. This suggests that the relationship between finances and help-seeking is also a complex one. These findings are consistent with other research indicating that weather and the political and economic climate can act as stressors creating financial volatility and stress leading to distress in farmers (Behere & Bhise, 2009; Edwards, Gray, & Hunter, 2015; Stain et al., 2008). Further, the current study extends this work by demonstrating that these factors can also affect help-seeking. The current sample also confirmed that many farmers were facing financial stressors, which is consistent with other reports (Gregoire, 2002; Judd, Jackson, Fraser, et al., 2006; Lunner Kolstrup et al., 2013; Melberg, 2003). This and other research have reported that inability to afford labour support can prevent farmers from being able to leave their farm (Elliott-Schmidt & Strong, 1997; Fuller et al., 2000), which the current

study highlights is often necessary for them to access help. This finding is inconsistent with Perkins et al. (2013) who found that while financial challenges are reported as barriers to care, those rural and remote residents experiencing perceived financial hardship were more likely to seek help for their mental health. Farmers experience financial stressors, and the relationship between finances (both perceived and objective) and mental health help-seeking is complex, where finances appear to impact both the need and the ability to seek help.

The three themes that are used to organise participant responses do not reflect independent categories. In many ways, they interrelate and complement each other, and underscore the complexity of help-seeking barriers and facilitators for this population. For example, the scarcity and variability of resources (e.g., primarily time and money) appears innate to farming life, and this creates ongoing prioritisation conflicts. When facing scarce resources, individuals from a culture that values self-reliance, strength, and the appearance of resilience may be more likely to turn to hard-work and self-sacrifice to solve their prioritisation challenges.

Summary

Farmers, partners, and GPs all recognised the importance of farming life influencing help-seeking. Specifically, the lifestyle and culture associated with farming, priorities, and the challenges of farming life seemed to impact farmer help-seeking. That is, the cultural identity associated with farming encouraged toughness and independence, or more formally stoicism and self-reliance, which can act to prevent help-seeking. Further, farmers are time-poor, while help-seeking is time-consuming. As such, this means prioritisation of help-seeking is crucial, but does not often occur, and this is currently preventing help being sought. Farming challenges can also impact farmer help-seeking by increasing the need for care, as well as also

preventing care due to the associated limited resources. Thus, it is important to consider farming life to understand farmer help-seeking, however, the role of health services must also be acknowledged.

Chapter 5: Phase 1 - Services

The previous chapter reports on the superordinate theme of farming life, which discussed how a farmers' lifestyle may impact their help-seeking. The current chapter presents the findings relating to the superordinate theme of services, which encompasses the barriers and facilitators of farmer help-seeking associated with health services (See Figure 5 and Figure 6). A brief review of background literature that is relevant to the services theme is provided, followed by the presentation of the findings within the services superordinate theme. The three themes discussed include how the service is delivered, services provided to farmers within a complex system, and the emergence of technology-based care. This is followed by a discussion to make inferences from the findings, including convergence or divergence with the existing literature.

Background

In terms of the interaction between rural people and GPs, there is some research showing that the service, or interaction, matters. That is, rural cultural knowledge has been reported in qualitative research to be key to successful rural service delivery, and rural people report a desire for services that are locally conceived to meet their needs (Alston, 2012; Bischoff et al., 2013; R. L. Wilson, Wilson, & Usher, 2015). Thus, it seems that the way the service is offered (or the person offering the service) may be particularly important in the determination of the acceptability of interventions and therefore, might be relevant to understanding farmers' help-seeking. There are parallels between these notions and the literature on the therapeutic alliance, which has demonstrated through multiple meta-analyses that the relationship between a person and their mental health care provider has a small to medium effect on the therapeutic outcome (Fluckiger, Del Re, Wampold, & Horvath,

2018; Horvath & Symonds, 1991; Norcross & Wampold, 2011). However, there is no research examining the specific factors associated with service provision that may act as barriers or facilitators for farmer help-seeking.

Research conducted with rural populations supports the inference that barriers, such as availability and access issues, are likely to affect help-seeking among farmers (Collins et al., 2009; Judd, Jackson, Fraser, et al., 2006). Nevertheless, it is unclear how these systems may interact with service delivery (how the professional delivers the service) to influence help-seeking.

Alternative service delivery modes (e.g., through modern technology) are regularly recommended for farmers, yet we know very little about uptake of such services and whether they are able to overcome traditional service barriers. E-mental health can be accessed remotely, and therefore is potentially ideal for farming and rural populations. It has many benefits and is clinically and cost-efficacious, however, there are indications that uptake is less than ideal, based on only 24% of individuals who completed mental health assessment going on to engage in treatment through the MindSpot Clinic (Orman et al., 2014; Titov et al., 2017). Thus, it is likely that there are also barriers preventing farmers from using such services. These may include the farmers' attitudes or literacy (lack of awareness and knowledge) regarding e-/tele-mental health services (Handley, Kay-Lambkin, Inder, Attia, et al., 2014), as well as insufficient internet connectivity, which is a common issue in rural and remote locations (Shealy, Davidson, Jones, Lopez, & de Arellano, 2015). Although technology-based services are regularly recommended by researchers to overcome barriers such as remote location and stigma (Bradford, Caffery, & Smith, 2015; Meurk, Leung, Hall, Head, & Whiteford, 2016), there is a dearth of research

examining how farmers decide to use (or not use) such services when seeking help for mental health.

A services superordinate theme was identified across all three participant samples, with farmers, partners, and GPs all identifying aspects of services and service delivery that they perceived to impact on help-seeking.

Findings

Three key themes with respect to services were identified by all participant groups: how the service is delivered, services are provided within a complex system, and emerging technologies. For a summary of the nature of these themes, see Table 5. Taken together, these themes demonstrate the complexity of interactions between farmers and health services. Within the themes, there were several factors that the participants reported as influencing help-seeking. Additionally, these factors were described as serving as barriers and facilitators, highlighting their complex and intertwined nature. Tables 1, 2, and 3 provide pertinent information about the participants, to contextualise the findings reported below.

Table 5

Themes developed across the three participant samples.

Theme	Summary
How the service is delivered.	The interaction between a farmer and a GP influences help-seeking. Positive interactions facilitate care being sought and negative interactions prevent it.
Services are provided within a complex system	The impact of mental health services and systems on help-seeking is complex; some components are barriers while other components can act as barriers or facilitators, dependent on other additional factors.
Emerging technologies: the users, practitioners, and systems	The relationship between technology-based services and farmers' help-seeking is also complex. There is the potential for technology-based services to be a facilitator of farmers' help-seeking, but there are barriers that prevent this.

Theme 1: How the Service is Delivered

The interaction between farmers and GPs when help is sought appears key to understanding help-seeking. Farmers and GPs each bring their own perspectives and expectations to the relationship, which both play a role in the success and the likelihood of future help-seeking. While factors within this theme were reported by all three participants groups, there were some differences particularly in the focus of the farmer and GP perceptions. Farmers tended to provide commentary on GPs and how they influence the therapeutic relationship, rather than acknowledging their own role in the relationship. Similarly, the GP participants reports mostly highlighted the farmer patient's role in shaping the therapeutic relationship. Thus, collecting data from multiple informants facilitated the identification of both sides of the service interaction. The differing perceptions between GPs and farmers are highlighted throughout the theme.

Farmers consistently and clearly asserted that GPs needed to display 'bush knowledge' as well as health knowledge to be able to understand their lifestyle and serve them appropriately. For example:

> They have to be able to relate to the people and sort of understand their way of life and what puts the pressure on them, and I don't think you can learn that out of a book. (Rudy, Farmer).

The farming participants indicated that many GPs and mental health practitioners lack the understanding needed:

> The people who deal in mental health I think have a difficult time (. . . .) I get the impression they're out here, and there is several of them. They're all trying to look to be helpful. (Rudy, Farmer).

While GPs also acknowledged the importance of bush knowledge, perceptions differed slightly. The GPs acknowledged the importance of bush knowledge in their practice, albeit as helpful rather than a necessity.

> As the practitioner you have to be really aware of what is going on seasonally with their busy time, you can't ask someone to come back and try and see for a check-up in the middle of harvest and planting (. . . .) I'm lucky I grew up on a big cattle and cropping place, so I'm, you know, I know what it's like. I know the lingo and that helps a lot, as we already know what questions to ask these fellas. So that gives you a foot in the door already, as such. Chat to them about how the harvest is going, Blah, blah, blah, did they get any rain, bit of general chit chat. (Mary, GP).

However, the GPs indicated that they had an interest in farmer health/mental health and thus likely demonstrate a greater understanding of farming life than GPs without this particular interest, especially those on temporary placements. While Mary (and other interviewed GPs) indicated that she has an understanding of farming life, Kate's report below suggests that this is not the case with all practitioners and those with bush knowledge are likely to have better outcomes.

> If the person who they are talking to has a really good understanding of the industry that these people are working in, I think they'd be able to relate to them a lot better. And be able to help them with their problem, yeah, they'd just be able to relate to them a lot better and provide them with, you know, solutions that are friendly to their lifestyle. (Kate, Partner).

Thus, bush knowledge is acknowledged as important to service provision for farmers, echoed by partners who also recognised the impact of bush knowledge on farmers' help-seeking behaviours. While the GPs noted that bush knowledge could assist in their practice, they placed less importance on this than the other participant groups.

The nature of the practitioner-patient relationship was also identified as a factor that may influence farmers' help-seeking tendencies. In particular, some GPs reported difficulty building rapport with farmers, potentially something impacted by the perceived lack of bush knowledge of GPs, and the overall stoic requirements of farming culture explored in the previous chapter. Difficulty establishing rapport may mean that the farmer is unwilling to return to the GP or seek help for other issues in

the future. This is problematic given the generally late presentation of farmers to GPs/healthcare (Brumby & Smith, 2009).

> If they come in and they've got something formulated some people will just tell you. I tend to find just teasing it out is the way to go, and as you build some rapport, they will become a little warmer and just disclose to you a little bit more. It can be a very painful procedure though. It can be very challenging to actually get someone to honestly say that things are not going well and they're not feeling well (. . .) It is so much about building a rapport with this person so that you can actually assist them. (Vanessa, GP).

The difficulty building rapport with farmers may stem from a number of complex and interwoven reasons such as continuity of care, cultural or gender norms, as well as treatment preferences.

> They really need to connect with someone that they're going to be able to go back to and develop a rapport with. So, you know, whether it's a big campaign of, you know, go and get your man check-up (. . . .) They've got to try to appeal to their practical side and like talk about psychology as a like a toolkit for managing your mood, and then you go and see the psychologist. You learn all these tools and you can use them later in life. You can pull them out if you need them later in life. And it has to be something very practical, relatable, which looks at fixing a problem, because that's the way men think about, it's a problem that needs a solution. (Mary, GP).

The GPs experiences align with reports from Abigail, a partner who highlighted farmers' hesitance toward seeking and receiving mental health care. Farmers may be hesitant to seek help if they do not have a good relationship with their GP. Further, a poor relationship may also affect the farmers' adherence to recommended treatment protocols.

> There is probably a level of suspicion maybe; I'm not sure that lots of farmers are totally convinced about what needs to happen in the treatment process. And that I guess comes back to their relationship with your health provider. If you've got a doctor that you really trust, and you know well, and you believe what they say then you're probably going to do what they say. If you're seeing a locum that you've never laid eyes on, there is a whole, you know, it's a lot harder for you as a patient to really put your faith in what they're asking you to do. (Abigail, Partner).

The difficulties in building relationships between farmers and GPs are also noted by the farmers in this sample, whose assertions indicate that the care provided is often not in line with their preferences. This may relate to the bush knowledge that

farmers desire of practitioners, which would allow GPs to build a good relationship and appropriately tailor their caregiving for farmers. For example, it was reported that farmers believe that mental health is typically managed using emotion-based options when there is a preference for more practical options.

> This is what you've got to do; 'this is what happens if you don't do this.' Forget about the 'I feel this way I feel that way'. I don't know how you do it, but if you make it sound like you're fixing up a bulldozer (. . .) you'll cure it in one week. (Greg, Farmer).

The relationship between a farmer and their GP is therefore likely to influence their help-seeking, as well as the way in which healthcare is delivered by professionals.

A GP's ability to create avenues that facilitate identification of mental health problems via routine screening rather than through active help-seeking is also crucial. Importantly, this issue was raised solely by GPs, who are most familiar with the benefits of routine screening. Although it was mostly instigated by GPs, the importance of screening did align with farmers' views on monitoring of their mental health. As such, GPs with good bush knowledge reported an ability to create situations that lead farmers to see them, more often than not related to physical issues, which may have more obvious symptoms and carry less stigma. For example, Jane shared the importance of screening for mental health in farmers during routine consultations.

> They might come in for skin thing or something unrelated to mental health (. . .) If the doctor doesn't ask them 'how're you going? How's the farm going?'(. . .) Then nothing, they won't say anything, they won't think to say 'hey, I'm really down, I'm having trouble sleeping like I'm not, I feel terrible I don't know what's going on'. (Jane, GP).

While this was identified as one way to identify potential problems, as reported below this can be difficult for the GP to implement within the scope of their practice and daily schedule. Importantly, GPs with familiarity with farming culture identified

the importance of integrating such screening into practice ("opportunistic medicine"), despite potential logistical challenges.

> That's a problem as well is that depending on what sort of day your doctor is having, you get someone on a flat-out day and someone comes in and goes 'I've got gout in my toe', they might go 'brilliant, it's going to take me 5 minutes. I'll be able to catch up. I'm already running 15 minutes late', so you have to have someone who recognises, one they don't come in very often and goes 'right, while you're here' and doing an opportunistic medicine. They've really got to capture them while they're there. (Mary, GP).

Using opportunistic medicine to integrate screening for mental health issues into routine care for farmers can help bring these issues into awareness and assist in the identification of problems. Further, positive experiences through this process can facilitate intervention and encourage future help-seeking by the farmer. While screening may facilitate identification of mental health problems, it will only work for those farmers who make contact with their medical professional, and the challenge to activate support channels may therefore remain for some.

In summary, the evidence suggests that farmers will be more likely to seek healthcare when the GP is able to demonstrate good bush knowledge and the ability to personalise care to farmer needs that are often more practical in nature. Mental health care delivered by unfamiliar professionals, with poor bush knowledge and an inability to personalise the delivery of services will act as a barrier to help-seeking. With respect to screening, the interaction between farmers and GPs and the relationship that is developed in routine care will likely play a more crucial role in encouraging farmers to seek help when issues arise. However, screening has the potential to increase individuals' awareness of their mental state. Therefore, a good relationship with a GP that has bush knowledge together with regular screening may assist in improving the help-seeking and receipt of care by farmers. Nevertheless, a range of system-level determinants will play a role in dictating the extent that GPs are able to provide these types of services.

Theme 2: Services are Provided Within a Complex System

The services and encompassing systems that provide mental health care play an important role in farmers' help-seeking. There are many service and system-related factors that were reported as important in influencing farmers' help-seeking; including perception of care outcomes, access and availability, and continuity of care. First, how farmers perceive the potential outcomes of their help-seeking influences whether or not they seek help. For example, if farmers do not perceive any potential benefits of seeking help, they will be less likely to do so. Perceived benefits may be linked to personal experience or knowledge rather than evidence-based knowledge. Farmers diverged with respect to their perceptions of the potential outcomes of care; some acknowledged that seeking help leads to positive outcomes.

> I witnessed a chap that was very sick [and sought help], and as far as I know, he's fine. The other chap that didn't seek mental health and sadly his family didn't push him to; he's no longer with us. (Rudy, Farmer).

For other farmer participants, they were unable to identify the potential benefits of help-seeking. "It's got less relevance verbalising it if you don't think someone can be of any assistance to you." (Steve, Farmer). Thus, farmers reported that the perception of potential service outcomes is influential in whether or not help-seeking occurs. While the GPs did not provide commentary on this topic, the partners tended to report on both sides of the farmers' perspectives. That is, the farmers who think they will have a positive outcome are more open to seeking help and those that expect negative outcomes are not.

> I think farmers probably don't place a lot of faith in the medical community. But I think that if they trust their doctor that's going to be the person (. . . .) My boyfriend on the one hand will go with doctor, but on the other hand he wouldn't. 'Cause he'd be worried they'd just write out a prescription for antidepressants and not really listen to what was going on (….) So, on the one hand he's a bit dubious of them, but he would also know (. . .) that, you know, if you get a good doctor you can trust them (JA, Partner).

Farmers consider the perceived outcomes when deciding whether to engage in help-seeking, with good and bad outcomes facilitating and preventing help-seeking, respectively.

Second, access to and availability of services were noted as essential to help-seeking. The three participant groups all agreed that the availability (do the services exist?) and accessibility (can farmers actually access them?) of GPs may not be suitable for farmers and may limit appropriate help-seeking. The appointment times offered by GP can prevent help-seeking from occurring in farming populations.

> The availability of GP consults can be an issue, farmers tend to work during daylight hours (..), a lot of them are reluctant to take time off to go to doctors during the day, but there are not as many medical services available during the night. (Jacob, GP).

This issue of accessible appointments and availability is more pronounced if specialised care such as from mental health professionals is needed. Abigail, a partner, shared that "We have visiting specialists, but you know, they might come every six weeks or less," (Abigail, Partner). Limited availability and accessibility is likely to act as a key barrier to timely help-seeking. Additionally, accessibility is likely to be further reduced by the context of small communities within rural and remote towns in which anonymity and privacy are diminished. For understanding, it is important to note that the farmers and partners often incorrectly referred to issues with anonymity or privacy as problems with confidentiality (see below). That is, they conflate the impersonality of anonymity and the ability to seclude information about oneself that is privacy (e.g., in a small community people know who you are and may see you at the GP office) with the legal requirement of confidentiality, where health information cannot be shared with others except under certain extenuating circumstances, or with the individual's explicit permission.

> [Farmers] don't go unless it's an emergency; it's life and death because it's not confidential (. . .). I've had older people say to me, there would be a

> young girl walk out of the doctor's surgery and she'd had a blood test, and they'd go 'oh she's pregnant'. (Albert, Partner).

Issues of anonymity and privacy were not raised by GPs as factors reducing accessibility. Only two GPs (Melissa and Mary) mentioned the importance of privacy and anonymity, specifically for small communities, but did not class them as barriers to care.

Third, continuity of care was suggested to impact on farmers' help-seeking, especially in light of the large locum workforce. Farmers and partners shared convergent views that continuity of care and the ability to develop an ongoing relationship with their GP is important in facilitating help-seeking. This is especially so when the presenting issue is related to mental health.

> There is no continual medical health provision, so every time you go to the doctor you see someone different. So, they're not seeing how you were 2 months ago or 3 months ago or 6 months ago they're not going 'oh this person is in trouble I saw them 6 months ago, they were a lot happier then' if there were differences. There is no safety net in the health system. (Albert, Partner).

The locum workforce, common in non-metropolitan areas, can be problematic in achieving continuity of care and trusted patient-doctor relationships. For example, "next time there is another person that you have to tell your story all over again to." (Abigail, Partner). Consistent with the desire for an ongoing relationship shared in the how the service is delivered theme, locum GPs were often considered unfamiliar to the farmers.

> You get a lot of (. . .) doctors that fly in and out and in and out (. . .), and you don't know them personally; as in a doctor in rural hospital or medical centre, and they've been there, and they know you. (Madge, Farmer).

From the perspective of GPs, issues with workforce retention and the resulting use of locum GPs were also noted as problematic in facilitating help-seeking and delivery of appropriate services.

> People don't want to go and see a fly in doctor (. . .) there are lots of parts of Queensland are still served by locum workforce where they've got people

> who come for a week or 2 at a time then go; and (. . .) treating mental illness is at least a medium-term proposition. (. . .) Imagine trying to go and see a locum about being depressed, if you know they're not going to be there next week. (Anthony, GP).

In summary, all participant groups highlighted issues with continuity of care and a locum workforce that negatively influence help-seeking. Farmers prefer to have an ongoing relationship with their GP especially considering the time commitment and sensitivity necessary for mental health care. In addition, farmers are faced with barriers of limited availability of specialist mental health services and limited accessibility to core GP services. Finally, perceptions that seeking help will not result in beneficial outcomes are often based on personal experience and can influence help-seeking.

Theme 3: Emerging Technologies: The Users, Practitioners, and Systems

The final theme explored technology-based services, which similarly to the previous themes, revealed aspects relating to the users, practitioners, and the services and systems. First, from the user perspective, some farming participants reported that they were not interested in making use of technology-based services because they prefer face-to-face contact and/or have low IT literacy, which was also consistent with the views of partners and GPs.

> I wouldn't want to go that way just I'm very old-fashioned in terms of that I know I shouldn't be, (. . .) but I just much prefer to talk to someone, you know. I don't search the web well, the internet quickly and efficiently perhaps I'm just that wrong generation I think. I wouldn't be interested in that. (Rudy, Farmer).

> I think regarding the whole e-stuff, like I reckon there is a lot of male farmers that don't use the computer very much. (Abigail, Partner).

Additionally, farmers expressed some concerns about technology-based services "because you don't know who's on the other end. You don't know what you're getting there." (Michael, Farmer). Farmers' reported their capabilities to engage with, and attitudes towards technology-based services are poor. While there is the potential for

technology-based services to facilitate, or at least reduce some barriers to service availability and accessibility, there are additional barriers from the user perspective that may limit their uptake and effectiveness.

Second, whether GPs support and refer farmers to technology-based services may influence the use of these mediums to seek help. GPs were divergent on their support for technology-based mental health care. Some GPs reported that navigating the technology-based mental health care landscape can be arduous and demonstrated hesitance in recommending these technology-based services to farmers. The GPs wanted knowledge about a service before they would potentially be willing to provide a referral.

> The Black Dog Institute was a little bit difficult to find their link for all those, all those different programs for a while there. They've improved their website, now it's a bit easier to find. But certainly, I think there, it's also not clear how long they are, you know, how simple they are. Sometimes I want to actually try them out myself just to get a feel for what I'm sending people too. But you have to actually fully register before you can actually be allowed to look at them so, so they're specific to what they've covered in the program are not entirely clear (. . .) I think that's part of it, the referring practitioners know exactly the specifics each of them offers. (Anthony, GP).

Alternately, other GPs were comfortable making referrals to technology-based services. There were additional concerns from GPs that might prevent referral to technology-based solutions, such as a belief that these programs would fail to provide adequate tailoring for a farming audience.

> I have recommended to go and do, if they're reluctant to go to a psychologist, to try and do some online CBT, (. . .) there is new stuff popping up all the time. But whether the new resources are just sort of more farm-y directed; I know there is certainly some phone lines for rural crisis stuff. But I don't know if there is any online services that match up with that. (Mary, GP).

Overall, GPs presented differing views pertaining to the use of technology-based services in reaching farmers. Those GPs who hold concerns or negative views of technology-based services are less likely to recommend technology-based services to

their patients, whereas those with positive perceptions are likely to present such services as a viable alternative for help-seeking.

Third, from the system perspective, the communications infrastructure in non-metropolitan areas was identified as a barrier to seeking help from technology-based services by all three participant groups. Specifically, poor connectivity, both with internet and mobile phones, was identified as having implications for the use of technology-based care options.

> The phones and the internet is probably our biggest issue really 'cause (. . .) that's just basic services that you expect to be able to have and you just don't have it. And that's where you can get a lot of help for things like mental [health]. You know, online you can get a lot of help and find all the resources to help you, and it's when you can access it, in your own time when it suits you. So, if he comes home, it's late at night and he wants to read up about something or look at strategies for something to do with mental health, or whatever he can do it in his own time. You know, a normal person can do it in their own time and their own leisure 'cause they can access the internet all the time but we can't. (JA, Partner).

One GP summarised several issues relating to technology-based mental health care and support.

> I don't think [farmers] realise the extent of the resources that are there. So, I suppose there's that part of it. But the other component really is to actually have good internet access and, you know. It's basically that, you know, IT literacy and that feeling of connectedness because a lot of farmers, you know, wouldn't necessarily have the will or, you know, to get online. Or that actually may not even know how to search the internet or type in you know a page address or anything like that. (Ben, GP).

Overall, technology-based mental health care is emerging as an option for rural and remote areas. However, several barriers appear evident for patients and health practitioners. Farmers are hesitant to use technology-based services due to familiarity and digital literacy issues. Generally, GPs understand the benefits of technology-based options, however, many were reluctant to make referrals. Moreover, system issues, such as lack of infrastructure and poor connectivity act as barriers to the use of technology-based services in help-seeking.

Discussion

The analysis presented for this superordinate theme provides the necessary first step in understanding what service-related barriers and facilitators operate to influence farmers' help-seeking. Three key themes were evident with respect to service-related factors that influence farmer help-seeking: how services are delivered to farmers, the systems that encompass the health services, and the engagement with e/tele-mental health services.

The first theme focused on the importance of the interaction between a practitioner and farmer in help-seeking efforts and thus, reflected important issues with how the service is delivered. In order to be trusted (and thus utilised), farmers want their GP to have bush knowledge, an understanding of farming culture within regional and remote areas. This knowledge, however, is uncommon, based on reports from farmers and partners, which is not conducive to help-seeking. While the GPs noted that bush knowledge is helpful to them professionally, they did not hold it to the same level of importance as the other participant groups. The findings of this research align with previous rural research that has demonstrated that GPs with rural cultural knowledge were judged as more successful in practice by their GP peers (Bischoff et al., 2013). The current findings provide further support for this notion from the perspective of the farmer, along with an indication that a lack of bush knowledge may act as a barrier to seeking help in the first place.

The relationship that was developed between a farmer and their GP during service delivery was also found to influence help-seeking. A lack of trust and general wariness by farmers was noted by all participant groups, which reduces the likelihood of help-seeking, as well as potentially diminishing adherence to recommended treatment protocols and the ability to build rapport. It was

acknowledged by the GP participants that with a large locum workforce servicing farming areas, GPs may not have the longevity, or personal knowledge of the patients necessary to build rapport and strong trusting relationships with farmers. These findings align with previous research demonstrating a general wariness from rural people toward health care services that are not locally conceived and delivered (R. L. Wilson et al., 2015), and suggest that similar issues are likely to be detrimental to help-seeking. The findings indicate that commonly noted difficulties engaging farmers in mental health care (Alston, 2012; Brumby & Smith, 2009), may in part be due to incongruence between services offered and the preferences of farmers.

Finally, the GPs identified that employing opportunistic screening may assist them to overcome some of the issues related to the lack of help-seeking for mental health concerns. Integrating mental health screening into routine physical appointments holds particular value given that previous research has demonstrated that 48% of farmers who died by suicide saw their GP for a physical issue in the three months prior to taking their own life (Kavalidou et al., 2015). Although such screening could result in early detection, it may create an additional burden to the doctor, is only possible when the farmer attends the GP, and is unlikely to be successful when implemented by GPs with whom the farmers are not familiar and comfortable. While screening to create awareness of any issues was only identified by GPs, there was an acceptance of the need to monitor mental health by farmers and partners.

The second theme focused on the services and systems within which care is provided in regional and farming areas. Farmers' decision-making for seeking help was reportedly guided by a number of services- and systems-related considerations.

First, seeking help was guided by perceptions of the potential outcomes of such help-seeking. Farmers that were able to perceive benefit associated with help-seeking were more open to engaging in mental health care. Alternatively, those farmers who were unable to see any potential benefit of seeking help were less inclined to seek care. Perceptions of potential outcomes of care, however, were based largely on anecdotes (e.g., of a friend or family member) or based on previous interactions with the GP. Importantly, these perceptions did not seem to be based on formal research evidence concerning the efficacy of the treatments.

A second services- and systems-related consideration reported to influence the uptake of care is that of perceptions of availability and accessibility of health services. The partner participants, as well as the farmers, and to a lesser extent GPs, highlighted many issues such as limited availability of specialist services, services with poor accessibility, and a transient workforce that demonstrates insufficient continuity of care. Services were often not perceived as accessible, even when available locally, due to limited opening hours. Further, accessibility or effectiveness of the service was hampered by lack of continuity of care, common to rural areas. All participant groups highlighted the high turnover of the health workforce in rural and remote areas. Consequently, farmers must see locum GPs, often on short-term placements, for their healthcare. This makes it difficult for farmers to develop rapport and trusted relationships with their doctor and can mean they simply do not seek help. The inability of the GP to monitor subtle differences in farmers' functioning over time was noted as another negative consequence of such locum GP placements that hinders service accessibility.

The findings extend previous research with rural and remote residents showing poor health service accessibility in remote areas (Bishop, Ransom, Laverty,

& Gale, 2017; Hossain et al., 2008; Judd, Jackson, Fraser, et al., 2006; Tonna et al., 2009), even when services are available. The findings also demonstrate how farmers perceive these issues and identify the associated consequences of delayed or absent help-seeking. Additionally, concerns over continuity of care previously raised in GP research (e.g., Fuller, Edwards, Martinez, Edwards, & Reid, 2004) are consolidated and extended by the farmers and their partners in this study. That is, in addition to recognising the challenges of GPs providing care in locum contexts, the first theme identified that farmers and their partners also desire an ongoing relationship with a GP who has bush knowledge. Health service and systems issues, such as farmers' perceptions and experiences of the outcomes of care, the availability and access to services, and continuity of care are all key factors impacting farmers' help-seeking.

Help-seeking in the context of emerging technology was explored in the third theme. Emerging technologies provide opportunities for healthcare to be delivered in new ways, although there is disagreement in the literature whether this should be a supplement to, or substitute for face to face (low intensity) services (Christensen & Hickie, 2010; Wakerman & Humphreys, 2012). Regardless, farmers noted several barriers specific to the use of technology-based care. Farmers explained their reluctance in using technology-based care options as due to low digital literacy and a general preference to speak with someone to face-to-face, although younger farmers were more open to this mode of delivery. Hesitance was also noted on the part of some GPs with concerns regarding an inability to keep up with the number of technology-based options available as well as dissatisfaction in the lack of farmer-specific options available. Without buy-in and referrals from GPs, technology-based services are unlikely to improve help-seeking by farmers. Whilst there have been some efforts to improve GP knowledge and referral systems through programs like

e-mental health in practice (eMHprac; eMHprac.org.au), GP knowledge and attitudes appear to still be problematic in rural areas. Additionally, poor connectivity emerged as a continuing barrier to farmers seeking assistance via technology-based care, consistent with previous research showing the negative impact of poor connectivity on therapy provided by video conference (Shealy et al., 2015). The progression of the Australian National Broadband Network may go some way towards alleviating these issues, although these are likely to still be of concern in remote areas, which rely on satellite internet services with low data allowances (McKillop, 2017). While technology-based services may offer one avenue to increase help-seeking among farmers, barriers remain both specific to farmers and the regional areas where they reside. Advancements are required in connectivity to facilitate these services, as well as interventions that enhance user experience, and address user and professional attitudes towards such services.

Summary

The three participant groups highlighted that the interaction of health services and farmers as service users plays a crucial role in help-seeking. The relationship between farmers and service providers is important, and in its current state may act to prevent help being sought. Additionally, there were also issues with respect to the health systems, such as perceived treatment efficacy, access and availability of services, and continuity of care, that seem to prevent farmers from seeking help. The farmers, GPs, and to a lesser extent partners, also indicated that technology-based care has potential but there are a number of other issues that must be addressed before its full potential can be realised. While service provision, and the previously discussed (Chapter 4) culture of farming, are both important to understanding farmer help-seeking, there also needs to be consideration of farmers as individuals.

Chapter 6: Phase 1 - Personal Factors

Chapter 6 presents a discussion of the final superordinate theme identified through the qualitative phase of this research (See Figure 5 and Figure 6). The two previous chapters highlighted themes of farming life (Chapter 4) and services (Chapter 5), and the different ways in which they may influence farmers' help-seeking. The current chapter focuses on the personal or individual-level factors that are identified as barriers and facilitators of help-seeking. This superordinate theme encompasses four themes: "Mental health literacy", "Stigma of mental illness and help-seeking", "Support, the partners' role in help-seeking", and "The intersectionality between being a farmer, age, and gender".

Background

Help-seeking is ultimately volitional, and thus likely influenced by a range of individual factors such as attitudes, demographics, and personal knowledge. There is very little research that has examined the role of individual-level factors in shaping help-seeking behaviours. In other populations such as rural and remote residents and men, several constructs at the individual level have been identified that may influence help-seeking, such as mental health literacy, stigma, and attitudes (Collins et al., 2009; Wrigley et al., 2005; Yousaf et al., 2013). For example, low levels of mental health literacy have been identified as a barrier to help-seeking in a systematic review focussing on Australian youth (Gulliver et al., 2010). Mental health literacy refers to an ability to recognise distress and know assistance is available, which is needed before help can be sought (Fuller et al., 2000; Jorm et al., 1997). Extrapolation from existing research reveals that mental health literacy may very well impact help-seeking in rural and farming populations (Collins et al., 2009;

Roy et al., 2014; Staniford et al., 2009), although this relationship has not yet been examined among farmers.

There are two forms of stigma that may also influence help-seeking: stigma towards mental illness and stigma towards help-seeking (Tucker et al., 2013). First, stigma towards mental illness has been implicated as an individual factor influencing farmers' help-seeking in one internationally-based qualitative study, as described in Chapter 2 (Roy et al., 2014). Second, stigma towards help-seeking itself has also been implicated as another personal factor of relevance to this population. Quantitative research with rural Australians found that over 80% of participants endorsed the view that people should solve their own problems with help-seeking from formal sources a last resort (Komiti et al., 2006). Whilst there are only minimal studies examining stigma and help-seeking in rural and farming populations, it seems likely that both stigma towards mental illness and stigma towards help-seeking may indeed be of importance. Further research is required to understand the effects of these different types of stigma and their role in influencing help-seeking in farmers.

Several other personal attributes and individual factors have been linked to help-seeking generally, namely certain socio-demographic factors. Being male, less educated, younger, and unmarried have all been found to negatively impact help-seeking (Addis & Mahalik, 2003; Yousaf et al., 2013), although, the impact of these factors in the farming context is not known. Additionally, with respect to relationship status, support from a significant other appears to be important, although the mechanisms were not explained (Kolves et al., 2012; McLaren & Challis, 2009). Whilst various personal factors may appear relevant to help-seeking in farmers, they have received insufficient attention in the literature. It is essential to identify and

understand how personal factors might manifest as barriers or facilitators of help-seeking among farmers.

Findings

The findings presented below provide insight into the role of personal factors in influencing farmer help-seeking. Four key themes were identified in the data, see Table 6 for a summary. The themes and corresponding factors were also classed as barriers or facilitators based on the in-depth information and examples provided by the participants. Tables 1, 2, and 3 provide pertinent information about the participants, to contextualise the findings reported below.

Table 6

Themes developed across the three participant samples.

Theme	Summary
Mental health literacy	Mental health awareness has improved but understanding and recognition of mental health issues is lacking. Farmers also lack knowledge of the efficacy of mental health treatments
Stigma of mental illness and help-seeking.	Help-seeking may be avoided to prevent a reduction in self-worth from being labelled as mentally ill or in need of help.
Support, the partners' role in help-seeking.	Support, provided by a farmers' partner can facilitate help-seeking, but it is complex. If support is not tactfully delivered it can be viewed negatively.
The intersectionality between being a farmer, age, and gender.	Being of older age and male negatively impacts farmer help-seeking.

Theme 1: Mental Health Literacy

Mental health literacy was, in some form, raised by *all* participants, in *all* three participant groups, as a factor that influences help-seeking among farmers. The groups generally converged in their views that "a lot of these programs that are going around now have lifted the awareness." (NW, Female). That is, it would seem that most participants felt that general mental health awareness had improved as a result of awareness-building programs over time. Importantly, however, there was

divergence in the reports of participants within the samples, regarding the level of knowledge and understanding of mental health among farmers. This within sample divergence was seen across all three participant groups, demonstrated below by a farmer example. Some participants reported "there would be very little knowledge to most people," (George, Farmer), while others expressed that "there is probably fairly good knowledge about it." (Rudy, Farmer). Further insight was shared by one partner.

> I think it's probably improving, but it's still fragmented (. . .) there has been, you know, increasing sort of information about it in the mainstream press and conversations about it in terms of the current drought we're having. (Anna, Partner).

This view was extended by a GP, who indicated that despite improvements, understanding of mental illness is still not optimal.

> There is probably still a very big lack of understanding as to what specifically makes something a mental illness, so what distinguishes depression from having a bad day or depression from stress for example. (Anthony, GP).

The lack of understanding regarding mental illness is important because it demonstrates that farmers may face difficulty in accurately identifying, or recognising, their own mental health problems, which can prevent timely help-seeking. The participant groups shared converging views that farmers generally lack the ability to recognise their own distress. The GPs were the most clear and specific about this.

> They see it in other people and may not necessarily recognise it in themselves but (. . .) people know it's there. (Vanessa, GP).

The findings also provided further evidence of poor mental health literacy as an obstacle to help-seeking. As one GP noted, "[Farmers] still are reluctant to acknowledge that [their mental health] might be the problem," (Mary, GP). This view was shared by participants across the three groups. That is, even if farmers are

able to identify signs of mental illness, it may be difficult for them to accept that this is a problem contributing to their lack of wellbeing.

There were also indications that farmers may not be aware of what the help-seeking process entails, which may be related to their reluctance to seek help. For example, one GP shared a reaction that she commonly received when farmers finally sought help.

> The people who actually do come in and do seek help and do get treatment (. . .) they're like "oh I wish I had done this a lot sooner. It's not as bad as I thought, the whole process isn't nearly as bad as I thought it was going to be." (Mary, GP).

From this example, the reluctance to seek help seems to at least in part be due to perceptions held by farmers that help-seeking is confronting or that treatment will be unpleasant. This lack of knowledge regarding the process of treatment was raised by the GPs but not explicitly acknowledged by farmers or partners. However, farmers did indirectly imply that their knowledge of the treatment process (and its efficacy) is lacking, by suggesting that there is "less relevance verbalising [your mental health issues] if you don't think someone can be of any assistance to you." (Steve, Farmer). Similarly, a partner also implied that farmers do not perceive the utility of seeking help, instead "They just think that (. . .) if they just work harder, it will fix things." (Abigail, Partner). This is problematic because Chapter 4 reported that the working demands of farming are substantial, and this is before further pressure is added by stressors, meaning working harder is unlikely to address any mental health issues, and may even lead to deterioration due to burnout (Lunner Kolstrup et al., 2013).

The findings of this theme highlight the importance of personal knowledge and mental health literacy as a factor that influences help-seeking, while the findings also revealed that this is more complex than simply knowing what mental health problems are. Farmers appear aware of issues relating to mental health generally,

although there were some apparent variations in the type and amount of knowledge they had, which were posited to influence help-seeking. Further, it was consistently reported that despite some degree of mental health literacy and awareness, farmers lacked the ability to recognise mental health problems in themselves, which is likely a necessary trigger for help-seeking. Farmers also seemed to believe that the help-seeking process is confronting, with reports indicating that they lack knowledge of this process as well as of the efficacy of treatment. The often-lacking mental health literacy in farmers is therefore likely to create barriers to help-seeking.

Theme 2: Stigma of Help-Seeking and Mental Illness

The second theme identified related to stigma. Importantly, responses relating to stigma varied within the three participant groups indicating its potentially complex nature in relation to help-seeking. Some participants reported that the stigma of mental illness acts as a barrier to help-seeking.

> [There's] a little bit of social stigma, a little bit. I think most farmers wouldn't like to admit that they were depressed or feeling suicidal or that sort of thing." (Mitchell, Farmer).

There were also participants that indicated they had noticed substantial reductions in stigma in recent years, which should serve to facilitate help-seeking.

> I think a drought like this has broken down like I said before. The barriers have broken down so much these last 3-4 years around the stigma. I think we are all of the realisation that we're not bulletproof and you know while we all handle it differently. Yeah, I think the stigma thing is nearly a thing of the past, to be honest. (Rob, Farmer).

Another farmer disclosed their mental illness and reported that "I don't think there is much stigma for me. But maybe for other people there might be." (Michael, Farmer). The variation in the partner group was similar to that seen within the farmer group, while the GPs suggested stigma is still present.

> There is still certainly like the stigma associated, I mean people get very cagey when you start talking about mental illness. (Anthony, GP).

These findings highlight that, unsurprisingly, there are individual differences in the experience of stigma.

There were two targets of stigma highlighted by participants, stigma relating to mental illness and stigma relating to help-seeking. This distinction between these targets of stigma is important as it is possible that they impact individuals differently. Participants within each informant group reported both of these types of stigma. For example, one farmer demonstrated a stigma of mental illness, but not of help-seeking.

> You don't want to go and seek help for mental health that's like admitting you've got a mental health problem. You want to go and seek help because things are a bit tough and you're not coping very well. (Rosemary, Farmer).

Other farmers reported beliefs that display a stigma of mental illness, while also indicating that the reduction of stigma reported above may be a work in progress.

> The fact that it's spoken about a lot is systems breaking down the stigma, though I'm not sure it actually suppresses that stigma all together because of the simple fact that, 'yeah well, mental health, well I must be a nut.' (Steve, Farmer).

The GPs also highlighted that mental illness remains stigmatised among farmers, describing how this shapes their presentation and reactions to diagnosis.

> From their specific point of view, there is a big stigma amongst farmers that if you've got depression or and/or anxiety, it's still huge, and they will delay presentation, and they and they want you to exclude every possible other thing under the sun first, before they will admit to a problem. (Amy, GP).

Further, there were suggestions as to why mental illness is stigmatised.

> It's really just that stigma thing, where they don't want to be seen as someone with a problem, you know, or someone who can't handle what's happening. (Kate, Partner).

This stigma seems to lead farmers to want to avoid labels of mental illness and the associated stereotypes, which they achieve by avoiding their GP, rejecting diagnoses, and reframing the reasons for seeking help (e.g., for stress, or sleep or physical symptoms). While the stigma of mental illness was clearly demonstrated, there were

also indications that the act of seeking help may also be separately stigmatised. This was most commonly reported by the GPs.

> There is a bit of a stigma attached to, you know, getting help for how you feel." (Jane, GP).

Further, there were suggestions provided as to why help-seeking may be stigmatised.

> They want to be seen as on top of it rather than seeking help. (Kathy, Partner).
>
> [Farmers] find it difficult to ask for help from anyone because they feel like they're letting their big tough guard down [to] accept help from other[s]. (Kate, Partner).

This indicates that farmers may be unwilling to communicate their need for help due to the perceived stigma that may be attached to help-seeking (e.g., instead of self-reliance), as well as (self-) stigma associated with a failure to meet cultural expectations of toughness. Thus, the findings here indicate that help-seeking may not only be influenced by the stigma of having a mental illness but also by stigma of being unable to cope on your own and remain tough.

Interestingly, farmers also identified stigma associated with help-seeking similarly to the reports of GPs and partners, however, they focused more on internal-focused stigma than external stigma. This was demonstrated by the use of 'I' statements in the following example.

> Well I don't know of anyone who's gone and sought help (….) I mean if I was going I'd probably keep it fairly quiet, because I'd think I was weak and vulnerable. (Rudy, Farmer).

The difference between stigma that is internal (self or perceived) and stigma that is projected by others was implied by several participants across the three groups. Many participants reported that although farmers think others will think less of them if they seek help that is generally not the case.

> The response [is] quite varied. Some of it would be sympathetic (. . .) and supportive. I don't think there would be any adverse comments (. . .).

> Realistically I think that's what people are afraid of, but generally, that's not how people respond to it. (Ben, GP).

That is, it was reported consistently across the groups that perhaps internal stigma acts as a greater barrier to help-seeking in farmers than actual external stigma. In fact, there were several reports across all of the informant groups that community responses would be favourable were a farmer to experience mental illness. For example, Madge provided an example of a reaction to a disclosure of mental illness, "Some people are saying (. . .) 'oh yeah, I'm on antidepressants.' 'Hey that's good man.' you know or something." (Madge, Farmer). Similarly, there was convergence between the groups that the community as a whole would likely be supportive of a farmer who needed to seek help.

> They're very sympathetic and very supportive because most people go through hard times in the farm community at one stage or another. (Ben, GP).

Susan shared a concrete example of support being provided to someone who had sought help for a mental illness.

> There has been a case where there has been a guy who is clearly mentally ill, doing a lot of bizarre things. We did get word that he had sought help, and the reaction was very positive. (Susan, Partner).

The reports from all three participant groups indicated that the communities are supportive of farmers seeking help, although farmers may not perceive this. This indicates that internal stigma may be particularly important in preventing help-seeking. Although communities are likely to react positively to a farmer disclosing a mental illness or help-seeking, this will not occur unless the farmer is first aware of their difficulties and identify the need for help.

Overall, it is likely that stigma does act as a barrier toward farmers' help-seeking, although the experience is likely individually variant. It was also reported by the farmer and partner groups that while stigma is slowly diminishing, both mental illness and help-seeking are at times stigmatised. As such, farmers may avoid

seeking help to prevent the reduction in (self-) worth stemming from being labelled as having a mental illness and/or as someone who needs mental health care. There were also indications that internal stigma is particularly relevant in the farming context, where farmers may stigmatise themselves, or expect a negative reaction from others, ultimately preventing them from seeking help. This is the case even though reports indicate likely positive community responses. Both mental illness and help-seeking may therefore be internally stigmatised by farmers, preventing them from seeking help.

Theme 3: Support, the Partners' Role in Help-Seeking

The third theme identified from the data reflected the receipt of support in seeking help as a crucial factor for farmers. Responses from all three participant samples suggested that farmers who received support from others were much more open and likely to engage in help-seeking. Importantly, responses also acknowledged that partners are a key group who may provide such support. Many farmers shared that their partners play a significant role in their help-seeking because "it's probably their wives that realise that they need it because they're the closest one to them." (George, Farmer). Similar sentiments were shared by GPs and partners. For example, a GP reported that "probably at least half, probably a lot more of my male farmers who come in asking for help are there because their wife told them too." (Amy, GP). Further, one partner participant reported that (female) partners do have this support role, but can face difficulty in facilitating the act of seeking help. For example, inadequate mental health literacy may mean that farmers do not, or cannot recognise an issue.

> I know a lot of women that have said 'oh you know I am really frightened about so-and-so (. . .) but (. . .) he'd no more listen to me and believe me than fly to the moon' (….) There—just sometimes it's really impossible for the wife to get through to the husband that they think that there is a problem. Or

> to get the husband to believe that they may have some issues. (Albert, Partner).

As such, while the reports indicate that partners can facilitate help-seeking, it seems that having this support does not always lead to farmers taking action.

Despite the fact that all participant groups agreed on the importance of receiving support in the help-seeking process, participants from the farmer sample also noted that such support might not be well received by the farmer, and thus may at times act as an obstacle rather than a facilitator. For example, they may not believe there is anything wrong

> You need friends, and wives, and family, and that to step in and help you. But I would imagine along the way there would be (. . .) a lot of farmers would reject it, they wouldn't believe it was happening to them. Probably less so now, because, you know, it's spoken about a lot. (Rudy, Farmer).

Further, it was reported that the way in which support was offered was important; support that is perceived positively would increase help-seeking while support perceived negatively may prevent help-seeking.

> There is support and support, (. . .) it depends how it is delivered (….) [If] it's a genuine, supportive thing it's fine. But if it's put in a way where it is sort of delivered in a derogatory way or whatever I'm sure it'd have the opposite effect. (Greg, Farmer).

An example of support that was not delivered tactfully and thus could be perceived negatively by a farmer was provided by one partner: "Wives saying 'go and get your head fixed'." (NW, Partner). NW likened it to providing "some cold hard reality about their behaviour or their issues. I guess making them accountable for their actions in some aspects." This particular partner indicated that this was her attempt at getting her husband to seek help, which was not successful. Alternatively, another partner reported successfully facilitating her husband's help-seeking.

> His patterns of behaviour changed significantly, so I was well aware that something was happening (. . .) I could recognise what was happening in terms of the anxiety attacks. So, I made the appointment and—yeah, just arranged it. (. . .) He'd got to the point where he—once I managed it and

> pointed out the facts, he knew that there was a problem. (. . .) there was absolutely no resistance. He knew that there was a problem. (Susan, Partner).

The three participant groups shared the view that support offered by the partner can be important for help-seeking, but tact is needed for this to be effective. The responses revealed a prevailing view that partners who convey support to farmers for seeking help and who can communicate this effectively, without conveying blame, may facilitate help-seeking.

Overall, support from partners was reported as a potential facilitator of help-seeking in farmers. The findings also indicated that support may not always be perceived positively or accepted by farmers and thus, the way support is offered is important. The three participant groups shared converging views that support from partners, when delivered appropriately, can encourage help-seeking to occur. The caveats and conditions for support to be an effective facilitator demonstrate the complexity of the influence of partners on farmer help-seeking, which may also be influenced by other personal factors not identified here.

Theme 4: The Intersectionality Between Being a Farmer, Age, and Gender

The fourth theme related to individual demographic characteristics that may influence help-seeking. The intersectionality of being a farmer, age and gender refers to the experience of farmers in the context of their intersecting social categories (age and gender) and how these impacts their help-seeking (Guittar & Guittar, 2015). Across all three participant samples, two demographic factors were consistently reported as influential to help-seeking: age and gender. With respect to age, most participants reported that younger farmers are better at seeking help.

> It's the younger generation that are getting on board and going "we really need to talk about this" (Albert, Partner).

Additionally, GPs noted that younger farmers may have better recognition of mental health issues. That is, "the younger guys are a little bit better at picking up that their

mood might be a bit off" (Vanessa, GP). One partner also suggested possible mechanisms for the age difference.

> The old, real old bushy-type blokes probably would be a lot harder to convince that they need some kind of mental health help, rather than the younger people from my generation (….) I think that's just the way they were probably raised and the things that they learnt at school and stuff like that. (Kate, Partner).

Thereby, it would seem that older farmers may be less open to seeking help for mental health and thus may be a particularly at-risk group.

Concerning gender, it was consistently reported that men were less likely to seek help, for example, Rob shared that "with men, it has been embarrassing to say you need help," (Rob, Farmer). Although this example was from a male farmer, many of the comments on gender were made by females in all three samples. The gendered expectations (external or internal) of farmers were shared across the groups, where males were regarded as worse at seeking help for their mental health.

> There is still this, you know, head in the sand mentality, I think. Which is worse with men in general about needing to be the strong one, needing to be the provider, the protector (. . . .) There is still a very big group of men, even if they'll acknowledge that depression is a common problem and that it is not anybody's fault. But if it's actually happening to them they still can't apply that to themselves. (Mary, GP).

This comment provides an example of how gender differences manifest, as well as indicating the influence of culture. It must be noted though that these gendered expectations appear to interact with the cultural expectations of being a farmer, evidenced by the male and female farmers' reports in the lifestyle and culture theme of the farming life superordinate theme (Chapter 4). The example above also suggests that progress has been made regarding depression and the associated attitudes, but not in the application of those attitudes toward themselves or help-seeking behaviour. Another related issue is the link between gender and stigma, described in the stigma of mental illness and help-seeking theme. The individuals,

across the three groups, that reported stigma as an issue in farming communities, also showed convergence that "amongst men in general, (. . .) unfortunately the stigma is still there," (Amy, GP). This heightened stigma for men may act as an additional barrier to seeking help for male farmers specifically. These findings suggest that men as a group face more, or compounded, barriers to help-seeking compared with their female counterparts.

Discussion

Four key domains emerged as important personal barriers or facilitators of help-seeking. First, the importance of mental health literacy and knowledge to farmer help-seeking was indicated, with every participant citing this factor as important. While this study found that farmers are reported to hold a surface-level awareness of mental health, it was also evident that knowledge levels varied across farmers. Further, an inability to recognise mental health problems in themselves was specifically identified by participants across the three participant groups as a barrier to help-seeking. Thus, these findings demonstrate the importance of mental health literacy in this group (as is also evident in the general population), but also highlights the nuances of how this operates in farming populations.

Mental health literacy may operate differently in farming populations due to cultural differences. For example, stoicism, a tendency to demonstrate strength, staunchness, toughness, and independence, is a valued characteristic in rural and farming populations, and this could prevent individuals from organically developing the skills to adaptively demonstrate and recognise emotions (Fuller et al., 2000; Judd, Jackson, Komiti, et al., 2006; Wagstaff & Rowledge, 1995). That is, cultural traits such as stoicism could prevent distress being demonstrated or recognised even in persons possessing adequate mental health literacy. Alternatively, it is also

possible that farmers may have the necessary skills to seek help, but are unwilling to acknowledge negative emotions due to their identification with stoic values. Further, the findings demonstrate that simply knowing what mental illness is and what it looks like, does not necessarily mean that farmers will be able to identify when they themselves experience problems. Considering the population-wide efforts made to improve mental health literacy over the years (Commonwealth of Australia, 2009, 2017; Jorm, 2015), these findings are promising, but also suggest that further benefit may be achieved through a more specific focus on improving individual's ability to recognise their own symptoms of distress. Future research needs to focus on how mental health literacy can be translated to self-awareness and self-identification of distress, and subsequently, into help-seeking behaviours, in line with recommendations made by Brew et al. (2016) to improve farmers' acknowledgement of mental ill health and attitudes towards mental health help-seeking.

The second theme identified concerned issues of stigma. Notably, participants across all groups identified stigma relating to the experience of mental illness, and separately, stigma related to the act of help-seeking, as important in preventing farmer help-seeking. Farmers were reportedly reluctant to seek help because of a perception that their (self-)worth would be diminished if they were in need of mental health care, or were suffering a mental illness. This is despite the reports across all the participant groups that their communities are likely to be supportive and respond positively if someone is distressed and seeks help. As such, the desire to avoid being labelled as needing help or as mentally ill were perceived as threatening to their self-image and therefore, still seems to act as a barrier to farmers seeking help. This is consistent with the findings of a recent review that found older

rural males still experience stigma toward mental illness, as well as toward any displays of poor coping (Crnek-Georgeson, Wilson, & Page, 2017).

The results of this study indicate that despite general improvements in mental health literacy and a small reduction in the desire for social distance aspect of stigma across the Australian community (Reavley & Jorm, 2011), stigma remains an issue for farmers, and acts as a barrier to help-seeking in two ways. Stigma acts as a barrier to help-seeking through the stigmatisation of distress and mental illness as well as the stigmatisation of help-seeking itself. The stigmatisation of help-seeking is a key finding, indicating that farmers do not want to be perceived as unable to cope independently, in addition to their avoidance of being labelled mentally ill from stigma towards mental illness. The current findings are consistent with Tucker et al.'s (2013) findings with a university student sample, that mental illness and help-seeking are subjected to separate forms of stigma. Stigma associated with help-seeking has not previously been explored in farmers and presents a key target for future research.

Despite the stigma and poor mental health literacy, all three groups highlighted that the help-seeking process could be made easier (i.e., facilitated) by receiving appropriate support. Specifically, the responses indicated that farmers have a preferred way to receive support. Support offered by the right person, such as a family member, in a positive way and accepted by the farmer was likely to facilitate help-seeking. However, if support was provided in unacceptable ways, it was deemed to act as a barrier to seeking help. The inclusion of the partners in this research allowed this to be clarified; one partner provided an example of poorly delivered support, which did not lead to help being sought. While this research has found that support from a partner may facilitate help-seeking from a professional,

Judd, Jackson, Fraser, et al. (2006) found that the farmers would prefer to seek help from their friends and family. Thus, it is possible that by providing support, partners and friends may become the source of informal help, rather than help being sought from professional sources. Thus, support may act as a facilitator of help-seeking, but there may be some complexity in this relationship.

Finally, the findings from this theme showed that being older and male appeared to be factors associated with less help-seeking. This is likely due to generational and cultural influences that are innate to these demographic characteristics. The participant groups all offered similar opinions with respect to the influence of age and gender on farmers' help-seeking. These findings are consistent with other studies that implicate age and gender as influencing a range of mental health-related behaviours such as coping and suicide (Crnek-Georgeson et al., 2017; Fennell et al., 2012). Specifically, Crnek-Georgeson et al. (2017) found that older males were at greater risk of suicide, which is seemingly also the case with respect to farmers not seeking help. This suggests such individuals should be targets for intervention.

Summary

The importance of individual or personal characteristics in farmer help-seeking was shared by the three participant groups. Mental health literacy has improved over time, but is still insufficient especially considering the variability between individuals, meaning illiteracy still acts as a barrier to help-seeking. The participants reported that the strength and forms of stigma also varied, with both stigma towards help-seeking and stigma towards mental illness highlighted. Further, both internal self-stigma and to a lesser degree, external perceived stigma were reported by participants to act as barriers. Additionally, support was highlighted as a

factor that could facilitate help-seeking if delivered appropriately. The three participant groups also reported that being older or male is a barrier to farmer help-seeking. The importance of personal factors in farmer help-seeking has been demonstrated, in addition to cultural and service factors.

Summary of Phase 1

The themes presented in Chapters 4, 5, and 6, have provided valuable information to understand farmer help-seeking. That is, in Phase 1, the farmer, partner and GP samples reported three superordinate themes that embody factors that act as barriers or facilitators of farmers' help-seeking: farming life, services and personal factors. The farming life superordinate theme highlighted that the lifestyle and culture surrounding farming have a role in farmer help-seeking. The services superordinate theme demonstrated that the interaction between farmers, practitioners and mental health services and systems can impact help-seeking. The third superordinate theme indicated that recognising the individual, with their own characteristics, is also critical to understanding farmer help-seeking. The information gained from Phase 1 can be used to guide additional research, including Phase 2. Phase 2 comprises a quantitative assessment of the joint and individual impacts of the reported factors to determine their relative strength in explaining variation in farmers' intentions to engage in help-seeking.

Phase 2

Chapter 7: Phase 2 - Literature Review

The previous chapters presented the findings of the qualitative interviews encompassed in Phase 1 of this research, within the superordinate themes of farming life, services, and personal factors (See Figure 5). While a great depth of information was attained, it was constrained to the unique perceptions, experiences, and conceptualisations of the three included populations. As such, there is the need to understand the constructs that stem from the reported themes in the context of the research evidence. A summary of Phase 1 findings, focussing on identified constructs (e.g., stigma), is provided in Chapter 7. This chapter explains each construct and discusses the relevant empirical evidence to locate these within the broader help-seeking literature. The evidence regarding these barriers and facilitators is then considered within the context of Vogel, Wester, et al.'s (2006) information processing model of help-seeking (See Figure 3).

Factors from Phase 1

As a review, this research used an exploratory mixed methods approach, with the findings of Phase 1 informing the development of Phase 2 (See Figure 5). The findings reported in Phase 1 highlighted a number of common factors relevant to help-seeking. The second phase investigates the magnitude of the impact each factor has on farmer help-seeking.

The farming life superordinate theme (Chapter 4) highlighted the importance of factors such as farming culture/stoicism, priorities, and farming challenges particularly with respect to finances. Chapter 5 reported on factors related to health services which impact help-seeking, including attitudes towards GPs, as well as the availability of, access to, and comfort with services (including e-mental health services). The third superordinate theme encompassed personal factors that impact

farmer help-seeking (Chapter 6) such as mental health literacy, stigma, support, and demographic characteristics such as age and gender. These constructs are examined further in the following quantitative study (Chapter 8) and are reviewed here with respect to existing research evidence.

The Literature Review Process

It should be reiterated that given the lack of research that directly examines such factors (from Phase 1) in farmer help-seeking, the following draws primarily from other help-seeking (e.g., for health problems) and rural populations, as well as other populations (which are specified) where necessary. Similarly to the literature review for Chapter 2, Scopus, Psychinfo and Sage databases were used, as well as Google Scholar. The search terms included combinations of 'mental health help-seeking', 'Australia', 'care-seeking', 'rural', 'remote', 'non-metropolitan', 'primary producer' and 'agricultur*', as well as the factor of interest (e.g., 'mental health literacy', 'stigma', 'gender', 'access'.). The eligibility criteria were much less restrictive for the Phase 2 literature review with studies included if they provided insight into the factors, particularly with respect to help-seeking. There were no criteria for publication date or type of literature, although empirical literature was preferred. Additional literature was included based on the references of relevant articles. Many abstracts and articles were reviewed and those that provided insight into associations between help-seeking and the factors elicited in Phase 1, or provided other pertinent information, were included in the current literature review. Relevant statistics from reputable sources such as the ABS and AIHW were also used as appropriate.

Barriers to Help-Seeking

Mental health literacy. The results from Phase 1 (See Figure 5) and research in other populations have indicated that mental health literacy has a role in help-seeking, including in farmers. Indeed, low mental health literacy is an identified barrier to help-seeking generally (Jorm, 2012). As a construct, mental health literacy refers to the knowledge and skills necessary to recognise, manage and prevent mental disorders and to act accordingly when necessary (Jorm et al., 1997). Jorm (2012) has conceptualised mental health literacy as having multiple components including the knowledge of how to prevent mental illnesses occurring, the ability to recognise when a mental illness is developing, the knowledge of how to manage mild mental health issues including effective self-help techniques, the knowledge of the options available to provide assistance or treatment for mental disorders, and the skills to provide support to individuals experiencing poor mental health. Without this knowledge, and the ability to apply such knowledge, farmers would be unable, or unwilling, to recognise that help may be necessary (Jorm, 2012).

Another example is that a farmer with sufficient mental health literacy may evaluate that they need more than self-help techniques and then consider other professional sources of help and take action. Given the largely encompassing nature of mental health literacy, including knowledge, recognition and action, and the debilitating nature of poor mental health, mental health literacy is essential and must be taught early, prior to its necessity (Jorm, 2012; Rickwood et al., 2005). Indeed, mental health literacy can potentially impact every step of help-seeking as per Vogel, Wester, et al.'s (2006) information processing model because it can impact recognition of mental health problems, the generation of potential options, the selection of an action, and how the action is evaluated.

Importantly, there is a vast body of research that has indicated the importance of mental health literacy in general help-seeking (Jorm, 2012; Suka, Yamauchi, & Sugimori, 2016), which provides further impetus to examine mental health literacy in farming populations. Specifically, research has shown there is a moderate to strong positive relationship between mental health literacy and intentions to seek help among Australian university students (M. O'Connor & Casey, 2015; C. L. Smith & Shochet, 2011), and Japanese adults (Suka et al., 2016).

Additionally, support for the role of mental health literacy in help-seeking is evident in the emerging body of research in farming and rural populations, including that presented in Phase 1 of the current research. There is evidence that some aspects of mental health literacy among farmers may be adequate, while other aspects need improvement. For example, a cross-sectional survey conducted in Queensland using a general rural sample found that 86% of participants thought a GP would be helpful for assisting with mental health issues (Bartlett, Travers, Cartwright, & Smith, 2006), which indicates that there is some knowledge of help-sources. In contrast, participants (61% identifying as a farmer) of a forum run by the Centre of Rural and Remote Mental Health (2008) reported that the information about the helplines available was the most helpful, suggesting that knowledge of help sources was lacking and, in turn, could be expanded. Another aspect of mental health literacy is understanding of mental health, which evidence suggests may be deficient, given that 44% of participants in Bartlett et al. (2006) study believed that it would not be harmful if a depressed person dealt with the issues themselves. These examples, and the findings reported in Phase 1, demonstrate that mental health literacy is relevant to farmers, and could be deficient, which indicates further investigation of mental health literacy in the context of help-seeking is needed. The potential ramifications

of poor mental health literacy, and in turn, inadequate help-seeking, are concerning given that untreated, depression can quickly deteriorate and may lead to significant impairment and even suicide (Ghio, Gotelli, Marcenaro, Amore, & Natta, 2014; Jorm et al., 2000). Thus, it is imperative to understand the strength of the relationship between farmer help-seeking and mental health literacy.

Stigma. Stigma was consistently highlighted by participants in Phase 1 as a barrier to farmer help-seeking (See Figure 5). Stigma is defined as negative attitudes based on a grouping factor that reduces the group's (self-) worth (Corrigan, 2004). This occurs through a process where people or groups are labelled, determined to be separate based on the label, then stereotypes are employed and applied, often with a negative emotional reaction leading to prejudice and discrimination (Link & Phelan, 2001; Link, Yang, Phelan, & Collins, 2004). In this instance, the salient socially relevant difference is related to mental health broadly. This distinction leads to stereotypes of mental illness being applied, such as posing a threat of violence. Those making the distinction often then experience an emotional reaction, commonly shame, which leads to a loss of status and discrimination (Link et al., 2004).

Stigma can lead to many negative outcomes such as discrimination, distress, and reduced self-esteem (Corrigan, 2004; Reavley & Jorm, 2013). Stigma has also been shown to prevent general help-seeking, due to the associated reluctance to be labelled (Corrigan, 2004). Indeed, Vogel, Wester, et al. (2006) indicate that stigma can impact the decision-making step in their information processing model of help-seeking because individuals may be apprehensive that they will be judged negatively for their actions. Stigma may be a particularly relevant issue in rural and remote areas because there is minimal anonymity and privacy due to the visibility of mental

health services and often small and close-knit communities (Crawford & Brown, 2002; Fuller et al., 2004; Kennedy et al., 2014). Stigma may be further perpetuated by the cultural norms of stoicism, emotional control, and self-reliance, evident in rural and farming populations (Collins et al., 2009; Elliott-Schmidt & Strong, 1997; Hossain et al., 2008; Wagstaff & Rowledge, 1995). These norms encourage people to demonstrate toughness and be able to solve their own issues, which conflict with seeking help. Therefore, people may act in accordance with norms to show cultural conformity as well as to avoid stigma, especially considering that help-seeking may be more noticeable in small communities.

Based on the findings of Phase 1, many types of stigma need to be considered with respect to the impact on farmer help-seeking. This includes self-stigma, which refers to a reduction in self-worth and self-esteem due to internalising stigmatised views of themselves based on belonging to a group (Clement et al., 2015; Corrigan, 2004). Public stigma occurs when individuals endorse stereotypes leading them to hold negative views of people who belong to a particular group (Corrigan, 2004). An example of this might be members of a community discriminating against a farmer experiencing a mental illness. The third type of stigma is perceived stigma, which refers to an individual's perception of the extent of other people's views and stigmatisation towards those belonging to a group (Clement et al., 2015; Corrigan, 2004; Tucker et al., 2013). Perceived stigma would be evident in a farmer thinking that other people hold stigmatised views of them because they have a mental illness.

There is now a large body of research examining the role of stigma in preventing general help-seeking behaviour. However, the role of mental illness stigma in influencing help-seeking behaviour is unclear, with a recent meta-analysis by Clement et al. (2015) demonstrating that the effect varies from non-existent to

small, with inconsistent findings regarding the direction of the relationship. In this meta-analysis, although nine studies demonstrated negative associations with help-seeking, only three were statistically significant. Further, nine studies showed positive associations between stigma and help-seeking, with only two relationships reaching significance, meaning firm conclusions can not be drawn. It is possible that the variability in results may be due to how stigma was defined or sample characteristics (e.g., ethnicity, age, and rurality). With respect to help-seeking intentions, the findings were more clear and Clement et al. reported a moderate negative association.

Additionally, a systematic review of randomised controlled trials of interventions to improve help-seeking found mixed results regarding the role of stigma (Gulliver et al., 2012). Of the six randomised controlled trials that met the inclusion criteria, three studies provided information designed to destigmatise mental illness with the aim of improving help-seeking. In two studies, help-seeking attitudes were improved at post-test. Further, only one study measured help-seeking behaviour, which was not improved by the stigma information condition (Gulliver et al., 2012). The findings from these reviews demonstrate that stigma may have a variable impact on help-seeking and that generalising across populations may be misleading. As such, it is prudent to examine stigma toward mental illness in individual populations, such as farmers in this research, because the valence and strength of the impact on help-seeking appear to vary markedly.

The stigma attached to mental health can be further broken down into stigma toward mental illness, and stigma toward help-seeking (Tucker et al., 2013), both of which were reported in Phase 1. Stigma related to help-seeking refers to the negative attitudes regarding help-seeking and the notion that this would lead to a reduction in

(self-)worth or esteem if help were to be sought (Tucker et al., 2013). Whereas, stigma towards mental illness is defined as negative attitudes regarding mental illness itself and the notion that having mental illness reduces (self-) worth (Tucker et al., 2013).

Within Link's (1987) conceptualisation of stigma, help-seeking was classed as a behavioural cue to mental illness. However, Tucker et al. (2013) argued that stigma of help-seeking and stigma of mental illness should be considered as separate forms of stigma that may have differential impacts on help-seeking. Indeed, Tucker et al. (2013) demonstrated that stigma of help-seeking and stigma of mental illness are distinct, with confirmatory factor analysis showing a two-factor structure in samples of undergraduate university students and community members. Further, the pattern of relationships between stigma and help-seeking attitudes and intentions was different for each stigma type. Across university student and community samples, help-seeking stigma (40% and 36%, respectively) accounted for a greater amount of variance in help-seeking attitudes then mental illness stigma (4% and 1%, respectively). Likewise, help-seeking stigma accounted for a greater amount of variance in help-seeking intentions (10% and 7%, respectively) than mental illness stigma did (1% and <1%, respectively). The above results support these types of stigma being examined separately to understand their influence among farmers.

There is some research conducted with an international farming population that provides further support for this distinction. One study conducted in the United States of America found that farmers living in remote areas reported higher rates of stigma toward help-seeking than residents of rural towns or regional cities that were not farmers (Hoyt, Conger, Valde, & Weihs, 1997). However, these findings may be influenced by remoteness as well as farming-specific factors. As earlier discussed,

many studies have found that farmers reported valuing self-reliance, which is a point of pride for them (Fraser et al., 2005; Rickwood et al., 2005; Roy et al., 2014; Staniford et al., 2009), and is also antithetical to help-seeking. Thus, there appears to be compelling reasons to examine the impacts of both stigma of mental illness and help-seeking separately.

The body of qualitative evidence with rural and farming populations, including that reported in Phase 1 of the current research, provides strong support for stigma having a role in help-seeking. There is also a body of quantitative evidence that suggests the impact of stigma varies by population (Clement et al., 2015). This evidence, in conjunction with the lack of research specifically examining farmer help-seeking, indicates that understanding the strength of the impact of each type of stigma is key, so that the correct specific types can be targeted.

Gender differences. Gender was raised as a factor related to help-seeking in Phase 1 of the current research (See Figure 5), and there are multiple studies showing that males are less likely to seek help than females across several populations including those in rural locations (Addis & Mahalik, 2003; Fischer & Turner, 1970; Haddad, 2013; Jackson et al., 2007). This was not always the case though, some rural studies found no differences between genders on help-seeking (Komiti et al., 2006; Perkins et al., 2013). Adding to the importance of examining gender, males and females have also been found to differ in their attitudes towards help-seeking (Mackenzie, Gekoski, & Knox, 2006).

There is also another body of research that suggests that gender may play a role in determining help-seeking indirectly, by impacting other potentially related factors. For example, Judd, Jackson, Komiti, et al. (2006) found there was a gender difference for self-recognition of mental health problems in rural populations. That

is, gender differences in an individual's ability to recognise mental health problems may impede help-seeking by leading to failure to attend to cues at step 1 of Vogel, Wester, et al.'s (2006) model of help-seeking .

Conversely, there is also evidence that shows no gender differences in emotion recognition. For example, Judd, Komiti, and Jackson (2008) found that there were no differences between genders on an alexithymia scale, which measures an individual's ability to identify, distinguish between, and express their emotions. This suggests that men may have the ability to describe their feelings, but may find it difficult to do so due to discomfort (Judd et al., 2008). Alternatively, perhaps there may be different personal perceptions of the importance of these symptoms between males and females. It is possible that the lower help-seeking rates found in males may also be due to attitudinal or socio-cultural factors that are more characteristic of males, for example, self-reliance, stoicism, and pride (Yousaf et al., 2013). Indeed, the attitudes and tendencies shown by farming men may be culturally formed by (farming) male gender roles, which Roy et al. (2014) indicated are related to help-seeking. Nonetheless, due to the complexity and conflicting evidence, it is important to understand the magnitude of the association between gender and farmer help-seeking, which can also provide insight relevant to the general help-seeking literature.

Access and availability. Poor access and availability arising from geographic isolation was consistently raised as a potential barrier to help-seeking in research with rural and farming populations, and among the samples in Phase 1 of the current research (See Figure 5). Qualitative research, using data from rural populations as well as rurally practising GPs and mental health professionals, has indicated that access to services is an issue (Bischoff et al., 2013; Humphreys,

Mathews-Cowey, & Weinand, 1997). For example, great travel distances to services, long delays to appointments, and a lack of (rural) cultural sensitivity shown by practitioners could discourage individuals from seeking help (Bischoff et al., 2013; Bishop et al., 2017; K. B. Smith, Humphreys, & Wilson, 2008; R. L. Wilson, Cruickshank, & Lea, 2012). Additionally, the minimal services available, especially as remoteness increases, may also act as a barrier to care. These access and availability issues may all contribute to lower than optimal rates of help-seeking. A better understanding of the way in which access and availability may impact help-seeking can be gained through consideration of additional evidence.

Availability of services. Statistics from AIHW (2008) have demonstrated similar numbers of GPs working across the levels of remoteness (84-100 per 100,000). Although, this does not take into account the GP density in terms of geography (i.e., per km^2). Further, when all medical practitioners are included, there is a pronounced disparity in the number of practitioners per 100,000 individuals, declining from 392 full-time equivalent (FTE) positions in major cities to 206 FTE positions in outer regional areas (AIHW, 2011).

When mental health specialists are considered, people in major cities are twice as likely to have seen a psychologist, with 33 services per 1000 people in major cities; this drops to 22 in remote areas and decreased to just five in very remote areas (AIHW, 2011). More recent statistics from 2015 show that 82.6% of psychologists work in major cities (106.2 FTE) with 60 FTE positions per 100,000 in inner regional areas down to 23.2 FTE in very remote areas (AIHW, 2017a). Similarly, psychiatrists provided many more services per 1000 people in major cities (113) than very remote areas (19; AIHW 2011). The majority of psychiatrists service metropolitan areas (88.1%) while only 0.1% service very remote areas, equivalent to

2.1 FTE (per 100,000; AIHW, 2017b). These statistics suggest fewer mental health services are available to rural and remote residents, which may have a direct impact on help-seeking behaviours.

Polain, Berry, and Hoskin's (2011) thematic analysis of community forums on drought and stress with older farmers indicated that availability of services was often meagre in rural New South Wales. The participants reported waiting periods of up to six weeks to see a GP. Further, mental health practitioners' population-based density is lower than GPs, which suggests that the associated waiting periods for appointments may be greater. Extending this, Mercer-Grant et al. (2011) found, from their qualitative focus groups and health data from physical and mental health assessments, that the limited availability of services seen in rural and remote areas negatively impacts farmers' health. While availability is a recognised issue in rural and remote areas, the strength of the impact of this on farmer help-seeking has yet to be examined.

Accessibility of mental health services. Accessibility of services goes beyond availability, encompassing factors that determine whether appropriate services can be obtained. This comprises factors such as privacy, continuity of care, cultural awareness, and travel time. Evidence of poor access to services comes from Caldwell et al. (2004) who reported that rural and remote GPs manage fewer psychological problems than their metropolitan counterparts, despite equivalent need based on prevalence of disorders in these areas (AIHW, 2017c). Furthermore, rural individuals also demonstrate fewer GP contact occasions per person than those in city areas. This is despite the fact that GPs are the most available source of professional help for rural and remote people, with similar distribution across remoteness. This suggests that the reduced GP usage rate is not solely due to the

remoteness, but also how accessible they are. One aspect of GP accessibility is likely their self-efficacy for providing psychosocial services, which has been found to be lower than that for addressing physical health problems. (Sturk, Kavanagh, Gallois, King, Turpin, King, & Bartlett, 2007). Moreover, many studies have implicated inaccessibility to mental health professionals as another key issue in both farmer suicide and help-seeking (Blackburn, Brumby, Willder, & McKnight, 2009; Brumby et al., 2011; Brumby et al., 2010; Judd, Jackson, Fraser, et al., 2006). However, the impact of perceived accessibility on farmer help-seeking has not been examined directly.

In addition to the research reported here, rural and farming qualitative evidence has indicated that privacy, comprising factors such as visibility, anonymity, and confidentiality, may act as a barrier to care by reducing accessibility. An interview study with rural and remote South Australian residents has demonstrated the majority of participants endorsed that privacy would prevent them from seeking help (Fennell, Hull, Jones, & Dollman, 2018). One possible explanation is that the act of seeking help among people in rural and remote areas is more visible due to the smaller population, which was reported by participants in Crawford and Brown's (2002) focus groups. This suggests that services in rural and remote areas may be seen as inaccessible in part due to the visibility, which means that service users' privacy is difficult to maintain.

Another key issue reportedly impacting on the accessibility of services for farmers is poor continuity of care. Continuity of care refers to care delivered by the same practitioner over time so that a good working relationship can be developed (Russell, Wakerman, & Humphreys, 2013). Fuller et al. (2004) highlighted that poor continuity of care hinders access to mental health services for rural people by

preventing the development of good relationships between individuals and service providers. Participants in this qualitative interview study in rural South Australia also reported that continuity of care is often hindered by high turnover of health staff in rural areas. The perception of high health-staff turnover may in turn reduce the likelihood of an individual seeking help (Fuller et al., 2004). Similarly, the findings of a Queensland-based focus group study with farmers by Hossain et al. (2008) also highlighted continuity of care as an issue; farmers reported difficulty having to talk to different practitioners each time help is sought. These findings suggest that continuity of care issues experienced in rural and remote areas are also likely to impact farmer help-seeking, although the strength of the relationship is not currently known.

Practitioners showing poor cultural awareness and sensitivity can create yet another accessibility issue. The participants from Polain et al.'s (2011) qualitative study with older farmers reported that practitioners servicing these areas were considered not accessible due to a perceived lack of rural cultural knowledge. Similarly, Perceval et al. (2011) reported that rural people valued locally provided services, and, in turn, think remotely delivered services should be supplementary. That is, rural people think practitioners with knowledge of rural culture are better able to meet their needs (Bischoff et al., 2013; Humphreys et al., 1997). Additional evidence of the importance of practitioners having cultural knowledge is demonstrated by the introduction of postgraduate courses in agricultural health and medicine in both the USA and Australia (Brumby, Rudolphi, Rohlman, &Donham, 2017; Fisher & Donham, 2011). The availability of these courses highlight the importance of, and need for, cultural awareness and knowledge to provide high quality health care to farmers, which based on Phase 1 findings is seemingly lacking.

The Phase 1 findings reported in the previous chapters corroborate the claims that farmers think practitioners with knowledge of their lifestyle are more suitable, which justifies the examination of the relationship between perceived cultural awareness and farmer help-seeking.

The participants in Phase 1 also highlighted that the limited availability of mental health services has implications for the accessibility of services. The number of practitioners available declining as remoteness increases means that vast travel distances are possibly required (Australian Government Department of Health and Ageing, 2008). When considering that during peak times, farmers may work 20 hours a day, the travel time and distance to seek help can present a conflict of priorities (AIHW, 2008; Brumby et al., 2010). This suggests that the travel required due to the geographic isolation of farms may present as an access issue. However, there is minimal evidence with respect to the strength of the impact of travel time on farmer help-seeking.

Overall, extrapolation from rural and remote samples indicates several factors relating to availability and accessibility of services that may play a role in farmer help-seeking. These include the declining number of health professionals as remoteness increases and travel time, as well as privacy, and continuity of care. The nature of these factors suggests that they might influence the decisions farmers make regarding which actions are viable to address their mental health issues, as per the information processing model of help-seeking (Vogel, Wester, et al., 2006). The qualitative findings, and the lack of quantitative evidence, support the argument that availability and accessibility of services should be included in an examination of the relative importance of these factors in determining farmer help-seeking.

Farming culture. Based on the findings of Phase 1 (See Figure 5), farming culture is seemingly a special case of rural culture that is potentially amplified, and includes factors such as self-reliance, stoicism and pride (Judd, Jackson, Komiti, et al., 2006). Indeed, it is important to note that farming is considered not only an occupation but also a lifestyle and has a specific culture (Kent & Alston, 2008; Sartore et al., 2008). As such, the importance of cultural context to understanding mental health and help-seeking has been highlighted in the current research as well as by Fuller et al. (2000) with respect to rural culture. Findings from Phase 1 highlight that factors such as stoicism and self-reliance are encompassed by farming culture, and reportedly impact help-seeking due to a reluctance to transgress cultural norms demanding toughness and self-reliance. Applying Vogel, Wester, et al.'s (2006) model to the Phase 1 findings, stoicism leads farmers to refuse to acknowledge mental health issues, not consider outside help-seeking as a viable option, or not seek help to preserve their cultural identity. Similarly, Fuller et al.'s qualitative research found that the recognition of distress, which is part of the help-seeking process (step 1), is also impacted by rural culture. There is some evidence that demonstrates a relationship between stoicism and help-seeking. For example, a study by Murray et al. (2008) demonstrated a strong relationship between help-seeking attitudes and stoicism in a sample of rural Australians. However, the relationships between stoicism and help-seeking intentions and behaviour were much weaker. Judd, Jackson, and Komiti et al. (2006) showed that stoicism has a weak relationship with lifetime help-seeking among rural Australians. Similarly, Rughani, Deane, and Wilson (2011) found a weak relationship between help-seeking intentions and stoicism in a sample of rural adolescents in Australia. Nonetheless, given that these studies are not with farming populations, it cannot be assumed that

the magnitude of these relationships will be the same for farmers. Thus, based on the Phase 1 findings in conjunction with the above evidence, it is considered important to examine the strength of the potential impact of stoicism on farmer help-seeking.

Priorities. The reports from Phase 1 indicate that farmers generally do not consider their mental health a priority (See Figure 5). Prioritisation decisions are grounded in a series of judgements individuals make, and are shaped by how they think and value various outcomes (Gerrig et al., 2008). Further, decision-making is influenced heavily by consideration of the relative gains and losses associated with a course of action (Gerrig et al., 2008). In alignment with the current findings, researchers have inferred that in the midst of competing demands, the benefits and necessity of farm work are most compelling, so the time needed to seek help may be regarded as an unhelpful loss of productivity (Kolves et al., 2012; Mercer-Grant et al., 2011). This is particularly the case given that farmers' work is important to them, and they consider long working hours as necessary, potentially to maximise income (Brumby et al., 2010; Collins et al., 2009; Mercer-Grant et al., 2011). Further, this workplace demand often cannot be overcome by hiring staff. This is because the business income needed to provide a FTE wage is substantial at approximately $200,000, especially considering that 50% of farmers work 49 or more hours per week (ABS, 2012; Queensland Government Department of Agriculture, 2014). As such, prioritisation seemingly influences farmer's help-seeking as reported in Phase 1, which requires examination to determine the strength of the association.

Farming challenges. The challenges associated with farming were also reported in Phase 1 to impact help-seeking (See Figure 5). For example, farming is an occupation in which individuals work for low average disposable income ($568 per week compared to other occupations $921; ABS, 2012). This could create

additional cost barriers to accessing mental health care, which may manifest when farmers generate options to address an issue, or which (in)action they choose. The low disposable income of farmers suggests that they cannot feasibly acquire additional labour to ensure tasks are completed in their absence while help is sought, given the high business income that is needed to support this. Based on the findings in Phase 1, these farming challenges could be conceptualised to impact the help-seeking process at many of the steps, particularly option generation and decision-making (Vogel, Wester, et al., 2006). Thus, the evidence justifies examining the strength of the relationship between farming challenges, particularly with respect to finances, and help-seeking.

Attitudes. While not explicitly raised in Phase 1 of the current research, farmer attitudes towards help-seeking may also explain help-seeking behaviours. Although some attitudes fall under previously discussed topics such as stigma and the culture of rural areas and farming (Judd, Jackson, Fraser, et al., 2006), general attitudes towards help-seeking may also play a role in farmers' help-seeking. As highlighted in Chapter 1, attitudes are often conceptualised to precede intentions (Ajzen, 1991). Attitudes toward help-seeking are likely to be important to farmer help-seeking because they reflect an individual's beliefs and willingness to enact the behaviour (Gulliver et al., 2012). This means there is the potential for attitudes to impact many, if not all, steps of help-seeking (Vogel, Wester, et al., 2006). While there is evidence that help-seeking attitudes are strongly related to and predict intentions in other populations (Shepherd & Rickard, 2012; J. P. Smith, Tran, & Thompson, 2008), this has not been examined among farmers.

Facilitators of Help-Seeking

Very few factors were raised in the existing help-seeking research of farming and rural populations that might act as potential facilitators of help-seeking. Nonetheless, the findings of Phase 1, that farmer help-seeking is potentially promoted by the constructs of partner support and the relationship with their GP, need to be interpreted in the context of the broader body of evidence.

Partner support. The Phase 1 findings highlighted that partner support, when delivered tactfully, may assist a farmer to seek help (See Figure 5). This aligns with previous research that found female partners encourage help-seeking in males generally (Doherty & Kartalova-O'Doherty, 2010). For example, in one study, males that were married or cohabitating were nearly three times more likely to seek help from a GP for a mental or emotional problem than the males that were single, separated, widowed, or divorced (Doherty & Kartalova-O'Doherty, 2010). Similarly, a systematic review of male help-seeking found that not being married was associated with lower rates of physical and mental health help-seeking (Yousaf et al., 2013). This is likely to extend to farmers considering that Roy et al. (2014) reported farmers often have their help-seeking given legitimacy by the people close to them.

However, not all research has reported that cohabitating increases the likelihood of help-seeking. A narrative review with search methods reported by Jackson et al. (2007) found that individuals who were separated, divorced, or never married were approximately twice (*OR* = 1.98 – 2.12) as likely to have sought help (Perkins et al., 2013). Although these findings with respect to marital status and help-seeking are contradictory, there may be explanations. For example, when the research focused on men, being in a relationship meant they were more likely to seek help, which could be due to having the support of their (female) partner (Doherty &

Kartalova-O'Doherty, 2010; Yousaf et al., 2013). On the other hand, Doherty and Kartalova-O'Doherty's (2010) study included a separate analysis for women and found that their relationship status did not influence their help-seeking. When considering Ide's (1986) qualitative findings that health is considered to be 'women's responsibility' in rural culture, these findings are not surprising. These findings indicate that females may support male partners to seek help, while males may not provide females with the same support.

Another point to consider is that farmers reportedly prefer to seek help from their friends and family (Judd, Jackson, Fraser, et al., 2006). Although, farmers also reported in other research that they prefer to manage their problems themselves so that they do not cause their family to worry (Staniford et al., 2009). This adds to the complexity of the nature of the possible relationship between support and help-seeking, specifically in farmers. Thus, it is important to examine the impact of support on farmers' help-seeking, whether intentions can be facilitated (or hindered) by partner (or other support source) involvement. If partners (or other people) can influence help-seeking, then strategies may be created that recruit partners to effectively promote help-seeking behaviours.

GP relationship. The participants in Phase 1 of the current research indicated that farmers' perceptions of GPs are important (See Figure 5). Further, the nature of a farmer's relationship with their GP or service provider comprises many of the factors that were introduced in the help-seeking literature in Chapter 2, such as prior service use, communication and rapport with health professionals, perceptions of health professionals' efficacy, and mistrust of providers. As discussed previously, GPs are the most readily available source of health care in rural and remote areas, which means that they may play a particularly important role in farmer help-seeking.

In addition, GPs are able to provide referrals to mental health professionals that are subsidised by public funding (Medicare; Australian Government Department of Health, 2017), meaning they are likely to be a farmers first point of contact with the health system. Nevertheless, farmers generally appear at least somewhat reluctant to discuss mental health issues with GPs, which is also supported by findings from Judd, Jackson, Fraser, et al. (2006). For help to be given, the GP needs to aware of the need for it. This requires the farmer to bring up their symptoms and the GP to recognise that it may be mental health related, or the GP needs to ask about mental health explicitly and the farmer give a truthful answer. This means that the interaction of GPs and farmers is seemingly important and may have an impact on help-seeking, in agreement with the effect therapeutic relationships have on care outcomes (Fluckiger et al., 2018). Thus, examining the impact of a farmers' attitudes toward GPs on farmer help-seeking is imperative, especially considering that it may impact the option generation, and selection stages of the help-seeking process (Vogel, Wester, et al., 2006).

Summary

The information processing model of help-seeking can be applied in the farming context, and with consideration of the reviewed literature, to understand the potential barriers and facilitators of help-seeking (See Figure 3; Vogel, Wester, et al., 2006). For example, in order to recognise mental health at the first step, the farmer must recognise the issue is mental health related, or have good mental health literacy. Their attitudes and socio-cultural context might also influence their ability to recognise distress. Then, in the second step, the farmer must generate options to resolve the problem, which again is a core skill encompassed by mental health literacy. Generating options for action in the second step may also be affected by

factors such as stigma, cultural norms, attitudes, and perceptions of access and availability. At this second step, these barriers would influence whether help-seeking is considered a worthwhile option. On the other hand, support offered by others may facilitate help-seeking at this step. At the third step, the farmer is required to use decision-making processes to choose a suitable course of action. This decision-making process could also be influenced by factors such as stigma, which may mean they risk discrimination if they seek professional help. Alternatively, perceptions of poor accessibility of services may also lead to perceptions of costly and unhelpful assistance. Perceptions like these could lead the farmer to consider if help-seeking is a viable solution. The final step is when farmers would evaluate if the action taken was sufficient. Importantly, in the case where the farmer has misattributed the meaning of the symptoms (e.g., sleep as opposed to distress) their action is unlikely to have led to a sufficient outcome. In such cases, the farmer would then consider other potential solutions, which could also be influenced by these barriers and facilitator, similarly to step 2.

Whilst the literature reviewed in this chapter, in addition to the Phase 1 findings, provide an indication of how these constructs relate to help-seeking (See Figure 7), these findings need to be corroborated directly among farming populations to understand their importance to farmer help-seeking. That is, quantitative research is needed to determine the strength and direction of the relationships between these constructs and farmer help-seeking. The following chapter accomplishes this task by presenting the findings of the cross-sectional survey based on the findings of Phase 1.

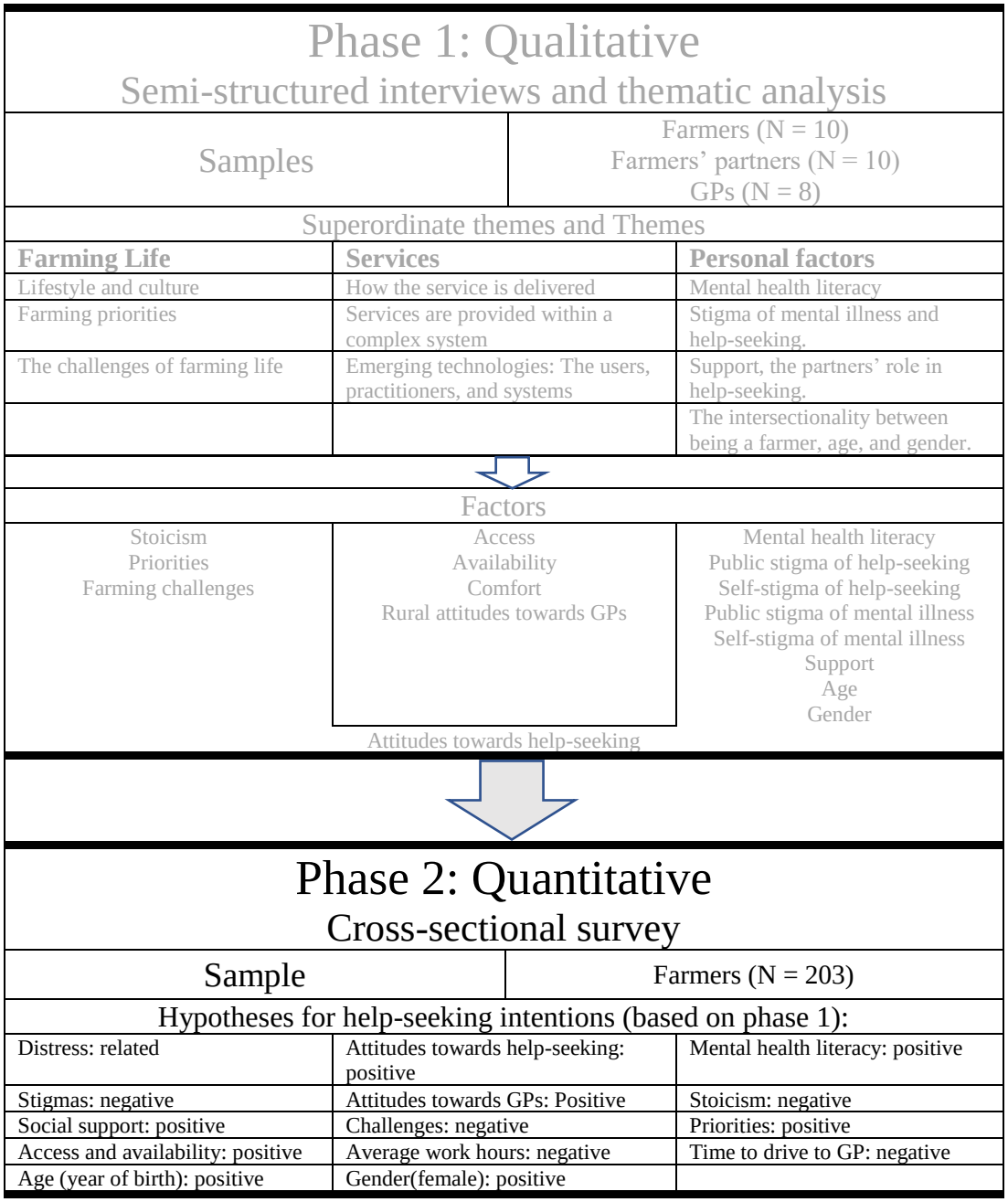

Figure 7. Summary of research, emphasising Phase 2.

Chapter 8: Phase 2 – Cross-Sectional Survey Study

Chapter 8 (Phase 2) presents the findings of the cross-sectional survey that quantitatively examines the factors elicited from Phase 1 (See Figure 7). The previous chapter summarised the empirical evidence regarding the constructs elicited during Phase 1 and, together with the results of Phase 1, provide the foundation for the current study aims and hypotheses. Following this is a detailed explanation of the research methods, including the construct measures, some of which were created specifically for this research. The analyses and results are then presented, followed by a discussion of the quantitative results. The implications, limitations, and future directions of the research are discussed in the general discussion (Chapter 9).

Study Aims

The influence and statistical importance of the factors elicited in Phase 1 and described in the literature concerning farmers' help-seeking are currently unknown. Thus, the aim of the quantitative phase is to statistically estimate the absolute and relative predictive power of the barriers and facilitators (jointly and individually) for farmer help-seeking that were generated in Phase 1. This focuses on help-seeking intentions from professional sources, meaning that the farmers' help-seeking intentions from GPs, and separately, mental health professionals are examined in conjunction with the factors elicited during Phase 1. These professional reference groups are two relevant sources of help for farmers who are experiencing distress. As such, the research question for this study is 'What is the statistical nature (significance, strength, and direction) of the relationships of barriers and facilitators with help-seeking intentions (from GPs and mental health professionals)?' The specificity of some of the constructs means that new dedicated measures were needed, since there were no other measures available. These constructs include

farming challenges, access and availability of mental health services, attitudes towards GPs (as conceptualised by rural people), and priorities toward help-seeking. Based on the findings of Phase 1 specific measures of these constructs were therefore created.

Hypotheses

Based on the findings of Phase 1, in conjunction with prior research, it is expected that multiple factors will relate to farmer help-seeking intentions. Specifically, it is hypothesised that intentions to seek help are inversely predicted by stigma, stoicism, farming challenges (e.g., lack of privacy, weather), higher average work hours, and time to drive to the GP (indicating access). Furthermore, it is hypothesised that positive attitudes towards help-seeking, mental health literacy, positive attitudes towards GPs, social support, prioritisation of help-seeking, access and availability, younger age, and female gender will significantly predict greater reported intentions to seek help. It is expected that distress will relate to help-seeking intentions, although, contradictory evidence with respect to need for help and refusal of help means that the direction is uncertain. For a summary of these hypotheses, see Table 7.

Table 7

Phase 2 Hypotheses

Hypothesis number	Factor	Hypothesised Direction
1	Distress	N/A[a]
2	Attitudes towards help-seeking	Positive
3	Mental health literacy	Positive
4	Stigma	Negative
5	Attitudes towards GPs	Positive
6	Stoicism	Negative
7	Social support	Positive
8	Challenges	Negative
9	Priorities	Positive
10	Access and Availability	Positive
11	Average work hours	Negative
12	Time to drive to the GP	Negative
13	Age (year of birth)	Positive
14	Gender (female)	Positive

[a] No directionality specified due to contradictory findings with respect to need and refusal of help.

Methods

Participants

The sample consisted of adults (over the age of 18 years to ensure the capacity to provide consent) living and working in Australia with primary production as their occupation. This broad definition was chosen after feedback (during Phase 1) that graziers do not refer to themselves as farmers, and that primary production is more inclusive of all types of direct agricultural work. For simplicity, the term farmer is used throughout. Difficulties faced during recruitment led to a broadening of the sample to farmers across all of Australia, compared to the Phase 1 interviews, which focussed on Queensland farmers, partners, and GPs. A power analysis was completed prior to recruitment using G*Power (Erdfelder, Faul, & Buchner, 1996). Using the psychology convention of power = .80, $\alpha = .05$, two-tailed, for a regression approach with approximately 20 predictors, a sample of 152 is sufficient to detect small effects. The current sample of 203 was, therefore, considered

sufficient for the planned analyses.

A convenience sample of 203 farmers was recruited to complete the cross-sectional survey. The online version of the survey was completed by 176 participants while 27 individuals opted for a paper-based survey. Participants included 97 female and 105 male farmers, with gender not reported by one participant. The participants were aged between 19 and 85 years (M = 53.89, SD = 13.71). A vast majority of the participants were Caucasian (89.7%). The participants resided in six Australian states: Queensland (93, 45.81%), New South Wales (55, 27.09%), Victoria (28, 13.79%), South Australia (13, 6.40%), Western Australia (9, 4.43%), and Tasmania (3, 1.48%); two participants failed to indicate their location. Most participants (n = 189, 93.1%) reported visiting their closest town at least once per fortnight. The farmers worked an average of 52.61 hours per week (SD = 19.63). To get to their GP of choice, farmers had to drive an average of 54 minutes (minimum 1 minute, maximum 1200 minutes). When considering the time needed to drive to their closest GP the average is lower at 30 minutes (minimum 1 minute, maximum 210 minutes). See Table 8 for further demographic information.

To better understand the sampled farmers, the number of individuals who used each source of help (for advice or help for a personal or emotional problem in the two weeks before being surveyed) is reported in Table 9. It is important to note that being distressed was not a criterion of inclusion for this research and as such, it cannot be assumed that the farmers actually needed professional help for their mental health.

Table 8

Demographic Characteristics of Participants

Demographic Characteristic	*n*	%
Type of farm[a]		
Grazing	138	67.98
Broad-acre	42	20.69
Wool production	30	14.78
Fruit	19	9.36
Vegetable	14	6.90
Dairy	13	6.40
Stud	16	7.88
Other	40	19.70
Farm ownership		
Yes	104	51.23
No	23	11.33
Yes, farm partnership	76	37.43
Relationship status		
Single	18	8.86
Dating	2	0.99
Married/de facto	168	82.76
Divorced	6	2.96
Widowed	9	4.43
Household Income		
0-50,000	69	33.99
50,001-100,000	73	35.96
100,000+	55	27.09
Missing	6	2.96
Education		
Some high school	12	5.91
Grade 10	30	14.77
Grade 12	24	11.82
Tafe/Trade	51	25.12
Undergraduate degree	55	27.09
Postgraduate degree	30	14.77
Missing	1	0.49
Chronic Health Condition		
Yes	61	30.04
No	142	69.95

[a] Sum is greater than 100% due to many farmers engaging in multiple types of farming.

Table 9

Number and percentage of farmers that sought help from help sources in the previous two weeks

Help Source	Sought help[a]	%
Intimate partner	69	33.99
Friend	39	19.21
Parent	16	7.88
Other relative/family member	29	14.28
Mental health professional	17	8.37
Phone help-line	1	0.49
Doctor/GP	16	7.88
Nurse or health professional	5	2.46
Minister or religious leader	1	0.49
Information website	14	6.89
Online counselling	0	0.00
Internet program with therapist assistance	0	0.00
Internet program no assistance	0	0.00
Did not seek help	57	28.08

a. Farmers were able to report using multiple help sources.

Data Collection

The University of Southern Queensland Human Research Ethics Committee approved this study (H17REA088; see Appendix D for approval letter). Potential participants were invited to complete the survey through a variety of means such as personal and professional networking, and advertising through up to 33 industry bodies (e.g., Agforce; for an exhaustive list see Appendix E). Many organisations did not respond to the advertising request, but of those that did, the majority agreed to advertise the research. Social networking websites, including Facebook and Twitter, were also used as part of the recruitment process. Additionally, over 175 individuals were directly contacted by email (farmers with contact details in the public domain, e.g., Nuffield Scholarship website). Through these methods, a small description of the research was shared with a link to complete the online version of the survey, as well as the candidate's email to request a paper copy if preferred.

Recruitment also took place at farming events such as the Farm Fantastic Expo, three biosecurity and pest management workshops, two Queensland district agricultural shows, the South Burnett Agricultural Network quarterly meeting and the Agforce yearly forum. Permission was sought before attending each of these events. The participants had the option to complete a hard copy of the survey and return via reply-paid envelope provided. Otherwise, the advertising material including the link was available to them as a flyer if they preferred to complete the survey online.

The above recruitment methods resulted in approximately 122 farmers participating in the study. Given the large sample size needed to achieve adequate power, an additional recruitment strategy was employed through collaborative efforts with researchers at the University of Canberra. Through their annual Regional Wellbeing Survey, the research team, led by Jacki Schirmer, has accumulated a database of farmers who have previously agreed to be informed of future research opportunities in the area of mental health and wellbeing. Thus, through a collaboration with these researchers, and following receipt of additional ethics approval from the University of Southern Queensland, information about the current research was provided to a group of approximately 500 Australian farmers. This invitation was sent via email, from the primary researcher on the Regional Wellbeing Survey, which specified the separate nature of this research and the University of Southern Queensland research team. This resulted in an additional 81 farmers agreeing to participate in the study, reaching a total sample size of 203 participants.

All participants received an information sheet (see Appendix F), which included all the necessary details about the research. The information sheet also provided details of the incentive, which was an entry into a prize draw with the

chance to win one of 10 $100 prepaid Visa cards. The farmers were also able to elect to leave their contact details, so they could be sent a summary of the results, to enter the associated prize draw incentive, or to allow contact for future research. These options were separate, so participants could choose how their details were used.

The participants were able to complete the survey at their convenience. A copy of the survey is provided in Appendix G. It was made explicit that submitting or returning the survey implied their consent to participate. The voluntary nature of the study meant that participants could withdraw without explanation or penalty. The participants were explicitly informed that withdrawal after survey submission was not possible because of the anonymous nature of the responses collected. However, the participants could elect to withdraw their details from the prize draw, a summary of the results request, or the permission for future contact at any time.

Measures

Outcome variables. There were two dependent variables targeted, a) intentions to seek help from a mental health professional, and b) intentions to seek help from a GP. These were measured using an item each from a single instrument, the General Help-Seeking Questionnaire (GHSQ; C. J. Wilson, Deane, Ciarrochi, & Rickwood, 2005).

Help-seeking intentions. The widely used GHSQ (C. J. Wilson et al., 2005) measured the farmers' help-seeking intentions. Although the measure includes two subscales, one for personal-emotional problems and one for suicidal problems, only the personal-emotional sub-scale was used. This decision was made to align with the definition of help-seeking used in this research, which refers to help sought for distress. The GHSQ includes a customisable list of sources from which individuals can seek help. Participants were asked to indicate their intent to seek help from each

source if they were to experience a personal or emotional problem. The list included 15 help sources, professional and non-professional, but only single items referring to general practitioners, and mental health professionals were used for the analysis. There were two additional questions, where participants were asked to rate the likelihood that they would not seek help, and the likelihood of seeking help from another source not listed.

The GHSQ uses a 7-point Likert scale scored 1 *extremely unlikely* to 7 *extremely likely*. However, because it is more relevant to the current focus to understand the difference between those with low versus high intentions, rather than fine-grained differences in intention captured by the 7-point response scale, an alternative form of scoring was used. The participants who responded with a score between 1 *extremely unlikely* and 4 *neutral* were classed as having low intentions and those who remained, scoring 5 *likely* to 7 *extremely likely*, were coded as having high intentions. This reflects the scoring used for a similar measure of intentions by Donovan, Poole, Boyes, Redgate, and March (2015). The GHSQ, with the original scale scoring, for personal-emotional problems has acceptable internal consistency ($\alpha = .70$) and three-week test-retest reliability, $r = .86$ (C. J. Wilson et al., 2005). The validity of the scale has also been supported by small to moderate positive correlations with actual help-seeking (The Actual Help-Seeking Questionnaire [AHSQ]; Rickwood et al., 2005). It is important to note that because the current research used two single items for the analyses, internal consistency was not calculated.

Predictor variables.

Demographic information. The participants were asked to provide their year of birth, gender, ethnicity, relationship status, hours worked per week, income,

postcode, how often they go into town, which region they work and reside in, farm ownership status, how many generations of farmers in their family, type of farm, the time it takes to drive to their closest GP, the time it takes to drive to their GP, and if they have any chronic health conditions. The AHSQ was also included to measure the farmers' help-seeking behaviour (see Table 9). Although due to the nature of the sample, with both distressed and non-distressed farmers included, it is not appropriate to predict help-seeking behaviour. These demographic variables provide a profile of the participants, but some were also used as potential predictors based on the findings of Phase 1. The variables used as potential predictors include year of birth, gender, average work hours, and time required to drive to their GP.

Distress. The 10-item Kessler Psychological Distress Scale (K10) was used to assess participants' psychological distress during the 30 days prior to the survey (Kessler et al., 2002). The measure used a 5-point Likert scale scored 1 *none of the time* to 5 *all of the time*. Responses to all of the questions are summed to produce a total score between 10 and 50. A higher score indicates a higher level of psychological distress. The K10 has shown convergent validity through a strong correlation with another similar measure, Goldberg and Williams' (1988) General Health Questionnaire-12 (GHQ-12; Andrews & Slade, 2001). Along with the validity, the internal consistency of the K10 ($\alpha = .93$) is excellent (Kessler et al., 2002). Kessler et al. (2002) also found that the K10 outperformed other similar measures such as the K6 and the GHQ-12. The internal consistency of the K10 in the current sample is excellent ($\alpha = .92$).

Attitudes towards seeking help. The 24-item Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS; Mackenzie, Knox, Gekoski, & Macaulay, 2004) was used to measure the farmers' attitudes towards seeking

professional psychological help. This measure is an updated and extended version of another popular measure of help-seeking attitudes, the Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPHS) developed by Fischer and Turner (1970). The IASMHS was developed in Canada with both community and university student populations involved in the development and testing of the measure. The measure uses a 5-point Likert scale rated 1 *disagree* to 5 *agree*. Total scores on this measure range from 24 to 96, and a community sample reported an average total score of 69.19 (*SD* = 14.36). Higher scores indicate more positive attitudes towards seeking help.

The IASMHS was found to have a three-factor structure: psychological openness, help-seeking propensity, and indifference to stigma (Mackenzie et al., 2004). Each factor has eight items, and the score can range from eight to 40. The average factor scores are 21.79 (*SD* = 6.76), 23.98 (*SD* = 5.35), and 23.42 (*SD* = 6.22) for psychological openness, help-seeking propensity, and indifference to stigma, respectively. Psychological openness is the amenability to acknowledge and seek professional help for mental health issues (Mackenzie et al., 2004). Help-seeking propensity is the willingness and ability of an individual to seek help (Mackenzie et al., 2004). Indifference to stigma encompasses an individual's lack of concern about what others may think of them if they were seeking help (Mackenzie et al., 2004).

Additionally, Mackenzie et al. (2006) found that the full scale has good internal consistency ($\alpha = .87$) with the three factors also showing acceptable internal consistency ($\alpha = .76 – .82$). The IASMHS is derived from the ATSPPHS, which means comparison to demonstrate convergent validity is not viable, but the scale was moderately correlated with past help-seeking and help-seeking intentions in a

community sample (Mackenzie et al., 2006). The IASMHS has also shown test-retest reliability over a three-week period (r = .85). For the current sample, the full IASMHS demonstrates good internal consistency (α = .89) and the sub-scales also have adequate internal consistency; psychological openness (α = .78), help-seeking propensity (α = .76), and indifference to stigma (α = .85)

Mental health literacy. The Mental Health Literacy Scale (MHLS; M. O'Connor & Casey, 2015), is a recently created measure of mental health literacy. Compared to previous measures, such as the vignette-based interviews created by Jorm et al. (1997), the MHLS is more suitable for surveys. The measure contains 35 items to assess six attributes that make up the unidimensional mental health literacy construct. Likert-type response scales are used for all questions including the initial 15 questions using 4-point scales (*very unlikely* to *very likely*) and the following 20 questions using 5-point scales (*strongly disagree* to *strongly agree*). All of the items are summed to make up the total MHLS score, which ranges between 35 and 160, with higher scores indicating greater mental health literacy. The average score was 127.38 (*SD* = 12.63), in an Australian university student sample. The scale has shown good internal reliability (α = .87-.89), test-retest reliability over two weeks, and construct validity (M. O'Connor & Casey, 2015; M. White & Casey, 2017). To determine criterion validity, the MHLS was compared to the GHSQ, and they were moderately positively correlated (M. O'Connor & Casey, 2015). The MHLS demonstrated good internal consistency for the current sample (α = .87).

Stigma. Four measures of different types of stigma were included in the survey to examine public stigma towards help-seeking, self-stigma towards help-seeking, public stigma towards mental illness, and self-stigma towards mental illness. Firstly, the Stigma Scale for Receiving Psychological Help (SSRPH;

Komiya, Good, & Sherrod, 2000) measures an individual's perceptions of the public stigma associated with seeking help from a professional. The SSRPH includes five items rated 0 *strongly disagree* to 3 *strongly agree*, which are summed to give a total score (0-15) with higher scores indicating greater perceptions of public stigma for receiving professional help. Komiya et al. (2000) found the SSRPH has satisfactory internal consistency ($\alpha = .72$), as well as construct validity, demonstrated by a moderate negative correlation with the Attitudes Toward Seeking Professional Psychological Help Scale-Short Form (ATSPPHS-SF; Fischer & Farina, 1995). The internal consistency of this measure for this research is excellent ($\alpha = .88$).

Secondly, the Self-Stigma of Seeking Help scale (SSOSH; Vogel, Wade, & Haake, 2006) is a 10-item measure of self-stigma associated with seeking psychological help; that is, whether being labelled as a help-seeker reduces an individual's self-esteem. The measure uses a 5-point Likert scale rated 1 *strongly disagree* to 5 *strongly agree*, and the ratings are summed into a total score (10-50). Higher scores indicate greater self-stigma associated with seeking psychological help. The average score in a student sample was 27.1 (*SD* = 7.7; Vogel, Wade, et al., 2006). The SSOSH demonstrated excellent internal consistency ($\alpha = .88 – .92$) and adequate test-retest reliability ($r = .72$) over a two-month period (Tucker et al., 2013; Vogel, Wade, et al., 2006). There is also evidence for the construct validity demonstrated by strong correlations with public stigma for seeking help (Tucker et al., 2013). Additionally, the convergent validity of the SSOSH is evidenced by strong negative correlations with attitudes towards help-seeking. The SSOSH scale has also been shown to discriminate between those who did and did not seek help. The internal consistency of the SSOSH for this research is excellent ($\alpha = .86$).

Thirdly, the Beliefs about Devaluation-Discrimination scale (BDD; Link, 1987) is a 12-item measure of the public stigma associated with mental illness. That is, it measures the perception of an individual being devalued or experiencing discrimination if they experience mental illness (Link, 1987). The BDD uses a 6-point Likert scale rated 1 *strongly agree* to 6 *strongly disagree*. The total score is calculated by creating an average of the 12 item-scores and can range from 1 to 6. A higher total score indicates greater public stigma toward mental illness. Tucker et al. (2013) demonstrated that the BDD had good internal consistency (α = .86 – .89) while Link's (1987) study demonstrated adequate internal consistency (a = .76). Link (1987) also provided evidence of the convergent validity of the BDD, demonstrated by the strong positive correlation with demoralisation in people suffering mental illness. The BDD has demonstrated good internal consistency in the current sample (α = .85).

Lastly, the Self-Stigma of Mental Illness scale (SSOMI; Tucker et al., 2013) is a 10-item measure of self-stigma associated with mental illness. This measure is an adaptation of the SSOSH measure, where any references to seeking psychological help were replaced with references to having a mental illness. As such, it measures a reduction in self-esteem associated with experiencing mental illness. The measure is rated 1 *strongly disagree* to 5 *strongly agree* with the item scores summed to form a total score (10-50). Higher scores indicate greater self-stigma associated with having a mental illness. The internal consistency of the SSOMI is excellent in both a student sample and a sample of people participating in a mental health forum (α = .91, and α = .92, respectively). Convergent validity is demonstrated for the SSOMI through a moderate positive relationship with a measure of public stigma towards mental illness; the BDD (Tucker et al., 2013). The SSOSH and the SSOMI are demonstrated

to be distinct by the finding that each construct was a significant and independent predictor of attitudes towards seeking help. The SSOMI demonstrated good internal consistency for the current sample (α = .82).

Social support. The Sources of Social Support Scale (SSSS; Carver, 2013) is a 10-item measure of a number of different aspects of social support (e.g., instrumental support and negative support), which was adapted to be specific to help-seeking. The ability to customise this measure to a specific target behaviour is a key strength. For efficiency, the participants were able to indicate their primary source of support as either their spouse/partner (*n* = 114), family members (*n* = 34), other primary producers (*n* = 1), or friends (*n* = 17), and then complete the scale with their chosen referent in mind. Two participants chose two referent groups, with one participant selecting wife and friends while the other selected family and friends. Thirty-five participants did not select a referent for their primary source of support. All questions used a Likert scale rated 1 *not at all* to 5 *a lot*. The SSSS contains four factors: informational support, instrumental support, emotional support, and negative support (Kinsinger, Laurenceau, Carver, & Antoni, 2011). The emotional support factor (α = .90) and the negative support factor (a = .81) demonstrated excellent internal consistency; the remaining factors are single-item measures (Kinsinger et al., 2011). In the current study, the emotional support factor (α = .49) and the negative support factor (α = .57) demonstrated poor internal consistency.

Stoicism. The Wollongong University Stoicism Scale (WUSS; Phillips, 2005; Wood, 2013) is a 15-item measure of stoicism. The WUSS uses a 6-point Likert scale rated 1 *strongly disagree* to 6 *strongly agree* to score the items. The total score is calculated by summing the 15 item-scores and can range from 15 to 90. A higher total score indicates a greater endorsement of stoicism. Wood (2013)

demonstrated that the WUSS had good internal consistency in one university sample (α = .83), although, it was low in another university student sample (α = .65). Wood (2013) provided evidence of the convergent validity of the WUSS, demonstrated by the strong positive correlation with the Liverpool Stoicism Scale (Wagstaff & Rowledge, 1995). Cronbach's alpha for the WUSS in the current sample was high, .92.

Farming challenges. This measure was created specifically for the current research based on data from the farming life theme in Phase 1 with respect to the challenges farmers reported facing. Participants were asked whether the eight listed factors would stop them from seeking help for mental health concerns (e.g., their financial situation, or lack of privacy; see Table 10). A 6-point Likert scale rated 1 *very unlikely* to 6 *very likely* was used to score the items. The 6-point scale without a neutral option was specifically chosen to increase discriminant ability of the measure by preventing the participants from choosing a neutral answer (Chomeya, 2010). The total score was calculated by summing the item-scores and can range from 8 to 48. A higher total score indicates greater likelihood of farming challenges preventing help-seeking. The structural validity and reliability of the measure were assessed in the current sample. Both parallel analysis and the Hull method (Lorenzo-Seva, Timmerman, & Kiers, 2011) indicated a unidimensional structure was suitable. An exploratory factor analysis was conducted using Robust Unweighted Least Squares (RULS) extraction with promin rotation. The Kaiser-Meyer-Olkin (KMO = .86) test of sampling adequacy was found to be adequate, and Bartlett's test of sphericity was significant at $p < .001$. The factor loadings were all high (from .64 – .80) and communalities were acceptable (from .41 – .64; See Table 10). The measure also demonstrated excellent internal consistency (α = .89).

Table 10

Item loadings and Communalities of the Challenges Measure

Item	Factor loadings	Communality
Inadequate internet access. (1)	.64	.41
Inadequate communication systems (landline and mobile phones etc.). (2)	.69	.48
Isolation (km from town). (3)	.80	.64
Weather. (4)	.65	.42
Lack of time. (5)	.76	.57
Your financial situation. (6)	.74	.55
The nature of your relationship with your GP. (7)	.70	.49
Lack of privacy. (8)	.69	.48

Note. Numbers next to items identify their position in the original scale.

Access, availability and comfort. This measure was also purpose-built for this research, based on the findings of the services theme from Phase 1. It measures the farmers' access to services, the availability of services, as well as their comfort with both in-person and internet-based services. The participants were asked to indicate how much they agree with 10 statements (e.g., "There are enough mental health professionals (including GPs) to support me if I needed them"), using a 6-point Likert scale rated 1 *strongly disagree* to 6 *strongly agree* with an additional 'I don't know/not applicable' option.

An exploratory factor analysis was conducted using RULS extraction with normalised promax rotation. Two items that demonstrated poor communalities (.14 and .23) were removed. Once these were removed, the KMO (.79) was acceptable. Bartlett's test of sphericity was significant at $p < .001$. Simple structure observed in the pattern of item loadings (see Table 11) indicated that a three-factor structure was

Table 11

Factor Loadings and Communalities of the Access, Availability, and Comfort measure

Item	Access and comfort with e-options	Comfort with mental health professionals	Access and availability of mental health professionals	Commun-alities
I would feel comfortable accessing a mental health professional (including a GP) if I was unwell. (1)	.03	**.66**	-.01	.43
There are enough mental health professionals (including GPs) to support me if I needed them. (2)	-.03	-.05	**.89**	.75
I can access a mental health professional (including GPs) when necessary. (3)	.03	.05	**.87**	.81
I would feel comfortable seeking help for my mental health from a mental health professional. (5)	-.02	**.97**	.01	.93
There are mental health professionals (including GPs) close enough for me to access. (6)	.02	-.03	**.91**	.81
I would feel comfortable using mental health phonelines or websites. (7)	**.75**	-.02	.09	.59
Mental health professionals (including GPs) are available when I need them. (9)	.01	.04	**.89**	.82
I would be willing to access mental health phonelines or websites. (10)	**1.01**	.02	-.07	1.00

Note. Factor loadings > .3 are in boldface. Numbers next to items identify their position in the original scale. The access and comfort with e-options factor is displayed, but will not be included in the analysis.

appropriate[1]. Based on the model fit information this factor structure has excellent fit to the data, robust mean and variance-adjusted χ^2 (7) = 5.19, *p* = *ns*, RMSEA < .01, NFI = 1.00, CFI = 1.00.

The sub-scale scores were calculated by summing the appropriate item scores. Possible scale ranges are 0 – 12, 0 – 12, and 0 – 24 for access and comfort with e-options, comfort with mental health professionals, and access and availability of mental health professionals, respectively. Higher scores indicate better access and availability. The loading ranges for the sub-scales were all high, including for access and comfort with e-options (.75 – 1.01), comfort with mental health professionals (.66 – .97), and access and availability of mental health professionals (.87 – .91). While the model fit information indicates excellent goodness of fit for the three-factor structure of this measure, the access and comfort with e-options factor (item 10 in Table 11) is problematic, demonstrated by a Heywood case. A Heywood case is demonstrated when an item has a factor loading (correlation) score of one or greater than one, due to negative variance estimates. There are multiple potential

[1] The factor program (Version 2; Lorenzo-Seva, & Ferrando, 2017) was used for the farming challenges, rural attitudes to GPs, and priorities measure due to their simple and unidimensional structure. The complexity of the access, availability and comfort measure means that this program was not a suitable, and as such, a more robust option (Mplus) was used. These programs use different processes to estimate factor structure, which is why parallel analysis and the Hull method are used in all analysis except for the access, availability, and comfort measure. The access, availability, and comfort measure instead uses model fit information to determine the factor structure.

causes of Heywood cases, including a misspecified model, presence of outliers, and high or low population correlations that result in empirical underidentification (Kline, 2011). Given that the access and comfort with e-options factor contains illogical estimates, and that the measure was specifically created for this research and has not yet been validated, this factor is not used in the present analyses. With the removal of the factor containing a Heywood case, the communalities were acceptable ranging from .43 – .93. The internal consistency for the factor comfort with mental health professionals was $\alpha = .79$, and for the factor of access and availability of mental health professionals was $\alpha = .94$.

Rural attitudes towards GPs. This is a third measure purpose-built for this research, based on the findings of Phase 1, especially as reported in Chapter 5. The participants reported a range of expectations, and conceptualisations of what is considered good care in rural and remote areas, which are reflected in this measure. A pool of 20 items were written to form the Rural Attitudes Towards GPs (RAGP) scale. Participants were asked to indicate their agreement with a range of statements relating to their attitudes towards GPs (e.g., GPs in my area understand the unique characteristics of our local environment and culture). A 6-point Likert scale, rated 1 *strongly disagree* to 6 *strongly agree,* was used to score the items. An exploratory factor analysis was conducted using RULS extraction with promin rotation. The KMO was excellent (.91), and Bartlett's test of sphericity was significant at $p < .001$. Both parallel analysis and the Hull method indicated a unidimensional structure was suitable (see Table 12). Six items were removed due to low loadings ($< \pm .45$) and weak communalities (< .25). With the 14 retained items, the factors loadings were moderate to high (-.82 – .50), and the communalities ranged from .26 – .68. The total

summed score ranged from 14 – 84. The 14-item measure demonstrated excellent internal consistency ($\alpha = .91$).

Table 12

Factor Loadings and Communalities of Rural Attitudes to GPs Measure

Item	Rural attitudes to GPs	Communalities
The health of my community would be much worse without GPs. (4)	-.51	.26
The GPs in my area would be able to offer health care that is suitable to me and my way of life. (note: please consider the GPs closest to you). (5)	-.80	.64
Seeking help from a GP for a *mental* health concern is a good course of action. (6)	-.68	.47
GPs in my area are able to give me the care I need to manage my health problems. (9)	-.82	.67
GPs can provide the help I need to manage my health effectively. (11)	-.70	.50
GPs in my area care about the community. (12)	-.79	.63
People can trust GPs to provide effective *mental* health care. (13)	-.82	.68
(Reversed) GPs wouldn't be able to help people like me because they don't really understand our way of life. (14)	.50	.25
I would be comfortable discussing my health concerns with a GP who is only temporarily working in my area. (15)	-.50	.26
GPs can provide the help I need to manage my *mental* health effectively. (16)	-.70	.49
Due to the work of GPs, the health of the people in my community is better. (17)	-.72	.51
I believe GPs are generally able to form good relationships with people in my community. (18)	-.82	.67
GPs in my area understand the unique characteristics of our local environment and culture. (19)	-.81	.66
People can trust GPs to provide effective *physical* health care. (20)	-.74	.55

Note. Numbers next to items identify their position in the original scale.

Priorities. This 3-item measure was created based on the findings of the qualitative research, as reported in Chapter 4. Participants were asked to indicate their agreement with three statements relating to their priorities concerning help-seeking (e.g., How important would it be for you to seek professional help if you were distressed? Scored 1 *not a priority* to 7 *high priority*). The total score is the sum of the three items and ranges from 3 – 21, with a higher score indicating higher prioritisation of help-seeking. An exploratory factor analysis was conducted using RULS extraction with promin rotation. The KMO (.70) indicated the sampling was adequate, and Bartlett's test of sphericity was significant at $p < .001$. Both parallel analysis and the Hull method indicated a unidimensional factor structure was suitable. The factor loadings ranged from .75 – .95 with communalities ranging from .57 – .91 (See Table 13). All items were retained, and the measure demonstrated good internal consistency ($\alpha = .85$).

Table 13

Factor Loadings and Communalities of Priorities Measure

Item	Priorities	Communalities
How likely is it that you would make time to seek professional help for your mental health if you needed it? (1)	.81	.66
If things were starting to get on top of you how likely would you be to make the time to seek professional help? (2)	.95	.91
How important would it be for you to seek professional help if you were distressed? (3)	.75	.57

Note. Numbers next to items identify their position in the original scale.

Data Analysis

The analyses were conducted using Mplus (Version 8; Muthén & Muthén, 2018). Separate analyses were conducted for the two outcomes; intentions to seek

help from a GP and intentions to seek help from a mental health professional. This was done to explore potential differences in the prediction of each outcome. These differences are considered important since these health professionals may be perceived differently, due to different specialisations as well as the lack of exposure to mental health professionals (Collins et al., 2009). Initially, the relationships between the candidate predictors extracted from Phase 1 and the two intention outcomes were explored using point-biserial correlations, due to the dichotomous criterion variables, to understand the nature of the relationships as well as inform the selection of predictors to be entered into the regression analyses. To reduce the number of predictors entered into each regression, only factors that demonstrated a significant bivariate relationship ($p < .05$) with the intention measure were entered into the respective logistic regression analysis. Logistic regression analyses were conducted to examine what proportion of variance in intentions the significant correlates could explain and also to determine which of these factors uniquely predicted help-seeking intentions.

Results

Preliminary Analysis

Initially, the data were screened for missing or incorrectly entered values. The screening showed that there were no incorrect entries, but there were missing data. One of the most effective and efficient approaches to analysing data with missing values is the full information maximum likelihood estimation approach (FIML; Enders, 2001; Peyre, Leplege, & Coste, 2011). The FIML approach uses all available data to estimate the population parameters that have the greatest likelihood of accounting for the sample data (Baraldi & Enders, 2010). The FIML approach is superior to alternative options such as listwise and pairwise deletion of cases that can

result in biased parameter estimates and reduced sample sizes (Enders, 2001). Additionally, data estimation approaches are inefficient and often make implausible assumptions about the distribution of the missing data.

The data were also screened for univariate and multivariate outliers using standardised residuals (z-score conversions; ±3.29, $p < .001$) and Mahalanobis' distance ($p < .001$). There were 13 univariate outliers found across the dataset. Of the 26 variables included in this research, four variables, self-stigma of mental illness, negative support subscale of the SSSS, comfort with mental health professionals, and average weekly work hours had one outlier each. There were two outliers for each of the measures of mental health literacy, informational support subscale of the SSSS, and travel time to their GP. The instrumental support subscale of the SSSS had three univariate outliers. With respect to multivariate outliers, there was one for each intentions measure representing one participant, suggesting that this individual was an unusual case. To address the outliers the analyses were conducted with outliers included and removed, however, the impact on the results was negligible, and there was no substantive difference in interpretation, thus, the outliers were retained for the analysis. The tolerances were examined for all of the variables included in each of the two analyses to check for multicollinearity. These were all above the required threshold (.2; .34 – .88), which suggests multicollinearity is not a problem for this data set (Menard, 2010). A fundamental assumption of logistic regression is linearity in the logit. This was tested using the Box-Tidwell test, and the assumption was violated (Box & Tidwell, 1962). As such, caution is needed when interpreting the findings because there may be non-linear relationships between the intentions measures and the predictors that are not captured by the analyses. There is also an assumption of independent error terms, which is upheld for

the current data because they do not bridge time or spatial units (Menard, 2010). Due to the presence of outliers and the violation of the linearity in the logit assumption, maximum likelihood estimation with robust standard errors (Huber-White) was used.

Correlation Analyses

The means, standard deviations, and point-biserial correlations are presented in Table 14. Based on being significant bivariate correlates, 14 and 15 candidate predictors were included in the intentions to see a mental health professional and intentions to see a GP logistic regression analyses, respectively. As is evident from Table 14, intentions to see a mental health professional was moderately and positively related to attitudes towards help-seeking, mental health literacy, comfort with mental health professionals, and priorities. There were also small positive correlations between intentions to see a mental health professional and emotional support. Conversely, intentions to see a mental health professional was moderately inversely correlated with self-stigma of help-seeking, stoicism, and farming challenges. Distress, public stigma of help-seeking, self-stigma of mental illness, and work hours also demonstrated small negative relationships with intentions to see a mental health professional.

There was a different pattern of relationships for intentions to seek help from a GP (see Table 14), which was moderately and positively associated with attitudes towards help-seeking, comfort with mental health professionals, and priorities. There were also small positive correlations between intentions to see a GP and attitudes towards GPs.

Table 14

Correlations, Means and Standard Deviations for Help-Seeking Intentions from a Mental Health Professional and a GP

Variable	Intentions / mental health professional r_{pb}	Intentions / GP r_{pb}	*M*	*SD*
K10	-.17*	-.27***	18.34	6.74
IASMHS PO	.38***	.31***	26.79	6.68
IASMHS HP	.45***	.31***	30.92	5.55
IASMHS IS	.21**	.29***	28.35	7.60
MHLS	.22**	.13	120.91	15.93
SSRPH	-.18*	-.25***	5.34	3.92
SSOSH	-.31***	-.29***	23.30	7.85
BDD	-.01	-.05	3.64	0.80
SSOMI	-.19*	-.14	31.29	7.51
SSSS E	.16*	<-.01	2.38	0.69
SSSS N	-.03	-.11	1.35	0.66
SSSS INFO	-.11	-.16*	1.74	0.98
SSSS INST	-.09	-.19*	1.54	0.89
WUSS	-.27***	-.29***	57.96	14.31
CHALL	-.20**	-.29***	25.53	10.49
AA C	.39***	.36***	9.44	2.66
AA MH	.11	.12	16.23	6.78
RGPA	.15	.19*	59.89	11.85
PRIOR	.38***	.35***	15.21	4.06
Work Hours	-.14*	-.15*	52.61	19.63
Time to GP	-.07	-.10	53.49	106.83
Birth year	-.11	-.22**	-	-
Gender	.08	-.11	-	-

Note. k10 = Kessler Psychological Distress Scale ; IASMHS PO = Inventory of Attitudes Toward Seeking Mental Health Services Psychological Openness; IASMHS HP = Inventory of Attitudes Toward Seeking Mental Health Services Help-seeking Propensity; IASMHS IS = Inventory of Attitudes Toward Seeking Mental Health Services Indifference to Stigma; MHLS = Mental Health Literacy Scale; SSRPH = Stigma Scale for Receiving Psychological Help; SSOSH = Self-Stigma of Seeking Help scale; BDD = Beliefs about Devaluation-Discrimination scale; SSOMI = Self-stigma of Mental Illness scale; SSSS E = Sources of Social Support scale emotional support ; SSSS N = Sources of Social Support scale negative support; SSSS INFO = Sources of Social Support scale informational support; SSSS INST = Sources of Social Support scale instrumental support; WUSS = Wollongong University Stoicism Scale; CHALL = farming challenges; AA C = Access and Availability comfort with mental health professionals ; AA MH = Access and Availability access and availability of mental health professionals ; RAGP = Rural attitudes towards GPs; PRIOR = priorities.
*$p < .05$. ** $p < .01$. *** $p < .001$

Conversely, intentions to see a GP was moderately inversely correlated with distress, public stigma of help-seeking, self-stigma of help-seeking, stoicism, farming challenges, and birth year. Informational and instrumental support, as well as work hours, demonstrated small negative relationships with intentions to see a GP.

Logistic Regression Analyses

Intentions to see a mental health professional. For each logistic regression analysis, only significant bivariate correlates were entered as predictors. The logistic regression analysis (N = 203) demonstrated that the 14 predictors combined accounted for a very large amount of the variance in intentions to seek help from a mental health professional (Pseudo-R^2 = .63, SE = 0.08 p < .001). For the odds ratios (OR), coefficients, and p-values of each predictor refer to Table 15. Psychological openness and comfort with mental health services were significant positive independent predictors of farmers' intentions to seek help from a mental health professional. One-unit increases in psychological openness and comfort with mental health services were associated with 17.9% and 33.7% increases in the odds of intending to seek help from mental health professionals, respectively.

Intentions to see a GP. The logistic regression analysis (N = 203) demonstrated that the 15 predictors together accounted for a large amount of the variation in intention to seek help from a GP (Pseudo-R^2 = .39, SE = 0.08, p < .001). For the ORs, coefficients, and the p-values, see Table 16. Comfort with mental health services was the only significant positive independent predictor of farmers' intentions to seek help from a GP. A one-unit increase in comfort with mental health services was associated with 23.8% increase in the odds of intending to seek help from a GP.

Table 15

Logistic Regression Analysis for Variables Predicting Intentions to Seek Help from A Mental Health Professional [N=203]

Variable	*OR* [95% CI]	*b* [95% CI]	*SE*	β [95% CI]	*SE*
Distress (K10)	0.97 [0.89, 1.05]	-0.03 [-0.11, 0.05]	0.04	-0.07 [-0.25, 0.15]	0.09
Psychological openness (IASMHS)	1.18 [1.08, 1.29] ***	0.16 [0.07, 0.26]	0.05	0.37 [0.17, 0.56]	0.10
Help-seeking propensity (IASMHS)	1.13 [0.96, 1.33]	0.12 [-0.04, 0.29]	0.08	0.23 [-0.08, 0.53]	0.16
Indifference to stigma (IASMHS)	0.92 [0.82, 1.02]	-0.09 [-0.20, 0.02]	0.06	-0.23 [-0.49, 0.04]	0.14
Mental health literacy (MHLS)	0.99 [0.95, 1.02]	-0.02 [-0.05, 0.02]	0.02	-0.08 [-0.29, 0.12]	0.11
Public stigma of help-seeking (SSRPH)	1.07 [0.91, 1.26]	0.07 [-0.10, 0.23]	0.08	0.09 [-0.13, 0.30]	0.11
Self-stigma of help-seeking (SSOSH)	1.01 [0.93, 1.11]	0.01 [-0.08, 0.10]	0.05	0.03 [-0.20, 0.26]	0.12
Self-stigma of mental illness (SSOMI)	0.93 [0.86, 1.01]	-0.08 [-0.16, -0.01]	0.04	-0.19 [-0.39, 0.01]	0.10
Emotional support (SSSS)	1.68 [0.86, 3.30]	0.52 [-0.15, 1.19]	0.34	0.12 [-0.03, 0.27]	0.08
Stoicism (WUSS)	1.00 [0.97, 1.03]	-0.01 [-0.04, 0.03]	0.02	-0.01 [-0.17, 0.16]	0.08
Farming challenges (CHALL)	1.03 [0.98, 1.08]	0.03 [-0.03, 0.08]	0.03	0.09 [-0.08, 0.27]	0.09
Comfort with mental health services (AA)	1.34 [1.05, 1.70] *	0.29 [0.05, 0.53]	0.12	0.26 [0.05, 0.47]	0.11
Priorities (PRIOR)	1.22 [0.95, 1.56]	0.20 [-0.05, 0.44]	0.13	0.28 [-0.04, 0.59]	0.16
Work hours	0.98 [0.96, 1.00]	-0.02 [-0.04, -0.01]	0.01	-0.13 [-0.27, 0.02]	0.07

Note. k10 = Kessler Psychological Distress Scale ; IASMHS = Inventory of Attitudes Toward Seeking Mental Health Services; MHLS = Mental Health Literacy Scale; SSRPH = Stigma Scale for Receiving Psychological Help; SSOSH = Self-Stigma of Seeking Help scale; SSOMI = Self-stigma of Mental Illness scale; SSSS = Sources of Social Support scale; WUSS = Wollongong University Stoicism Scale; CHALL = Farming Challenges measure; AA = Access and Availability measure; PRIOR = priorities.

* $p < .05$. ** $p < .01$. *** $p < .001$

Table 16

Logistic Regression Analysis for Variables Predicting Intentions to Seek Help from A GP [N=203]

Variable	*OR* [95% CI]	*b* [95% CI]	*SE*	β [95% CI]	*SE*
Distress (K10)	0.96 [0.89, 1.03]	-0.05 [-0.12, 0.03]	0.04	-0.13 [-0.34, 0.08]	0.11
Psychological openness (IASMHS)	1.03 [0.96, 1.12]	0.03 [-0.05, 0.11]	0.04	0.09 [-0.13, 0.31]	0.11
Help-seeking propensity (IASMHS)	0.99 [0.89, 1.10]	-0.01 [-0.11, 0.10]	0.05	-0.02 [-0.27, 0.24]	0.13
Indifference to stigma (IASMHS)	0.95 [0.87, 1.03]	-0.05 [-0.14, 0.03]	0.04	-0.17 [-0.44, 0.10]	0.14
Public stigma of help-seeking (SSRPH)	0.94 [0.82, 1.08]	-0.06 [-0.20, 0.08]	0.07	-0.10 [-0.33, 0.13]	0.12
Self-stigma of help-seeking (SSOSH)	0.98 [0.91, 1.05]	-0.02 [-0.09, 0.05]	0.04	-0.08 [-0.32, 0.16]	0.12
Informational support (SSSS)	0.85 [0.50, 1.43]	-0.17 [-0.69, 0.36]	0.27	-0.07 [-0.29, 0.15]	0.11
Instrumental support (SSSS)	0.65 [0.38, 1.12]	-0.43 [-0.97, 0.11]	0.28	-0.16 [-0.37, 0.05]	0.11
Stoicism (WUSS)	0.99 [0.96, 1.03]	-0.01 [-0.04, 0.03]	0.02	-0.04 [-0.24, 0.16]	0.10
Farming challenges (CHALL)	0.99 [0.95, 1.04]	-0.01 [-0.05, 0.04]	0.02	-0.05 [-0.25, 0.16]	0.10
Comfort with mental health services (AA)	1.24 [1.03, 1.50] *	0.21 [-0.03, 0.40]	0.10	0.25 [-0.03, 0.48]	0.11
Attitudes towards GPs (RGPA)	1.00 [0.96, 1.04]	-0.01 [-0.04, 0.04]	0.02	-0.02 [-0.21, 0.17]	0.10
Priorities (PRIOR)	1.11 [0.93, 1.33]	0.11 [-0.07, 0.29]	0.09	0.19 [-0.13, 0.51]	0.16
Work hours	0.99 [0.97, 1.01]	-0.01 [-0.03, 0.01]	0.01	-0.07 [-0.25, 0.11]	0.09
Birth year	1.00 [0.97, 1.03]	-0.01 [-0.03, 0.03]	0.02	-0.02 [-0.20, 0.16]	0.09

Note. k10 = Kessler Psychological Distress Scale ; IASMHS; SSRPH = Stigma Scale for Receiving Psychological Help; SSOSH = Self-Stigma of Seeking Help scale; SSSS = Sources of Social Support scale; WUSS = Wollongong University Stoicism Scale; CHALL = Farming Challenges measure; AA = Access and Availability measure; RAGP = Rural attitudes towards GPs; PRIOR = Priorities measure.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Discussion

This study examined the relationship between factors identified (in Phase 1 and the literature) as potential barriers or facilitators of farmers' help-seeking and actual help-seeking intentions towards mental health professionals and GPs. The purpose of Phase 2 was to understand the nature of the relationships between the factors raised in Phase 1 and help-seeking intentions. It was found that 14 out of 24 measured factors for mental health professional and 15 out of 24 measured factors for GPs were related to help-seeking intentions, although the results suggested that the patterns of these relationships were slightly different. There were 11 factors that demonstrated bivariate relationships with the same directionality and similar magnitudes, across both intentions to seek help from a mental health professional and a GP.

With respect to intentions to seek help from a mental health professional, the combination of the factors that demonstrated a significant relationship with intentions explained a large amount (approximately 60%) of the individual differences in intentions. Psychological openness and comfort with mental health services both independently predicted the intentions of a farmer to seek help from a mental health professional. That is, they predicted these intentions even after controlling for all the other predictors entered into the model. The variables included in the logistic regression predicting intentions to seek help from a GP explained a large (approximately 40%) proportion of the individual differences, though comparatively smaller than for mental health professionals. Comfort with mental health services independently predicted the intentions of a farmer to seek help from a GP. These are further discussed below.

Intentions to Seek Help from Mental Health Professionals

The findings of this study demonstrated that many factors had a relationship with intentions to seek help from a mental health professional, which supports the majority of the hypotheses (see Table 7 and Table 17).

Table 17

Hypothesis Support for Mental Health Professionals Analyses

Hypothesis number	Factor	Hypothesised Direction	Supported	Observed Magnitude
1	Distress	N/A	Yes, inverse	Small
2	Attitudes towards help-seeking	Positive	Yes	Medium
3	Mental health literacy	Positive	Yes	Medium
4	Stigma	Negative	Somewhat	Small to medium
5	Attitudes towards GPs	Positive	No	*ns*
6	Stoicism	Negative	Yes	Medium
7	Social support	Positive	Somewhat	Small
8	Challenges	Negative	Yes	Small
9	Priorities	Positive	Yes	Medium
10	Access and Availability	Positive	Somewhat	Medium
11	Average work hours	Negative	Yes	Small
12	Time to drive to the GP	Negative	No	*ns*
13	Age (year of birth)	Positive	No	*ns*
14	Gender (female)	Positive	No	*ns*

Intentions to see a mental health professional was moderately and positively related to attitudes towards help-seeking, mental health literacy, comfort with mental health professionals, and priorities. There were also small positive correlations between intentions to see a mental health professional and emotional support. That is, farmers that intend to seek help from mental health professionals also demonstrate greater or more positive attitudes toward help-seeking, mental health literacy, comfort with mental health services, priority afforded to help-seeking, as well as

emotional support, though to a lesser extent. Conversely, the intention to see a mental health professional was moderately inversely correlated with self-stigma of help-seeking and stoicism. This means that farmers who intended to seek help from a mental health professional had lower scores on these factors, and the effect sizes were moderate. Distress, public stigma of help-seeking, self-stigma of mental illness, farming challenges, and work hours also demonstrated small negative relationships with intentions to see a mental health professional. Therefore, farmers who intended to seek help from a mental health professional had slightly lower stigma, farming challenges and fewer work hours. The large proportion of individual differences in intention that is explained by these factors suggests that they are important and warrant further examination, particularly with respect to farmers' help-seeking behaviour.

Pertaining to predicting intentions to seek help from a mental health professional, only two of the included factors were unique predictors, indicating they were able to predict intention above and beyond the shared effect among the factors included. Psychological openness and comfort with mental health services emerged as independently influential in the process of farmers forming intentions to seek help from a mental health professional. While both of these unique predictors had a small effect, comfort with mental health services was the strongest independent predictor of farmers' intentions to seek help from a mental health professional. This means that farmers who intend to seek help from a mental health professional demonstrate greater comfort with these professionals generally. This finding aligns with those of Fuller et al. (2004), who demonstrated the importance of a good relationship between individuals and service providers, in the context of help-seeking. The current research also extends Polain et al.'s (2011) qualitative findings that older farmers

want mental health services provided by practitioners they know and trust in a comfortable setting, by suggesting this is a uniquely important factor in shaping intentions for farmers of different ages. As such, further research could explore pathways to increasing farmers' comfort with mental health services.

The finding concerning psychological openness indicates that greater openness to acknowledging mental health and the importance of seeking help is also uniquely crucial in shaping farmers' likelihood of intending to seek help from a mental health professional. These findings are similar to Jackson et al. (2007), who found attitudes were generally predictive of help-seeking intentions in rural-based studies. However, the attitudinal measure subscales are aggregations that encompass components from many constructs, in this instance, reverse-scored stigma, stoicism, avoidance, and self-reliance (Hammer, Parent, & Spiker, 2018), which might obscure some important fine-grained differences that exist among these sub-components. This suggests that these factors together as psychological openness have more impact than the factors singularly. That is, stigma and stoicism also contribute to the model, but are not significant unique predictors. It is also important to note that the IASMHS measure of attitudes was the superior choice for an attitudinal measure when the survey was created, but it is recognised that there is a recently published measure with a greater focus on general attitudes toward help-seeking (Hammer et al., 2018).

There were also factors that were not linearly related to farmers' intentions to seek help from a mental health professional, contrary to the hypotheses. Public stigma of mental illness, rural attitudes to GPs, access and availability of mental health services, travel time to see a GP, age (as birth year), and gender as well as negative, informational, and instrumental support did not demonstrate linear

relationships with intentions to seek help from a mental health professional. It follows that these factors may not influence farmer intentions to seek help.

There are many reasons that these factors may not be related linearly to intentions to seek help from a mental health professional. For example, public stigma of mental illness may not be related to farmers' help-seeking intentions because unless these intentions are disclosed, other people would not be aware and in turn would not discriminate against the farmer. In line with Tucker et al. (2013), the findings suggest that public stigma of mental illness is less important to help-seeking intentions than the other forms of stigma included in this research (public and self-stigma of help-seeking and self-stigma of mental illness). With respect to attitudes towards GPs, the current referent is mental health professional, so this finding is unsurprising because it is not the correct referent. Additionally, the hypotheses regarding age and gender were not supported, and one possible explanation is that stereotypes were drawn upon by participants that reported older and male farmers are less likely to seek help. Alternatively, the relationships could be non-linear, which could be examined in future research.

Intentions to Seek Help from GPs

Several of the hypotheses with respect to intentions to seek help from a GP were also supported (see Table 7 and Table 18). Many factors were negatively associated with intentions to seek help from a GP. The factors that demonstrated moderate negative relationships with intentions to seek help from a GP included distress, self-stigma of seeking help, public stigma of seeking help, stoicism, and farming challenges. Informational and instrumental support, average weekly working hours, and birth year were weakly inversely related to intentions to seek help from a GP.

Table 18

Hypothesis Support for GPs Analyses

Hypothesis number	Factor	Hypothesised Direction	Supported	Observed Magnitude
1	Distress	N/A	Yes, inverse	Medium
2	Attitudes towards help-seeking	Positive	Yes	Medium
3	Mental health literacy	Positive	No	*ns*
4	Stigma	Negative	Somewhat	Small to medium
5	Attitudes towards GPs	Positive	Yes	Small
6	Stoicism	Negative	Yes	Medium
7	Social support	Positive	No	Small/*ns*
8	Challenges	Negative	Yes	Medium
9	Priorities	Positive	Yes	Medium
10	Access and Availability	Positive	Somewhat	Medium
11	Average work hours	Negative	Yes	Small
12	Time to drive to the GP	Negative	No	*ns*
13	Age (year of birth)	Positive	No	*ns*
14	Gender (female)	Positive	No	*ns*

This indicates that farmers who intend to seek help from a GP are likely to demonstrate slightly or moderately lower distress, self-stigma of seeking help, public stigma of seeking help, informational and instrumental support, stoicism, and average weekly working hours, as well as experience fewer farming challenges, and be of older age. On the other hand, priorities, attitudes toward seeking help, and comfort with mental health services were moderately positively correlated with intentions to seek help from a GP. Additionally, a weak but positive bivariate relationship was shown for rural attitudes toward GPs with intentions to seek help from a GP. The bivariate relationships suggest that these factors are weakly to moderately associated with intentions towards help-seeking. Indeed, these factors

together accounted for a large amount of the variance in intentions to seek help from a GP.

There was one unique predictor of farmers' intentions to seek help from a GP, comfort with mental health services, and the effect was small. This means that farmers who are more comfortable with mental health service providers are slightly more likely to intend to seek help from a GP. This finding is similar to that for intentions to seek help from a mental health professional, as reported above. The finding that comfort with mental health service providers is also important for intentions to seek help from a GP is unsurprising, given the previously reported findings of Fuller et al. (2004) and Polain et al. (2011), which highlighted that having a good, trusting, and comfortable relationship with a service provider is paramount.

The findings pertaining to intentions to seek help from a GP were mostly in line with the hypotheses with respect to their direction, except for age. A bivariate relationship where younger age was related to intending to seek help was expected. However, this was not the case in the current study because older age was weakly associated with intending to seek help from a GP. Although somewhat surprising, these findings may in part be due to increased contact with GPs generally in older age. That is, given that older farmers also report declining physical ability as they age (Polain et al., 2011), they may have increased contact with their GP. In turn, this increased contact could lead to opportunities to increase older farmers' familiarity and comfort with, and consequently intentions to seek help from GPs. This unexpected finding warrants further exploration, particularly concerning help-seeking behaviour, to understand the impact of age on help-seeking and in turn inform intervention efforts.

The findings with respect to social support were also contrary to expectations. It was expected that social support would be positively associated with help-seeking, but with respect to intending to seek help from a GP this was not the case. One potential explanation is that because intentions were targeted, it may be that individuals with less social support have greater intentions to see a GP because of their lack of informal support. This is plausible given the findings of this research, in conjunction with Jackson et al.'s (2007) and Perkins et al.'s (2013) findings, which suggest that those without social support (inferred from self-report in the current research or from separated, divorced or never married status) might be more likely to seek help. Further research is needed to clarify the role of social support in help-seeking.

The factors that were not linearly related to intentions to seek help from a GP are also noteworthy. Mental health literacy, public and self-stigma of mental illness, emotional and negative support, access and availability of mental health services, travel time to current GP, and gender did not demonstrate linear relationships with intentions to seek help from a GP, contrary to the hypotheses. These findings suggest that these factors do not associate with or impact farmers' intentions to seek help from a GP, at least not in a linear fashion. It seems that logistical factors, such as travel time to the GP as well as access and availability, may not be the prime consideration when forming intentions to seek help (from a GP, as well as a mental health professional). These logistic factors may also fit within the conceptualisation of perceived behavioural control in the TPB model, where perceived behavioural control impacts both intentions and behaviour (Ajzen, 1991). Further, McEachan et al.'s (2011) meta-analysis found that perceived behavioural control accounted for more variance in behaviour (9.24%) than intentions (4.58%). Applied to this context,

this supports the notion that farmers may give some consideration to logistical or control type factors when forming intentions, but these factors may be given greater consideration once it comes to enact the behaviour. As such, these factors do not relate to farmers' intentions to seek help from a GP but should be examined for help-seeking behaviour.

It is possible that mental health literacy is not related to intentions to see a GP with respect to farmers (in contrast with intentions to see a mental health professional) because GPs are not mental health specific practitioners. That is, knowledge of mental health and the associated services may not be necessary to access a GP. Farmers may intend to seek help from a GP for symptoms, without necessarily associating the symptoms with mental ill health. This finding counters previous research by M. O'Connor and Casey (2015) and C. L. Smith and Shochet (2011) who found mental health literacy predicted help-seeking intentions. However, these studies considered average intentions across formal and informal sources of help, and highest intentions for a formal source of help, respectively. Thus, the results of the current research suggest that mental health literacy is not important in understanding farmers' intentions to seek help from a GP.

Similarly, the lack of relationship with stigma towards mental illness suggests that intending to see a GP may not act as a cue that someone is experiencing mental illness so is safe from the threat of stigma. While Clement et al. (2015) found that there was a moderate negative association between stigma towards mental illness and help-seeking intentions, the current findings suggest that this is not the case for farmers. In the same research Clement et al. also found that the influence of stigma on help-seeking behaviour varies between populations from not impactful to highly impactful. This suggests that there may be similar variation when considering

farmers' intentions to seek help from a GP, which is unrelated to public and self-stigma toward mental illness. With this in mind, the measures used were self-report, and this can introduce biases. This could lead to participants reporting low stigma but acting in ways that are incongruent to this. Indeed, this has been found previously with research into racism and prejudice (Greenwald, Poehlman, Uhlmann, & Banaji, 2009). Given that implicit measures are more predictive than self-report measures (Greenwald et al., 2009), it would be beneficial to use implicit measures of stigma to understand farmers' help-seeking intentions as well as behaviours.

Overall, the results show that large proportions of variance in help-seeking intentions can be explained using the set of factors examined here. The relationship patterns demonstrated that different factors are associated with intentions to seek help from a mental health professional and a GP. This indicates that future research should consider sources of help separately when examining intentions or behaviour since they likely have unique determinants. The constructs that were substantively different between the two intentions measures are mental health literacy, self-stigma of mental illness, emotional support, instrumental support, informational support, rural attitudes to GPs, and age. In addition to this, there were differences in the prediction of these intentions, in both magnitude and constructs. Separate consideration is key because aggregation of the help sources may obscure important differences. Alternatively, in the context of intervention, it could lead to non-impactful outcomes.

Conclusion

This study has demonstrated the pattern of relationships for factors that relate to farmer help-seeking intentions. Given that these constructs stem from Phase 1, this suggests that there is some generalisability of the findings, with consideration to

the non-random sample. That is, Phase 2 of this research provides preliminary evidence of the factors that relate to farmer help-seeking, including the direction and strength, which can inform future research. This study adds to the emerging empirical literature on farmer help-seeking, which is necessary given the risk of poor mental health and suicide within this population (Arnautovska et al., 2014; Schirmer et al., 2015). This research has not only demonstrated which factors relate to farmers' help-seeking intentions, but has also found that when examining help-seeking, the sources should be considered by professional speciality, and not aggregated to formal sources.

Chapter 9: General Discussion

As highlighted through this thesis, the elevated presence and risk of psychological distress, poor mental health, and suicide among farmers, coupled with their poor help-seeking, demands a better understanding of the factors that prevent and promote help-seeking. There is emergent evidence with respect to rural help-seeking, but little research examining farmers specifically. Further, existing evidence has demonstrated key differences between rural residents and farmers that warrant greater specificity in such research. Thus, the aim of this research was to conduct a mixed methods investigation of the barriers to, and facilitators of, mental health help-seeking in farmers. Given the unique context of farming, and lack of research overall, the first qualitative phase of the research aimed to explore the issue through in-depth analysis of the reports of farmers, their partners, and rural GPs. The second phase then aimed to examine the factors identified in Phase 1 quantitatively, and uncover the nature and magnitude of their relationships with help-seeking intentions in a broader sample. As such, the Phase 1 findings informed the Phase 2 hypotheses (See Figure 8 for an overview of the entire research project, including findings). That is, an exploratory sequential mixed methods approach was employed in an attempt to comprehensively address the research questions posed, providing depth as well as breadth. Chapter 9 presents an overall discussion of the findings of this body of research. The knowledge gained from the previous phases is integrated to provide discussion of the likely unique factors that may prevent and promote help-seeking in farmers.

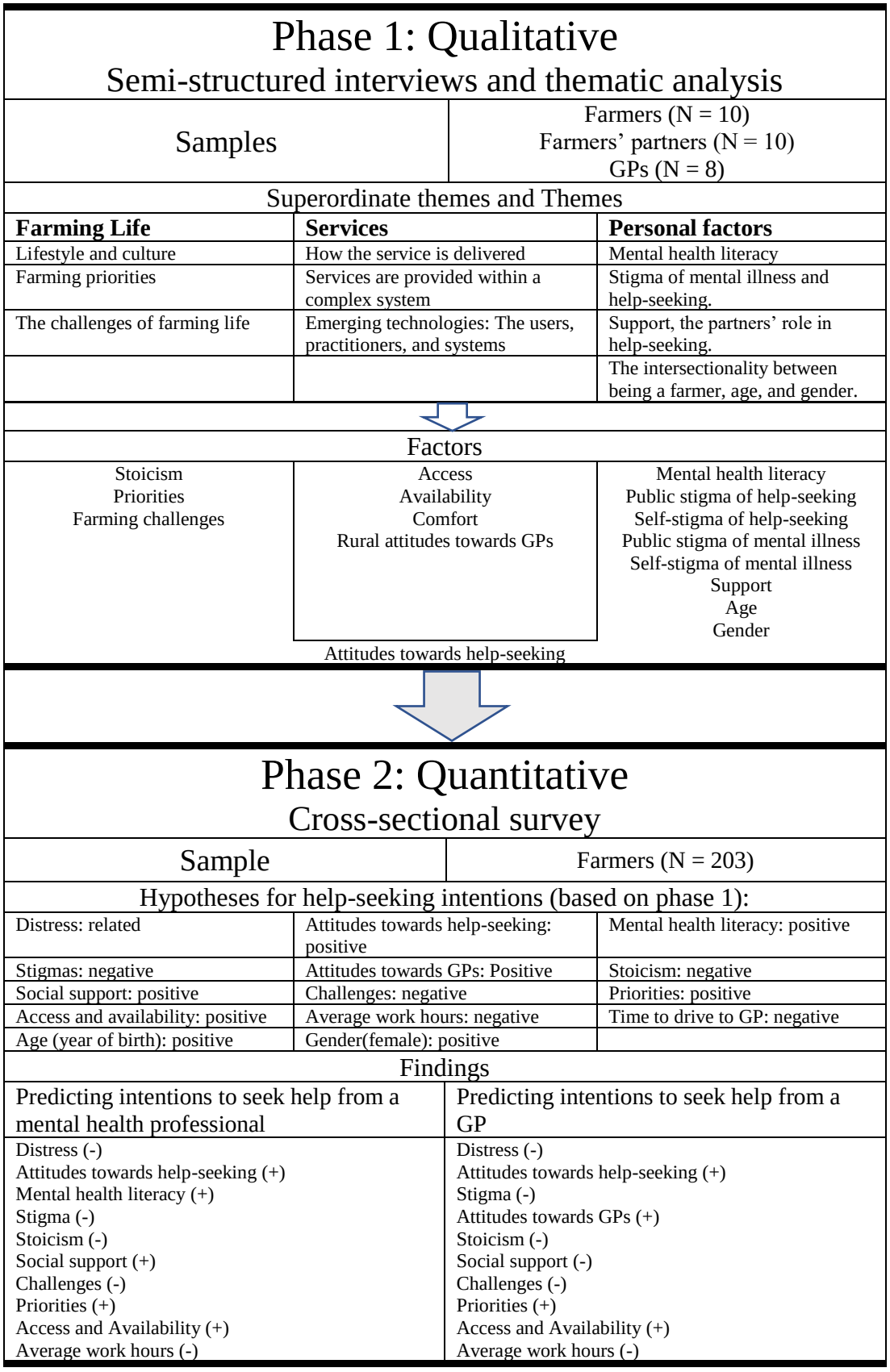

Figure 8. Summary of research with findings.

Barriers and Facilitators of Farmers Help-Seeking

A number of factors were identified in the qualitative and quantitative phases of this research that can be located as operating at different stages of the information processing model of help-seeking (See Figure 3; Vogel, Wester, et al., 2006).

Farming culture. The results of this research highlight the distinct culture and lifestyle associated with farming as an occupation and identity, which appears to play a key role in help-seeking. This culture is embedded in farmers' identities, and this explains why factors, such as stoicism, play a role in inhibiting their help-seeking. Given the influence of identity on our beliefs and values and, in turn, our choices and behaviour (Berk, 2013), stoicism has the potential to impact many stages of the help-seeking process including encoding and interpreting the issue, compiling a range of options to address the issue, and decision-making with respect to action or inaction. Likewise, considering the strength of farming culture, it is not surprising that farmers prioritise work tasks, which can further hinder help-seeking. This is evidenced by long working hours and priorities directed towards work rather than help-seeking, both of which were negatively related to help-seeking intentions. Further, in the course of their work, farmers experience many challenges, such as financial hardship. These challenges reportedly increase farmers' distress, as well as having a role in preventing them from seeking help. Farmers' priorities and challenges appear likely to impact both the options they generate for help-seeking and the action they decide to take. Throughout both phases of the current research, factors associated with farming culture and identity were identified as important barriers to timely help-seeking, influencing the interpretation of symptoms, generation of help-seeking options, and action. Given the strength of the stoic self-reliant culture, the prioritisation of work, as well as the challenges of farming life,

farmers may be unable or reluctant to recognise distress and decide to seek help. Thus, reducing the influence of some aspects of stoic norms (when no longer functional in the admittedly challenging farming environment) and increasing the prioritisation of help-seeking may minimise the discord between farming culture and help-seeking.

The way farmers interact with services. The interactions between farmers and services also emerged as an important set of factors in this research. Farmers want their service providers to be knowledgeable about them and understanding of their way of life, and practitioners who have such farming knowledge may find it easier to build positive therapeutic relationships with farmers. This may also assist with increasing both the farmers' perceptions of how helpful seeing a practitioner will be, as well as the farmers' comfort with practitioners. Currently, farmer (dis)comfort with GPs and mental health practitioners appears to act as a barrier to help-seeking. Specifically, in the quantitative phase, it was demonstrated that farmers' comfort with practitioners independently predicted intentions to seek help from a mental health professional and a GP. For each unit increase in farmer comfort with practitioners (1 *strongly disagree* to 6 *strongly agree*), there was a 33.7% increase in the odds of them intending to seek help from a mental health practitioner and a 23.8% increase in the odds of them intending to seek help from a GP. The average score for comfort with health professionals was 9.44 out of a possible 12, and using a score of 10 and above (i.e., indicating an average score of 5 *agree*, on the two comfort questions) as a guide suggests that approximately 62% of the sample are comfortable with mental health professionals, while this is the majority, it must be considered that the individuals in the sample were motivated to complete the Phase 2 survey. Further, in the qualitative evidence, farmers (and partners) provided many

indications of discomfort with GPs and mental health practitioners. Thus, farmers' (dis)comfort with GPs is a clear target for intervention in order to bring about improvements and facilitate help-seeking in the broader farmer population.

However, comfort is just one aspect relating to the accessibility and availability of services and should be understood in the context of the complicated interrelationships between the systems, services, and practitioners. At the service level, there appear to be many barriers such as poor continuity of care, long wait times for appointments, low density of practitioners (meaning time-consuming travel is often required), and privacy concerns due to the small communities. Many of the qualitative findings with respect to farmers' interactions with practitioners and services were reflective of a general factor relating to farmer attitudes towards GPs. Attitudes towards GPs seemingly act as a barrier for farmers in seeking help, but presents another clear opportunity for targeted intervention. Improving attitudes towards, and relationships with, GPs and other professionals is a key component to improving help-seeking in farming populations. A surprising finding from this research was that neither length of time taken to reach a GP or access and availability of mental health professionals were related to farmer help-seeking intentions. This may be due to the practical nature of these factors, which could be conceptualised under perceived behavioural control, which has been found to affect behaviour more than intentions (Ajzen, 1991; McEachan et al., 2011). That is, farmers may not give these factors consideration while forming help-seeking intentions.

The emergence of technology and the implications for mental health care also appear important. In this research, farmers reported a hesitance to use technology-facilitated care, which was supported through the qualitative findings as well as the

report of no e-mental health service use. Technology-based services offer great potential to overcome many of the barriers of service accessibility and availability described above and facilitate help-seeking and timely receipt of evidence-based services. Although, barriers are likely to remain with respect to service providers, farming lifestyles, and personal factors, as well as the previously discussed infrastructure issues. Unfortunately, it would seem that the discomfort and unwillingness to engage with such digital services on the part of farmers may be hindering their potential impact. Overall, the findings of this research confirmed that factors relating to the way farmers interact with services and service providers play an important part in determining whether they seek help. The factors described above appear most likely to impact the 'generation of options' stage of Vogel, Wester, et al.'s (2006) information processing model for help-seeking. Given the lack of trust in and comfort with GPs and health professionals, as well as practical barriers relating to accessibility and availability of such services and unwillingness to try technology-based solutions, seeking help via these mechanisms is unlikely to be actioned by farmers.

Individual level factors. There were also barriers and facilitators identified at the individual level. Farmers' mental health literacy was variable, but in general, despite population-level interventions already in place, this was still identified as lacking. This was noted, particularly with respect to understanding of mental health problems or illness, self-recognition of poor mental health as well as knowledge of treatment, in Phase 1. That is, farmers may be aware of mental illness and that it is a problem but do not understand it, or the process of treatment. They are also not adept at recognising symptoms of distress or mental illness that they may have, which in turn inhibits the realisation that help is necessary. Overall, farmers' mental health

literacy appears to still act as a barrier to help-seeking, and thus, represents a target for intervention. This appears especially important given that problems with mental health literacy can affect help-seeking at every stage of the information processing model of help-seeking (Vogel, Wester, et al., 2006). For example, farmers' help-seeking options may be limited without adequate knowledge of mental health services and treatment options.

Another relevant attitude identified was stigma, although there were marked differences between individuals (and across groups in the qualitative research). For example, it was reported that some farmers might not be impacted by stigma, while it may have a strong effect on other farmers. Additionally, the qualitative research highlighted that multiple types of stigma were present including self-stigma and public stigma. Further, stigmatisation was possible in response to both having a mental illness and for seeking help. The quantitative phase similarly demonstrated that the strength of the relationship between each type of stigma and help-seeking differed. Specifically, the results of this phase determined that the bivariate relationships between self-stigma and help-seeking were stronger than that of public stigma. Furthermore, stigma of help-seeking was more important than stigma of mental illness. To clarify, the self and perceived discrimination that stems from seeking help were the most impactful types of stigma on farmer help-seeking intentions, based on the bivariate relationships with intentions (especially considering this was across both intentions to see a GP and mental health practitioner). With respect to stigma of mental illness, there was very little influence, where only self-discrimination was weakly associated with farmers' intentions to seek help from a mental health professional. Although, considering the *OR*s, it suggests that the impact was similar in magnitude to that stemming from stigma

towards help-seeking. Thus, the results of this research show that, at least in farming populations, stigma still acts as a barrier to help-seeking for mental health difficulties. Applying Vogel, Wester, et al.'s (2006) model of help-seeking, it would seem that stigma could potentially impact several stages, most likely when generating the options for help, and when making decisions about which actions to follow.

In addition to mental health literacy and stigma, psychological openness also emerged as a unique predictor of help-seeking, at least from mental health professionals, in Phase 2 of this research. Specifically, for each unit increase in psychological openness, there was an approximately 18% increase in the odds of a farmer intending to seek help from a mental health professional. Targeting psychological openness may enhance attitudes towards and acceptability of seeking help from mental health professionals. Psychological openness may impact multiple stages of help-seeking decision making. That is, poorer psychological openness may mean symptoms are not encoded and interpreted as mental health issues, and appropriate courses of action (e.g., seeking help from a mental health professional) are not identified nor actioned, thus disrupting several stages of decision making (Vogel, Wester, et al., 2006).

Finally, farmers identified the important role of support in relation to help-seeking. Interestingly, the complex nature of support and how it might facilitate or hinder help-seeking under different conditions became evident, especially throughout the qualitative phase of research. The findings of this research suggest that support can act as a facilitator in the right circumstances (e.g., when delivered tactfully by the farmers' partner), but individuals' experiences of such support are likely to vary. This is because both the farmer and the partner have a role in whether

support is successful at facilitating help-seeking. For example, successful support required the partner demonstrate tact while the farmer has to be open to, accept, and engage with the support. Further complicating our understanding of the role of support, an absence of support, particularly informational and instrumental support, was also related to increased help-seeking. Seemingly, the farmers who do not have a person providing them with information about help-seeking or assisting with the practical components of seeking help are more likely to intend to seek help. This may be due to an increased sense of personal responsibility on the part of the farmer, though it is unclear if this would translate into real differences in help-seeking behaviour. Thus, it is clear that support is important, however, the way in which it affects help-seeking intention or behaviour is far from straightforward. This complex relationship needs to be further unpacked in future research. What is clear, however, is that the amount and type of support provided to farmers may very well influence the way in which symptoms are encoded and interpreted, as well as the way in which help-seeing avenues are identified and actions implemented.

Overall, the themes and factors identified in this research provide an understanding of farmer help-seeking in the context of barriers and facilitators. However, these themes and factors do not exist in a vacuum and, thus, are complementary and likely inter-related, as evidenced by the many bivariate relationships with intentions that did not demonstrate unique partial effects in the regression analyses. That is, the evidence from this research supports that these factors must be considered holistically, not as isolated constructs. Further, consideration must be given to the individual, their family unit, and community due to the additional influence these stakeholders can have on farmer help-seeking. For example, the strong cultural identity of farming encourages stoicism, which may

interfere with mental health literacy by masking symptoms of poor mental health (Fuller et al., 2000; Judd, Jackson, Fraser, et al., 2006; Wagstaff & Rowledge, 1995). Additionally, stoicism can also perpetuate stigma (Collins et al., 2009; Elliott-Schmidt & Strong, 1997; Hossain et al., 2008). Taken together this means that not only are farmers upholding the cultural expectation to be self-reliant and minimise displays of emotionality, but they may also experience discrimination or loss of self-worth if they express the need or intent to seek help. That is, the stoic norms encourage farmers to solve problems without assistance and because this is part of their identity, going against the norm may be associated with stigma, particularly self-stigma. Further, this stoicism, in conjunction with mental health literacy, may impact how farmers present to health services, and without acknowledgement or recognition of their problem, they are unlikely to obtain effective assistance from their service provider. This is just one example of how the factors may interact and compound to prevent or promote farmer help-seeking.

Implications

The overall findings of this research highlight that a multi-faceted approach is needed to address the barriers and promote the facilitators of farmer help-seeking. The approach should also be multi-faceted with respect to the target, including the individual, the family, and community, as well as services and the health system.

Targeting the individual. As discussed above, there are many individual-level factors that appear to impact farmer help-seeking and that seem amenable to intervention. One strategy for intervention may involve campaigns via mediums such as radio advertisements, informal presentations at farming related events, and specific workshops to increase convenience for the farmers. Importantly, the findings of the qualitative phase of research provided unique insights into how such

interventions should be presented. Specifically, there was a clear preference for interventions that focus on practical solutions ("like you're fixing up a bulldozer" Greg, Farmer), rather than focusing on the emotional content. Farmers as a group and culture respond to step-by-step practical solutions, irrespective of the target issue, and interventions that try and enhance emotional understanding will likely have limited success.

The variability found in farmers' mental health literacy suggests that, despite recent improvements, there is a need for more mental health education and skills-training. The results of this research support the very recent findings of Handley, Lewin, Perkins, and Kelly (2018) who demonstrated that self-recognition of mental health problems in rural residents (experiencing at least moderate distress) continues to be a crucial issue. Recognition and interpretation of the cues of distress as described in the information processing model (Vogel, Wester, et al., 2006) are crucial to seeking help, and the noted problems with mental health literacy warrant attention here. Further, a systematic review of randomised controlled trials has demonstrated that targeting mental health literacy has the added benefit of improving attitudes towards help-seeking (Gulliver et al., 2012). Given that the farmers' attitudes are also influential in help-seeking, promoting mental health literacy is likely to have positive effects.

Similarly, framing education about the importance of mental health with respect to maximising work productivity may be a useful strategy to help prioritise mental health and elevate the prioritisation of help-seeking. Farmers often prioritise work over health, but understanding the flow on impacts of poor health on their productivity could create a change in perspective and attitude. In the same vein, enhancing understanding that early intervention usually requires shorter treatment

time may be powerful in bringing about change, given that farmers generally prioritise farming in light of the associated time burden (de Diego-Adelino et al., 2010; Ogrodniczuk & Oliffe, 2010). While the time pressures are likely to endure, addressing priorities in a way that is sensitive to the farming context, norms, and values may assist with reducing the burden of help-seeking for farmers.

The findings from the current research demonstrated that farmers' relationships with their GP or mental health practitioner matter and thus, are a key target for intervention. Interventions that demonstrate the potential benefits of help-seeking and facilitate the development of stronger relationships with GPs and mental health care providers are likely to be effective (in conjunction with practitioner focused interventions, as discussed below). Further, including information about the role of GPs in the specific context of rural areas may also be beneficial to reiterate the confidential nature of GP and mental health practitioner services. Along with improvements in attitudes towards GP and mental health practitioners, education of this nature may also assist with improving farmers' comfort with these service providers. While the above educational tactics may assist with improving farmer help-seeking, it is likely intervention is also needed within the community as well as at the services and systems levels.

Targeting the community. In addition to targeting farmers individually, the results of this research suggest it would also be prudent to target farming communities, including farming families. This may be achieved through community events and workshops, as well as more targeted strategies. For example, following the innovative approach of Kennedy and colleagues to target farmers, 'community champions' could be used as a figurehead for mental health leadership (Kennedy, Brumby, Versace, & Brumby-Rendell, 2018; Kennedy, Versace, & Brumby, 2016).

That is, community champion farmers could be empowered and supported through community-based initiatives, in collaboration with health services, to encourage other farmers to learn about their mental health and options for seeking help if it becomes necessary. The content and nature of this approach can be guided by the results of the current program of research. Such strategies also create an avenue to provide support and commendation for individuals that do seek help. The inclusion of health professionals as a collaboration with community champions may also help to address farmers' comfort with relevant professionals. This collaboration of community champions and health professionals could be used to address several of the identified barriers related to farmer help-seeking.

For example, stoicism was demonstrated as a barrier to help-seeking, although the participants reported that cultural change might be occurring slowly, particularly in response to the drought across Queensland and New South Wales. Thus, work to increase the momentum of this change may be beneficial. Action to counter aspects of the cultural norms of stoicism (that discourage help-seeking) may also help to address the issues with stigma. This is because stigma, particularly self-stigma, has been linked to stoicism in farmers, resulting in less favourable attitudes towards help-seeking (Hogan, Scarr, Lockie, Chant, & Alston, 2012). This is particularly important to target, given that self-stigma had stronger relationships with help-seeking intentions than public stigma. However, it may still be beneficial to address the public stigma that farmers face. Evidence from a review of systematic reviews suggests that social contact with those who are mentally ill or have sought help is likely to be effective (Thornicroft et al., 2016), meaning that with this exposure, farmers may then experience less stigma and in turn increased help-seeking.

Support also played a role in farmer help-seeking, with farmers explaining the importance of support delivered in the right way, by the right person. Given the findings, it is important to include farming communities, particularly the farmers' families, in campaigns to increase mental health literacy and create positive attitudinal change, as well as teach them the skills to communicate about mental health with tact. Similarly, the role of rural financial counsellors, who are trusted and well used in the farming community, could be extended to include training in psychological self-care such as stress-management as a distress prevention-mechanism and to make mental health referrals, as their service is provided at no cost to the community (Fuller & Broadbent, 2006). This would provide communities and key farming stakeholders with the knowledge and skills to be able to address mental health issues in others, tactfully. However, considering that health is generally considered a woman's responsibility in rural areas (Alston, 2012; Ide, 1986; Kent & Alston, 2008), it is important not to perpetuate this norm. As such, it may be beneficial to teach partners how to provide support but also accept that the farmers' help-seeking is not their responsibility because it is only the farmer that can make the final decision to seek and accept help. Involving the community and fostering support for individuals seeking help may lead to both farmers getting assistance towards help-seeking, as well as supporting new norms. In addition to community- and individual-level interventions, the findings of this research also indicate justification for services and systems-level interventions.

Targeting the services and systems. Based on the findings of this research, there are several implications for the role of mental health services and systems. The findings demonstrate that several factors related to the way the service is delivered, including the necessity of GPs (and mental health professionals) to develop an

understanding of farming culture, trusting and ongoing relationships with patients, and stigma-free screening integrated into routine care are all important and could form the focus of interventions to improve farmer help-seeking. In line with this, one novel avenue to address these issues might be to integrate such skills (e.g., understanding rural cultures, building rapport with farmers, and opportunistic screening for at-risk populations) into the training of rural GPs and mental health professionals, including those working on temporary placements. In Australia, there is an agricultural health and medicine course that could be used to this end (Brumby et al., 2017), which could be made compulsory and integrated into the training of rural GPs and mental health professionals. Additionally, GPs specifically, could receive training in delivering mental health care to increase their self-efficacy (a known issue; Sturk et al., 2007) and in turn increase their ability to provide psychosocial care. This could enhance rural competence or bush knowledge, comfort with GPs, as well as increasing the possibility of mental health issues being detected and treated, whether by a GP or mental health professional. GPs and mental health professionals could also use this knowledge to tailor how they deliver their services to better align with farmers preferences. This, in turn, could contribute to an improvement in farmers' comfort with the services, which the current data show is vital.

Issues such as the availability and accessibility of services might also need to be addressed, although this is not a new concept in rural health. Ideally, this would be addressed by equitably increasing the number of GPs and mental health professionals servicing rural and remote areas, but considering the large locum workforce and high turnover of health staff, implementation may prove exceptionally difficult. High turnover of health staff due to poor retention and locum

placements, means farmers may not be able to see the same doctor over time, to the detriment of the professional relationship. Based on the findings of this research, it seems likely that specific system-level planning to reduce the reliance on a locum workforce would increase the chances of farmers engaging in mental health care. Alternatively, if a locum workforce is unavoidable, then planning for stability by having the same practitioners provide services over time may help to improve farmers experiences and perceptions, and in turn, their help-seeking. Encouragingly, there have been efforts to attract more doctors to rural and remote areas through the expansion of state-based rural generalist medicine programs, with a national program announced in February 2018 (Hayes, 2018). Given that one of the advanced skills within this program is mental health, the forthcoming national rural generalist program may help to address availability and accessibility issues with respect to help-seeking.

Another avenue to improve accessibility could be to reduce the time burden of help-seeking. This could be achieved by means such as more conveniently located services, or GP farm visits. However, implementation of either of these options would require substantial financial investment. Another option that may help to address some accessibility issues is technology-mediated care. Technology-mediated care has the potential to address many practical barriers to farmer help-seeking across the individual, community, services, and systems levels. However, these mediums are not covered by Medicare for GP mental health services (Australian Government Department of Health, 2013); although in response to drought, it was announced in August 2018 that this would change (Coltzau, Simson, Diamond, & Stewart, 2018). Additionally, GPs are wary of recommending the available e-mental health services because they are not familiar with the content or quality of each.

Aside from practical constraints, such as poor internet connectivity, the results of this research uncovered that farmers also hold reservations towards technology-based care. This means that farmers' and GPs' concerns regarding e-mental health services would need to be addressed before implementation. This could be achieved by widening the reach of the eMHprac program (emhprac.org.au) to teach GPs about e-mental health services to address their concerns. Followed by training agricultural and health service professionals (e.g., rural financial counsellors) to provide farmers with exposure to brief or less intense e-mental health programs to increase familiarity, because prior use greatly increases the likelihood of intending to use these programs in the future (March et al., 2018).

If GPs could use technology to provide care, then this could address the associated financial and time burdens by allowing farmers to see a GP while on their farm, which could make it easier to prioritise help-seeking. Additionally, reducing the cost associated with help-seeking may be particularly helpful for farmers, given their low discretionary income (ABS, 2012). Technology-facilitated GP appointments could potentially also ameliorate privacy and public stigma-related issues because there is minimal visibility of help-seeking while at the farm. Further, farmers' privacy could be preserved if telehealth consultations could be booked without the input or knowledge of those outside of the practitioner and the patient. These changes would mean the farmers do not have to park their car in visible places or engage with receptionists whom they may know. Despite the many problems technology-facilitated care could address there are issues that remain. These include the current lack of Medicare funding for technology-based GP consultations, poor communications infrastructure (although improvements are occurring; McKillop, 2017; Shealy et al., 2015), as well as farmers' attitudes toward technology-based

care. Given the announced changes for technology-mediated GP-provided mental health care, and works to improve internet connectivity, new intervention may be best directed towards improving farmers' knowledge and attitudes concerning technology-mediated care.

It is clear that intervention is necessary to improve farmer help-seeking, with many suggestions made based on the findings of this research. Importantly, to improve help-seeking, change is needed not only with farmers but also within families and communities and at the level of service providers and healthcare systems. This research provides a guide to the specific factors that could be targeted with respect to each of these domains. Although the findings of this research provide some direction, they must be considered within the context of the strengths and limitations of the research.

Strengths and Limitations

The use of mixed methods is a key strength of this research. The exploratory sequential mixed methods approach allowed a comprehensive understanding of barriers and facilitators, as well as quantification of the influence of these in a broader sample. That is, the mixed methods approach allowed farmer help-seeking first to be explored in depth through the perspectives of the farmer, partners, and GPs, and second, the effects that emerged were quantified to ascertain the magnitude of their possible influence. This is particularly beneficial because mixed methods can help to ameliorate some of the weaknesses that qualitative and quantitative research methods are individually vulnerable to, by providing understanding as well as impact in an integrated manner (Creswell, 2014; Creswell & Plano Clark, 2011). Considering this research was specific to farmers, it allowed an understanding of an under-researched area in a high-risk participant group. This research also provided

the farmers, as well as stakeholders, a voice to articulate what hinders and helps farmers to seek help.

Another key strength of the current research is that it captured the perspectives of three distinct informant groups during Phase 1. Triangulating these perspectives allowed for additional insight into farmer help-seeking, while not being disadvantaged by misinformation associated with relationship dynamics. In this research, there was novel information provided by the GP and farmers' partners groups that may not have been gathered from farmers alone. For example, the difficulty in building rapport was discussed in depth by the GPs, as was their professional reluctance to recommend digital technologies. Thus, barriers not only exist within all participant groups, but nuanced information can be obtained from these diverse groups in combination, as well as individually. Further, the inclusion of farmers' partners and GPs in this research also acknowledges that they are important stakeholders in farmers' help-seeking.

The recruitment of 203 farmers is another strength of this research. This is especially the case given the constraints of the research project as a discrete study of the barriers and facilitators of farmer help-seeking. That is, this research is not part of a larger program, and recruitment was completed by the candidate with only limited resources. As a group, farmers are difficult to access and reluctant to participate in health research, which is unsurprising given that the findings of Phase 1 highlighted that farmers generally do not prioritise their health. Thus, this sample of 203 farmers is beneficial to the exploration of the understudied area of farmer help-seeking.

The findings must also be considered in the context of the limitations of this research. There were limitations that stem from participant sampling, particularly for

Phase 2. The generalisability is limited because the sample was not relatively large, or random given the opt-in nature of the recruitment. Notwithstanding, the sample size met the requirements of the power analysis suggesting adequate power. Additionally, while the sample was not random, multiple and varying techniques were used to recruit participants from a variety of sources. This may have introduced self-selection bias where those who self-selected were generally more open about and willing to discuss mental health. As such, it is acknowledged that a larger random sample is ideal, but considering the hard to target nature of farmers the current research has provided an evidence base that has utility to support preliminary conclusions and interventions.

The demographic profile of the participants, for both Phase 1 and Phase 2, also introduced limitations. In Phase 1, this is due to the gender and age of the participant samples. The partners sample was entirely female, and the majority (62%) of the GPs were as well. This was unsurprising given that other research with farmers has also seen higher participation by women, even though the majority of farmers are male. Further, as previously discussed, in rural culture health is considered as women's responsibility, which may explain why more of the GPs were female. Concerning age, the partners' average age was much younger than that of the farmers. This could mean that the groups perceive the barriers and facilitators differently. However, the nature of the interview script, where participants were asked questions about farmers as a collective group, may have reduced the impact of the age and gender of the participants on the responses, given that the responses showed a degree of consistency. With respect to the demographic profile of Phase 2 participants, the farmers were well educated compared to the Australian average. That is, approximately 42 per cent of the Phase 2 sample had completed an

undergraduate or postgraduate degree, while the Australian average, as of May 2018, was lower with approximately 31 per cent having a bachelor degree or above (ABS, 2018). This suggests that the Phase 2 sample may be more likely to seek help than a farmer with a lower level of education, as research has demonstrated that those who are less educated are less likely to seek help (Addis & Mahalik, 2003; Yousaf et al., 2013). As asserted above, a random sample that is representative is preferable (particularly for Phase 2), but this research still provides new insight into farmer help-seeking.

The reliance of this research on self-report measures must be considered because it can introduce multiple issues. There is the potential for socially desirable response tendencies to bias responses, particularly given the sensitive nature of mental health. Nevertheless, self-report has been used in similar research on help-seeking (Brew et al., 2016; Hull et al., 2017), and remains an important approach in understanding an issue such as help-seeking. Another issue that may arise is that the farmers may not have insight into their own behaviours, especially the underlying cognitive processes. For example, farmers may report that they do not endorse stigma but may act in ways that are congruent with stigma. This is to be expected because not all people are equally perceptive or articulate (Creswell, 2014). While this is an issue, it is beyond the scope of the current study to use more objective measures, such as implicit association tasks or behavioural observations. Although this research uses self-reported data, it provides a valuable understanding of the barriers and facilitators of farmer help-seeking as perceived by the target population and informed by multiple perspectives.

The newly created measures utilised in Phase 2, whilst fulfilling a gap in the current literature, may also create limitations for this research. While preliminary

investigations with respect to internal consistency and internal structural validity were undertaken, the four newly created measures have not been independently validated. However, these measures were created based on the rich qualitative findings of Phase 1 and were chosen because there were no existing instruments available. Importantly, the Phase 1 findings are reflected in the instruments created, including the terminology employed. To create the measures for this research well-established techniques and processes for measure creation were followed (e.g., Clough, Ireland, & March, 2017; Fiene, Ireland, & Brownlow, 2018). For example, after the measures were drafted, content area experts provided feedback. These experts included psychometricians and also clinical psychologists. Based on the feedback, the measures were revised with questions added, removed, and reworded. Thus, these newly created instruments were designed using strong methodology. Also, as part of the quantitative analyses, these newly-created measures were subjected to correlation analyses with intentions to seek help from a GP and intentions to seek help from a mental health professional. Many of the factors related to at least one of the intentions measures, with the majority associated with both. Thus, this suggests these measures have some (concurrent) criterion-related validity and utility, though warrant further examination and validation before firm conclusions can be drawn.

A final limitation is that the focus on distress means this research neglects other aspects of the stress or mental health experiences of farmers. For example, it was reported in Phase 1 that the financial stressors that many farmers endure are burdensome and have many implications for their businesses. Thus, while this research focuses on and recommends help-seeking specifically for mental ill health, seeking assistance to address stressors directly (e.g., rural financial counselling) is

likely another beneficial course of action for farmers. This was not a focus of the current research, but given that this research demonstrated farmers work and help-seeking are intertwined, the difference between seeking assistance for other issues and mental health help-seeking for the associated stress warrants exploration.

Contributions

Although this research does have limitations, it has made significant strides in understanding the complex issue of barriers and facilitators to help-seeking among farmers. It has addressed an important issue in a hard to reach group and created an understanding that can be used to inform future research. As such, it has made an original contribution to knowledge by addressing gaps in the research literature with respect to factors that act as barriers and facilitators of farmer help-seeking. In addition to this, the current research has also drawn attention to avenues for targeted support and intervention at the individual, community and broader service level.

The current research has also made methodological contributions including the specific approach used, where farmers, partners, and GPs were included in exploratory mixed methods research. The research outcomes demonstrate the utility of exploratory mixed methods research, particularly in the context of farmers and health. That is, this approach can be used to explore health-related issues that farmers face to provide a rich understanding. The inclusion of the multiple samples is a key component of the depth of understanding gained, due to the different perspectives (including professional) it allowed to be elicited. This understanding was then able to be incorporated into the survey to ensure that relevant (and specific) potential predictors could be examined for relationships with the target intentions. Thus, this research highlights the benefits of using an exploratory mixed methods

approach, with farmer, partner, and GP samples, to understand health-related issues in farmers.

Another beneficial contribution from this research is the four newly-created measures. These measures were created to address the lack of measurement tools for farming challenges, (rurally-conceptualised) attitudes towards GPs, access and availability of mental health services, and prioritisation of help-seeking. Given the reported importance of these constructs in the findings of this research, the development of appropriate assessment instruments was vital, and potentially an important contribution of this work. While validation of these measures is still needed, preliminary criterion validity has been established. As such, the contribution of these four measures means the underlying constructs can be quantified, once validation has occurred.

Opportunities for Future Research

The current research also creates a number of other potentially fruitful avenues to be explored. Firstly, informal help-seeking could be explored, using similar methods to the current research, to understand what prevents and promotes farmers to seek informal help. Additionally, confirming the findings of the current studies in a sample of farmers experiencing distress is another such avenue. Given that Schirmer et al. (2013) found that, in the context of farmers, the construct of distress may need careful conceptualisation (low distress even with high hopelessness and suicidal ideation), this suggests that a very large sample of general farmers (no stipulation of distress) is needed, with behavioural examinations using those participants who report over a threshold of distress. This future research could use a prospective study to examine farmers' help-seeking behaviour to determine if

these factors, as well as other relevant factors, have a causal impact on whether farmers seek help.

Future intervention research should also aim to address the barriers farmers face with respect to help-seeking. Additionally, such research could also examine the efficacy of strategies to foster the facilitators of help-seeking. One way to do this is to develop and evaluate interventions to ameliorate the barriers and strengthen the facilitators reported here in an attempt to improve farmers' help-seeking. Input from the community and consideration of the farming and health-service context will be critical for the success of such research.

In addition to help-seeking specific research, there are adjacent research areas that this research has implications for. The current research highlighted that mental health literacy varies greatly in farmers, with some aspects such as understanding of mental illness, self-recognition of poor mental health as well as knowledge of treatment, lacking more than others. As such, research is needed to better understand farmers' mental health literacy, particularly in conjunction with help-seeking. Additionally, there is also a clear need for future research to examine ways to improve attitudes toward, and acceptance of, e-mental health services among farmers. Many of the noted barriers to farmer help-seeking could be overcome if farmers would engage with such approaches.

Conclusion

Farmers seldom engage in help-seeking, despite poor mental health, elevated rates of suicide, and the known benefits of seeking help (Arnautovska et al., 2014; Brew et al., 2016). The current program of research aimed to better understand these issues and, to date, is the first to specifically explore the barriers and facilitators of mental health help-seeking among Australian farmers. As such, it provided much-

needed insight into the factors that can prevent and promote farmer help-seeking intentions, and indirectly, behaviours. That is, within the superordinate theme of farming life, the lifestyle and culture of farming, farming priorities and farming challenges were reported to affect farmer help-seeking negatively. The services superordinate theme highlighted that health providers, services and systems influence farmer help-seeking. The personal factors superordinate theme was comprised of mental health literacy, stigma, support, and demographics (age and gender) themes, which were also found to influence farmer help-seeking. Phase 2 of the research emphasised the complex nature of these barriers and facilitators, by way of the shared variance of multiple factors affecting farmer help-seeking intentions. That is, distress, attitudes towards help-seeking, mental health literacy, stigma, support, stoicism, farming challenges, comfort with mental health services, priorities, and work hours affected farmer intentions to seek help from a mental health professional, while psychological openness and comfort with mental health professionals were key independent predictors. With respect to farmer intentions to seek help from a GP, the shared variance between distress, attitudes towards help-seeking, stigma, support, farming challenges, stoicism, comfort with mental health services, attitudes towards GPs, priorities, work hours, and age were predictive, and of these, comfort with mental health professionals was independently predictive. Ultimately, there is still further research needed, but this thesis provides a significant original contribution to knowledge with respect to the barriers and facilitators of farmer help-seeking.

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Appendix A

Ethics approval Phase 1

OFFICE OF RESEARCH
Human Research Ethics Committee
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UNIVERSITY OF SOUTHERN QUEENSLAND AUSTRALIA

28 January 2016
Miss Caitlin Vayro
Institute for Resilient Regions
Springfield QLD 4300

Dear Caitlin
The USQ Human Research Ethics Committee has recently reviewed your responses to the conditions placed upon the ethical approval for the project outlined below. Your proposal is now deemed to meet the requirements of the *National Statement on Ethical Conduct in Human Research (2007)* and full ethical approval has been granted.

Approval No.	**H16REA004**
Project Title	Barriers and facilitators of mental health help-seeking for farmers in regional communities
Approval date	28 January 2016
Expiry date	28 January 2019
HREC Decision	**Approved**

The standard conditions of this approval are:

(a) conduct the project strictly in accordance with the proposal submitted and granted ethics approval, including any amendments made to the proposal required by the HREC
(b) advise (email: ethics@usq.edu.au) immediately of any complaints or other issues in relation to the project which may warrant review of the ethical approval of the project
(c) make submission for approval of amendments to the approved project before implementing such changes
(d) provide a 'progress report' for every year of approval
(e) provide a 'final report' when the project is complete
(f) advise in writing if the project has been discontinued, using a 'final report'

For (c) to (f) forms are available on the USQ ethics website:
http://www.usq.edu.au/research/support-development/research-services/researchintegrity-ethics/human/forms

Please note that failure to comply with the conditions of approval and the *National Statement (2007)* may result in withdrawal of approval for the project.
Annmaree Jackson
Ethics Coordinator

Appendix B

Information package Phase 1- Farmer example

University of Southern Queensland

Participant Information for USQ Research Project Interview

Project Details

Title of Project:	Barriers and facilitators of mental health help-seeking for farmers in regional communities
Human Research Ethics Approval Number:	H16REA004

Research Team Contact Details

Principal Investigator Details
Miss Caitlin Vayro
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Supervisor Details
Dr Sonja March
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Telephone: (07) 3470 4434
Mobile:

Description

This project is being undertaken as part of a PhD (Doctor of Philosophy) Project.

The purpose of this project is to create an understanding of mental health help-seeking in farmers. The importance of farmers to Australia, both as food providers locally, and economically through export is recognised. Farmers' mental health and wellbeing is important individually, but also because these factors can influence productivity, as when one is mentally healthy they may be more focused and productive.

This research will include discussion around topics such as mental health literacy, knowledge regarding services, stigma, gender, regionality/rurality and cultural/occupational factors. Your opinion about possible (short animated video) intervention topics and receptiveness to intervention mediums will also be included in the interview. Mental health literacy is knowledge about mental health and related skills to recognize, manage and prevent disorders and acting accordingly when necessary. The main questions to be asked will be included with this information package for you to read.

The research team requests your assistance because as a farmer you can provide valuable insight and understanding of what factors help and prevent farmers from seeking help regarding mental health.

This research will be carried out in accordance with the National Statement on Ethical Conduct in Human Research

Participation

We welcome your participation if you are:

- A current farmer

- over the age of 18
- living/working in Queensland
- where farming is your occupation and primary source of income

This research aims to recruit 10 farmers, including yourself. To gather a variety of views 10 Partner's of farmers and 10 GPs will also be recruited for interviews. Overall, 30 people will be interviewed.

Your participation will involve participating in an interview that will take approximately 1 hour of your time. You are able to take rest breaks as needed. For the purpose of this interview, we would like if you could reflect on your experiences within the farming community broadly, not necessarily individually.

For convenience the interview will take place either:
At a time and venue that is convenient to you.
OR
Undertaken by telephone/ teleconference at a date and time that is convenient to you.
For privacy, we recommend the interview be undertaken in a private area, without other people present.

A list of the main questions will be included with this information, an example of a question that will be asked is

"In your opinion, what would happen if a farmer sought help for mental health issues?"

The interview will be audio recorded.

Although it would be helpful if you answered all the questions, you do not have to answer any question(s) that you do not wish to.

Once the recording has been transcribed you will be sent a copy and given one week so that you may make any changes you feel necessary. If you don't feel the need to edit your transcript, then no further action is needed and your data will be used as transcribed, unless you withdraw your data. Once all interviews have taken place and all transcripts returned (if applicable) all the data will be analysed for themes. The information gathered regarding intervention (short animated video) will be used to inform the creation of a short animated video.

Your participation in this project is entirely voluntary. If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. You may also request that any data collected about you be destroyed. If you do wish to withdraw from this project or withdraw data collected about you, please contact the Research Team (contact details at the top of this form). If publication has occurred, the published data will not be able to be withdrawn, although the data may be withdrawn from all future use; you will be informed if there has been publications prior to you requesting withdrawal of data.

Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with the University of Southern Queensland or any entity that may advertise on our behalf.

Expected Benefits

It is expected that this project will not directly benefit you. However, it will benefit farmers in general by increasing the understanding of factors that prevent and increase mental health help-seeking. This is beneficial to farming communities broadly as it can provide a basis for techniques to create change which may benefit farmers by reducing factors that prevent mental health help-seeking and increasing factors that encourage mental health help-seeking.

Risks

There are minimal risks associated with your participation in this project, which are unlikely. These include

Feelings of distress- These feelings may occur due to the topics that are likely to be covered in the interview, such as weather, government regulation and disposable income in regards to mental health help-seeking. However, to minimise the possibility of distress you will not be asked about the state of your own mental health and you are able to skip any question, or withdraw from participation at any time without penalty.

Privacy of other people- At times you may be asked or feel it is appropriate to share explanation of a topic by providing an example, which may involve other people. As these other people have not consented to participation having their identifiable details may breach their privacy. To avoid this privacy breach we (the researchers) ask that all examples not include names or details that may identify another person.

Time imposition- The researchers recognise that 1 hour may create an imposition of time. The length of the interview may be reconsidered or negotiated with you. Further, the interviewer will manage the time so that the agreed time is adhered to. During the interview you may ask how many planned questions remain (there may be unplanned questions to gain better understanding). You may also terminate the interview at any time for any reason, without penalty. As a token of our appreciation, you will also be given a $20 prepaid visa.

In the event that this study causes harm to you, please report this to the supervisor (details above). If the harm is a consequence of the study then appropriate care or treatment will be made available at no cost to you.

Sometimes thinking about the sorts of issues raised in the interview can create some uncomfortable or distressing feelings. If you need to talk to someone about this immediately please contact
USQ's Psychology clinic Toowoomba Clinic: +61 7 4631 1763
Springfield Clinic: +61 7 3470 4005
(24/7) Country Callback line on 1800 54 33 54
(24/7) Lifeline on 13 11 14.
(24/7) Beyondblue on 1300 22 4636
You may also wish to consider consulting your General Practitioner (GP) for additional support.

Privacy and Confidentiality

Due to the recorded nature of the data, the data will be stored identifiably; however, all data will be treated confidentially unless required by law. Only the research team will have access to the identifiable data (including recordings and transcripts). Transcription will be completed by the primary investigator.

The data gathered will be used to inform further research as part of a PhD thesis as well as being submitted for publication, which may include summaries of the entire data set and quotes. No identifying information will be included in any publication or report stemming from this project. You will be asked to provide a pseudonym which will be used for any reporting/publication from this data. Further, in reporting the data your gender and which group you belong to will be reported. Non-identified data may be shared for verification of the findings or other academic uses.

It is not possible to participate without being recorded.

Any data collected as a part of this project will be stored securely as per University of Southern Queensland's Research Data Management policy. The interview recording will be stored as per USQ policy which states it must be stored securely for a minimum of 5 years. Electronic data will be stored on password protected university computers/servers while hard copy files will be stored in a locked cabinet at the University of Southern Queensland.

Consent to Participate

We would like to ask you to sign a written consent form (enclosed) to confirm your agreement to participate in this project. Please return your signed consent form to a member of the Research Team prior to participating in your interview.

Alternatively, if signing a consent form is not possible but you wish to participate then you may provide verbal consent once the information sheet is read to you, which would be recorded for evidence of consent.

Questions or Further Information about the Project

Please refer to the Research Team Contact Details at the top of the form to have any questions answered or to request further information about this project.

If you wish to receive a summary of the research results once the study has been completed, you will be provided the option to supply contact details which these results will be forwarded to. You may request a summary at any time by emailing the research team and providing contact details These details will be kept separate to the recording and transcript at all times.

Concerns or Complaints Regarding the Conduct of the Project

If you have any concerns or complaints about the ethical conduct of the project you may contact the University of Southern Queensland Ethics Coordinator on (07) 4631 2690 or email ethics@usq.edu.au. The Ethics Coordinator is not connected with the research project and can facilitate a resolution to your concern in an unbiased manner.
This project has Human Research Ethics Committee approval H16REA004

Thank you for taking the time to help with this research project. Please keep this sheet for your information.

Appendix C

Interview questions- Farmer example

Due to the semi-structured nature of the interview an interview schedule was created, but there was flexibility to ask questions in a different order to align to the flow of the interview set by the participants.

Interview questions.

How long have you been a farmer ?

How often do you go into town?

Can you tell me about farming life?

What does it mean to be a farmer?

Can you now think about what some of the challenges that farmers face may be?

How do farmers know when stress is getting on top of them?

Can you tell me about the level of knowledge regarding mental health in farmers?

What sort of things should farmers seek help with/for?

What sort of things should farmers seek help with about in regards to emotions, stress and thoughts?

What does a farmer do if stress, thoughts or emotions become overwhelming?

What should a farmer do if stress, thoughts or emotions becomes overwhelming?

Is there a point at which farmers would seek help regarding stress, thoughts or emotions?

Where would a farmer go to seek mental health help?

What would stop them from seeking help?

In your opinion, what would happen if a farmer sought help for mental health issues?

How would others view a farmer that sought help relating to mental health?

What would help a farmer to seek help regarding mental health?

What would make it easier for farmers to seek help for mental health?

Would it help if they know where to go?

Would it help if other farmers showed support for help-seeking behaviour

Would it help if the public had a more realistic view of farmers as a group?

What is the most important thing in your opinion that would make help-seeking easier?

What would prevent a farmer from seeking help regarding mental health?

What would make it harder for farmers to seek help when they are stressed, or things get too much?

If we were trying to overcome some of these barriers, what would be the best way to do this specifically for farmers?

What would be the best way to reduce stigma?

What would be the best way to increase knowledge?

We have discussed [topics discussed], is there any other things that you think would influence whether a farmer sought help or not?

Appendix D

Ethics approval Phase 2

OFFICE OF RESEARCH
Human Research Ethics Committee
PHONE +61 7 4687 5703| FAX +61 7 4631 5555
EMAIL human.ethics@usq.edu.au

20 April 2017
Miss Caitlin Vayro
Institute for Resilient Regions
Springfield QLD 4300

Dear Caitlin
The USQ Human Research Ethics Committee has recently reviewed your responses to the conditions placed upon the ethical approval for the project outlined below. Your proposal is now deemed to meet the requirements of the *National Statement on Ethical Conduct in Human Research (2007)* and full ethical approval has been granted.

Approval No.	**H17REA088**
Project Title	Factors that influence mental health help-seeking in Queensland farmers
Approval date	20 April 2017
Expiry date	20 April 2020
HREC Decision	**Approved**

The standard conditions of this approval are:

(a) Conduct the project strictly in accordance with the proposal submitted and granted ethics approval, including any amendments made to the proposal required by the HREC
(b) Advise (email: human.ethics@usq.edu.au) immediately of any complaints or other issues in relation to the project which may warrant review of the ethical approval of the project
(c) Make submission for approval of amendments to the approved project before implementing such changes
(d) Provide a 'progress report' for every year of approval
(e) Provide a 'final report' when the project is complete
(f) Advise in writing if the project has been discontinued, using a 'final report'

For (c) to (f) forms are available on the USQ ethics website:
http://www.usq.edu.au/research/support-development/research-services/researchintegrity-ethics/human/forms

Samantha Davis
Ethics Officer

Appendix E

Industry bodies contacted

Agforce

Australian Chicken Growers

Australian Prawn Farmers Association

Australian Women in Agriculture

AusPork Limited

AusVeg

Bundaberg Fruit and Vegetable Growers

Canegrowers

Cattle Council of Australia

Central Highlands Regional Resources Use Planning Cooperative

CFI Land care

Cotton Australia

Cotton Growers Association

Country Women's' Association New South Wales

Country Women's' Association Queensland

Farmers for Climate Action

Goat industry Council of Australia

Graingrowers Limited

GrowAg

Growcom

Mustering Wellness

National Farmers Federation

New South Wales Farmers Association

New South Wales Irrigators

Pastoralists Association of West Darling

Queensland Agriculture Workforce Network

Queensland Farmers Federation

Queensland Regional, Rural and Remote Women's' Network

Ricegrowers Association of Australia

Sheepmeat Council of Australia

Summerfruit Australia

Victorian Farmers Federation

Western Australia Farmers

Appendix F

Information package Phase 2

University of Southern Queensland

Participant Information for USQ Research Project Questionnaire

Project Details

Title of Project:	Factors influencing mental health help-seeking for Australian primary producers
Human Research Ethics Approval Number:	H17REA088

Research Team Contact Details

Principal Investigator Details

Miss Caitlin Vayro
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Supervisor Details

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Associate Supervisor Details

Assoc. Professor Charlotte Brownlow
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Dr Michael Ireland
Email: Michael.Ireland@usq.edu.au
Telephone: (07) 4631 4497

Description

This project is being undertaken as part of PhD (Doctor of Philosophy) Project.

The purpose of this project is to investigate the factors that might influence mental health help-seeking in primary producers. The importance of primary producers to Australia, both as food providers locally, and economically through export is recognised. Primary producers' mental health and wellbeing is important individually, but also because these factors can influence productivity, as when one is mentally healthy they may be more focused and productive.

This research follows on from a previous interview based study that asked primary producers what they think influences the help-seeking of all primary producers generally. We now seek the opinion of a larger group of primary producers in explaining how these factors influence whether or not help is sought when experiencing difficulties. Factors to be examined include stigma, stoicism, beliefs regarding services, mental health literacy, distress, and factors to do with 'life on the farm/property'. Mental health literacy is knowledge about mental health and related skills to recognise, manage and prevent disorders and acting accordingly when necessary

The research team requests your assistance because as a primary producer you can provide valuable insight regarding the influence of factors to help and prevent primary producers from seeking help regarding mental health.

This research will be carried out in accordance with the National Statement on Ethical Conduct in Human Research

Participation

We welcome your participation if you are:

- A current primary producer
- over the age of 18
- living/working in Australia
- where primary production is your occupation (No hobby farmers, please)

Your participation will involve completion of an anonymous questionnaire that will take approximately 30 minutes of your time. You will be asked a range of questions regarding your thoughts, beliefs, and experiences. Each set of questions will have their own more specific instructions for clarity.

This questionnaire may be completed on location at farming or production events, or through this link (http://tinyurl.com/producer-wellbeing) at a time suitable for you.

Questions will include:
"I would feel worse about myself if I could not solve my own problems" rated strongly disagree to strongly agree
Or
"People can trust a GP to provide effective mental health care" rated strongly disagree to strongly agree

Your participation in this project is entirely voluntary. If you do not wish to take part, you are not obliged to. If you decide to take part and change your mind during the completion of the questionnaire you may exit the window and your results will not be recorded. In the case of a paper-based questionnaire you may return it and indicate you wish it to be destroyed at the time, or you may take it to destroy yourself. Due to the questionnaire being anonymous you are not able to withdraw your data once it has been submitted.

Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with the University of Southern Queensland or any entity that may advertise on our behalf.

When participating in this research you will be given the (voluntary) option to consent to the research team keeping your details for multiple purposes such as to receive a summary of results or for notification of future research in this area.

As a token of our appreciation, you will also be given the option to participate in a prize draw, where 10 participants will win a $100 prepaid visa. This will be drawn once the required number of people complete the survey, estimated to be October 2017. The random draw will take place at USQ Springfield by the primary investigator and supervisor.

Expected Benefits

It is expected that this project will not directly benefit you. However, it will increase knowledge regarding mental health help-seeking which may be used to help increase help-seeking behaviour which may benefit the community by allowing the management, and possible reduction of the incidence, of distress in primary producers.

Risks

Although unlikely, there is a possibility of discomfort due to the questions in the survey such as feelings of distress. These feelings may occur due to the nature of the questions, such as those regarding stigma, weather, and disposable income in regard to mental health help-seeking. However, you may skip any questions that you find distressing, or withdraw from participation at any time (before submission) without penalty.

Sometimes thinking about the sorts of issues raised in the questionnaire can create some uncomfortable or distressing feelings.
If you need to talk to someone about this immediately, please contact

USQ's Psychology clinic Toowoomba Clinic: +61 7 4631 1763
Springfield Clinic: +61 7 3470 4005
(24/7) Country Callback line on 1800 54 33 54
(24/7) Lifeline on 13 11 14.
(24/7) Beyondblue on 1300 22 4636

You may also wish to consider consulting your General Practitioner (GP) for additional support.

Privacy and Confidentiality

All comments and responses will be treated confidentially unless required by law.

The names of individual persons are not required in any of the responses.
You will be given the option to leave your name and contact details on a separate form for any of the following 3 purposes: 1) if you wish to receive a summary of the findings of this research. 2) to opt into the prize draw. 3) To elect to hear about other related research, which may include recruitment for further studies, although participation is voluntary. If you elect to allow contact for future research, this would be from a member of the current research team and for future research on the topic of mental health help-seeking in farmers. Your name and contact details will be stored separately to any survey data. If you participate via the internet your details will be provided in a file separate to your anonymous survey. If you complete a paper-based survey your details will be on a separate piece of paper that is stored separately (and securely) from your anonymous survey.
If you do not allow the research team to contact you for future research then your information will be securely destroyed once the summary/incentive has been distributed (whichever you elect).

Any data collected as a part of this project will be stored securely as per University of Southern Queensland's Research Data Management policy. Electronic data will be stored on password protected university computers/servers while hard copy files will be stored in a locked cabinet at the University of Southern Queensland.

As research involves activities such as synthesis, and verification of results the anonymous data may be shared for academic purposes. Your anonymous data may also be used in future research. Your data may also be used in publications such as academic papers and conferences, as well as traditional and social media.

Consent to Participate

The return of the completed paper-based questionnaire is accepted as an indication of your consent to participate in this project.

Clicking on the 'Submit' button at the conclusion of the internet-based questionnaire is accepted as an indication of your consent to participate in this project.

Questions or Further Information about the Project

Please refer to the Research Team Contact Details at the top of the form to have any questions answered or to request further information about this project.

If you wish to receive a summary of the research results once the study has been completed, you will be provided the option to supply contact details which these results will be forwarded to. You may request a summary at any time by emailing the research team and providing contact details These details will be kept separate to the survey at all times.

Concerns or Complaints Regarding the Conduct of the Project

If you have any concerns or complaints about the ethical conduct of the project you may contact the University of Southern Queensland Ethics Coordinator on (07) 4631 2690 or email ethics@usq.edu.au. The Ethics Coordinator is not connected with the research project and can facilitate a resolution to your concern in an unbiased manner.

Thank you for taking the time to help with this research project. Please keep this sheet for your information.

Appendix G

Survey

Demographics

We'd like to ask you a few questions about yourself to help us understand you.

What year were you born? _____

Gender ☐Male ☐Female

Ethnicity

☐Caucasian
☐Indigenous Australian
☐Asian
☐Middle Eastern
☐European
☐Other (please specify) _____

Education

☐Primary school
☐Some high school
☐Completed grade 10
☐Completed grade 12
☐Tafe/trade
☐Undergraduate degree
☐Postgraduate degree

Relationship status

☐Single
☐Dating
☐Married/De facto
☐Divorced
☐Widowed

How many hours do you work per week? _____

Household income

☐$1-$10,000
☐$10,001-$20,000
☐$20,001-$30,000
☐$30,001-$40,000
☐$40,001-$50,000
☐$50,001-$60,000
☐$60,001-$70,000
☐$70,001-$80,000
☐$80,001-$90,000
☐$90,001-$100,000
☐$100,000+

Postcode _____

How often do you go into town?

☐Daily
☐Weekdays
☐2-3 times a week
☐Once a week
☐Once a fortnight
☐Once a month
☐Less frequently than once a month

What region do you work/reside in?

☐Far North Queensland
☐ North Queensland
☐ Mackay, Isaac, Whitsundays
☐ Central Queensland
☐ Central West Queensland
☐ Wide Bay Burnett
☐ Darling Downs and South West
☐ South East Queensland
☐ I do not work/reside in Queensland

Does the farm you work on belong to you

☐Yes ☐No
☐In partnership with others

How many generations of your family have worked in primary production?

☐1 ☐4
☐2 ☐5
☐3 ☐6+

What type of primary production are you involved in?

☐Grazing ☐Vegetables
☐Broad-acre ☐Dairy
☐Wool ☐Stud
☐Fruit ☐Other (please specify)

How long would it take you to drive to the **closest** GP (in minutes) _____

How long would it take you to drive to **your** GP (in minutes) _____

Do you have any chronic health conditions?

☐No ☐Yes (please list)

_____

Section 1.

The following questions ask about how you have been feeling during the past 30 days. For each question, please circle the number that best describes how often you had this feeling.

During that month how often did you feel…

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
Tired out for no good reason?	1	2	3	4	5
Nervous?	1	2	3	4	5
So nervous that nothing could calm you down?	1	2	3	4	5
hopeless?	1	2	3	4	5
restless or fidgety?	1	2	3	4	5
so restless that you could not sit still?	1	2	3	4	5
depressed?	1	2	3	4	5
so depressed that nothing could cheer you up?	1	2	3	4	5
that everything was an effort?	1	2	3	4	5
worthless?	1	2	3	4	5

The last question asked about feelings that might have occurred during the past 30 days. Taking them altogether, did these feelings occur more often in the past 30 days than is usual for you, about the same as usual, or less often than usual? (If you never have any of these feelings, circle response option “4.”)

More often than usual			About the same	Less often than usual		
A lot	Some	A little		A little	Some	A lot
1	2	3	4	5	6	7

The next few questions are about how these feelings may have affected you in the past 30 days. You need not answer these questions if you answered "None of the time" to all of the ten questions about your feelings.

During the past 30 days, how many days out of 30 were you totally unable to work or carry out your normal activities because of these feelings?
_____ (Number of days)

Not counting the days you reported in response to Q3, how many days in the past 30 were you able to do only half or less of what you would normally have been able to do, because of these feelings?
_____ (Number of days)

During the past 30 days, how many times did you see a doctor or other health professional about these feelings?
_____ (Number of times)

During the past 30 days, how often have physical health problems been the main cause of these feelings?

All of the time	Most of the time	Some of the time	A little of the time	None of the time
1	2	3	4	5

Section 2.

If you were having a personal or emotional problem, how likely is it that you would seek help from the following people?

Please indicate your response by circling the number that best describes your intention to seek help from each help source that is listed.

	Extremely unlikely		Unlikely		Likely		Extremely likely
Intimate partner (e.g., girlfriend, boyfriend, husband, wife, de' facto)	1	2	3	4	5	6	7
Friend (not related to you)	1	2	3	4	5	6	7
Parent	1	2	3	4	5	6	7
Other relative/family member	1	2	3	4	5	6	7
Mental health professional (e.g., psychologist, social worker, counsellor)	1	2	3	4	5	6	7
Phone helpline (e.g., Lifeline, Country callback line)	1	2	3	4	5	6	7
Doctor/GP	1	2	3	4	5	6	7
Nurse or health professional	1	2	3	4	5	6	7
Minister or religious leader (e.g. priest, Rabbi, Chaplain)	1	2	3	4	5	6	7
Information website	1	2	3	4	5	6	7
Online counselling	1	2	3	4	5	6	7
Internet program with therapist assistance	1	2	3	4	5	6	7
Internet program without therapist assistance	1	2	3	4	5	6	7
I would not seek help from anyone	1	2	3	4	5	6	7
I would seek help from another not listed above Please list in the space provided, if none leave blank	1	2	3	4	5	6	7

Section 3.

In this set of questions ‘professional’ means anyone who has been trained in mental health and wellbeing (e.g., psychologists, psychiatrists, social workers, and family physicians [GPs]). The term ‘psychological problems’ as used in these questions refers to difficulty with stress (including stress management), personal or relationship difficulties, emotional problems, social difficulties, worries, and anxiety etc.

Please indicate how much you agree with each statement

	Disagree	Somewhat disagree	Undecided	Somewhat agree	Agree
There are certain problems which should not be discussed outside of one’s immediate family.	1	2	3	4	5
I would have a very good idea of what to do and who to talk to if I decided to seek professional help for psychological problems.	1	2	3	4	5
I would not want my significant other (spouse, partner, etc.) to know if I were suffering from psychological problems	1	2	3	4	5
Keeping one’s mind on a job is a good solution for avoiding personal worries and concerns	1	2	3	4	5
If a good friend asked my advice about a psychological problem, I might recommend that they see a professional	1	2	3	4	5
Having been mentally ill carries with it a burden of shame	1	2	3	4	5
It is probably best not to know everything about oneself	1	2	3	4	5
If I were experiencing a serious psychological problem at this point in my life, I would be confident that I could find relief in psychotherapy	1	2	3	4	5
People should work out their own problems; getting professional help should be a last resort	1	2	3	4	5
If I were to experience psychological problems, I could get professional help if I wanted to	1	2	3	4	5

Important people in my life would think less of me if they were to find out that I was experiencing psychological problems	1	2	3	4	5
Psychological problems, like many things, tend to work out by themselves.	1	2	3	4	5
It would be relatively easy for me to find the time to see a professional for psychological problems	1	2	3	4	5
There are experiences in my life I would not discuss with anyone	1	2	3	4	5
I would want to get professional help if I were worried or upset for a long period of time	1	2	3	4	5
I would be uncomfortable seeking professional help for psychological problems because people in my social or business circles might find out about it	1	2	3	4	5
Having been diagnosed with a mental disorder is a blot on a person's life.	1	2	3	4	5
There is something admirable in the attitude of people who are willing to cope with their conflicts and fears without resorting to professional help.	1	2	3	4	5
If I believed I were having a mental breakdown, my first inclination would be to get professional attention.	1	2	3	4	5
I would feel uneasy going to a professional because of what some people would think.	1	2	3	4	5
People with strong characters can get over psychological problems by themselves and would have little need for professional help	1	2	3	4	5
I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family.	1	2	3	4	5
Had I received treatment for psychological problems, I would not feel that it ought to be "covered up."	1	2	3	4	5
I would be embarrassed if my neighbour saw me going into the office of a professional who deals with psychological problems.	1	2	3	4	5

Section 4.

Please rate the degree to which each item described how you might react if you faced (psychological) problems for which you were considering seeking help.

	Strongly disagree		Agree and disagree equally		Strongly agree
I would feel inadequate if I went to a therapist for psychological help.	1	2	3	4	5
My self-confidence would NOT be threatened if I sought professional help.	1	2	3	4	5
Seeking psychological help would make me feel less intelligent.	1	2	3	4	5
My self-esteem would increase if I talked to a therapist.	1	2	3	4	5
My view of myself would not change just because I made the choice to see a therapist	1	2	3	4	5
It would make me feel inferior to ask a therapist for help.	1	2	3	4	5
I would feel okay about myself if I made the choice to seek professional help.	1	2	3	4	5
If I went to a therapist, I would be less satisfied with myself.	1	2	3	4	5
My self-confidence would remain the same if I sought help for a problem I could not solve.	1	2	3	4	5
I would feel worse about myself if I could not solve my own problems.	1	2	3	4	5

Section 5.

Please rate the degree to which you agree with each item

	Strongly disagree			Strongly agree
Seeing a psychologist for emotional or interpersonal problems carries social stigma	0	1	2	3
It is a sign of personal weakness or inadequacy to see a psychologist for emotional or interpersonal problems	0	1	2	3
People will see a person in a less favourable way if they come to know they he/she has seen a psychologist	0	1	2	3
It is advisable for a person to hide from people that he/she has seen a psychologist	0	1	2	3
People tend to like less those who are receiving professional psychological help	0	1	2	3

Section 6.

Below are a number of statements that people use to describe themselves. Please indicate the extent that you think each statement applies to you by circling the appropriate number next to each statement.
Rate how much you agree or disagree with the statement in relation to yourself.

	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
My personal pride tends to prevent me from asking others for help.	1	2	3	4	5	6
I almost never complain when I am unwell.	1	2	3	4	5	6
I tend to tolerate hardship without complaint	1	2	3	4	5	6
I work hard to prevent people from seeing my vulnerable side.	1	2	3	4	5	6
I think it is important to remain strong and silent in the face of hardship even if you are hurting inside.	1	2	3	4	5	6
I believe if I can’t sort out my own problems then no one can	1	2	3	4	5	6

I consider myself to be a foundation of strength for others.	1	2	3	4	5	6
If people ask me how I am going, I tend to say things are “good’ even when things are going badly.	1	2	3	4	5	6
I tend to constantly exert strong control over my emotions.	1	2	3	4	5	6
I tend to keep battling with a problem on my own even if my health is being negatively affected.	1	2	3	4	5	6
I am the kind of person who wears a smile even when things are not going my way.	1	2	3	4	5	6
I prefer to be seen as not being overly affected by good or bad events.	1	2	3	4	5	6
When I am in emotional pain, I prefer to deal with it on my own	1	2	3	4	5	6
When the going gets tough I just grin and bear it.	1	2	3	4	5	6
I feel ashamed when letting others know how I feel.	1	2	3	4	5	6

Section 7.

Next is a list of people who you might seek help or advice from if you were experiencing a personal
or emotional problem.
Tick any of these who you have gone to for advice or help in the past **2 weeks** for a personal or emotional problem and show how often on the scale as well as briefly describe the type of problem you went to them about.

	Yes	How often help was sought	Briefly describe the type of problem you sought help for
Intimate partner (e.g., girlfriend, boyfriend, husband, wife, de' facto)	☐		
Friend (not related to you)	☐		
Parent	☐		
Other relative/family member	☐		
Mental health professional (e.g., psychologist, social worker, counsellor)	☐		
Phone helpline (e.g., Lifeline, Country Callback Line)	☐		
Doctor/GP	☐		
Nurse or health professional	☐		
Minister or religious leader (e.g., Priest, Rabbi, Chaplain)	☐		
Information website	☐		
Online counselling	☐		
Internet program with therapist assistance	☐		
Internet program without therapist assistance	☐		

Someone else not listed (please specify) _____	☐
I have not sought help from anyone for my problem	☐
I have not had a problem where I needed to seek help	☐

Section 8.

The purpose of these questions is to gain an understanding of your knowledge of various aspects to do with mental health. When responding, we are interested in your **degree** of knowledge. Therefore when choosing your response, consider that:

Very unlikely = I am certain that it is NOT likely

Unlikely = I think it is unlikely but am not certain

Likely = I think it is likely but am not certain

Very Likely = I am certain that it IS very likely

If someone became extremely nervous or anxious in one or more situations with other people (e.g., a party) or performance situations (e.g., presenting at a meeting) in which they were afraid of being evaluated by others and that they would act in a way that was humiliating or feel embarrassed, then to what extent do you think it is likely they have **Social Phobia**

☐Very unlikely ☐Unlikely ☐Likely ☐Very Likely

If someone experienced excessive worry about a number of events or activities where this level of concern was not warranted, had difficulty controlling this worry and had physical symptoms such as having tense muscles and feeling fatigued then to what extent do you think it is likely they have **Generalised Anxiety Disorder**

☐Very unlikely ☐Unlikely ☐Likely ☐Very Likely

If someone experienced a low mood for two or more weeks, had a loss of pleasure or interest in their normal activities and experienced changes in their appetite and sleep then to what extent do you think it is likely they have **Major Depressive Disorder**

☐Very unlikely ☐Unlikely ☐Likely ☐Very Likely

To what extent do you think it is likely that **Personality Disorders** are a category of mental illness

☐Very unlikely ☐Unlikely ☐Likely ☐Very Likely

To what extent do you think it is likely that **Dysthymia** is a disorder

☐Very unlikely ☐Unlikely ☐Likely ☐Very Likely

To what extent do you think it is likely that the diagnosis of **Agoraphobia** includes anxiety about situations where escape may be difficult or embarrassing

☐Very unlikely ☐Unlikely ☐Likely ☐Very Likely

To what extent do you think it is likely that the diagnosis of **Bipolar Disorder** includes experiencing periods of elevated (i.e., high) and periods of depressed (i.e., low) mood

☐Very unlikely ☐Unlikely ☐Likely ☐Very Likely

To what extent do you think it is likely that the diagnosis of **Drug Dependence** includes physical and psychological tolerance of the drug (i.e., require more of the drug to get the same effect)

☐Very unlikely ☐Unlikely ☐Likely ☐Very Likely

To what extent do you think it is likely that in general in Australia, **women are MORE likely to experience a mental illness of any kind compared to men**

☐Very unlikely ☐Unlikely ☐Likely ☐Very Likely

To what extent do you think it is likely that in general, in Australia, **men are MORE likely to experience an anxiety disorder compared to women**

☐Very unlikely ☐Unlikely ☐Likely ☐Very Likely

In regards to your answers for the next set of questions, please consider

Very Unhelpful = I am certain that it is NOT helpful

Unhelpful = I think it is unhelpful but am not certain

Helpful = I think it is helpful but am not certain

Very Helpful = I am certain that it IS very helpful

To what extent do you think it would be helpful for someone to **improve their quality of sleep** if they were having difficulties managing their emotions (e.g., becoming very anxious or depressed)

☐Very unhelpful ☐Unhelpful ☐Helpful ☐Very helpful

To what extent do you think it would be helpful for someone to **avoid all activities or situations that made them feel anxious** if they were having difficulties managing their emotions

☐Very unhelpful ☐Unhelpful ☐Helpful ☐Very helpful

In regards to your answers for the next set of questions, please consider

Very unlikely = I am certain that it is NOT likely

Unlikely = I think it is unlikely but am not certain

Likely = I think it is likely but am not certain

Very Likely = I am certain that it IS very likely

To what extent do you think it is likely that **Cognitive Behaviour Therapy (CBT)** is a therapy based on challenging negative thoughts and increasing helpful behaviours

☐Very unlikely ☐Unlikely ☐Likely ☐Very Likely

Mental health professionals are bound by confidentiality; however, there are certain conditions under which this does not apply.

To what extent do you think it is likely that the following is a condition that would allow a mental health professional to **break confidentiality:**

If you are at immediate risk of harm to yourself or others

☐Very unlikely ☐Unlikely ☐Likely ☐Very Likely

Mental health professionals are bound by confidentiality; however, there are certain conditions under which this does not apply.

To what extent do you think it is likely that the following is a condition that would allow a mental health professional to **break confidentiality**:

If your problem is not life-threatening and they want to assist others to better support you

☐Very unlikely ☐Unlikely ☐Likely ☐Very Likely

Please indicate to what extent you agree with the following statements:

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
I am confident that I know where to seek information about mental illness	1	2	3	4	5
I am confident using the computer or telephone to seek information about mental illness	1	2	3	4	5
I am confident attending face to face appointments to seek information about mental illness (e.g., seeing the GP)	1	2	3	4	5
I am confident I have access to resources (e.g., GP, internet, friends) that I can use to seek information about mental illness	1	2	3	4	5
People with a mental illness could snap out if it if they wanted	1	2	3	4	5
A mental illness is a sign of personal weakness	1	2	3	4	5
A mental illness is not a real medical illness	1	2	3	4	5
People with a mental illness are dangerous	1	2	3	4	5
It is best to avoid people with a mental illness so that you don't develop this problem	1	2	3	4	5
If I had a mental illness I would not tell anyone	1	2	3	4	5
Seeing a mental health professional means you are not strong enough to manage your own difficulties	1	2	3	4	5

If I had a mental illness, I would not seek help from a mental health professional	1	2	3	4	5
I believe treatment for a mental illness, provided by a mental health professional, would not be effective	1	2	3	4	5

Please indicate how willing you would be considering the following:

	Definitely unwilling	Probably unwilling	Neither unwilling or willing	Probably willing	Definitely willing
How willing would you be to move next door to someone with a mental illness?	1	2	3	4	5
How willing would you be to spend an evening socialising with someone with a mental illness?	1	2	3	4	5
How willing would you be to make friends with someone with a mental illness?	1	2	3	4	5
How willing would you be to have someone with a mental illness start working closely with you on a job?	1	2	3	4	5
How willing would you be to have someone with a mental illness marry into your family?	1	2	3	4	5
How willing would you be to vote for a politician if you knew they had suffered a mental illness?	1	2	3	4	5
How willing would you be to employ someone if you knew they had a mental illness?	1	2	3	4	5

Section 9.

Please select the person you consider your main source of support

☐Wife/husband/partner

☐Family (siblings, parents, extended family, or adult children)

☐Other primary producer

☐Friends

These items concern the kinds of help and support you get regarding mental health help-seeking from the person you have selected above

	Not at all	A little	A moder-ate amount	A pretty large amount	A lot
How much does this person give you **advice or information** about seeking help for your mental health (whether you want it or not)?	1	2	3	4	5
How much does this person give you **assistance** with things related to seeking help for your mental health (for example, helping you with daily chores, driving you places, dealing with bills and paperwork)?	1	2	3	4	5
How much does this person give you **reassurance, encouragement, and emotional support** (affection) concerning seeking help for your mental health	1	2	3	4	5
How much does this person **listen to and try to understand** your worries about seeking help for mental health?	1	2	3	4	5
How much can you **relax and be yourself** around this person?	1	2	3	4	5
How much can you **open up to** this person if you need to talk about your worries regarding mental health help-seeking?	1	2	3	4	5
How often does this person **argue** with you relating to mental health help-seeking?	1	2	3	4	5
How often does this person **criticize** you relating to mental health help-seeking?	1	2	3	4	5

How often does this person **let you down** when you are counting on them?	1	2	3	4	5
How often does this person **withdraw from discussions** about mental health help-seeking or try to **change the topic** away from mental health help-seeking?	1	2	3	4	5

Section 10.

Please rate the degree to which each item described how you might react if you had a mental illness

	Strongly disagree		Agree and disagree equally		Strongly agree
I would feel inadequate if I had a mental illness	1	2	3	4	5
My self-confidence would NOT be threatened if I had a mental illness	1	2	3	4	5
Having a mental illness would make me feel less intelligent	1	2	3	4	5
My self-esteem would increase if I had a mental illness	1	2	3	4	5
My view of myself would not change if I had a mental illness	1	2	3	4	5
It would make me feel inferior if I had a mental illness	1	2	3	4	5
I would feel okay about myself if I had a mental illness	1	2	3	4	5
If I had a mental illness, I would be less satisfied with myself	1	2	3	4	5
My self-confidence would remain the same if I had a mental illness	1	2	3	4	5
I would feel worse about myself if I had a mental illness	1	2	3	4	5

Section 11.

Please indicate how much you agree with each statement

	Strongly agree					Strongly disagree
Most people would willingly accept a former mental patient as a close friend	1	2	3	4	5	6
Most people believe that a person who has been in a mental hospital is just as intelligent as the average person	1	2	3	4	5	6
Most people believe that a former mental patient is just as trustworthy as the average citizen	1	2	3	4	5	6
Most people would accept a fully recovered former mental patient as a teacher of young children in a public school	1	2	3	4	5	6
Most people feel that entering a mental hospital is a sign of personal failure	1	2	3	4	5	6
Most people would not hire a former mental patient to take care of their children, even if he or she had been well for some time	1	2	3	4	5	6
Most people think less of a person who has been in a mental hospital	1	2	3	4	5	6
Most employers will hire a former mental patient if he or she is qualified for the job	1	2	3	4	5	6
Most employers will pass over the application of a former mental patient in favour of another applicant	1	2	3	4	5	6
Most people in my community would treat a former mental patient just as they would treat anyone	1	2	3	4	5	6
Most young women would be reluctant to date a man who has been hospitalized for a serious mental disorder	1	2	3	4	5	6
Once they know a person was in a mental hospital, most people will take his opinions less seriously	1	2	3	4	5	6

Section 12.

We are interested in finding out whether any of the factors below would stop you from seeking help for mental health concerns if you had them. Please pick the number to tell us how likely each item would be to stop you from seeking help for mental health concerns.

	Very unlikely	Unlikely	Slightly unlikely	Slightly likely	Likely	Very likely
Inadequate internet access	1	2	3	4	5	6
Inadequate communication systems (landline and mobile phones etc.)	1	2	3	4	5	6
Isolation (km from town)	1	2	3	4	5	6
Weather	1	2	3	4	5	6
Lack of time	1	2	3	4	5	6
Your financial situation	1	2	3	4	5	6
The nature of your relationship with your GP	1	2	3	4	5	6
Lack of privacy	1	2	3	4	5	6

Section 13.

We are interested in finding out about how easy it is for you to find help in your local area. Below are a number of statements, please tell us how much you agree with each statement. We understand these questions may seem repetitive but please give consideration to each question as you answer it.

	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree	I don't know/ not applicable
I would feel comfortable accessing a mental health professional (including a GP) if I was unwell.	1	2	3	4	5	6	0

There are enough mental health professionals (including GPs) to support me if I needed them.	1	2	3	4	5	6	0
I can access a mental health professional (including GPs) when necessary.	1	2	3	4	5	6	0
There are mental health phonelines or websites available to me.	1	2	3	4	5	6	0
I would feel comfortable seeking help for my mental health from a mental health professional.	1	2	3	4	5	6	0
There are mental health professionals (including GPs) close enough for me to access.	1	2	3	4	5	6	0
I would feel comfortable using mental health phonelines or websites.	1	2	3	4	5	6	0
I can access mental health phonelines or websites when needed.	1	2	3	4	5	6	0
Mental health professionals (including GPs) are available when I need them.	1	2	3	4	5	6	0
I would be willing to access mental health phonelines or websites.	1	2	3	4	5	6	0

Section 14.

The next question relates to your attitudes towards General Practitioners (GPs). Please indicate how much you agree with each statement. Note: Some questions ask about the GPs in your area, if there are no GPs in your area please consider your closest GP.

	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
Seeking help from a GP for a *physical* health concern is a good course of action.	1	2	3	4	5	6
It is essential for a GP to make an effort to get to know me and my way of life.	1	2	3	4	5	6
To provide the best care, GPs need to have a longstanding commitment to their patients.	1	2	3	4	5	6
The health of my community would be much worse without GPs.	1	2	3	4	5	6
The GPs in my area would be able to offer health care that is suitable to me and my way of life.	1	2	3	4	5	6
Seeking help from a GP for a *mental* health concern is a good course of action.	1	2	3	4	5	6
I wouldn't trust a GP that has only worked in my area for a short time.	1	2	3	4	5	6
GPs are critical to the health of my community.	1	2	3	4	5	6
GPs in my area are able to give me the care I need to manage my health problems.	1	2	3	4	5	6
GPs are only reliable sources of help if they stay in a community for a long time.	1	2	3	4	5	6
GPs can provide the help I need to manage my health effectively.	1	2	3	4	5	6

GPs in my area care about the community.	1	2	3	4	5	6
People can trust GPs to provide effective *mental* health care.	1	2	3	4	5	6
GPs wouldn't be able to help people like me because they don't really understand our way of life.	1	2	3	4	5	6
I would be comfortable discussing my health concerns with a GP who is only temporarily working in my area.	1	2	3	4	5	6
GPs can provide the help I need to manage my *mental* health effectively.	1	2	3	4	5	6
Due to the work of GPs, the health of the people in my community is better.	1	2	3	4	5	6
I believe GPs are generally able to form good relationships with people in my community	1	2	3	4	5	6
GPs in my area understand the unique characteristics of our local environment and culture	1	2	3	4	5	6
People can trust GPs to provide effective *physical* health care.	1	2	3	4	5	6

Section 15.

These questions relate to your priorities. If accessing professional help was possible…

	Very Unlikely						Very Likely
How likely is it that you would make time to seek professional help for your mental health if you needed it?	1	2	3	4	5	6	7

	Very Unlikely, would never seek help						Very Likely, would make time to seek help
If things were starting to get on top of you how likely would you be to make the time to seek professional help	1	2	3	4	5	6	7

	Not a Priority						High Priority
How important would it be for you to seek professional help if you were distressed	1	2	3	4	5	6	7