The Efficacy of a Preventative Intervention on Regional Young People’s Attitudes and Intentions Towards Help-Seeking for Mental Health Issues

A thesis submitted in fulfilment of the requirements for the award of the degree

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by
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I hereby declare that this submission is my own work and to the best of my knowledge and belief, understand that it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at Charles Sturt University or any other educational institution, except where due acknowledgement is made in the thesis [or dissertation, as appropriate]. Any contribution made to the research by colleagues with whom I have worked at Charles Sturt University or elsewhere during my candidature is fully acknowledged. I agree that this thesis be accessible for the purpose of study and research in accordance with normal conditions established by the Executive Director, Library Services, Charles Sturt University or nominee, for the care, loan and reproduction of thesis, subject to confidentiality provisions as approved by the University.

Lindy Cavanagh

[Signature]

28/01/2016
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Abstract

Mental illness is one of the leading causes of morbidity and mortality in Australia affecting 1 in 4 young people (Muir et al., 2009). A population experiencing particular vulnerability to mental illness are those aged between 12-24 years (Australian Institute of Health and Welfare (AIHW), 2008), as this chronology coincides with the developmental stage of adolescence. Vulnerability to mental illness is heightened during adolescence as it is a significant stage of both physical and mental development and transition. Subsequently, young people have the highest incidence and prevalence of mental illness however, they are the least likely to help-seek (Rickwood, Deane & Wilson, 2007), which results in a decrease in their health and wellbeing (McGorry, 2011). The effect of poor mental health in young people has significant implications that impact not only on the young person but have broader social, emotional, educational and financial implications (Australian Bureau of Statistics, 2010).

The principal aim of this thesis was to investigate regional young people's attitudes about, and intentions to help-seek for mental health issues. Using an educational resource designed for secondary students, (Herrman, 2001) as a primary health intervention, a further aim was to investigate the efficacy of the HeadStrong resource. The thesis proposed that a positive relationship between participating in the HeadStrong program and increased propensity to help-seek, would subsequently result in the greater likelihood of young people seeking help for mental health issues (Ajzen, 2002).

The research questions were investigated using a mixed method approach on a proportionate stratified random
sample (Minichiello, Sullivan, Greenwood, & Axford, 2004) of 10 New South Wales (NSW) Central West secondary schools. The sample of schools included independent, catholic, single sex and coeducational schools (five of these schools were used as a control group). The participants in the research were Stage 5 (Years 9 and 10) students and the setting for the administration of the intervention occurred during timetabled Personal Development, Health and Physical Education (PDHPE) classes.

As an exploratory multi-case study (Yin, 2003), the research employed a range of data collection methods. Data collection methods included the administration of the “Inventory of Attitudes Toward Seeking Mental Health Services” (Mackenzie, Knox, Gekoski, & Macaulay, 2004) to detect attitudes towards help-seeking for mental health issues. The questionnaire was administered to consenting Stage 5 PDHPE students in the sample schools.

In addition, the researcher conducted semi-structured face-to-face interviews with Stage 5 PDHPE students, and PDHPE teachers who administered the HeadStrong resource in the intervention schools. The interviews aimed to explore student and teacher perceptions of the efficacy of the HeadStrong intervention and young people’s attitudes and intentions to help-seek for mental health issues.

Quantitative data were analysed using the statistical procedures of t-tests and Analysis of Covariance (ANCOVA). This analysis assisted in preparing a representative attitude of the sample of Stage 5 PDHPE students and highlights student’s existing attitudes about help-seeking in the subscales of i) help-seeking propensity and ii) indifference to stigma. The
Stage 5 student interviews assist in identifying students’ mental health literacy by identifying their knowledge of the behaviour of help-seeking and examining students’ intent to help-seek for mental health issues. In addition to this, the interviews assist in identifying the existing barriers to, and facilitators of help-seeking, and evaluates the efficacy of the HeadStrong program from a students’ perspective.

There were no significant findings revealed from the analysis of the survey data. Interview findings revealed that students would seek help from informal sources of help such as family and friends, however a delay in help-seeking was evident, with timing and openness of behaviour problematic. Findings from the study revealed students would advise others to help-seek from a counsellor or professional. The barriers to help-seeking for mental health issues identified by students included stigma, confidentiality, difficulty of access, lack of anonymity and a self-reliant, independent culture. The severity and duration of the situation, support, and knowing someone who had experienced a mental health issues were highlighted by students in the study as facilitators of help-seeking.

The PDHPE teacher interviews assist in providing further insight regarding young people’s perceptions of barriers, and facilitators of help-seeking for mental health issues. Additionally, the efficacy of the HeadStrong program is evaluated in relation to decreasing stigmatising attitudes and increasing young people’s intent to help-seek for mental health issues.

Findings from the study revealed teachers would advise students to help-seek from formal sources of help if experiencing a mental health issue and identified barriers to
help-seeking. Examples of these barriers included a lack of mental health literacy and gender differences. Teachers highlighted access to services and mental health literacy as facilitators of help-seeking.

Both teachers and students perceived the HeadStrong program as having the capacity to change student attitudes toward help-seeking for mental health issues and increase student intent to carry out the behaviour.

The thesis assists in revealing the attitudes and intentions of regional young people towards the behaviour of help-seeking for mental health issues. The perceived barriers to, and facilitators of help-seeking are highlighted, and an evaluation of the efficacy of a primary health promotion strategy, HeadStrong, aimed at developing mental health literacy in young people is presented.
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1.1 Introduction and Background

Mental illness is one of the leading causes of morbidity and mortality in Australia affecting one in four young people (Muir et al., 2009; Slade et al., 2009). Young people aged between 12-24 experience particular vulnerability to mental illness (AIHW, 2008). While these statistics are now seven to eight years old, it is important to note that the Australia's Health (2014) report reveals an estimated 1 in 5 (20%) of the population aged 16-85 had experienced a common mental disorder in the previous month (p. 133). The Mental Health of Children and Adolescents report on the second Australian Child and Adolescent Survey of Mental Health and Wellbeing (Lawrence et al., 2015) revealed one in seven children and young people aged 4-17 years experienced a mental disorder in the past year (p. iii). Whilst these reports are more current, the data from these reports is not explicitly divided into categories that align with the researcher’s study.

Chronologically this population group is also experiencing the psychological developmental stage of adolescence. Vulnerability to mental illness is heightened during adolescence as it is a significant stage of both physical and mental development and transition. Subsequently, young people have the highest incidence and prevalence of mental illness however, they are the least likely to help-seek to address their conditions (Rickwood, Deane & Wilson, 2007). An additional variable compounding the likelihood of young people seeking help is rurality. Hodges, O’Brien and McGorry
suggest that people living in regional and remote areas are less likely to help-seek for mental health issues than their urban counterparts. This lack of help-seeking behaviour results in a decrease in rural young people's health and well-being (McGorry, 2011).

Therefore, the principal aim of this thesis was to investigate rural young people's attitudes and intentions to help-seek for mental health issues. In addition, a further aim was to investigate the efficacy of the HeadStrong resource; a mental health educational resource designed for secondary students, to increase their mental health literacy (Black Dog Institute, 2011). The thesis proposes a positive relationship between students’ participation in the HeadStrong program and their increased propensity to help-seek. In other words, students' participation in the HeadStrong program subsequently results in the greater likelihood of their seeking help for mental health issues (Ajzen, 2002).
1.1.1 The Intervention Program: HeadStrong Resource

HeadStrong is a resource developed by the Black Dog Institute, and designed to improve Stage 5 (Years 9 & 10) students' mental health literacy. HeadStrong includes information relating to challenges facing young people, mood disorder facts and statistics, at-risk personality types, coping strategies, fears of help-seeking and sources of help. The HeadStrong resource includes PowerPoint presentations and curriculum resources for Personal Development, Health and Physical Education (PDHPE) teachers. The HeadStrong teaching and learning activities are divided into five modules that link directly to NSW syllabus outcomes and content from the Stage 5 PDHPE syllabus (See Table 1.1).
### Table 1.1: How HeadStrong Links to the NSW PDHPE Stage 5 Syllabus

<table>
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<th>HeadStrong Module</th>
<th>Module Content</th>
<th>Links to NSW PDHPE Stage 5 Syllabus</th>
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<tr>
<td><strong>Module 1</strong>: Mood and mental wellbeing</td>
<td>This module is an introduction to the concepts of mental health and wellbeing, values, perceptions, the dynamic nature of mental health, and stigma.</td>
<td>For classes with limited learning in mental health.</td>
</tr>
<tr>
<td><strong>Module 2</strong>: The low down on mood disorders</td>
<td>Exploring the nature of moods, indicators of a mood disorder, and misinformation and misunderstanding relating to stigma.</td>
<td><strong>Outcome 5.6</strong>: A student analyses attitudes, behaviours and consequences related to health issues affecting young people</td>
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<tr>
<td><strong>Module 3</strong>: Reaching out: helping others</td>
<td>Seeking help, supporting someone you care about, and accessing services.</td>
<td><strong>Outcome 5.1</strong>: A student analyses how they can support their own and others’ sense of self. <strong>Students learn about</strong>: Supporting others</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Outcome 5.8</strong>: A student critically analyses health information, products and services that promote</td>
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Students learn about: Factors influencing access to health services

Module 4: Helping yourself
Building resilience and exercising the mind - good mental health and wellbeing is not merely the absence of illness.

Outcome 5.1: A student analyses how they can support their own and others’ sense of self.

Students learn about: Supporting yourself

Module 5: Making a difference
Proposing, developing and implementing local actions to raise awareness, dispel myths and reduce stigma.

Outcome 5.3: A student analyses factors that contribute to positive, inclusive and satisfying relationships.

Students learn about: Affirming diversity

Outcome 5.7: A student analyses influences on health decision-making and proposes strategies to promote health and safe behaviours.

Students learn about: Empowering individuals and communities

To assist PDHPE teachers to implement the program the HeadStrong staff provide professional development workshops and webinars to support the resource.

In relation to this study, a one day professional development workshop was facilitated by the HeadStrong team and delivered to PDHPE teachers in both control and intervention schools prior to the teachers implementing the resource with their Stage 5 students. The professional development workshop was aimed at supporting the teaching of mental health in Stage 5 PDHPE, by equipping teachers with the knowledge and skills to facilitate the HeadStrong content within their classes. The content of the HeadStrong curriculum resource is outlined in Table 1.2.
Table 1.2: Contents of HeadStrong curriculum resource

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Module 2: The low down on mood disorders
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   Activity 5: When does fluctuating mood become a mood disorder?
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Module 3: Reaching out: helping others
   Activity 7: The help seeking journey
   Activity 8: Supporting somebody who may be experiencing a mood disorder
   Activity 9: Looking after yourself when you are supporting a friend

Module 4: Helping yourself
   Activity 10: Building resilience
   Activity 11: Exercise your mood

Module 5: Making a difference
   Activity 12: Planning community action to reduce stigma
   Activity 13: Taking action to reduce stigma
The resource outlines the key content and evidence of student learning and contains classroom activities and teacher development notes. A PowerPoint presentation accompanies the curriculum resource and includes teacher notes as a guide. The Power Point addresses the following areas:

- what it means to be a teenager;
- the telltale signs of a mood disorder;
- facts and stats about mood disorders;
- the different types of mood disorders;
- common coping strategies;
- fears of seeking help;
- navigating the mental health maze;
- the benefits of good therapy;
- touching on medication;
- the importance of family and school support;
- understanding resilience; and
- building resilience.

The HeadStrong resource is purposely aligned with the New South Wales Stage 5 PDHPE curriculum and is currently being tailored to the Australian curriculum in order to be distributed nationwide. The HeadStrong program is considered a primary health intervention as it aims to increase mental health literacy in order to safeguard the mental health of young people before mental health issues arise.

In this study, the efficacy of the HeadStrong resource was investigated by exploring regional young people's perceptions of the barriers to and facilitators of help-seeking. In addition young people's attitudes and intentions to help-seeking for mental health issues were explored. In order to guide this thesis, and provide a scaffold to explore regional young
people’s help-seeking knowledge and behaviours, the following research questions were formulated:

1.1.2 Research Questions

1. What do regional young people understand by the notion of “help-seeking”?
2. What attitudes do regional young people have about help-seeking for mental health issues?
3. What intentions do regional young people have to help-seek for mental health issues?
4. What perceived barriers prevent regional young people from help-seeking for mental health issues?
5. What perceived facilitators assist regional young people to help-seek for mental health issues?
6. What are regional PDHPE teachers’ perceptions of the ability of the HeadStrong program to enhance Stage 5 students’ attitudes and intention to help-seek for mental health issues?
7. What are regional Stage 5 students’ perceptions of the ability of the HeadStrong program to enhance their attitudes and intention to help-seek for mental health issues?

1.1.3 The HeadStrong Team

This thesis is positioned in a larger research study, comprising the HeadStrong research team. The HeadStrong team is a collaborative research partnership which includes members from the Black Dog Institute and academics and PhD students from Charles Sturt University (CSU) and the University of New South Wales (UNSW). The Black Dog Institute is a not-for-profit, educational, research, clinical and community-oriented facility offering specialist expertise in depression and bipolar disorder. Figure 1.1 represents the relationships between members of the HeadStrong research team and the study.
Figure 1.1: Diagrammatic representation of the relationships between members of the HeadStrong research team and the larger study.
1.2 Significance

There is a wealth of research that examines the barriers and facilitators to help-seeking for mental health problems (Boyd et al., 2007; Ciarrochi & Deane, 2001; Ciarrochi et al., 2003; Hodges et al., 2007; Rickwood et al., 2005; Rickwood et al., 2007; Wilson, Bushnell & Caputi, 2011). However, there is a need to investigate the barriers and facilitators experienced by young people in regional areas and the effect of these barriers on regional young people's help-seeking for mental health issues.

Fuller et al. (2000) highlight the differences between regional and metropolitan areas in regard to help-seeking for general health related issues. According to Hodges, O'Brien and McGorry (2007), people living in regional and remote areas are less likely to help-seek for mental health issues such as suicide, in comparison to their urban counterparts. Failure to help-seek causes concern, as it is during the stage of adolescence when individuals are faced with a number of physical, social and emotional developmental tasks (Hazen, Schlozman & Beresin, 2008). The developmental stage of adolescence presents young people with challenges such as emotional separation from parents, recognition as a member of a peer group, exploration of romantic relationships, a formation of their sense of sexuality, and development of personal identity (Hazen et al., 2008). Furthermore, it is during adolescence that individuals are undertaking difficult crises or conflicts relating to emerging developmental challenges and may struggle with identity confusion, community recognition and question who they are and in which direction they are heading in life (Erikson, 1956). These developmental challenges contribute to adolescents' emotional and social states and can impact on their mental health and wellbeing. In
addition to this, Best et al. (2014) demonstrate advances in the field of adolescent development and state that many young people are facing significant new pressures and challenges due to the increasing demands of modern society. Best et al. (2014) further suggest that these increasing demands which include technological advances require children today to have more support, training and coping skills in order to prepare them for today’s society. The developmental influence these new technologies have on young people need to be considered (Best et al., 2014) when highlighting influences and challenges on the developmental stage of adolescence.

Health is predisposed not only by biological factors, but also social and economic circumstances of daily life (AIHW, 2011). Poor mental health has social, emotional, educational and financial implications for young people. The mental health report released from the Mission Australia Youth Survey (2014) revealed mental health issues to have significant detrimental effects on wellbeing, functioning and development in adolescence. Kessler et al. (1995) outline many personal costs for individuals who experience mental health issues, and the additional costs to their families and communities. These costs are further detailed in the following section.

1.2.1 Costs to the Individual
Associated with mental health issues are high rates of enduring disability (McGorry et al., 2007) including poor educational achievement (McGorry & Goldstone, 2011), unemployment (Mission Australia, 2014, McGorry & Goldstone, 2011), impaired social functioning (McGorry & Goldstone, 2011; O’Connell et al., 2009) and diminished quality of life (Kessler et al., 1995). Impaired academic achievement is highlighted by McGorry and Goldstone (2011) and Mission
Australia (2014) as a consequence of young people experiencing mental health issues. According to McGorry and Goldstone (2011), poor academic achievement can lead to school failure. Individuals suffering from poor mental health have days absent from school and additionally are affected socially as they distance themselves from peers. Absence from school also emotionally affects young people emotionally as their sense of connectedness diminishes (Erikson, 1956), and educationally as they limit their future employment options (AIHW, 2011). Mission Australia's Mental Health Report highlights unemployment as a detrimental effect as a result of a mental health issue (2014). Impaired or unstable employment affects those who experience mental health issues (McGorry & Goldstone 2011; McGorry et al., 2007) as it influences their financial status, impacting on their ability to function, and ultimately their quality of life (Kessler et al., 1995). This detrimental financial impact on an individual's employment status also has social and emotional impacts. O'Connell et al. (2009) note that mental health issues limit individuals' abilities to reach social achievement. Impaired relationships present an additional cost to society, as individuals with mental health issues can cause social disruption (O'Connell et al., 2009).

1.2.2 Costs to Families and Communities
O'Connell et al. (2009) outline mental health issues in young people as a public health concern. O'Connell et al. (2009) claim mental health issues impose heavy costs to society, as individuals experiencing mental health issues require extra care and affected individuals are at risk of underperforming as adults. Young people who experience mental health issues contribute to the social disruption (O'Connell et al., 2009) of families and communities as significant legal and financial
Implications may result from their condition. For example, young people who experience mental health issues may express violent tendencies and damage personal or community property (AIHW, 2011). McGorry and Goldstone (2011) further highlight the relationship between mental health issues and violence, which can result in poor family and social functioning (McGorry et al., 2007).

Mental and substance use disorders are the key health issue for young people and if these disorders persist, and this cycle of dysfunction and disadvantage continues, the constraints, distress and disability that result from these illnesses, can last for decades, extending many years into the future and affecting adult life (McGorry & Goldstone, 2011; McGorry et al., 2007). Therefore, in order to improve the status of regional young people's mental health and address the disadvantages they may be experiencing, mental health literacy needs to be improved and young people need to be equipped with knowledge and skills to enable them to carry out the behaviour of help-seeking. As its core focus, this thesis explores regional young people's perceived barriers to, and facilitators of help-seeking for mental health issues and furthermore highlights their existing attitudes and intentions to the behaviour of help-seeking.

1.3 Thesis Overview
In order to identify regional young people's attitudes and intent to help-seek for mental health issues data were gathered by surveying and interviewing Stage 5 PDHPE students and interviewing their PDHPE teachers. These data built an understanding of students':

- Mental health literacy and their knowledge of the concept of help-seeking;
• Attitudes about help-seeking and intentions to help-seek;
• Perceptions of barriers to, and facilitators of help-seeking; and
• Perceptions of the efficacy of the HeadStrong program.

This thesis comprises seven chapters that examine regional young people’s attitudes and intentions to help-seeking for mental health issues. Following this introduction, Chapter Two provides an overview and critique of the existing research relating to: i) young people, ii) their mental health, and iii) their attitudes and intentions to the behaviour of help-seeking. The concepts of health and young people are defined and the health of Australian young people profiled, highlighting the social and economic influences on the health of young people. These factors include family structure, geographical location, education and employment, ethnicity, Aboriginality and refugee status. Following this, mental health and mental health literacy are defined, accompanied by a critique of the international and Australian research on young people’s mental health literacy, highlighting how the existing research informs the design of this thesis. Aligning to the foci of this thesis, the concept of help-seeking is defined and research relating to the barriers and facilitators to help-seeking is presented.

Chapter Three presents the theoretical framework used to analyse the qualitative data gained from the interviews with Stage 5 students and their PDHPE teachers. This chapter describes the characteristics of a range of the social cognition models of health behaviour including the health belief model, protection motivation theory, locus of control, social cognitive theory and theory of reasoned action, and critiques their applicability for use in relation to this thesis. Ajzen’s Theory
of Planned Behaviour is identified as the chosen theoretical framework as it examines the relationship between attitudes, predicted intentions and resultant behaviour. The chapter identifies and justifies the application of Ajzen's Theory of Planned Behaviour (1988) as the theoretical framework used to explain the thesis results.

Chapter Four describes and justifies the research design and methodological approach chosen for this thesis. The research questions and hypotheses for the study are presented. The data collection and analysis techniques used to determine regional young people's attitudes and intentions to help-seeking for mental health issues are outlined and justified, together with the methods used to investigate the perceived barriers to, and facilitators of help-seeking behaviour. In addition, the chapter describes the methods used to evaluate the efficacy of the HeadStrong resource. Considerations of validity and reliability are identified and discussed and ethical considerations associated with the design and conduct of the study are also presented in this chapter.

Chapter Five presents the findings of the analysis of the Inventory of Attitudes Towards Seeking Mental Health Services (IASMHS) (Appendix 2) distributed to the Stage 5 PDHPE students and the findings of the data analysis of individual interviews with Stage 5 PDHPE students. The survey was administered pre- and post-intervention and a follow-up administered six months after the pre-intervention survey. These findings were analysed using the statistical procedures of $t$-tests and Analysis of Covariance (ANCOVA). This analysis assisted in preparing a representative attitude of the sample of Stage 5 PDHPE students and highlights students' existing attitudes to help-seeking in the subscales of i) help-seeking propensity and ii) indifference to stigma. The interviews assist
in identifying students' mental health literacy by identifying their knowledge of the behaviour of help-seeking and examining students’ intent to help-seek for mental health issues. In addition to this, the interviews assist in identifying the existing barriers to and facilitators of help-seeking for mental health issues and evaluate the efficacy of the HeadStrong program from the students’ perspective.

Chapter Six details the findings of the data analysis of the interviews with the PDHPE teachers who implemented the HeadStrong program. This chapter also provides further insight regarding young people’s perceptions of the barriers, and facilitators of help-seeking for mental health issues. Additionally, Chapter Six evaluates the efficacy of the HeadStrong program in increasing student mental health literacy and destigmatising attitudes about help-seeking for mental health issues from PDHPE teachers’ perspectives. The findings presented in these results chapters are discussed with reference to the reviewed mental health literature, the HeadStrong resource, and Ajzen's Theory of Planned Behaviour.

Finally, Chapter Seven discusses the results of the survey and interview data analysis. The discussion of results is informed by Ajzen’s Theory of Planned Behaviour (TPB) and explains the findings and results in light of each of Ajzen’s constructs within the Theory of Planned Behaviour. Conflicting and confirmatory data are presented and discussed, contributing to an informed understanding of the existing barriers to, and facilitators of, help-seeking for mental health issues, and young people's attitudes and intent to perform the resultant behaviour of help-seeking. Furthermore, the factors that contribute to the limitations of the study are outlined, in
addition to implications and recommendations for future research and practice.
Chapter Two: Mental Health Issues Experienced by Young People

The Barriers to and Facilitators of Help-Seeking

2.1 Introduction
The purpose of the literature review is to provide an overview and critique of the existing research relating to young people, their mental health, and their attitudes about and intentions to help-seek for mental health issues. Additionally, factors that create barriers to and facilitators of help-seeking for young people are addressed. The existing research relating to young people and mental health is examined to identify the gaps and inform the design of this thesis. To commence this chapter, key terms that bind this thesis are defined. These terms include young people, health, mental health, regional and rural, and help-seeking.

2.2 Defining Young People
Wyn (2009) suggests numerous ways to define the concepts of youth and young people. Wyn defines the concept of youth as i) a universal phase of psychosocial and physical development between childhood and adulthood; ii) a category which can be defined by chronological age; iii) a shortfall state on the way to adulthood; iv) a cultural phase of life that is socially constructed and historically specific; v) a social process defined by social relations; or vi) a product of both psychosocial development and the influence of social circumstances and processes (Wyn, 2009).

The AIHW (2011) supports only one aspect of Wyn’s definition: that which categorises young people chronologically. The
AIHW state that young people can be defined in terms of the chronological ages, between 12-24 years. This is a useful way of defining young people as it allows for the examination of a particular population and provides explicit temporal boundaries.

Wyn (2009) claims that there are other ways that the collective term young people can be defined. She states that the developmental psychology literature describes young people in terms of developmental tasks and the developmental stage known as adolescence. Purcell et al. (2011) state that young people transition into independent adulthood through experiencing unique developmental challenges. These developmental challenges or tasks of young people are categorised into domains which do not occur in isolation, but rather interact with each other. These domains include physical, cognitive, psychological, and moral development (Hazen, Schlozman, & Beresin, 2008).

Hazen, Schlozman and Beresin (2008) support the classification of tasks into domains, suggesting that the concept of adolescence is complex, and informed by many paradigms including biologic, psychologic, social and cultural, which impact on this stage of development. Thus, given the variability of the individual and cultural influences, the most constructive definition of adolescence is not concerned with chronological age, but is characterised by the developmental tasks that are accomplished during this stage (Hazen et al., 2008).

Hazen et al. (2008) present a general profile of the stage of adolescence. Biologically, the developmental stage of adolescence begins with the onset of puberty. Physical changes are triggered by hormonal changes in young people resulting
in rapid growth, known as a growth spurt, the growth of body and pubic hair, and the growth and maturation of reproductive organs (Hazen et al., 2008). Buchanan et al. (1990) also see adolescence as a developmental period, a troubled time with fluctuating hormones and biologically determined drives over which there is little control. Hazen et al. (2008) further list a number of social and emotional developmental tasks which young people experience during the developmental stage of adolescence. These tasks include emotional separation from parents, participation in a recognised peer group exploration of romantic relationships, formation of their sense of sexuality, and development of personal identification. Hafner and colleagues (1998) reinforce this description of the developmental change, claiming adolescence to be one of the steepest periods of social change and growth in human life. Rickwood, White and Eckersley (2007) express the problematic issue of the occurrence of a mental health problem coinciding with this developmental phase, stating that social roles such as finishing education, obtaining work and financial autonomy, leaving home, or developing a significant personal relationship are compromised.

According to Sawyer et al. (2012) the shape of adolescence is rapidly changing as children are beginning puberty earlier and taking on characteristically adult roles at an older age than they did historically. Sawyer et al. (2012) state there is growing interest in understanding how puberty affects the developing brain with new understandings of the diverse and dynamic effects on adolescent health. Sawyer et al. (2012) discuss and reveal the effects of puberty and brain development, together with social media on adolescence and reveals new evidence about adolescent brain neuroplasticity and the identification of brain changes that create conditions for heightened
receptivity to health messages. Neurocognitive development has major effects on decision-making, emotional wellbeing, and behaviour (Sawyer et al., 2012). A life-course perspective is taken by Sawyer et al. (2012) which emphasises that “the health of adolescents is affected by early childhood development and the biological and social-role changes that accompany puberty, shaped by social determinants of health that affect the uptake of health-related behaviours” (p. 1630).

Erik Erikson is one of the most influential theorists of emotional development. Erik Erikson’s concept of adolescent emotional development involves individuals finding a sense of inner continuity by undertaking difficult crises or conflicts relating to particular emerging developmental challenges within this stage of their life (Erikson, 1956). Erikson’s theory, suggests that the adolescent struggles with identity confusion, community recognition and challenges who they are as an individual, and in which direction they are heading in life. Petersen, Kennedy and Sullivan (1991) give emphasis to the role external factors have in driving emotional changes in adolescence. Described as a time of developmental transition (Petersen et al., 1991), adolescence hosts a number of transitional changes such as schools, changes in peer expectations, increased life stress and changes in peer relationships and roles within the family and other contexts (Larson et al., 2002). Identity confusion and the developmental challenges that face young people contribute to their social and emotional development.

Knowledge relating to cognitive development in adolescence has stemmed from the seminal work of Jean Piaget. Adolescence is contained within the formal operations stage of Piaget’s theory and is significant in that hypothetical, systematic, abstract thinking is constructed and developed.
Within this stage, the individual is capable of combining suggestions and propositions engaging in logical formal thought (Piaget, 2008). Hazen et al. (2008) state that cognitive development in adolescence may entail a number of factors including a heightened capacity for conceptual and advanced reasoning, including more advanced assessment of risk versus reward, improved language and memory skills, and an increased capability to self-regulate emotional states.

Construction of moral development also occurs during adolescence where young people’s “moral thinking is guided by the individual’s interpersonal relationships and place in society” (Hazen et al., 2008, p. 166). During adolescence, young people develop a greater ability to see others' perspectives. As young people’s moral development is further constructed, individuals question the values of influencing beings such as parents or institutions with whom they are connected and begin to focus on how others identify them and their role obligations (Hazen et al., 2008). Moral development is influenced by values attained and guided by an individual’s interaction with society. Cognitive and social development can directly relate to moral development, reinforcing the fact that the developmental tasks highlighted are not specific to each domain, but rather interact with each other throughout the developmental stage of adolescence (Hazen et al., 2008).

The field of developmental psychology characterises the period of adolescence by three distinct stages: early, middle and late adolescence (AIHW, 2011). The developmental tasks are interrelated within these three stages of adolescence. Table 2.1 illustrates these developmental tasks.
<table>
<thead>
<tr>
<th></th>
<th><strong>Biological</strong></th>
<th><strong>Psychological</strong></th>
<th><strong>Social</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Early adolescence</strong></td>
<td>Early puberty (girls: breast bud and pubic hair development, start of growth spurt; boys: testicular enlargement, start of genital growth)</td>
<td>Concrete thinking but early moral concepts; progression of sexual identity development (sexual orientation); possible homosexual peer interest; reassessment of body image</td>
<td>Emotional separation from parents; start of strong peer identification; early exploratory behaviours (smoking, violence)</td>
</tr>
<tr>
<td><strong>Mid adolescence</strong></td>
<td>Girls: mid-late puberty and end of growth spurt; menarche; development of female body shape with fat disposition</td>
<td>Abstract thinking, but self still seen as &quot;bullet proof&quot;; growing verbal abilities; identification of law with morality; start of fervent ideology (religious, political)</td>
<td>Emotional separation from parents; strong peer identification; increased health risk (smoking, alcohol, etc.); heterosexual peer interest; early vocational plans</td>
</tr>
</tbody>
</table>
growth spurt

| Late adolescence | Boys: end of puberty; continued increase in muscle bulk and body hair | Complex abstract thinking; identification of difference between law and morality; increased impulse control; further development personal identity; further development or rejection of religious and political ideology | Development of social autonomy; intimate relationships; development of vocational capability and financial independence |

*(Adapted from McIntosh, Helms, & Smyth, 2003).

Young people begin puberty in early adolescence and start the development of sexual maturation. During early adolescence, young people's friends gain importance and family values are questioned (AIHW, 2011). In middle adolescence, the process of sexual maturation continues, friends and peer groups are relied on more heavily for support, and experimentation and risk-taking behaviours may begin (AIHW, 2011). By the stage of late adolescence, physical and sexual changes steady, and social, emotional and neural development is more developed, however, it is not yet completely established and mature (AIHW, 2011).
Given the different ages at which individuals experience these developmental tasks, for the purpose of this thesis, *young people* will be defined by chronological age. Young people will be classified as those aged between 12-24 years of age, as the adoption of this definition allows the researcher to examine a particular category that has defined boundaries. However, as the notion of adolescence is socially constructed the developmental tasks previously mentioned will assist to inform this thesis in relation to the factors that influence young people's mental health.

### 2.3 Defining Health

Before the concept of mental health is addressed in this thesis, it is necessary to define the term *health*. Historically, health has been defined in multiple ways that are influenced by the practices and discourses of the time. Germov (2009) identifies the study of health from the following perspectives:

i) Epidemiological - which focuses on statistical patterns of disease;

ii) Biomedical - which expresses health as a function of the body’s biological mechanisms; and

iii) Socio-ecological - which conveys health as an interaction of social, economic, geographic, and environmental factors.

Herrman (2001) describes health as including a number of interrelated components including mental, physical, emotional, social, cultural and spiritual dimensions. Health can be defined as a holistic balance that individuals ascertain within themselves and with their surrounding environment (Herrman, 2001). While these various definitions of health are noted, for the purpose of this thesis the seminal definition proposed by the World Health Organisation (WHO) will be used. The WHO is the World’s leading authority on health and
health research. According to the WHO, health is defined as a “state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (World Health Organisation, 1948, p. 100). Mental health is therefore one dimension of the complete state of health.

2.4 Profiling the Health of Australia’s Young People

In order to understand the impact of mental illness on regional young people and the implications of poor mental health on their help-seeking attitudes and intent, it is in order here to explore the nature of Australia’s young people’s health in general.

As at 30 June 2009, there were nearly 4.0 million young people aged 12-24 years, representing almost one fifth of the Australian population (AIHW, 2011). Of this 4.0 million youth population, females (49%) constituted a slightly lower proportion than males (51%) (AIHW, 2011). In comparison to other age groups, White and Wyn (2008) claim, that overall, young people experience ‘good health’. The AIHW reports on young people’s self-rating of their health status and reveals most young people rate their health as ‘good’ or ‘excellent’ (AIHW, 2011). Similarly, results from 2007-2008 surveys conducted by the Australian Bureau of Statistics on self-assessed health status revealed “a large majority (93%) of young people aged 15-24 years rated their health as ‘excellent’, ‘very good’ or ‘good’” (AIHW, 2011, p. 15). This self-rated good health may be attributable to young people’s personal view of their individual health status. Wang and Satariano (2007) believe a person's individual perception of their personal health is a predictor of their prospective health status. When capturing a broader view of health, an individual’s rating of their overall health is used as a regular indicator of their health status (AIHW, 2008). However, Muir and associates
(2009) report, titled the *State of Australia’s young people: A report on the social, economic, health and family lives of young people*, provides an overview of young Australians' health and identifies areas which may need further support. Muir et al. (2009) state that almost a quarter of young people are overweight or obese and one in four have a mental disorder, with suicide being the leading cause of death for young people. In addition to this, young people are participating in risky behaviours such as smoking, drinking and driving dangerously. However, overall the report presents a positive representation of young people and displays them as “healthy, happy and productive” (Muir et al., 2009, p. 1).

Young Australians have improved living conditions and better physical health than other populations, however, despite this, there are concerns about young people's health and well-being in the areas of substance use and abuse, mental health and obesity (White & Wyn, 2008). The AIHW (2011) verifies these findings stating there are rising rates of diabetes amongst young people, too many young people are overweight or obese, too many young people are drinking at risky or high levels, sexually transmissible infections are rising and there are high rates of mental disorders in young people. Previously published literature by Rickwood et al. (2005) reinforce the findings of both White and Wyn (2008) and the AIHW (2011), stating there is an increasing prevalence of mental health problems and mental health disorders in young people. These mental health disorders may develop with associated behaviours including intentional self-harm and suicidal behaviour (AIHW, 2011). Furthermore, the AIHW (2011) declare whilst young people are of good physical health, with aspects such as strength, speed, fitness and many cognitive abilities at their greatest, a number of other health risks arise such as increased risk-taking behaviours which may lead to injury, and
increased sexual activity which may expose young people to sexually transmitted infections.

In addition to these health risks, young people are vulnerable in many ways during their adolescence. As our lifespan has increased, the developmental stage of adolescence has extended and due to the fast rate of change in our social, economic, and technological environments, young people have become more vulnerable (Purcell et al., 2011). Purcell et al. (2011) further state that it is anticipated that mental illness can seriously upset this developmental course of adolescence and limit a young person's potential.

2.4.1 Defining Rurality
The term *rural* is defined by a multitude of government agencies and departments, however, “there is neither a generally accepted nor generally applicable definition that can be used to identify rural areas” (Commonwealth Department of Health and Aged Care, 2001, p. 23). For the purpose of this thesis the term *regional* will be used to describe the nature of the locations in which the sample population sites are located.

According to the AIHW (2004) there are three major geographic classifications that are currently used to categorise localities according to their remoteness. These classifications include:

1. Rural, Remote and Metropolitan Areas (RRMA);

2. Accessibility/Remoteness Index of Australia (ARIA) classifications; and

3. Australian Standard Geographical Classification (ASGC) Remoteness Areas which is based on ARIA+ index values.
The geographic classifications of RRMA, ARIA and ASGC Remoteness Areas are used to group areas with like characteristics (AIHW, 2004). These classifications can be used to describe and explain regional differences, for example health outcomes. The following section describes each of the classifications.

1. Rural, Remote and Metropolitan Areas (RRMA) Classification

The RRMA classification was developed by the Department of Primary Industries and Energy, and the Department of Human Services and Health (DPIE & DSH, 1994). The RRMA classifies each Statistical Local Area (SLA) as metropolitan (including ‘capital cities’ or ‘other metropolitan areas’), rural (‘large rural centres’, ‘small rural centres’ and ‘other rural areas’), and remote (‘remote centres’ and ‘other remote areas’) (AIHW, 2004). An ‘Index of Remoteness’ score is used when classifying each SLA. This index of remoteness score is calculated by a combined personal distance index and distance indices which relate to the SLA’s population density and the centre of an SLA to the nearest urban centre (AIHW, 2004). Once this is calculated, each SLA is allocated a class within the zone based on the population of the urban centre, for example ‘small rural centres’. Table 2.2 illustrates these zones and their associated population within the RRMA classification.
Table 2.2: Structure of the Rural, Remote and Metropolitan Areas (RRMA) classification

<table>
<thead>
<tr>
<th>Zone</th>
<th>Class</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metropolitan zone</td>
<td>Capital Cities</td>
<td>M1</td>
</tr>
<tr>
<td></td>
<td>Other Metropolitan Centres (urban centre population &gt; 100,000)</td>
<td>M2</td>
</tr>
<tr>
<td>Rural zone</td>
<td>Large Rural Centres (urban centre population 25,000-99,999)</td>
<td>R1</td>
</tr>
<tr>
<td></td>
<td>Small Rural Centres (urban centre population 10,000-24,999)</td>
<td>R2</td>
</tr>
<tr>
<td></td>
<td>Other Rural Areas (urban centre population &lt; 10,000)</td>
<td>R3</td>
</tr>
<tr>
<td>Remote zone</td>
<td>Remote Centres (urban centre population &gt; 5,000)</td>
<td>Rem1</td>
</tr>
<tr>
<td></td>
<td>Other Remote Areas (urban centre population &lt; 5,000)</td>
<td>Rem2</td>
</tr>
</tbody>
</table>
2. Accessibility/Remoteness Index of Australia (ARIA) Classification

The ARIA classification was developed by the Commonwealth Department of Health and Aged Care in 1997 (AIHW, 2004). Within this classification, areas are allocated on the basis of the average ARIA index score within an area. This ARIA index score is based on the road distance from the closest service centres in each of four classes defined using census data (AIHW, 2004). Within the ARIA classification, areas are categorised as ‘highly accessible’, ‘accessible’, ‘moderately accessible’, ‘remote’ and ‘very remote’. Each of these categories is outlined in Table 2.3.
Table 2.3: Summary of ARIA Remoteness categories, scores and characteristics of areas

<table>
<thead>
<tr>
<th>Category</th>
<th>ARIA score</th>
<th>Characteristics of Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly accessible</td>
<td>0 – 1.84</td>
<td>Relatively unrestricted access to a wide range of goods and services and opportunities for social interaction</td>
</tr>
<tr>
<td>Accessible</td>
<td>&gt;1.84 - 3.51</td>
<td>Some restriction to accessibility of some goods, services, and opportunities for social interaction</td>
</tr>
<tr>
<td>Moderately accessible</td>
<td>&gt; 3.51 - 5.80</td>
<td>Significantly restricted accessibility of goods, services, and opportunities for social interaction</td>
</tr>
<tr>
<td>Remote</td>
<td>&gt; 5.80 - 9.08</td>
<td>Very restricted accessibility of goods, services, and opportunities for social interaction</td>
</tr>
<tr>
<td>Very remote</td>
<td>&gt; 9.08 - 12</td>
<td>Very little accessibility of goods, services, and opportunities for social interaction</td>
</tr>
</tbody>
</table>

(Commonwealth Department of Health and Aged Care, 2001)
3. Australian Standard Geographical Classification (ASGC) Remoteness Areas

ASGC Remoteness categorises areas as ‘major cities’, ‘inner regional’, ‘outer regional’, ‘remote’ and ‘very remote’ (AIHW, 2004). This categorisation was released by the Australian Bureau of Statistics in 2001 and was based on an enhanced measure of remoteness (ARIA+). The ARIA+ index values used to allocate areas to categories of remoteness are calculated similarly to ARIA index values used in the ARIA classification (AIHW, 2004). However, the AIHW (2004) states there are some differences in the calculation of the index. For example, the ARIA+ index values are based on road distance from a locality to the closest service centre in each of five classes of population size, as opposed to the four used in ARIA. Table 2.4 illustrates the strengths and weaknesses of the three classifications of accessibility and remoteness.
Table 2.4: Summary of strengths and weaknesses of the RRMA, ARIA and ASGC Remoteness classifications

<table>
<thead>
<tr>
<th>Classification</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
</table>
| RRMA           | - RRMA is a simple tool to apply both for research and administration purposes, including the allocation of health resources.  
- Due to the strong influence of population size, RRMA often equally classifies towns of similar size (intuitive).  
- The use of three zones (metropolitan, rural and remote) is reasonably logical.  
- RRMA is preferred by many national organisations over ASGC Remoteness | - The restriction to SLA boundaries, resulting in large, heterogeneous areas being equally classified.  
- The use of straight-line distances and SLA centroids, which can result in highly imprecise measures.  
- The use of population density is meaningless because of the varying size and nature of SLA boundaries.  
- RRMA has never been updated and still uses 1991 population counts. |
|                | - The flexibility to measure remoteness at any geographic boundary level by using a one kilometre grid.  
- The additional precision from using road | - Only measures geographical remoteness, giving many examples of highly dissimilar towns having the same classification (e.g. Port Macquarie and Gundagai). |
| ARIA | distances and service town locations, rather than straight line distances and SLA centroids.  
|      | • The clearer conceptualisation of measuring only geographical remoteness of localities (e.g. not muddied by also measuring density).  
|      | • The separation of the five remoteness categories is somewhat subjective.  
|      | • Penalises smaller, more densely populated states (e.g. over 75% of rural Victoria's population is defined as 'highly accessible').  
|      | • Use of the category label 'accessible' and the term 'accessibility' within its name (it is not a measure of access)  
|      | All points listed under ARIA, plus:  
|      | • More refined methodology  
|      | (additional service centre category, better separation of major cities)  
|      | • A change of labels including the use of 'regional' rather than 'accessible'  
|      | • Updated by ABS as part of the ASGC  
| ASGC-RA | All points listed under ARIA (except the last point), plus:  
|      | • Extreme heterogeneity within some areas, especially Inner Regional and sometimes Outer Regional  

Adapted from (McGrail & Humphreys, 2009).
In the past, health agencies and government agencies have used the three classifications to inform policy and allocate health related resources. The amount of resources allocated to a town or city is determined by the classification of an area. Different agencies use different classifications thus, inconsistency of classifications results in inconsistency in the allocation of resources. The RRMA, ARIA and ASGC classifications when applied to schools in the population sample of this thesis appear in Table 2.5.
<table>
<thead>
<tr>
<th>Area</th>
<th>Rural, Remote and Metropolitan Areas (RRMA) Classification</th>
<th>Accessibility/Remoteness Index of Australia (ARIA) Classification</th>
<th>Australian Standard Geographical Classification (ASGC) Remoteness Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bathurst</td>
<td>R2</td>
<td>Highly Accessible</td>
<td>Inner Regional 100%</td>
</tr>
<tr>
<td>Dubbo</td>
<td>R1</td>
<td>Accessible</td>
<td>Outer Regional 2.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inner Regional 97.7%</td>
</tr>
<tr>
<td>Lithgow</td>
<td>R2</td>
<td>Accessible</td>
<td>Outer Regional 0.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inner Regional 99.2%</td>
</tr>
<tr>
<td>Oberon</td>
<td>R3</td>
<td>Accessible</td>
<td>Outer Regional 10.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inner Regional 89.5%</td>
</tr>
<tr>
<td>Orange</td>
<td>R1</td>
<td>Highly Accessible</td>
<td>Inner Regional 100%</td>
</tr>
<tr>
<td>Young</td>
<td>R3</td>
<td>Accessible</td>
<td>Inner Regional 76.4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Outer Regional 23.6%</td>
</tr>
</tbody>
</table>
While the data in Table 2.5 are based on 2001 SLA boundaries and released in the AIHW report *Rural, regional and remote health: A guide to remoteness classifications* (2004), the table highlights the differences between the classifications for each of the areas in the sample population.

It is evident from Table 2.5 there are conflicting classifications of remoteness of the populations within the sample. In order to overcome the inconsistency of classification that informs policy and practice, the Australian Government (2009) has directed that the ASGC classification be used to inform policy around the resourcing of health.

For the purpose of classifying schools in this thesis sample, the ASGC classification was selected as it was the most appropriate in defining the term “regional”. Schools in the sample population used for this thesis are classified as 'inner regional' or 'outer regional'.

### 2.5 Social and Economic Influences on the Health of Young People

It is noted that in general, young people are a healthy population, compared to other populations, and they self-report as being “healthy” (AIHW, 2011). Despite self-reporting as being healthy, there are particular social and cultural factors and specific populations of young people who need to be identified in regard to their compromised health status.

According to the AIHW (2011) health is predisposed not only by biological factors, but also by social and economic circumstances of daily life. These factors include young people’s level of education, socioeconomic status, geographic
location, ethnicity, Aboriginality, family structure, employment status, gender and refugee status.

2.5.1 Family Structure
Families can be an important influence on young people in the developmental stage of adolescence. According to the AIHW, research has shown that family environment factors such as close relationships, strong parenting skills and behaviours, and good communication has a positive impact on young people's development and the behaviours and choices they make during this transitional stage (AIHW, 2011). However, family compositions have become more diverse, with young people experiencing more transitional movements within their families throughout childhood and adolescence (AIHW, 2011). There are a number of family types in which young people are raised today such as couple families, one-parent families, non-parental care or shared care with most providing a stable family environment. However, some young people experience family breakdowns, re-partnerships and blended families, which can cause conflicts and stresses and can have a negative effect on the mental health and wellbeing of young people (AIHW, 2011). Eckersley (2007) outlines a number of factors which impact young people's mental health. According to Eckersley (2007), family conflict and breakdown is a contributing factor to the increase in mental health problems and mental disorders in young people. Supporting this, Wyn (2009) claims that young people who are residing with families or communities which are disjointed, fragmented, failing to support young people or have poor resources, are the most likely to experience mental health problems.
2.5.2 Ethnicity
As at 30 June 2009, the Australian Bureau of Statistics (2010) states that most young people were born in Australia (78%). Even though this is the case, with slightly less than one-quarter of the Australian youth population born overseas (22%), Australia is one of the most culturally diverse countries in the world (AIHW, 2011). The Australian Bureau of Statistics (2010) reported that in 2009 around 5% of young people were born in other English-speaking countries and approximately 16% born in all other countries. Country of birth has the potential to impact on young people’s health, as those born overseas may have different cultural beliefs or language barriers if the principal language spoken at home is not English. Cauce et al. (2002) believe perceptions of mental service providers as culturally insensitive, play a role in the reluctance to help-seek existing in ethnic minorities. Many ethnic minority youth and their families who identify a problem drop out of the help-seeking pathway before they even come into contact with a mental health service provider (Cauce et al., 2002). These factors have the potential to disadvantage young people and affect their health status as they face difficulties accessing and understanding health promotion initiatives targeting their demographic (Furlong & Cartmel, 2006). Another group who are disadvantaged and more inclined to be affected by mental health problems is refugees.

2.5.3 Refugee Status
Correa-Velez et al. (2010) state that young refugees are often socially excluded. A young refugee may experience a sense of loss of belonging to their family, community and country and therefore may be more at risk of developing mental health problems in comparison to their non-refugee counterparts. In
addition to this, Tsoupas (2011) claims the experiences that refugees in general undergo are devastating and traumatic and therefore can have a significant impact upon their mental health and wellbeing.

Life experiences of adolescent refugees not only impact on their mental health status, but affect their ability to access mental health care (Anstiss, Ziaian, Procter, Warland, & Baghurst, 2009). Mental health services are under-utilised by the general population of young people, and according to Anstiss et al. (2009) the under-utilisation of mental health services is greater for those from refugee backgrounds. Anstiss et al. (2009) claims this situation has arisen as the ‘Western’ mental health systems do not have a clear understanding of help-seeking behaviours and do not accommodate the needs of ethnically diverse populations, more specifically refugees.

2.5.4 Geographic Location
A factor which significantly influences young people's mental health and their attitudes to help-seeking is their geographic location (Rickwood et al., 2007). Boyd et al. (2006) present rates of psychiatric disorders are higher in rural populations than in metropolitan areas. Males in particular, have been identified by Moon, Meyer and Grau (1999) as having high rates of death by suicide which increases in risk with remoteness accordingly. The AIHW (2009) indicated that three-quarters of the nation’s young people were living in the three most populated states of New South Wales, Victoria and Queensland. This is similar for all Australians across the states and territories. While the majority of young Australians lived in major cities (71%), 26% resided in ‘inner’ and ‘outer’ regional
areas and 2% resided in remote and very remote areas (AIHW, 2011).

According to Fuller et al. (2000) the physical nature of the rural environment and the self-reliant nature of the culture existing in these areas are two aspects of rural circumstances that differ from urban areas. The physical environment of rural areas is recognised as one of isolation, coupled with environmental hazards and economic downturn. These conditions can lead to mental stress and emotional strain (Fuller et al., 2000). In addition to this, Fuller et al. (2000) state that the nature of rural cultures results in individuals ignoring emotional and mental distress and therefore not help-seeking for mental health problems.

In relation to help-seeking for mental health disorders, Hodges et al. (2007) claim many young people are reluctant to do so and additionally do not have ready access to treatment for these problems. In regional areas the incidence of mental health problems is more prominent than in other areas and these issues of access and reluctance to help-seek are intensified (Hodges et al., 2007). Burns et al. (2004) declare that rural young people, in comparison to urban young people, experience more difficulties with stress and coping. Furthermore, Hodges et al. (2007) elaborates on the disadvantage of access and existing barriers associated with living in regional areas, by explaining the challenges associated with early interventions targeting young people and their mental health problems in these communities. These challenges include the stigma of mental illness, logistic barriers such as cost and availability of transportation across vast geographical distances, and concerns about lack of anonymity and confidentiality.
Therefore barriers to help-seeking in regional areas including stigma, social visibility, lack of anonymity or confidentiality, an existing self-reliant culture, limited educational and employment opportunities and logistic difficulties, all adversely impact on young people's attitudes and the likelihood of regional young people help-seeking for mental health problems (Boyd et al., 2007; Hodges et al., 2007).

2.5.5 Education and Employment

Newnham et al. (2008) state that living in a rural environment is often challenging for young people as it is difficult to access potential education opportunities due to distance. Muir et al. (2009) state in comparison to young people residing in urban areas, those living rurally are disadvantaged educationally with lower rates of attainment, performance and participation. In addition to this, young people living in rural areas are disadvantaged in terms of employment as opportunities are more limited and when unemployed, those living rurally are more prone to be jobless for longer than those living in major cities (Newnham, Boyd, Newnham, Francis, & Aisbett, 2008).

France, Lee and Powers (2004) state that depressive symptoms are associated with demographic characteristics, including low income and educational qualifications and a history of unemployment. Factors such as education, income and employment status can influence people's attitudes and intentions to the behaviour of help-seeking. Research has demonstrated the impact that social disadvantage can have on young people's emotional development and wellbeing (Barry & Jenkins, 2007; Melzer, Fryers, & Jenkins, 2004; Turrell & Mathers, 2000). According to Barry and Jenkins (2007) and Melzer et al. (2004) the occurrence of mental health issues such as anxiety and depression are more prevalent in lower-
socioeconomic populations. The AIHW (2011) further state that in addition to social and economic factors, geographic location, socioeconomic disadvantage and homelessness, refugee status and Aboriginality can contribute to mental health problems.

2.5.6 Aboriginality

Young Indigenous people tend to be those most reluctant to help-seek for mental health problems (Rickwood, Deane, & Wilson, 2007). This reluctance may be attributed to a lack of knowledge about mental health problems and where to seek help for these issues (Rickwood et al., 2007).

In 2006, Indigenous young people made up 3.7% of the total youth population in Australia with an estimated 138 400 Aboriginal and Torres Strait Islander young people aged 12-24 years (AIHW, 2011). In relation to all young Australians, Indigenous young people are more evenly distributed across the differing populated areas with 34% living in major cities, 22% in inner and outer regional areas, 16% in very remote areas and 9% in remote areas (AIHW, 2011).

According to Wyn (2009) young Indigenous people suffer from poorer health than their non-Indigenous peers. Young Indigenous people are more inclined to have higher rates of infectious diseases, obesity and smoking, and a notably lower life expectancy than non-Indigenous people (Wyn, 2009). Additionally, Indigenous young people have lower educational attainment and achievement than those who are non-Indigenous (Muir et al., 2009). The prevalence of mental illness in Indigenous young people may be linked to their geographical location with a larger percentage of the total
population of Indigenous young people living in outer regional, remote or very remote areas.

According to the AIHW (2011), Indigenous young people had ‘high’ or ‘very high’ levels of psychological distress. The National Aboriginal and Torres Strait Islander Health Council (2004), note that Aboriginal and Torres Strait Islander people experience higher rates of both social and emotional wellbeing problems and some mental disorders than their non-indigenous counterparts. Patel et al. (2007) state Indigenous people are historically disadvantaged. Forced removal of Indigenous children from their families has caused serious and long-term mental health problems for Indigenous people. Young Indigenous people, more specifically young males, contribute to a high percentage of suicide deaths within the population of young people (Patel et al., 2007). Hunter (1993) outlines one crucial difference Aboriginal young people experience, and that is reduced access to culturally sensitive care. Further to this, it is noted that some mental health issues like depression and anxiety, may be a response to racism, disadvantage and historical oppression (Hunter, 1993).

The previous determinants play an influential role in determining the health of young people. Factors including socio-economic status, employment and education, gender, ethnicity, Aboriginality, geographical location and peer influence all contribute to the characterisation of young people and their overall health status. These factors have been highlighted to display their impact on the health of young people, in particular their mental health status.

As an aim of the thesis is to investigate the efficacy of a mental health intervention in regional secondary schools in New South Wales, it is imperative that the social and economic
influences on the health of young people in these contexts are well understood. It is important to recognise that the highlighted factors of socio-economic status, employment and education, gender, ethnicity, Aboriginality, geographical location and peer influence can have an impact on an individual’s mental health status. These determinants can also play a role in influencing young people’s attitudes and intentions towards help-seeking for mental health issues. As this study focuses on sites in Central West NSW regional areas, there are a diversity of demographic factors that may impact on young people’s mental health.

2.6 Defining Mental Health
Mental health is defined as “the capacity of individuals and groups to interact with one another and the environment, in ways that promote subjective wellbeing, optimal development, and use of cognitive, affective and relational abilities” (Commonwealth Department of Health and Aged Care & AIHW, 1999, p. 5). Mental health is far more than purely the absence of mental illness, rather it is “the realisation of an individual’s potential shaped by numerous factors such as biological make-up, gender roles, family life, human relationships, work opportunities, educational achievements, and a variety of structural and socioeconomic determinants” (Commonwealth Department of Health and Aged Care & AIHW, 1999, p. 5). As a seminal source, the World Health Organisation (1948) defines mental health as a state of wellbeing where the individual can cope with the normal stresses of life and work productively and fruitfully while realising his or her own abilities and ultimately enabling the individual to make a contribution to his or her community.

Conversely, mental illness is defined by the Australian Health Ministers as “a clinically diagnosable disorder that
significantly interferes with an individual’s cognitive, emotional or social abilities” (2010, p. 5). Individual’s perceptions, emotions, behaviour and social wellbeing is effected by mental illness and mental health problems (AIHW, 2011, p. 24). Vulnerability to mental illness is heightened during adolescence as this is a significant stage of transition, in both physical and mental development (Australian Bureau of Statistics, 2010). Young people suffering from mental disorders can have serious disruptions to their growth and development as it affects their self-confidence, independence and school, home and work relationships, ultimately eroding their quality of life (Australian Bureau of Statistics, 2010).

2.6.1 Mental Health and Young People

Wilson, Bushnell and Caputi (2011) state that approximately half the injury and disease burden in Australia among people aged 15-24 years is directly attributable to mental health problems, with one in four young people living with a mental disorder (Muir et al., 2009). The highest incidence of mental health problems occurs between 16-24 years of age (Australian Bureau of Statistics, 2008) and there are a number of mental disorders which contribute to the disease burden of mental illness and are health problems for the Australian population, including schizophrenia, depression, anxiety disorders, dementia and substance use disorders (Tully, Zajac, & Venning, 2009).

According to the AIHW (2011) the prevalence of mental health problems and disorders account for the highest burden of disease among young people. The following section provides an overview of the common mental health disorders that affect young people and need to be considered when examining help-seeking for mental health issues and their
impact on young people's mental health status. Depression and anxiety disorders are the main mental health problems amongst young people, accounting for almost one-quarter (24%) of the burden of disease in adolescence (Begg et al., 2007).

2.6.1.1 Adolescent Depression
Hazen et al. (2008) claim depression is one of the most common psychiatric conditions affecting adolescents. The Australian Bureau of Statistics National Survey of Mental Health and Wellbeing (2008) reveals one in sixteen young Australians is currently experiencing depression. Depression amongst adolescents frequently goes unrecognised as it is likely for depressed teens to keep the symptoms of depression and their suffering to themselves (Hazen et al., 2008).

2.6.1.2 Anxiety Disorders
A certain degree of anxiety is normal throughout adolescence, however according to Barton et al. (2007) disorders may occur when anxiety interferes with social and occupational functioning, often occurring when the anxiety is excessive and prolonged. According to Kendall et al. (2004) the most common mental disorders in children and adolescents are anxiety disorders. The National Survey of Mental Health and Wellbeing (Sawyer et al., 2000) shows mental health problems in the general population with anxiety disorders being the most prevalent. A number of correlating issues are associated with anxiety disorders including higher rates of suicidal behaviour, impaired educational achievement later in life, drug and alcohol dependence (Barton et al., 2007), problems with peer relationships and lower academic achievement (Campbell, 2003).
2.6.1.3 Substance Use Disorders

Substance use disorders are among the most prevalent mental disorders in the general community (Kessler et al., 1994; AIHW, 2007) and the increase in substance use and abuse by young people is a major problem confronting society in the twenty first century. Alcohol is arguably the greatest substance use issue for young people (Rickwood et al., 2007). The National Drug Strategy Household Survey conducted in 2004 revealed 31% of young people aged 12-24 years reported drinking once or more a month at levels that put them at high risk of short-term harm and 11% of young people in this age group drank at levels that put them at risk of long-term harm (AIHW, 2007, p. 84). The 2013 National Drug Strategy Household Survey revealed fewer young people are taking up smoking and are increasingly choosing to abstain from alcohol with the percentage of those aged 12-17 abstaining from alcohol increasing from 64% to 72% between 2010 and 2013 (AIHW, 2014). The survey findings did however, reveal a relationship between drug use and poor mental health.

The extent and impact of mental illness within the Australian population, in particular amongst young people has become increasingly evident and forms a substantial part of the disease burden in Australia. Young people have the highest incidence and prevalence of mental illness however, they are the least likely to help-seek for their problems, and receive little help to overcome these illnesses which impacts on their survival and well-being (McGorry, 2011).

2.7 Defining Health Literacy

The term health literacy was coined by Simonds in 1974. Simonds sees health education as a social policy and calls for the need to develop health education policies, in his article
“Health Education as Social Policy” (1974). In calling for policy development, Simonds (1974) states that a goal for the education setting be that “Minimum standards for “health literacy” should be established for all grade levels K through 12” (p. 9). Although the term is not explicitly defined, this is recognised as the seminal citing of the term health literacy and Simonds (1974) suggests it is strongly linked to health education, attending appropriate levels of health education and developing “informed and health activated citizens” (p. 3).

The early use of the term health literacy shows a link between health literacy and health education (Ratzan, 2001). One of the most widely recognised definitions of health literacy was developed by Nutbeam (1998) who states “health literacy represents the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health” (p. 357). The relationship between health literacy more broadly, and mental health literacy in relation to this study, is therefore important when examining young people’s help-seeking behaviours.

The current use of the term health literacy has been defined and re-defined, conceptualised and re-conceptualised and largely dependent on the perspective of the specific discipline in which it is used. Within the disciplines of medicine and nursing, health literacy is primarily defined narrowly as a skill where an individual can obtain, read or process health information and have an understanding allowing them to act on that information (Boswell, Cannon, Aung, & Eldridge, 2004; Kandula et al., 2009). This definition places the responsibility of understanding relevant health information on the individual. Responsibility for improved health literacy outcomes is directed to the healthcare provider/individual relationship, which does not take into account a breadth of
social factors which can impact on the health of an individual (Boswell et al., 2004; Ferguson & Pawlak, 2011; Kandula et al., 2009).

Health literacy in the education discipline emerges as a broader, more holistic definition. It is recognised that health literacy is both an individual and social issue, and that the behaviour of an individual, and the social influences they are exposed to, are interrelated (Begoray, Wharf-Higgens & MacDonald, 2009). Ishikawa and Kiuchi (2010) use a broad definition evolving from health promotion and a public health perspective, recognising health literacy is a “means for enabling individuals to exert greater control over their health as well as over the range of personal, social, and environmental determinants of health” (p. 2). Therefore in relation to this study, it is necessary that health literacy is defined in an educational context and recognised as both an individual and social issue in order to examine regional young people’s attitudes and intentions towards help-seeking for mental health issues.

2.8 Defining Mental Health Literacy

The term mental health literacy was coined by Professor Anthony Jorm and his colleagues (1997) and refers to:

- knowledge and beliefs about mental disorders which aid their recognition, management or prevention. Mental health literacy includes the ability to recognise specific disorders, knowing how to seek mental health information, knowledge of risk factors and causes, of self-treatments, and of professional help available; and attitudes that promote recognition and appropriate help-seeking. (p. 182)
Ciarrochi, Wilson, Deane and Rickwood (2003) broaden this explanation, in relation to help-seeking, to include emotional competence. When young people do not know how to identify and describe emotions, or manage their emotions in an effective and non-defensive manner, this impedes help-seeking, therefore a certain level of emotional competence is required to seek help for mental health issues (Ciarrochi et al., 2003; Rickwood, Deane & Wilson, 2007).

The seminal Australian study in the area of mental health literacy (Jorm et al. 1997), presented 2031 individuals between the ages of 18-74 years with two case vignettes; half were questioned about a person with depression, and half about a person with schizophrenia. The results of this study revealed only 39% of the sample correctly identified depression and only 27% of the sample correctly labelled schizophrenia. This recognition of mental health problems is an example of levels of mental health literacy. Meadows et al. (2012) claim with a higher public level of mental health literacy, early recognition of, and appropriate intervention in mental health disorders would be improved. However, according to Burns and Rapee (2006) studies suggest that the public does not possess a high level of mental health literacy. Cotton et al. (2006) concur, claiming many members of the Australian population are unable to correctly identify mental disorders and common treatments and thus their mental health literacy is quite limited. In relation to this thesis, the HeadStrong program aims to improve young people’s mental health literacy and therefore aims to improve the health status of Australians by equipping individuals with knowledge to recognise and intervene in relation to mental health issues.

A study conducted by Wright et al. (2005) involved a telephone survey to identify gaps in mental health literacy among the
sample population of 1207 adolescents aged 12-25 years in two metropolitan regions in Melbourne, and two adjacent semi-rural and rural regions in the state of Victoria. The telephone survey presented participants with a vignette displaying symptoms of a mental health disorder and then asking questions about problem recognition and sources of help (Wright et al., 2005). From the survey responses, a greater percentage of young people recognised depression than psychosis in the vignettes, and the most frequently mentioned sources of help were family and friends and a counsellor/psychologist (Wright et al., 2005). However, from previous studies, results revealed adolescents to have a lower level of mental health literacy than adults. Wright et al. (2005) concluded improving mental health literacy during adolescence could potentially reduce the burden of disease associated with mental illness in the longer term by increasing the number of young people receiving treatment for mental health problems. More current research conducted by the NSW Commission for Children and Young People (2014) looked at barriers and support to young people seeking adult help for a friend experiencing mental health issues. Two online surveys were completed. A student survey was completed by 3241 students in Years 9 and 10 from 121 schools across all educational sectors, and a principal survey was completed by 89 principals of those schools. Interviews with principals and focus groups with students were also undertaken to further explore issues raised in the survey (NSW Commission for Children and Young People, 2014). The study revealed most young people (87% of a sample of 3241) correctly identified that a young person was experiencing a serious mental health problem from a hypothetical scenario. However, almost one-third of young people in this study said they did not know a suitable adult to get help from for a friend experiencing a
mental health issue (NSW Commission for Children and Young People, 2014).

According to Kelly et al. (2007) it is during adolescence when mental disorders often occur for the first time. The lack of mental health literacy is particularly prominent during adolescence and early adulthood as it is during this time health-related behaviours are shaped and young people assume responsibility for their own health actions (Rickwood et al., 2005). Wright et al. (2005), and Jorm et al. (1997) state if mental health disorders are recognised and treated early, in the stage of adolescence, the chances of a better long-term outcome increases.

Therefore, it is important to focus on improving the mental health literacy of young people. In order to achieve this, young people require knowledge about early changes produced by mental disorders, the best types of help available, and knowledge and skills about how to access this help (Kelly et al., 2007). In relation to this thesis, the HeadStrong program and its implementation in schools aims to address these knowledge and skills and in doing so, assist in improving young people's mental health literacy levels and improve their attitudes about and intent to help-seek for mental health issues.

2.7.1 International Studies Aiming to Improve Mental Health Literacy

The previously presented research indicates that mental health literacy levels are low in the adolescent years. An important question is whether mental health literacy levels can be increased through educational interventions. Studies in Pakistan, (Rahman, Mubbashar, Gater, & Goldberg, 1998)
America (Battaglia, Coverdale, & Bushong, 1990; Esters, Cooker, & Ittenbach, 1998) and the United Kingdom (Pinfold et al., 2003) have reported mental health awareness programs in school settings to be effective in changing young people’s opinions about mental health matters and help-seeking (Burns & Rapee, 2006). These studies have further shown mental health awareness programs to have the potential to infiltrate this awareness more broadly into the community (Burns & Rapee, 2006).

In one early and significant study, Esters et al. (1998) reported on the effect a mental health unit of instruction had on American rural adolescents' conceptions of mental illness and their attitudes about seeking help. The participants for Esters et al.'s (1998) study were 40 adolescents, aged between 13-17 years. Twenty students were allocated as the treatment group, and the remaining 20 as the control group (Esters et al., 1998). All students participated in a pre-test questionnaire. The treatment group was then presented with an instructional unit relating to mental health for three days of class. A post-test questionnaire was completed by all students, followed by a second post-test questionnaire 12 weeks later (Esters et al., 1998). Students' conceptions of mental illness and their attitudes to seeking psychological help were measured, revealing the intervention to be successful in changing students' attitudes about and knowledge of mental health and the utilisation of services (Esters et al., 1998). Esters and associates' study demonstrates the impact education can have on decreasing stigma, changing adolescents' attitudes and conceptions about mental illnesses and mental health professionals which currently stand as barriers to help-seeking for mental health disorders (Esters et al., 1998). Esters et al. (1998) recommends further research to use a more
comprehensive curriculum and engage students for a longer amount of time than in the study completed.

2.7.2 Australian Research on Mental Health Literacy in Young People

As noted previously a number of Australian researchers have illustrated the importance of mental health literacy, and also examined the effect of education in enhancing levels of literacy. Kelly et al. (2007) state that Australian research on interventions to improve the mental health literacy and skills in young people has been limited and at times poorly evaluated. Adolescent mental health literacy needs to be improved in order to increase the likelihood of young people accessing the most appropriate help when needed (Burns & Rapee, 2006). Jorm et al. (2006) express the importance of improved mental health literacy stating that a lack of appropriate recognition of mental disorders may lead to delays in help-seeking and inappropriate help-seeking. In addition to this, lack of appropriate help-seeking may be due to the existing gap between public and professional beliefs about treatment of mental health disorders (Jorm et al., 2006).

Burns and Rapee’s (2006) study aimed to extend current knowledge about mental health literacy to an adolescent population group. Participants for this study were 202 students aged between 15-17 years from two private, single sex schools on the lower North Shore of Sydney. Participants were asked to complete the Friend in Need questionnaire which presented five vignettes of young people going through a range of life difficulties and their responses to these difficulties. The questionnaire asked a number of questions such as “What do you think is the matter with each character?” and “Do you think (name) needs help from another person to
cope with his/her problem?” (Burns & Rapee, 2006). Overall, the results of the study revealed a mixed level of knowledge in relation to participants’ ability to ‘label’ depression and to identify the key symptoms (Burns & Rapee, 2006).

Research conducted by the NSW Commission for Children and Young People (2014) identified important findings regarding help-seeking and help giving for mental health issues. Results revealed links between student mental health skills and knowledge, social relations in schools, and the likelihood of young people to help-seek from adults for friends experiencing mental health issues (NSW Commission for Children and Young People, 2014). Most students who participated in the research indicated that they would support a friend with mental health problem by either; “listening to their friend in an understanding way (74%), suggesting the friend talk to an adult (48%), and suggesting the friend seek professional help (37%)” (p. viii).

In relation to this thesis, HeadStrong aims to equip young people with the knowledge of signs and symptoms of mental health issues, and the knowledge of sources of help when they experience a problem. With the intent to increase mental health literacy, this thesis aims to examine the impact of the HeadStrong program on improving young people’s attitudes and intentions to the behaviour of help-seeking.

2.7.2.1 Gender Differences

Gender is socially constructed as an exogenous variable (Barker, 2007). According to Barker (2007) the way young people internalise gender norms and act on them suggests a combination of individual and exogenous factors. Barker (2007) claim studies from a number of industrialised countries confirm that girls are generally more likely to seek help than
boys. In addition to this, international research reveals that boys are more likely to deny and repress problems than girls and delay seeking help longer (Barker, 2007; Kutcher et al., 1996). Furthermore, research by Frydenberg (1997) and Barker (2000) reveals girls are also generally more likely to pay attention to health-related issues and use health services. While internalised gender norms have different manifestations depending on context and culture (Barker, 2007), it is important to consider gender norms when understanding the help-seeking behaviour of adolescents, and in relation to the context of this thesis, regional young people in Central West NSW.

Gender differences have been found in relation to perceptions and awareness of illness (Cotton et al., 2006). Cotton et al. (2006) state gender is one factor which may influence mental health literacy. Women tend to generally be more aware of symptoms of illness, whereas men are more likely to delay help-seeking and are unaware of health problems which they may be experiencing (Cotton et al., 2006).

Gender has been demonstrated to be a strong predictor of attitude toward help-seeking for mental health issues (Wrigley, Jackson, Judd, & Komiti, 2005). Wrigley et al. (2005) claim women help-seek for mental health issues more frequently than men and are more willing to discuss mental health issues with a general practitioner. In relation to adolescents, Barker (2007) state gender norms are key to understanding help-seeking behaviours. According to Barker (2007) boys are more likely than girls to repress and deny problems in moments of stress and are additionally at a higher risk of substance use during these times. Whilst boys more frequently manage on their own, girls are more likely to use social support systems to seek help (Barker, 2007).
Burns and Rapee's (2006) study aiming to extend current knowledge about mental health literacy in adolescents reported girls in the sample population to demonstrate higher mental health literacy. Girls were more able to correctly label the depression vignettes to which they were exposed and expressed greater concern over a depressed peer than boys. In addition, girls were more aware that depression requires a longer recovery than normal teenage problems and were able to identify individual symptoms of depression (Burns & Rapee, 2006).

Cotton et al. (2006) used data from Wright et al.'s (2005) study on recognition of depression and psychosis to examine gender differences in mental health literacy of young Australians. Results revealed, that overall, males were significantly less literate than females with respect to knowledge about the symptoms of depression which may provide possible reasons for young males' delayed help-seeking behaviour (Cotton et al., 2006). A summary of mental health literacy gender differences has been included in Table 2.6.

Table 2.6: Summary of gender differences in relation to mental health literacy

<table>
<thead>
<tr>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unaware of health problems</td>
<td>More aware of symptoms of illness</td>
</tr>
<tr>
<td>More likely to repress and deny problems</td>
<td>More willing to discuss mental health issues with a general practitioner</td>
</tr>
<tr>
<td>More frequently manage on their own</td>
<td>More likely to use social support systems</td>
</tr>
<tr>
<td>Less literate with respect to knowledge about symptoms of depression</td>
<td>More literate with respect to knowledge about symptoms of depression</td>
</tr>
<tr>
<td>Delay help-seeking</td>
<td>More able to label and identify</td>
</tr>
</tbody>
</table>
Inadequate knowledge of mental health disorders is not the only factor limiting help-seeking (Jorm et al., 2006). Negative attitudes and the stigma surrounding mental health issues influence an individual's decision to help-seek.

2.8 Help-Seeking
According to Rickwood, Deane, Wilson and Ciarrochi (2005) help-seeking is the behaviour of being actively in search of help from others. Baker (2007) explains help-seeking in relation to adolescence as perceiving the need of personal, psychological, affective assistance, or social or health services, and acting with a positive purpose to meet this need. Help-seeking is not a simple course of action where an individual suffers from psychological distress and then seeks help for it (Rickwood et al., 2007). Help-seeking requires communication with other people. Receiving help requires understanding the advice and information about problems or distressing issues (Rickwood et al., 2005). Additionally, treatment, and general support for these issues is also obtained during the help-seeking process. Help-seeking utilises other people as a form of coping, and is often based on social relationships and interpersonal skills (Rickwood et al., 2005).

Help-seeking can be classified as either informal or formal help-seeking. Informal help-seeking is when assistance or advice is sought from familiar social relationships including friends and family, while formal help-seeking is gained, from sources such as mental health professionals, teachers, and youth workers (Rickwood et al., 2005). Barker (2007) also recognises the different forms of help-seeking as formal and informal. Barker explains seeking help from formal sources to
include services such as counsellors, psychologists and medical staff, whilst informal sources includes peer groups, friends, family members, or other adults in the community (2007).

A study conducted by Sheffield, Fiorenza and Sofronoff (2004) examined adolescents’ willingness to seek psychological help for mental health issues. A sample of 254 Brisbane secondary school students completed a questionnaire that examined the relationship between demographic and psychological variables, attitudes toward mental illness, and willingness to seek help for a mental illness (Sheffield et al., 2004). Results revealed students with greater social support predicted they were more willing to help-seek from informal sources of help (Sheffield et al., 2004). In addition to this, adolescents who were more willing to seek help from formal and informal sources were more likely to report fewer perceived barriers to help-seeking, greater adaptive functioning, and higher psychological distress (Sheffield et al., 2004).

According to Rickwood et al. (2005) and Barker (2007), young people are more likely to help-seek from informal sources rather than accessing formal help-seeking sources. Furthermore, other sources which do not involve direct contact with people such as the internet, are increasingly being utilised (Rickwood et al., 2005). Self-help treatments are often used, by young people to deal with mental health problems (Rickwood et al., 2007). In Reavley, Yap, Wright and Jorm’s (2011) study regarding the actions young people take to deal with mental health disorders, self-help behaviours such as physical activity and getting up early and out in the sunlight were used regularly when managing mental illnesses.
According to Hampshire and Nicola (2011) there are a number of areas relating to the mental health of young people which need addressing including the intention to, and attitudes about help-seeking. Hampshire and Nicola (2011) state that initiatives that encourage and equip young people with skills to help-seek are needed. Family and friends of young people should be exposed to knowledge about mental health so they can identify when they are struggling and how to assist them (Hampshire & Nicola, 2011). Additionally, Hampshire and Nicola (2011) identify the need for early interventions and broader public discussion on mental health and claim there should be a focus on closer linkages between the range of institutions with which young people come into contact.

2.8.1 School-based interventions to improve mental health literacy and help-seeking

There has been relatively little research on school-based interventions to improve mental health literacy and help-seeking. Kelly, Jorm and Wright (2007) state that research in this area has been scarce and at times poorly evaluated. The Australian research on school-based interventions has been summarised in Table 2.7.
Table 2.7: Summary of school-based interventions to improve mental health literacy and help-seeking among young people

<table>
<thead>
<tr>
<th>School-based intervention</th>
<th>Aims</th>
<th>Intervention</th>
<th>Evaluation</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>MindMatters (&quot;Understanding mental illness&quot; materials)</td>
<td>To increase mental health literacy, build a sense of belonging and decrease social distance in secondary schools.</td>
<td>Varied. MindMatters provides curriculum support materials to all schools in Australia, but the use of these is not standardised. Schools are encouraged to make the materials, including the curriculum units and teaching processes, fit in with their own curriculum.</td>
<td>No baseline questionnaires. Students and school staff completed post-intervention questionnaires.</td>
<td>No change in social distance measures. Changes in mental health literacy could not be assessed.</td>
</tr>
<tr>
<td>beyondblue Schools</td>
<td>To increase</td>
<td>Twenty-five intervention</td>
<td>Questionnaires</td>
<td>The intervention did not</td>
</tr>
<tr>
<td>Research Initiative (mental health literacy component) Australia (Sawyer et al., 2010; Spence et al., 2005).</td>
<td>mental health literacy, reduce depressive symptoms and decrease social distance in secondary schools.</td>
<td>schools ran a number of resilience enhancing programs, mental health literacy curricula and related activities over a 3-year period. Mental health information sessions were conducted for the school community. Twenty-five matched schools were selected as controls.</td>
<td>at different stages of the 3-year intensive intervention, in intervention and control schools.</td>
<td>reduce levels of depressive symptoms. Staff ratings suggested some improvements in the school environment, however there was no evidence amongst students that the intervention enhanced individual protective skills such as positive coping strategies or social support.</td>
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<tr>
<td>---</td>
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<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Mental Illness Education Australia (Rickwood, et al., 2004).</td>
<td>To reduce stigmatising attitudes, and improve</td>
<td>Information and awareness sessions run in-school by a presenter and either a consumer-educator or carer-</td>
<td>Pre- and post-intervention questionnaires completed by</td>
<td>Improvements in mental health literacy, including the ability to recognise mental illnesses; modest</td>
</tr>
</tbody>
</table>
mental health literacy and help-seeking intentions in secondary school students.

Students $(n=457)$ who did and did not attend the information sessions.

Improvements in stigmatising attitudes; weak improvements in help-seeking intentions.

*(Adapted from Kelly, Jorm & Wright, 2007)*

According to Kelly, Jorm and Wright (2007) there is no standardisation of mental health education in schools. Continued research and intervention on mental health literacy of young people is important, and ways of promoting health-enhancing behaviour, such as help-seeking should be the focus of future intervention research (Kelly, Jorm & Wright, 2007). The HeadStrong intervention aims to address this need, designed to improve mental health literacy and enhance help-seeking behaviours amongst young people.
An inconsistency also exists between health and education sectors in relation to health promotion intervention development. In order to address this, Fazel, Hoagwood, Stephan and Ford (2014) believe collaboration between the two sectors would be enhanced by mutual contributions to basic professional training. According to Kreichman, Salvador and Adelsheim (2010), specific training for most mental health professionals to become familiar with the school context is scarce. This is problematic if the health sector is designing programs to implement in schools. Similarly, within the education sector, teacher training programs need to incorporate mental health education and involve curricula targeted at mental health issues likely to be present in schools (Fazel et al., 2014). In addition to this, training teachers in mental health promotion skills would assist in identification and referral for students who need help, and would also assist teachers to feel less overwhelmed by the emotional and behavioural challenges in their classrooms (Schwean & Rodger, 2013). The HeadStrong intervention aims to address this as the HeadStrong resource was developed collaboratively, and also provides teachers with professional development.

2.9 Barriers to Help-Seeking
There are a number of barriers which inhibit young people help-seeking for mental health problems. A lack of emotional competence is one potential barrier, as those with low emotional capability are deficient in some of the skills required to help-seek and thus are the least likely to do so (Rickwood et al., 2005). Young people low in emotional competence may not help-seek for a number of reasons. These may include: i) having fewer opportunities to help-seek as they have limited sources of social support from extended family
and friends, thus lower intention to help-seek for problems (Ciarrochi, Wilson, Deane, & Rickwood, 2003); ii) past experiences in help-seeking from health professionals may have been unsuccessful making them less likely and more reluctant to help-seek in the future (Ciarrochi & Deane, 2001), or iii) they may feel humiliated about their perceived lack of competence to help-seek (Rickwood et al., 2005).

Wilson et al. (2011) state that additional barriers to young people help-seeking is their incomplete mental health and emotional literacy. In the process of help-seeking for mental illness, the recognition of the problem is the first step and claimed by Wilson et al. (2011) to be the most important.

Barriers to help-seeking in regard to young people seeking adult help for a friend were identified in research conducted by the NSW Commission for Children and Young People (2014). Young people reported a range of barriers to seeking adult help on behalf of a friend with the most mentioned including: “worrying that their friend would be embarrassed and not want an adult to know (72%); feeling unsure about the best thing to do (51%); thinking that involving an adult would make things worse (44%); thinking that going to an adult would break their friend’s trust (40%); and thinking that they would not seek adult help if their friend said they did not want any help (40%)” (p. viii).

Young people may not help-seek for mental health illnesses due to negative attitudes and beliefs they may have about relating to professional help. These attitudes and beliefs may originate from negative past experiences when seeking professional help, or they may have negative beliefs about the value of such help (Rickwood et al., 2005; Wilson et al., 2011). Fueling the attitude that professional help sources are useless,
young people tend to believe that their family can provide more help for any personal and emotional troubles they may experience. Furthermore, a fear of stigma of mental health problems is high in young people and relates to fears concerning the confidentiality of professional help services (Rickwood et al., 2007; Rickwood et al., 2005).

2.9.1 Stigma
Stigma is noted by Meadows et al. (2012) to be a shameful mark of difference on a person which dehumanises them, often branding them publicly or socially from others. Stigma can be categorised as personal stigma, also referred to as self stigma, which exists when an individual has personally internalised negative attitudes or thoughts or perceived stigma where an individual has a perception that others hold negative attitudes (Griffiths et al., 2006; Jorm et al., 2006).

Individuals with depression are deemed to have a general concern regarding the stigma associated with mental disorders (Griffiths, Christensen, & Jorm, 2008). According to Kelly and Jorm (2007) stigmatising attitudes and beliefs towards depression are not uncommon. The stigmatising attitudes which exist among the general population can lead to feelings of fear, avoidance, bias, anger or distrust towards people with depression or other mental disorders (Kelly & Jorm, 2007). Calear and colleagues’ (2011) study on personal and perceived depression stigma in Australian adolescents brings to light perceived depression stigma as being rated higher than personal depression stigma. Calear et al. (2011) further express the negative impact stigma has on the individual, stating that these negative feelings towards those with mental illnesses can affect the well-being of the individual, increasing their psychological distress (Griffiths et al., 2006) and
inhibiting them from executing appropriate help-seeking behaviours. Even though young people rate other people’s stigma significantly higher than their own personal stigma, both can negatively affect an individual’s decision to help-seek for mental health problems and thus it is important that both be explored and addressed (Calear et al., 2011; Griffiths et al., 2008).

There are international studies which display these negative attitudes about mental health care such as Corrigan’s (2004) American study on the impact stigma has on people accessing mental health services. Corrigan (2004) highlights stigma as a deterrent for individuals participating in treatment for mental health illnesses. Stigma diminishes self-esteem and deprives individuals of social opportunities through social disapproval (Corrigan, 2004). According to Corrigan (2004) the labeling of mental illness needs to be avoided in order to encourage people to seek help for mental health problems they may be experiencing. Wright et al. (2011) support Corrigan (2004) stating that labeling mental health problems with psychiatric terms can be stigmatising. Link and Phelan (2010) also believe labeling a person as “mentally ill” is stigmatising, however they also hold the belief that labeling of mental disorders (the problem itself) can be beneficial, as it facilitates treatment and thus can be a facilitator of help-seeking.

An Australian study undertaken by Griffiths et al. (2008) investigated and compared the predictors of personal and perceived stigma associated with depression in three Australian population samples. The first sample consisted of 1001 Australian adults. Data were collected from a national household survey of attitudes, beliefs and knowledge about mental disorders including depression (Griffiths et al., 2008). The second population sample was a local community sample
of 5572 residents aged 18 to 50 years in the Australian Capital Territory and adjacent town of Queanbeyan, New South Wales. The sample was randomly selected and the residents completed a community survey of the attitudes and beliefs about depression. Finally, sample three was a psychologically distressed breakup of the latter sample where additional information about respondents’ knowledge about depression was gained (Griffiths et al., 2008). Personal and perceived stigma were measured by administering the surveys to the three samples. Results revealed personal stigma to be consistently higher among men, individuals with lower levels of education, those born overseas, those with greater psychological distress, and those with lower levels of depression literacy (Griffiths et al., 2008). The results of Griffiths et al.’s (2008) study are significant to this thesis as individuals who live in regional areas generally have limited educational opportunities (Boyd et al., 2007; Hodges et al., 2007) which may impact their level of education and therefore, as indicated by Griffiths et al.’s (2008) findings, are more likely to suffer from personal stigma.

Griffiths et al. (2006) conducted a national, cross-cultural study comparing the extent of stigma in response to mental disorders among the two countries of Australia and Japan. Similar methodologies were used in each country, conducting a survey interview, presenting participants with one of four vignettes of a person with a mental disorder (Griffiths et al., 2006). The sample consisted of 3998 Australian adults aged over 18 and 2000 Japanese adults aged from 20 to 69 (Griffiths et al., 2006). The study aimed to highlight the personal attitudes and perceptions of the attitudes of others in the community by providing participants with vignettes describing individuals with a mental disorder and requiring them to respond revealing their attitudes towards mental
disorders (Griffiths et al., 2006). Results of Griffiths et al.’s (2006) study revealed the Japanese population to have greater levels of personal stigma and social distance in comparison to Australians. However, Australians had higher levels of the perception of the attitudes and perceived discrimination of others than Japanese. Overall, personal stigma was revealed to be significantly greater than perceived stigma in both countries (Griffiths et al., 2006). Griffiths et al.’s (2006) study concluded that stigmatising attitudes about mental health disorders were common in both Australia and Japan, however these negative attitudes were more prevalent among the Japanese public.

In comparison to the wider population, there have been few studies evaluating the levels of depression stigma in adolescents (Calear et al., 2011). There has also been minimal research on the factors predicting stigmatising attitudes in adolescents (Reavley & Jorm, 2011).

Reavley and Jorm (2011) state that stigmatising attitudes towards people with mental disorders are common among adolescents. This stigma can act as a barrier to help-seeking and interfere with treatment. Young people with mental disorders can feel abnormal and socially disconnected and these stigmatising attitudes prevalent in adolescents have an adverse effect on the quality of life of those with a mental illness (Reavley & Jorm, 2011).

In order to increase help-seeking behaviour and reduce stigma in the community, predictors of personal and perceived depression stigma need to be identified in Australian adolescents to gain a greater understanding of how these stigmatising attitudes and beliefs are developed (Calear et al., 2011). Calear et al.’s (2011) study examined current levels of
personal and perceived depression stigma amongst Australian adolescents. In addition to this, Calear et al. (2011) identified predictors of personal and perceived stigma and observed whether personal stigma was lower than perceived stigma.

Participants in this study were 1375 adolescents aged between 12-17 years (Calear et al., 2011). Personal and perceived depression stigma was measured using the Depression Stigma Scale (Griffiths, Christensen, Jorm, Evans, & Groves, 2004) and a number of other socio-demographic and symptom scale measurements (Calear et al., 2011). Findings revealed adolescents rated other people’s stigma (perceived stigma) as significantly higher than their own personal stigma (Calear et al., 2011). Griffiths et al.’s (2006) comparative study of stigma within Australia and Japan revealed similar results, finding higher levels of perceived stigma than personal depression stigma.

Predictors of personal and perceived depression stigma were highlighted in Calear et al.’s (2011) study revealing personal depression stigma was predicted by being male, younger and with no history of personal or parental depression. Research has displayed being male, and having no personal or parental history of depression as predictors of personal stigma (Griffiths et al., 2008; Jorm & Wright, 2008). Predictors of perceived stigma were, and have previously been, identified as being female (Calear et al., 2011; Jorm & Wright, 2008), having a history of parental depression (Calear et al., 2011; Griffiths et al., 2008) and experiencing higher levels of anxiety and personal depression stigma (Calear et al., 2011).

In order to de-stigmatise mental health issues and decrease levels of personal and perceived stigma, young people need to be educated about mental health literacy in order to increase
early and appropriate help-seeking attitudes and intentions (Wilson et al., 2011).

2.9.2 Effects of Educational Interventions on Stigma
As noted previously, researchers have illustrated the need to educate young people about mental health literacy to improve their attitudes and intentions toward the behaviour of help-seeking. An important question is whether attitudes towards help-seeking for mental health issues can be destigmatised through educational interventions. Schachter et al.’s (2008) Canadian study examined the effects of school-based interventions on mental health stigmatisation through the process of a systematic review. Electronic database searches were conducted using various combinations of subject terms, index terms and text words (Schachter et al., 2008). From these searches, studies which did not focus on a school-based intervention which influenced stigma for individuals 18 years of age or younger were excluded. Reports were further excluded on relevance basis, resulting in 40 reports which described evaluation studies then being entered into Evidence Synthesis (Schachter et al., 2008). Schachter et al. (2008) argues the most effective and efficient strategies to eliminate and prevent discrimination and stigma entail implementing developmentally-appropriate, curriculum-based, sustainable interventions at an early stage. In relation to this thesis, the HeadStrong primary health intervention supports Schachter et al.’s (2008) findings and appropriately addresses this criterion. The HeadStrong program is developmentally-appropriate as it targets Stage 5 students who are within the developmental stage of adolescence. Research displays the highest incidence of mental health problems occurs between 12-24 years of age (Slade et al., 2009). Furthermore, it is within this stage, at approximately 14 years, where adolescents have a sufficient
level of emotional maturity to deal with the sensitive content included within the HeadStrong program (Wyn, 2009) and thus are the appropriate sample population for this thesis. In addition to this, the HeadStrong resource itself has direct links to the PDHPE curriculum and thus further supports Schachter et al.’s (2008) findings which state that curriculum-based interventions are most effective and efficient when preventing and eliminating stigmatisation of mental health disorders.

Pinfold et al.’s (2003) study assessed the effectiveness of an educational intervention on 472 United Kingdom secondary school students which aimed to increase their mental health literacy and challenge negative stereotypes associated with severe mental illness. The educational intervention consisted of two mental health awareness workshops. The first mental health awareness workshop; Phase 1 was delivered by a facilitator who worked in the field of mental health. The focus of Phase 1 was to improve students’ understanding of mental health and illness, promote positive wellbeing and challenge stigma and stereotypical labels associated with describing mental illness (Pinfold et al., 2003). Phase 2 sessions were co-facilitated by a person who had personal experiences of living with mental health problems (Pinfold et al., 2003). Participants completed pre- and post-questionnaires to reveal knowledge, attitudes and behavioural intentions (Pinfold et al., 2003). The quantitative data for the study were analysed using SPSS, paired t-tests and analysis of variance, whilst qualitative data were coded using content analysis to identify emergent themes (Pinfold et al., 2003). In relation to this thesis, pre- and post-questionnaires were also conducted, along with a 6-month follow-up questionnaire and face-to-face individual interviews. The data gathered from these data collection methods was analysed similarly to Pinfold et al.’s (2003) study with quantitative data analysis using SPSS, paired t-tests and
analysis of variance, and qualitative data being coded using intra- and inter-textual analysis to identify key themes.

A number of results were revealed from the analysis conducted in Pinfold et al.’s (2003) study. In relation to the shift of student views, there was an increase in positive attitudes towards people with mental health problems, with 73% of students self-rating their attitudes as more positive immediately after attending the workshop sessions (Pinfold et al., 2003). In addition to this, Pinfold et al. (2003) revealed 61% of students retained this positive self-rating at the 6-month follow-up survey.

From this study, it can be concluded small, positive shifts in student understanding of mental health and illness, and positive changes in reported attitudes towards people with mental health problems, can be produced through short educational workshops (Pinfold et al., 2003). However, Pinfold et al. (2003) stated that findings revealed in order to address young people's deep-rooted beliefs and fears about interacting with people with severe mental illness it would take more than just two short educational workshops. In relation to this thesis, the HeadStrong program is delivered over an extended period of time of approximately 5-8 weeks. This extended delivery time addresses the need of longer contact than two short educational workshops outlined in Pinfold et al.’s (2003) study. In addition to this, the HeadStrong program and the student learning activities featured in the resource are designed to link mental health to other important social and health issues. Pinfold et al. (2003) outlines the importance of this extended teaching time when teaching about mental health as it ensures mental health problems are recognised by young people as a central health problem.
A limitation from Pinfold et al.'s (2003) study is that there was no control group for the intervention, which therefore weakened the findings of the research. In relation to this thesis, a control group was established in order to strengthen the study to enable comparisons to be made between the intervention and control groups in regard to their levels of mental health literacy and their attitudes and intentions towards help-seeking for mental health issues.

From Calear et al.'s (2011) study it is clear there are existing stigmatising attitudes and beliefs amongst the adolescent population, and anti-stigma campaigns and interventions, such as the HeadStrong program would be appropriately targeted at young people within this age group. Meadows et al. (2012) believe that in order to combat the widespread damaging social attitudes toward people with mental illness, education initiatives and interventions, and de-stigmatising campaigns can assist in informing and creating an understanding about mental illness for individuals and the wider community.

Young people need mental health literacy and emotional literacy to be able to recognise if they may be experiencing symptoms of mental illnesses that require attention or treatment and subsequently be able to help-seek for these symptoms (Wilson et al., 2011). Therefore, in order to address this barrier, it is important that young people's beliefs about seeking professional psychological help is improved so their use of mental health services can increase (Rickwood et al., 2005).

Rickwood et al. (2007) outline that another barrier young people may face when accessing help for mental health illnesses is the belief that they should solve problems themselves. Throughout the developmental stage of
adolescence, young people have an increasing need for autonomy and independence and rely more on themselves to handle their problems (Rickwood et al., 2007). The perceived barriers to help-seeking outlined prevent young people from accessing mental health services. These barriers need to be addressed in order to increase early and appropriate help-seeking among young people (Wilson et al., 2011).

2.10 Facilitators of Help-Seeking
Facilitators are factors that encourage young people to help-see for mental health problems. Facilitators of help-seeking often work in direct contrast to barriers. For example, young people with negative past experiences of seeking professional help are less likely to consult with professional services. In contrast to this, young people who have had positive past experiences (Gulliver et al., 2010) and have positive attitudes towards seeking professional help are more likely to intend to help-seek from these services (Rickwood et al., 2005). An aspect of Wilson and Deane’s (2001) study examined adolescent opinions about increasing appropriate help engagement. From this study it was revealed, memories of successful prior helping episodes were an important factor for current help-seeking.

Another facilitator to young people help-seeking is their mental health literacy and emotional competence (Rickwood et al., 2007; Rickwood et al., 2005). Gulliver et al. (2010) state past experience with help-seeking may act as a form of knowledge or mental health literacy, a factor deemed important in the process of help-seeking. Mental health literacy is having the knowledge and ability to recognise mental health problems, realising the symptoms, risks, causes and treatment involved, and how and when it is necessary to help-seek (Rickwood et al., 2007). Rickwood et al. (2007) claim
young people are more likely to help-seek for mental illnesses if they are able to recognise they have a mental health problem and have the mental health literacy to help-seek. Rickwood et al. (2005) state that mental health literacy for young people also incorporates knowledge on services available to them and an awareness of what to expect from different types of services. Improving mental health literacy in young people may lead to better outcomes for individuals experiencing mental health issues as it can play a role in facilitating early help-seeking (Kelly, Jorm & Wright, 2007).

Young people who have existing relationships with people they know and who they can trust, are more likely to help-seek from them if they feel they are experiencing any mental health problems (Rickwood et al., 2007). Wilson and Deane’s (2001) study reinforces this finding revealing relationships and trust as key approach factors for current help-seeking. These established and trusted relationships generally fall with their friends and family and thus young people are more likely to help-seek from them for their personal and emotional problems (Rickwood et al., 2007).

There are a number of barriers to and facilitators of help-seeking which may influence young people's attitudes towards help-seeking for mental health problems. In order to change negative perceptions about help-seeking for mental health problems, the promotion of good health needs to occur through early intervention and preventative programs and initiatives (Calear et al., 2011; Pinfold et al., 2003; Schachter et al., 2008).

2.11 Health Promotion
Young people with mental illnesses can benefit greatly from early detection and treatment. Therefore it is important that
promotion of mental health through early intervention and preventative programs occur through health promotion.

Health promotion is defined by the World Health Organisation as “the process of enabling people to increase control over, and to improve their health” (as cited in Nutbeam, 1998, p. 351). Health promotion is an in-depth process with societal and political influences and is aimed at strengthening individuals' skills and abilities such as behavioural actions, and changing social, environmental and economic conditions such as access to appropriate services and improving employment and working conditions (Herrman, 2001; Nutbeam, 1998). Health promotion enables individuals to improve their health by increasing control over the determinants of their health (Nutbeam, 1998).

The Ottawa Charter for Health Promotion was produced by the World Health Organisation in 1986, and launched at the first international conference for health promotion, in Ottawa, Canada. According to Rickwood (2011) the Ottawa Charter is established as the definitive framework for health promotion. It is an expansive health promotion framework that encompasses the many diverse mental health needs from individuals to the societal (Rickwood, 2011). The three basic strategies for health promotion identified by the Ottawa Charter are i) advocacy for health to create the necessary conditions; ii) enabling all individuals to achieve their full health, and iii) mediating differing interests in society when pursuing health (World Health Organisation, 1986). The three strategies of advocacy, enabling and mediating are supported by the five priority areas of the Ottawa Charter which are the fundamental tools for health promotion (Nutbeam, 1998). The five priority areas are i) building healthy public policy; ii) creating supportive environments; iii) strengthening
community action; iv) developing personal skills; and v) reorienting health services (World Health Organisation, 1986).

Herrman (2001) claims health promotion and prevention are connected actions with health promotion focusing on the determinants of health, and health prevention on the causes of disease. There are three stages of intervention when preventing illness: i) primary, ii) secondary; and iii) tertiary. Primary intervention focuses on the prevention of the onset of illness, while secondary intervention is characterised by reducing the duration of treatment if the illness is accessed early; and finally tertiary prevention is where intervention aims to reduce consequent development of the disease (Herrman, 2001). In relation to this thesis, the HeadStrong program is a health promotion initiative, classified as a primary health intervention.

Health promotion literature suggests using a settings approach for promoting mental health. According to Poland et al. (2000) characteristics of the settings approach includes the subjects of the intervention (collectively and individually), the location in which the health promotion takes place, and the surroundings and structure of the setting itself. A settings approach has the focus not only on the individual, but their habitual social surroundings are taken into account including where they live, work and play (Poland et al., 2000). Poland et al. (2000) state settings are not merely locations, they are means and products of human social interaction.

In relation to pedagogical approach, literature suggests providing opportunities for young people to practice help-seeking skills is effective when promoting behavioural change (McBride, 2003; Tobler et al., 1999). The pedagogical approach of allowing students to practice behaviours in low risk
situations, using real-life scenarios is supported by McBride (2003). Although McBride's (2003) literature explicitly focuses on drug education, according to McBride, this teaching method provides young people with important opportunities to practice skills that they can take with them to real-life situations and as a result, encourages behaviour change. Further to this, Tobler et al.'s (1999) research on drug prevention supports offering students opportunity to exchange ideas and experiences and practice new skills. Through the pedagogical provision of practice, for example in the form of role-play, this allows students to obtain feedback which can act as a future catalyst for change when presented with a similar situation.

Wells, Barlow and Stewart-Brown’s (2003) systematic review of universal approaches to mental health promotion in schools, revealed mental health intervention studies to show some positive results, demonstrating it is possible to have positive impact through school-based programs. However, the most successful and sustainable interventions were more likely to be mental health-promoting programs which were implemented continuously over extensive periods of time, i.e. a year or longer (Wells, Barlow & Stewart-Brown, 2003). Wells, Barlow and Stewart-Brown (2003) claim long-term interventions promoting positive mental health of all students and involving changes to the school environment are likely to be more successful than brief classroom-based mental illness prevention programs.

The overall experience of attending school, and the interaction between schools and young people provide unique opportunities for health promotion (McCuaig, Coore & Hay, 2012). Rowling (2007a, b) also recognises the importance of schools as settings for promoting mental health. It was
important that a settings approach, more specifically a school setting was used when conducting this research, as we know from the work of Rowling (2007a, b) that schools are a safe place to undertake mental health education. The World Health Organisation believes adopting a Health Promoting Schools approach can achieve positive health outcomes for young people. The three key domains of the Health Promoting Schools approach include: i) teaching and learning, ii) school policy and ethos, and iii) school-community relationships (McCuaig & Nelson, 2012).

Weare and Nind (2011) conducted a review of international evidence in their systematic review of mental health in schools. It was revealed, for optimal impact and sustainability, mental health skill development needs to be embedded within a whole-school, multi-modal approach, as opposed to a skills focused, curriculum based, approach alone. A whole-school approach, well implemented, typically includes changes to school ethos, teacher education, liaison with parents, parenting education, community involvement and coordinated work with outside agencies (Weare & Nind, 2011).

The importance of adopting a Health Promoting Schools approach is acknowledged in this thesis as the researcher recognises that mental health promotion is much more than simply inserting curriculum materials into health classes (Wyn et al., 2000). This thesis investigates and contributes to one part of the health promoting schools approach: the use of a particular curriculum. It is acknowledged that the evaluation of the HeadStrong resource is contributing to one aspect of the health promoting schools approach: teaching and learning. It is important that the HeadStrong resource is evaluated as it contributes to the nature of a health promoting school and if it is not effective, it is detrimental to the success in the other
domains. It is recognised that further work in the other domains shall assist in improving mental health and wellbeing using a whole-school approach (Rowling, 2009).

Patton et al. (2000) support utilising a settings approach for mental health promotion and furthermore, acknowledges the advantages of using schools as this setting. Patton et al. (2000) claim schools are an access point to many young people at a time where mental health disorders stemming from emotional problems and behaviours commonly develop. Furthermore, the transitions in education and schooling that occur during young people's lives are extremely significant events and the quality of these experiences inevitably affect young people's emotional wellbeing (Patton et al., 2000). Therefore, in relation to this thesis, utilising a settings approach, schools were the selected setting for mental health promotion to take place.

2.11.1 Type of Interventions

Adopting a psychological research approach, Sawyer, Borojevic and Lynch (2011) claim there are three intervention approaches which can be used to offer help for young people who may be suffering from mental health problems. These consist of clinical interventions, and two population-level interventions including targeted and universal interventions (Sawyer et al., 2011).

There are positive and negative factors relating to each intervention. Clinical interventions are those that are usually delivered by staff from health and community services to young people and families who have sought help from these services. Clinical interventions can provide individualised, detailed assessment and treatment for mental illnesses suffered by young people as there is direct contact between
the health and community services staff and the young people and families in distress (Sawyer et al., 2011). However, clinical interventions rely on individuals having the knowledge and ability to choose to help-seek for the mental health problems they may be experiencing. In addition to this, although face-to-face contact is preferred, with the increasingly high prevalence of mental health disorders it is unlikely there will be ample funding to provide clinical services for all those with problems (Sawyer et al., 2011).

In contrast to clinical interventions, population-level interventions, both targeted and universal, do not rely on individuals choosing to help-seek. Population-level interventions target greater numbers of people, aiming to provide help for many individuals living in particular regions (Sawyer et al., 2011). Targeted interventions, which fall under population-level interventions, aim to identify children or families who are considered to be at risk for future problems (Sawyer et al., 2011). A major restraint is that it may be difficult to correctly identify young people who will develop a future mental health disorder. However, targeted interventions have the potential to intervene and provide help to those young people who do not help-seek from clinical services (Sawyer et al., 2011).

Universal interventions, also classified as population-level interventions, focus on total populations at a community, regional or national level and are delivered to all individuals, removing the risk of young people being labelled, singled out and suffering from stigma associated with mental illnesses (Sawyer et al., 2011). Supporting the use of universal interventions, Hodges et al. (2007) state that early intervention aims to avert the development or progression of the mental illness for individuals at risk of developing a disorder or at the
onset of disorder. Barrett and Turner (2004) claim programs within universal interventions are delivered to all students regardless of whether they are experiencing any symptoms and are generally intended to build resiliency and improve general mental health. Therefore the prevention of the development or progression of mental health problems minimises damage to individuals and their mental health and wellbeing (Hodges et al., 2007). Whilst universal interventions could potentially assist large numbers of young people, Sawyer et al. (2011) claim most individuals in the population group may not be at risk and thus the effect of the intervention may offer only limited benefits.

When conducting health and educational research, Rowling and Jeffreys (2006) claim using evidence from more than one discipline is essential in order to ensure outcomes are of value to all involved and that programs are relevant and acceptable to inter-sectorial partners. There are compounding variables that contribute to an intervention-approach program's capacity to improve young people's mental health literacy that are powerfully embedded in each school’s policy and practice. Recognition of the interaction of components in a settings approach is essential. The culture and context of a setting needs to acknowledge how schools as organisations operate, improve and change in a dynamic nature (Rowling & Jeffreys, 2006). According to Rowling and Jeffreys (2006), if the constraints imposed by internal school structures are not recognised, then inappropriate application of research designs can result. Wyn et al. (2000) make further remark conveying that the efficacy of mental health promoting resources are crucially linked to the school context or setting in which they are implemented. This therefore provides justification for the exploration of the existing barriers to, and facilitators of, help-
seeking by interviewing young people in the context of their school setting and regional space.

The HeadStrong intervention can be classified as both a settings approach, and a population-level intervention, more specifically a universal intervention, as the program was distributed to particular regions and schools within these areas, rather than just individual students. For this thesis, a settings approach to health promotion was adopted.

2.12 Chapter Summary
The present chapter has outlined literature that indicates that young people have lower than optimal levels of mental health literacy, relatively negative attitudes to help seeking, and to people with mental health issues. These characteristics appear to lower access to mental health services, and provide barriers to receiving evidence-based mental health support. A number of studies have systematically examined the effects of education and other programs in increasing health literacy, improving help-seeking attitudes and behaviours, and lowering stigma. However, this research has limitations, and a number of important studies have not used randomised controlled trials to evaluate the effect of these programs.

What is clear from the synthesis of literature, is that population based curriculum programs which focus on increasing knowledge, providing help-seeking contacts, reducing stigma, and promoting help-seeking have promise in improving mental health outcomes for young people. However, more research is required. Thus this thesis examines the effect of an education program: HeadStrong, on regional young people's attitudes about and intentions to the behaviour of help-seeking for mental health issues. This thesis utilises a settings approach, implementing HeadStrong with young
people in the Central West region of New South Wales, with the aim to improve their mental health literacy and attitudes towards help-seeking.
Chapter Three: Theoretical Framework

The Theory of Planned Behaviour

3.1 Introduction


Armitage and Conner (2000) suggest that these models have been designed to identify the variables which underlie health-related decisions and predict behaviour. Additionally, Conner and Norman (1996), identify a number of advantages of using social cognition models to predict health behaviour. These advantages include: i) the provision of a clear theoretical background to research, ii) the ability to guide the selection of variables to measure, iii) the capacity to develop reliable and valid measures, and iv) a rationale for how these variables are combined in order to predict health behaviours and outcomes. By predicting health outcomes and behaviours, interventions can be designed to alter the cognitions underlying unhealthy behaviours, promote positive health outcomes and change behaviour (Conner & Norman, 1996). The following section of this chapter describes the characteristics of a range of social cognition models of health behaviour and critiques their applicability for use in this thesis.
3.2 Health Belief Model (HBM)

Health-related action and behaviour depends on three factors occurring simultaneously (Rosenstock, Strecher, & Becker, 1988). These factors include i) sufficient motivation to make health issues relevant; ii) a belief by the individual that they are vulnerable to a health problem or threat of illness; and iii) the belief that by following a particular health recommendation, the perceived threat can be reduced and benefits can arise (Rosenstock, et al., 1988). The Health Belief Model (Rosenstock, 1974) includes six determinants of behaviour which include perceived susceptibility, perceived severity, perceived benefits, perceived barriers, health motivation and cues to action. Armitage and Conner (2000) explain that all six components are generally regarded as independent predictors of health behaviour.

As the research questions of this thesis aim to identify the perceived barriers to and facilitators of help-seeking for mental health problems, the Health Belief Model has the potential to act as an analytical and theoretical framework. Additionally, the research intervention (the HeadStrong program) aims to improve young people’s mental health literacy and therefore equip young people with the knowledge to recognise if they are vulnerable (perceived vulnerability) to particular mental health problems. However, Conner and Norman (1996) state that even though the Health Belief Model is the oldest and most widely used social cognition model in health psychology, compared to other social cognitive models, the Health Belief Model has flaws. The Health Belief Model does not incorporate several social cognitive variables found to be highly predictive of behaviour, such as intention to perform a behaviour and social pressure (Conner & Norman, 1996). As one focus of this thesis aims to investigate young people’s intentions to help-seek for mental health problems,
the Health Belief Model has not been chosen as a theoretical framework for this thesis.

3.3 Protection Motivation Theory
Rodgers' (1975) Protection Motivation Theory is closely related to the Health Belief Model (Armitage & Conner, 2000). A primary difference between the two models is the way in which they are organised (Prentice-Dunn & Rogers, 1986). Whilst the Health Belief Model is structured using a number of variables that contribute to behaviour, the Protection Motivation Theory's coping process is based on two components: i) the individual's expectancy that executing a behaviour can eliminate the threat, and ii) a belief in one's capability to successfully carry out the recommended courses of action (Conner & Norman, 1996; Floyd, Prentice-Dunn, & Rogers, 2000).

There are two forms of coping within the Protection Motivation Theory; adaptive coping which is beneficial to health, and maladaptive coping which is harmful to health (Armitage & Conner, 2000). Intention to perform adaptive or maladaptive responses results from the two components previously outlined: the threat-appraisal process and the coping-appraisal process (Conner & Norman, 1996; Floyd, et al., 2000).

The decision to take action in relation to a health problem needs to come from the belief that there is some harm, and that the individual is vulnerable to this harm (Floyd, et al., 2000). In relation to this thesis, young people need to be aware of the harm of diminished mental health and the extent to which it is affecting individuals of their age. Increasing young people's appraisal of threat can be achieved through improving young people's mental health literacy, through
interventions such as the HeadStrong program. Floyd et al. (2000) claim the appraisal of threat supplies the motivation to initiate the coping process. In order to adopt the recommended coping response, the individual must believe that they have the ability to perform the coping response (help-seeking), and that by performing it they will avoid the danger (Floyd et al., 2000).

Connor and Norman (1996) state that the Protection Motivation Theory incorporates many important cognitive variables underlying health behaviours, however, the way it has been conceived and operationalised has varied and thus detracted from its explanatory power. Milne, Sheeran and Orbell (2000) further highlight the imperfections within the model claiming it useful in predicting concurrent behaviour, but less effective when predicting future behaviour. Whilst the coping-appraisal aspect of the protection motivation theory was found by Milne et al. (2000) to have predictive validity, the threat-appraisal component did not yield as great results. As this thesis aims to investigate the attitudes and intentions of young people to the behaviour of help-seeking for mental health problems, the theoretical framework to be used needs to focus on intention. As intention is a primary determinant of behaviour (Ajzen & Fishbein, 1975) the Protection Motivation Theory is not the most efficacious framework for analysis of data gathered in this thesis.

3.4 Locus of Control
When examining behaviour, it is important to consider an individual’s health Locus of Control. Many factors may facilitate or hinder the performance of behaviour. Some of these factors are internal to the individual such as skills and willpower, while other factors are located externally, such as task demands and the actions of another person (Ajzen, 1985).
According to Connor and Norman (1996) Locus of Control has been used by health psychologists as a predictor of preventative health behaviour, as perceived control over an outcome or event is independent on the internal or external locus of the factors responsible for it. Individuals vary in their beliefs about the extent to which events are under their own personal control. Individuals with an *internal* Locus of Control believe that they are in control of events, what they do and what happens to them (Connor & Norman, 1996). Those with an *external* Locus of Control believe that events are unrelated to their actions and determined by forces beyond their control (Connor & Norman, 1996).

In relation to this thesis, Locus of Control could be relevant to the action of help-seeking for mental health problems. Those with an internal Locus of Control may be more likely to help-seek, because they believe that there is something they can do to address their mental health problems and those with an external Locus of Control may be less likely to help-seek, because they believe that there is nothing they can do to change their situation.

However, Connor and Norman (1996) state that overall, the health Locus of Control construct has been revealed to be a relatively weak predictor of health behaviour. Wallston (1992) supports this, claiming the health Locus of Control construct accounts for only small amounts of variance in health behaviour. The Locus of Control construct could be used as a framework for analysis in this thesis however may relate more to outcome expectations than to efficacy expectations.

### 3.5 Social Cognitive Theory

Perceived self-efficacy, situation-outcome and action-outcome expectancies are central determinants of motivation and
behaviour within Bandura’s (1986) Social Cognitive Theory (Armitage & Conner, 2000). Situation-outcome expectancies relate to the environment determining behaviour consequences whilst action-outcome expectancies refer to an individual’s actions determining a particular outcome (Armitage & Conner, 2000). Self-efficacy relates to people’s confidence about their capability to carry out a particular behaviour (Bandura, 1986). Bandura’s Social Cognitive Theory predicts that behaviours are performed if: i) an individual perceives control over the outcome, ii) there are few existing external barriers, and iii) an individual has confidence in their own ability (Armitage & Conner, 2000).

Rosenstock, Strecher and Becker (1988) claim within Bandura’s Social Cognitive Theory, behaviour is determined by expectancies and incentives, and that an individual who values the perceived effect of changed lifestyles and improved mental health (incentives) will attempt to change their behaviour. This change of behaviour will come about if they believe that their present way of life poses threats to them personally (Rosenstock et al., 1988). Additionally, Rosenstock et al. (1988) suggest that behaviour change can occur firstly, if an individual believes that the change in behaviour will reduce threats (outcome expectations), and secondly, if the individual believes they are personally capable of adopting new behaviours (efficacy expectations).

In relation to this thesis individuals' behaviour can change if young people feel vulnerable, and realising mental health problems may affect them in a negative way. For example, young people may be absent from school due to the anxiety they suffer as a result of thinking about attending.
In addition to the situation-outcome expectancies, responding to health threats takes a preventative approach within the Social Cognitive Theory through action-outcome expectancies and self-efficacy expectancies (Connor & Norman, 1996). According to Bandura’s Social Cognitive Theory, young people’s help-seeking behaviours can change if they believe that they are capable of carrying out the action and process of help-seeking and they believe it will reduce threats (prevent the development of, or address existing, mental health problems). Although the Social Cognitive Theory has been used to predict a variety of health behaviours, the model typically accounts for only medium proportion of variance in behaviour (Armitage & Conner, 2000) and holds limitations in that only individual-level social-cognitive variables are factored in the model (Resnicow et al., 1997).

3.6 Theory of Reasoned Action

Fishbein and Ajzen’s (1975) Theory of Reasoned Action is a precursor to the Theory of Planned Behaviour. The Theory of Reasoned Action portrays intention as the primary determinant of behaviour. Fishbein and Ajzen (1975) define intention as the motivation to perform a particular behaviour. Armitage and Conner (2000) state that with this in mind, the more an individual intends to perform the behaviour, the more likely its performance.

3.7 Theory of Planned Behaviour

The Theory of Planned Behaviour was derived from the Theory of Reasoned Action (Fishbein & Ajzen, 1975). The Theory of Reasoned Action presented limitations when dealing with behaviours where individuals had incomplete volitional control and therefore was adapted to take into account the degree of control over the behaviour (Ajzen, 2012). This was
accomplished by incorporating the concept of *perceived behavioural control* as an added predictor of intention and behaviour (Ajzen, 2012). According to the Theory of Planned Behaviour, intentions are influenced by attitudes toward the behaviour, subjective norms, and perceptions of behavioural control, and individuals act in accordance with these intentions and perceptions of control held over the behaviour (Ajzen, 2001). Doll and Ajzen (1992) claim, within Ajzen’s Theory of Planned Behaviour, behavioural performance can be predicted from an individual's intention to carry out the behaviour and the perceptions they hold regarding the control over the behaviour (Doll & Ajzen, 1992).

In order to apply Ajzen’s Theory of Planned Behaviour, it is firstly important to define four key terms:

1. Attitude;
2. Belief;
3. Intention; and

Ajzen defines an *attitude* as “a disposition to respond favourably or unfavourably to an object, person, institution, or event” (Ajzen, 1991, p. 3). Attitude is a predisposition and viewed as an underlying variable that is assumed to guide or influence behaviour (Fishbein & Ajzen, 1975). Whilst attitude refers to an individual’s favourable or unfavourable response to an object, *beliefs* can be characterised as what information the individual has about the object, person, institution or event (Fishbein & Ajzen, 1975).

It is important to understand the key term of *intention* when applying Ajzen's Theory of Planned Behaviour. According to Fishbein and Ajzen, (1975) *behavioural intention* refers to a
person's intentions to perform behaviours. Intention refers to the probability that an individual will perform an action or behaviour (Fishbein & Ajzen, 1975). Finally, *behaviour* is defined as “observable acts that are studied in their own right” (Fishbein & Ajzen, 1975, p. 13).

The three considerations guiding human behaviours, according to Ajzen’s Theoretical Framework of Planned Behaviour are:

1. Behavioural beliefs;
2. Normative beliefs; and
3. Control beliefs.

Behavioural beliefs are those relating to the likely outcomes, or in Ajzen's terms consequences or other characteristics of the behaviour (Ajzen, 2002). Individuals’ beliefs relating to the characteristics and likely consequences of the HeadStrong program will influence young people's behaviour in either positive or negative ways. Examples of positive consequences for young people may include feeling supported, believing their mental health levels will improve, and believing symptoms of poor mental health may be reduced as a result of increased help-seeking for mental health problems. According to Ajzen's Theory of Planned Behaviour (2002), negative consequences may involve young people drawing on past negative experiences, where they have experienced poor relationships with mental health professionals and do not wish to help-seek as they believe the likely consequence of help-seeking will result in an unconstructive outcome.

Normative beliefs according to Ajzen (2002) regard the normative expectations of other people. Those living in regional areas tend to have a normative belief that they should
be able to look after themselves: attitudes embedded in a very self-reliant culture and therefore do not help-seek for mental health problems as they may appear weak to other individuals (Fuller et al., 2000; Jorm et al., 2006).

Finally, control beliefs are beliefs about existing factors that may promote or hinder performance of the behaviour (Ajzen, 2002). In regards to help-seeking for mental health problems, young people's control beliefs relate to their ‘sense of self’ and emerging adult identity. If young people have sufficient mental health literacy skills to recognise the signs and symptoms of mental health problems and acknowledge the need to seek appropriate support, then they are more likely to assume that they have control over their behaviour.

In relation to this thesis, it is during the phase of adolescence that young people are developing their sense of identity (Erikson, 1956). Coupled with the struggles of identity formation, for young people living in regional areas, are the factors of distance, low educational levels, and lack of accessibility to health services. The incidence of poor mental health is significantly higher in the regional adult population as compared to their metropolitan peers (AIHW, 2008). It is for this reason that regional young people were selected as a sample for the implementation of the HeadStrong program.

Together, these three beliefs produce, or result in, three determinants which then lead to the intention of performing behaviour. Ajzen, (2002) states that intentions are determined by the following three determinants:

1. Attitude toward the behaviour;

2. Subjective norm; and

3. Perceived behavioural control.
Attitude toward the behaviour is produced from behavioural beliefs, and can be a favourable or unfavourable response to something (Ajzen, 2002). According to Ajzen (2002) individuals learn to favour behaviours that they deem to have efficacious results whilst at the same time, they can also develop unfavourable attitudes towards behaviours that have previously resulted in detrimental outcomes. Regional young people may have had positive or negative past experiences when accessing health services and their beliefs regarding these experiences will influence their attitudes towards the behaviour of help-seeking.

The second determinant of intention is as a result of normative beliefs and known as subjective norm. Subjective norm is the perceived social pressure of an individual to carry out or not carry out the behaviour (Ajzen, 1991). Individual’s beliefs and perceptions of what other people may think about particular behaviours may deter young people from the actual performance of the behaviour. In relation to this thesis, an impacting subjective norm resulting from normative beliefs would be the stigma associated with help-seeking.

The final determinant of intention is perceived behavioural control (Ajzen, 1991). Control beliefs, outline the level of perceived behavioural control in which the behaviour is performed. Perceived behavioural control highlights the perceived ease or difficulty of performing the behaviour (Ajzen, 2002) and the degree of control the individual has on the execution. The HeadStrong program aims to increase regional young people’s perceived behavioural control, aiming to equip young people with the knowledge and recognition of their ability to put behaviours into practice, and the perceived ease of doing so.
The three determinants of attitude toward the behaviour, subjective norm, and perceived behavioural control, combined together, lead to, and produce behavioural intention (Ajzen, 2002). Finally, Ajzen believes intention is the immediate antecedent of behaviour, and thus, performance or execution of behaviour by individuals is expected to follow intention when the opportunity arises (Ajzen, 2002).

The HeadStrong primary health intervention aims to develop regional young people’s positive attitudes towards help-seeking. Using Ajzen’s Theory of Planned Behaviour, it follows that if individuals are provided with support to access health services, and they have positive intentions, then these intentions may result in positive behaviours. Figure 3 illustrates the relationship between Ajzen’s Theory of Planned Behaviour and its implications for this thesis.
Figure 3.1: Model of Ajzen's theory of planned behaviour as it applies to this thesis
In relation to Figure 3, behavioural beliefs such as negative or positive characteristics derived from past experiences associated with help-seeking, together with both normative beliefs (e.g. stigma) and control beliefs (e.g. young people’s sense of identity) influence regional young people’s attitudes to the behaviour of help-seeking. The HeadStrong program acts as a vehicle to improve mental health literacy in the intervention sample of regional young people. According to the model, increasing the mental health literacy of regional young people will positively influence young people’s attitudes to help-seek and their prospective consequential intentions and behaviour.

The Theory of Planned Behaviour is as the theoretical framework for this research for a number of reasons. The Theory of Planned Behaviour has been used broadly to theorise research related to mental health attitudes and intentions (Andrykowski, Beacham, Schmidt, & Harper, 2006; Conner & Heywood-Everett, 1998; Etchegary, Carrey, Curran, & Hatchette, 2010; Kelly, Jorm, & Wright, 2007; Mo & Mak, 2009), and has been applied widely in health based contexts (Conner & Armitage, 2003; Connor & Norman, 1996; Godin and Kok, 1996; Hausenblas, Carron & Mack, 1997). Additionally, the Theory of Planned Behaviour, through review and empirical comparison with other models of health behaviour, has been shown to hold significant predictive power (Connor & Armitage, 2003) with a large volume of research indicating that the Theory of Planned Behaviour is effective in predicting health behaviours.

As this thesis is not a longitudinal study, and thus cannot investigate young people's behaviour, the selected theoretical framework needs to focus on prediction of behaviour. As Ajzen's model has significant power of predictability of
behaviour, through investigating attitudes and intentions, this thesis uses the Theory of Planned Behaviour as a theoretical framework.

The Theory of Planned Behaviour extends the Theory of Reasoned Action by including the measure of perceived behavioural control as a determinant of intentions and behaviour (Armitage & Conner, 2000), and provides an improvement on the Health Belief Model, Protection Motivation Theory and the Social Cognitive Theory in terms of intention and behaviour prediction. This has been displayed through studies directly comparing the models and revealing this superiority (Conner & Norman, 1994; Quine, Rutter, & Arnold, 1998). Furthermore, the Theory of Planned Behaviour has been described as “one of the better theoretically developed models” (Conner & Heywood-Everett, 1998, p. 88) and has broad support for predicting intentions and health behaviours (Conner & Armitage, 2003).

As an aim of the thesis is to investigate the factors that facilitate and act as barriers to help-seeking for regional young people, it is important to draw on a theoretical framework that examines the relationship between attitudes, intentions and behaviours. Ajzen’s Theory of Planned Behaviour (TPB) is used to analyse the qualitative data gained from the Stage 5 student and PDHPE teacher interviews. Chapter Four will now address the methodological approaches adopted for this thesis.
Chapter Four: Methodological Considerations, Techniques and Processes Explained

4.1 Introduction

This Chapter is an overview of the approaches selected to investigate regional young people's attitudes to and intent to help-seek for mental health issues. In addition, the chapter highlights the approaches used to identify the perceived barriers to, and facilitators of help-seeking. Finally, this Chapter outlines the methods used to evaluate the efficacy of the HeadStrong resource.

Chapter Four has multiple purposes including:

- Outlining and justifying the methodological approach chosen;
- Stating the research questions and hypotheses for the study;
- Explaining and justifying the data collection and analysis techniques used for each data source;
- Identifying and discussing considerations of validity and reliability; and
- Presenting ethical considerations associated with the conduct of the study.

4.2 Mixed Method Approach

The researcher employed a mixed method design to examine the relationship between the primary health intervention HeadStrong, and regional young people's attitudes about and intentions to help-seeking for mental health problems. Gay, Mills and Airasian (2012) claim that mixed method research "builds on the synergy and strength that exists between
quantitative and qualitative research methods in order to understand a phenomenon more fully than is possible using either quantitative or qualitative methods alone” (p. 481). In this thesis, the phenomenon being explored is help-seeking.

A mixed method approach employed a range of data collection methods including the administration of questionnaires and conducting semi-structured individual interviews. The use of questionnaires as a data collection tool enabled a broad and representative sample of the participant sample to be investigated. Individual interviews with Stage 5 students and PDHPE teachers allowed for descriptive answers illuminating participants’ understandings of help-seeking, and the perceived barriers and facilitators that exist for regional young people when help-seeking for mental health issues. Rich amounts of participant interview data were included to provide an in-depth understanding of student and teacher perceptions (Bryman, 2008). The interviews with PDHPE teachers further examined the efficacy of the HeadStrong program and whether the resource was effective in improving students’ mental health literacy. When combined, the two methods, offered multiple insights into the attitudes and intentions of regional young people to help-seeking and the efficacy of the HeadStrong primary health intervention.

4.3 Research Questions
The task of investigating attitudes and intentions of regional young people to help-seeking for mental health issues and additionally evaluating the efficacy of the HeadStrong program was complex. Therefore the researcher proposed the following research questions to guide this study:

1. What do regional young people understand by the notion of “help-seeking”?
2. What attitudes do regional young people have about help-seeking for mental health issues?
3. What intentions do regional young people have to help-seek for mental health issues?
4. What perceived barriers prevent regional young people from help-seeking for mental health issues?
5. What perceived facilitators assist regional young people to help-seek for mental health issues?
6. What are regional PDHPE teachers’ perceptions of the ability of the HeadStrong program to enhance Stage 5 students’ attitudes about, and intention to help-seeking for mental health issues?
7. What are regional Stage 5 students’ perceptions of the ability of the HeadStrong program to enhance their attitudes about, and intention to help-seeking for mental health issues?

4.4 Case Study
A case study refers to the process of investigating a phenomenon which claims to retain an extensive collection of data (Sturman, 1997). These data are collected through an in-depth examination of the phenomenon studied, in context with an emphasis on gaining an holistic understanding (Cohen, Manion, & Morrison, 2007). According to Gerring (2007) this comprehensive examination of a phenomenon is most usefully defined as an intensive study of a single or small number of units to understand larger cases. Shavelson and Towne (2003) claim case studies are only a preliminary research strategy and are only appropriate for the exploratory phase of investigation. However, Yin (2003) declares that case studies are far from being simply an exploratory strategy. A case study is a comprehensive research strategy and involves an all-encompassing method, covering the logic of design, data
collection techniques, and specific approaches to data analysis (Yin, 2003).

Burns (2000) offers a typology of case studies including historical, observational, oral history, situational analysis, clinical case studies and multi-case studies. Historical case studies depend profoundly on records, documents and interviews and trace development of an organisation or system over time (Burns, 2000). Observational case studies use observation methods as their major tool, focusing on a specific group of people, a specific place, or an activity (Burns, 2000). Burns (2000) describes oral history case studies as first person narratives of a single individual collected through extensive interviewing and situational analysis as particular events which are studied in the form of a case study. A clinical case study is more specific and aims to understand in depth a particular individual and identify possible treatments through the use of detailed interviewing, non-participant observation, documents and records (Burns, 2000). Finally, multiple-case studies involve a collection of two or more cases within the same study, or a form of replication, where an argument can be made that each case must be selected and produce contrary results for predictable reasons or produces similar results (Burns, 2000).

Supporting the differing array of case study research, Yin (2003) states there are explanatory, descriptive and exploratory case studies. Yin (2003) declares an explanatory case study presents data that bear a cause-effect relationship and provides explanation of how events within the case study occurred. Descriptive case studies, according to Yin (2003) provide a complete description of an occurrence within its context. Finally, an exploratory case study “is aimed at defining the questions and hypotheses of a subsequent study
or at determining the feasibility of the desired research procedures" (Yin, 2003, p. 5). An exploratory case study explores what the research questions and hypotheses may be for a future study, or establishes the practicability of the research currently undertaken.

According to these typologies, this research is best described as an exploratory case study that took part at multiple case study sites as it involved data collection that was undertaken prior to the final definition of study questions and hypotheses and the replication logic was utilised (Burns, 2000; Yin, 2003).

4.5 Hypotheses

The purpose of this study was to examine regional young people's attitudes to help-seeking for mental health issues. In order to do this, regional young people's help-seeking attitudes in the sub categories of help-seeking propensity and indifference to stigma were both examined. Therefore, this research commenced with the following two hypotheses:

1. The HeadStrong program will have a positive impact on regional young people's help-seeking propensity.

2. The HeadStrong program will have a positive impact on regional young people's indifference to stigma.

To assess each hypothesis, the following null hypothesis was tested:

\[ H_0: \mu_1 = \mu_2 \]

where:

\[ H_0 = \text{the null hypothesis} \]

\[ \mu_1 = \text{the mean of the control group, and} \]

\[ \mu_2 = \text{the mean of the HeadStrong group}. \]
Therefore, the null hypothesis was tested that the HeadStrong program would have no effect on regional young people's attitudes to help-seeking for mental health issues.

4.6 Data Source One: Surveying the Stage 5 Students

4.6.1 Site and Participants

4.6.1.1 Settings Approach: School

The ideal setting to administer the HeadStrong program and collect data was in schools. “For those up to 16 years, the school setting is central, as school attendance is compulsory” (Rickwood et al., 2007, p. 37). School is central for older adolescents also as most remain at school until Year 12, thus this makes school an ideal and opportunistic setting in which to reach out to young people (Rickwood et al., 2007). Wyn et al. (2000) support school as an appropriate setting to implement early interventions to improve mental health outcomes as opposed to their family, community, or leisure environments, claiming young people are most accessible in a school setting. It is during young people's schooling lives where they are most vulnerable to emotional problems and risk taking behaviours, thus, it is in this setting where programs aimed at decreasing the prevalence of health risk behaviours are ideally administered (Patton et al., 2000). Furthermore, if provided with positive experiences, the relationships young people have with their peers and teachers within a school setting, can contribute positively to their mental health and emotional wellbeing. However, it is also important to acknowledge, achieving successful implementation and sustaining positive benefits from school health programs is often challenging in evolving, complex school systems (Keshavarz, Nutbeam, Rowling & Khavarpour, 2010). Keshavarz et al. (2010) discuss multiple characteristics of schools suggesting these should be
considered when implementing new programs, as schools are complex systems. These include:

- Schools’ components and structure;
- Diversity in and between schools;
- Context dependency;
- School interactions;
- The flow of information in schools;
- Feedback loops in schools;
- Rules in schools;
- Credit and blame attribution in schools; and
- Learning, changing and adaptation.

Keshavarz et al.’s (2010) insights into understanding schools helps explains some of the challenges of introducing and sustaining change in schools.

**4.6.1.2 Sampling Procedures**

When conducting survey research, the sample that is surveyed needs to be carefully considered (Elmes, Kantowitz, & Roediger III, 2012). The sample needs to be a reasonable representation of the population for which the questions are intended. Thus according to Elmes et al. (2012) a large random sample is proposed to be the surest way to have a representative sample. A random sample can be characterised as one in which each individual in the population has an equal chance of being selected to take part in the survey and each selection of subject is independent of any other selection of the population (Burns, 2000; Elmes et al., 2012). Stratified sampling was used to divide the population into smaller units, and random sampling was then performed on these smaller divisions (Elmes et al., 2012). Stratified sampling ensures that groups or strata are sampled randomly within the population, and offers increased opportunity of accurate representation as it guarantees all groups in the sample are represented in the same proportions as they are in the population (Burns, 2000).
Participants were recruited from 10 NSW Central West, Association of Independent Schools and Bathurst Diocese secondary schools.

**4.6.1.3 Sampling Limitations**

The sample for this thesis comprised Association of Independent Schools (AIS) and Diocese of Bathurst Catholic Central West secondary schools. Within the non-government sample of schools selected for this thesis, there are identifiable “at risk” populations of young people, namely Indigenous (Wyn, 2009) and refugee students (Anstiss et al., 2009; Tsoupas, 2011). While these percentages are significantly lower than their government school comparisons, selecting non-government schools as a sample is valid. It is acknowledged that the implications of the findings of the research are limited to the sample population. Whilst it would be more advantageous to include government schools in the sample, because of the percentage of students “at risk”, the implementation of Phase 2 of the HeadStrong program will occur in 2016, after State Education Research Approval Process (SERAP) approval. The delay in obtaining SERAP approval made analysis of Phase 2 data beyond the timeline of completion of this thesis.

The participant sample comprised both Stage 5 (Years 9 & 10) PDHPE students and their PDHPE teachers. Table 4.1 displays the secondary schools of the sample population and the number of students and classes within these schools and Table 4.2 provides case study site demographics for sample population schools.
Table 4.1: Classes and student numbers within sample population schools

<table>
<thead>
<tr>
<th>School</th>
<th>Stage 5 Population</th>
<th>Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>School A</td>
<td>42</td>
<td>2</td>
</tr>
<tr>
<td>School B</td>
<td>103</td>
<td>5</td>
</tr>
<tr>
<td>School C</td>
<td>140</td>
<td>7</td>
</tr>
<tr>
<td>School D</td>
<td>128</td>
<td>6</td>
</tr>
<tr>
<td>School E</td>
<td>75</td>
<td>3</td>
</tr>
<tr>
<td>School F</td>
<td>107</td>
<td>5</td>
</tr>
<tr>
<td>School G</td>
<td>40</td>
<td>2</td>
</tr>
<tr>
<td>School H</td>
<td>36</td>
<td>2</td>
</tr>
<tr>
<td>School I</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>School J</td>
<td>107</td>
<td>5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>794</strong></td>
<td><strong>38</strong></td>
</tr>
<tr>
<td>School</td>
<td>School sector</td>
<td>Total enrolments</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>School A</td>
<td>Non-government, Christian day and boarding school</td>
<td>476</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School B</td>
<td>Non-government, catholic college</td>
<td>542</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School C</td>
<td>Non-government, catholic high school</td>
<td>1040</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School D</td>
<td>Non-government, Uniting Church day and boarding school</td>
<td>1068</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School</td>
<td>Type</td>
<td>Grade</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>School E</td>
<td>Non-government, Catholic high school</td>
<td>7-12</td>
</tr>
<tr>
<td>School F</td>
<td>Non-government, Catholic high school and boarding college</td>
<td>7-12</td>
</tr>
<tr>
<td>School G</td>
<td>Non-government, Independent school</td>
<td>K-12</td>
</tr>
<tr>
<td>School H</td>
<td>Non-government day school</td>
<td>K-12</td>
</tr>
<tr>
<td>School I</td>
<td>Non-government, Catholic school</td>
<td>K-10</td>
</tr>
<tr>
<td>School J</td>
<td>Non-government, Independent Catholic</td>
<td>7-12</td>
</tr>
</tbody>
</table>
All teachers who delivered the HeadStrong program were PDHPE trained.

In addition to school counsellor availability outlined in Table 4.2, access to, and the nature of local mental health services has been included to provide further insight into the case study sites.

All schools had access to local mental health services including services specifically targeting regional young people:

- **Headspace Centres** (Bathurst and Dubbo): Offers support, services, and information to young people (12-25) facing difficulties. Helps people access health workers including GPs, psychologists, social workers, alcohol and drug workers, counsellors, vocational workers or youth workers.

- **Child and Adolescent Mental Health Services (CAMHS)**: Provides a range of services from assessment of mental health difficulties and are able to offer several treatment options. A team of clinicians made up of Registered Nurses, Psychologists, Social Workers and Psychiatrists.
The recruitment process involved emailing Principals and Head Teachers of the Personal Development, Health and Physical Education faculties within non-government NSW Central West secondary schools and inviting them to participate in the research.

The consenting schools were assigned to either the intervention or control group using stratified randomisation. A statistician involved in the HeadStrong program randomly allocated schools to the intervention or control condition: five schools participated in the HeadStrong intervention and Stage 5 students were presented with the content in their PDHPE classes during Term 1, 2013. The students in the control group received instruction in the HeadStrong program in Term 3, 2013.

4.6.1.4 Participant Sample
Stage 5 students from the selected 10 non-government schools across the Central West of NSW were invited to participate in the HeadStrong project. Stage 5 students were identified as the potential population for this research, as the highest incidence of mental health problems occurs between 12-24 years of age (ABS, 1998). At approximately 14 years, young people have a sufficient level of emotional maturity to deal with the sensitive content included within the HeadStrong program (Wyn, 2009). Furthermore, at this age, young people are starting to progress through the developmental tasks of adolescence (Hazen et al., 2008), and the HeadStrong program can assist in preventing the early onset of mental health problems, as it is a primary health intervention aimed at enhancing mental health literacy.

In relation to the selection of NSW Central West schools, the influential factor of rurality was considered when constructing
the sample. Within the broader population regional people are more likely to suffer from mental illness than their urban peers (AIHW, 2005). Thus for the purpose of this thesis it was essential to identify a sample of regional young people. A total of 380 students completed the pre-test survey, 322 students completed the post-test survey, and 208 students completed the follow-up survey. Participants were aged 13 to 16 years with approximate equal representation of genders.

4.6.2 Survey Design and Justification
Survey research most commonly involves using a questionnaire to acquire data from a sample of people (Baker, 2002). Burns (2000) highlights the specific characteristics of the survey including; i) the requirement of a sample of participants to respond to a number of standard questions under comparable conditions, ii) the administration of it by an interviewer, mail, or telephone, iii) the respondents represent a defined population, iv) the results of the sample survey can be generalised to the defined population, and v) comparisons can be made through using standard questions.

According to Burns (2000) there are two major forms of surveys including the descriptive and the explanatory survey. The descriptive survey endeavours to estimate accurately the nature of existing conditions, or the attributes of a particular population being surveyed (Burns, 2000). The explanatory survey looks for cause and effect relationships but without experimental manipulation (Burns, 2000). For this thesis, a descriptive survey was used as its focus is to investigate the attitudes of regional young people in regards to help-seeking attitudes.
Survey data are usually gathered through the administration of a questionnaire and contain either closed items, open-ended items or scale items (Burns, 2000). For this thesis, scale items were used in the questionnaire. A scale is a set of items to which the participant indicates their level of agreement or disagreement when responding (Burns, 2000). A scale that indicates a particular position in which the respondent agrees or disagrees is known as a rating scale and often called a Likert scale (McBurney & White, 2004). Rating scales are used to extract the attitudes of the respondents (McBurney & White, 2004) and thus the ideal format to be used for this study.

There are both advantages and disadvantages to survey research and the administration of questionnaires to gather data. The advantages of administering a questionnaire are outlined by Burns (2000) to include; i) cost, ii) delivery of the exact set of questions, phrased the same way to participants, iii) the respondent can answer at their own time and pace, iv) fear and embarrassment is avoided through anonymity, and confidentiality encourages more truthful responses, and v) finally, it is more practical to include a larger number of participants.

According to McBurney and White (2004) the main problem with surveys is response rate. However, in order to combat this, a pen and paper survey was administered during PDHPE class time as opposed to sending a survey home with the students, or mailing it to the students' home address. This enabled the students to complete the survey in class within the allocated time provided.

Another disadvantage of written surveys is that there is no possibility of clarifying questions that might be misunderstood (McBurney & White, 2004). This factor has been
addressed as the instruments used within the survey were altered by the researcher and the HeadStrong team to accommodate the diversity of literacy levels of the students completing the questionnaires. In addition to this, the surveys were completed during class time and participants were able to ask questions if there was need for clarification.

The Inventory of Attitudes Toward Seeking Mental Health Services (Mackenzie, Knox, Gekoski, & Macaulay, 2004) was used in this study to detect attitudes to help-seeking for mental health problems (see Appendix 2). This survey was a section contained in the larger survey administered by the Black Dog Institute with the main goal of assessing if students' mental health literacy was increased by participating in the HeadStrong program (see Appendix 3).

There are a number of existing help-seeking questionnaires and instruments used to measure young people’s intentions and past, present and future behaviours to help-seeking including Rickwood et al.’s (2005) general help-seeking questionnaire and actual help-seeking questionnaire. The general help-seeking questionnaire measures future help-seeking intentions and can also assess prior help-seeking experience (Rickwood et al., 2005). Within the questionnaire, participants’ future help-seeking intentions are measured by presenting them with a number of potential help sources. Individuals are then asked to indicate how likely it would be for them to help-seek from these sources, ranking this likelihood on a 7-point scale ranging from “no intention” to “very high likelihood” of help-seeking (Rickwood et al., 2005). Participants’ past help-seeking experience is calculated within the questionnaire by asking participants to indicate on a 5-point scale the level of helpfulness of the professional help which had been sought for a specified problem. Individuals are
asked if professional help had been sought in the past, how many times it had been sought, what type of sources were sought and whether the help was worthwhile (Rickwood et al., 2005).

The actual help-seeking questionnaire assesses participants' recent help-seeking behaviour, and lists a number of potential help sources and individuals are asked if they had sought help from each of the sources during a specified period of time for a specified problem (Rickwood et al., 2005). Participants can also indicate that they have not sought any help, whilst still indicating they have had a problem (Rickwood et al., 2005).

Fischer and Turner (1970) developed a scale to measure attitudes towards seeking professional help for psychological issues, with attention to psychometric concerns, titled the Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPHS). However, in order to explore young people’s attitudes towards help-seeking for mental health problems, the Inventory of Attitudes Toward Seeking Mental Health Services was selected to use as Section 7 (which focuses on help-seeking), of the larger survey being administered by Black Dog Institute. According to Mackenzie et al. (2004) the Attitudes Toward Seeking Professional Psychological Help Scale had a number of concerns where revision was needed. The ATSPPHS contained language that was outdated and there were methodological concerns (Mackenzie et al., 2004). The Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) replaced the 4-point rating scale existing within the ATSPPHS with a 5-point rating scale,
to increase reliability and validity (Mackenzie et al., 2004). The IASMHS changed wording replacing gender-specific language with gender-neutral pronouns, several groups of professionals were acknowledged to provide mental health services, rather than just the select few outlined in the ATSPPHS, and in order to provide greater consistency, the term psychological problems replaced the several terms being used to refer to mental health problems (Mackenzie et al., 2004). Furthermore, additional items were created and included in the IASMHS to measure important concepts and prediction of behaviours that were not originally measured in the ATSPPHS.

4.6.2.1 The Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS)

The Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) is a 24 item instrument with a 5 point rating scale and contains three internally consistent factors; these being psychological openness, help-seeking propensity, and indifference to stigma (Mackenzie et al., 2004). Internal consistency of the scale Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) was tested by using Cronbach’s alpha, and was found to achieve a high level of internal consistency ($\alpha = .87$) (Mackenzie et al., 2004).

The instrument was altered to accommodate the appropriate age and literacy levels of the sample population. This was necessary to enable students completing the survey to understand the questions being asked and ensure they were relevant to their particular stage of understanding and development (see Appendix 4).
4.6.3 Threats to Validity

There are a number of factors that are not part of the intervention or research design that had the potential to influence the outcome(s) of the research. These factors are considered “threats to validity”. In this thesis it is recognised that the research design poses threats to the study and as a consequence minimises the certainty of making valid causal conclusions.

To ensure validity in this research the interview schedule was piloted with a sample of Stage 5 students from a local regional secondary school to determine the suitability of the questions and appropriateness of the literary level of the questionnaire. Data from the completed pilot questionnaires were used to validate the question types and question sequence.

The Inventory of Attitudes Toward Seeking Mental Health Services questionnaire used in both the pilot and primary survey has been previously validated by the authors Mackenzie, Knox, Gekoski, and Macaulay (2004). However, in order to enable findings to be attributable to the intervention implemented, it is important to address the various threats to validity of the research design. There are four types of validity to consider and examine, including “internal”, “statistical conclusion”, “construct” and “external” validity (Shadish, Cook & Campbell, 2002). These four types of validity, align with Shadish, Cook and Campbell’s (2002) identified threats to validity and were used to assist in the evaluation of the research design. Although numerous threats to validity are outlined by Shadish, Cook and Campbell (2002), only those which operate to a major extent in the study will be addressed in the following section. Those identified to act as minor threats will be discussed within the appendices of this thesis (Appendices 5, 6 & 7).
4.6.3.1 Threats to Internal Validity

Validity exists internally within this research. Internal validity is when the explanation of the event, issue or set of data the research provides can actually be sustained by the data (Cohen et al., 2007). External validity refers to the degree to which the results can be generalised to the wider population, cases or situations (Cohen et al., 2007). In this study, internal validity is concerned with the validity of a conclusion that attributes a difference in students’ attitudes towards help-seeking for mental health issues to their participation in the HeadStrong intervention.

Shadish, Cook and Campbell (2002) outline nine threats to internal validity, which are presented in Table 4.3. In regard to this thesis, in the opinion of the researcher, four major threats to internal validity exist including selection, history, maturation and attrition, which will be discussed in subsections below. The remaining threats to internal validity are considered minor and are discussed in Appendix 5.

Table 4.3: Threats to internal validity

<table>
<thead>
<tr>
<th>Threats to internal validity</th>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambiguous temporal precedence</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Selection</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>History</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Maturation</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Regression</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Attrition/mortality</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Testing</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Instrumentation

Additive and interaction effects of threats to internal validity

Selection
This threat to internal validity exists when there is a difference in the characteristics of participants within and between groups involved in the research before the intervention is implemented (Ary, Jacobs & Razavieh, 2002). Selection is a threat to validity in this research design, as even though a stratified randomised controlled trial was conducted in regard to allocation of intervention to schools, the students who participated were in pre-organised class groups, and therefore the researcher had limited control over the composition of the control and intervention groups.

To reduce the threat of selection, pre-test data were collected to establish demographic characteristics and knowledge and attitudes towards help-seeking, prior to being exposed to the HeadStrong intervention.

History
History is a threat to internal validity where events happen between the pre-, post- and follow-up test period that are not part of the intervention and can influence the results (Burns, 2000). In relation to this study, the internal validity may have been threatened as each school and class participating in the HeadStrong program were exposed to different teachers. Thus, it can be implied that the delivery of the intervention could be different. To uphold a certain level of consistency of implementation, each teacher administering the HeadStrong resource undertook professional development on the delivery of the program. Teachers were provided with a curriculum
resource containing specific learning activities and a time guide in order to maintain consistent delivery. However, it is recognised that each teacher will have their own manner and style of teaching and therefore this was taken into consideration during the analysis of results.

**Maturation**
Maturation is a threat to internal validity where between pre-, post- and follow-up test occasion, there can be an observed effect that may be attributed to participants getting older, wiser or more experienced (Shadish, Cook & Campbell, 2002). Despite the potential for maturation to be a threat, it is not likely when examining students from the same year level at the same time.

**Attrition/Mortality**
This is considered a threat to internal validity when participants fail to complete the outcome measures (Shadish, Cook & Campbell, 2002). Throughout the course of testing, (pre-, post- and follow-up) a number of participants dropped out and were unable to provide data as they were either absent on the test occasion or did not fully complete the questionnaire, leaving missing values which could be due to a number of factors including disinterest, misunderstanding and time constraints.

4.6.3.2 **Threats to Statistical Conclusion Validity**
Shadish, Cook and Campbell (2002) outline seven threats to statistical conclusion validity, which are presented in Table 4.4. In regard to this thesis, in the opinion of the researcher, two major threats to validity exist and are discussed in following subsections. The remaining threats to statistical conclusion validity are considered minor and are discussed in Appendix 6.
Table 4.4: Threats to statistical conclusion validity

<table>
<thead>
<tr>
<th>Threats to statistical conclusion validity</th>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low statistical power</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Violated assumptions of statistical tests</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Fishing and the error rate problem</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Unreliability of measures</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Unreliability of treatment implementation</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Extraneous variance in the experimental setting</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Heterogeneity of units (respondents)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Unreliability of Treatment Implementation*

Differences in the way the intervention was implemented poses a threat to statistical conclusion validity. The variation in the way the intervention was implemented can inflate error variance and may decrease the chance of obtaining true differences (Shadish, Cook & Campbell, 2002). In relation to this thesis, reliability of the HeadStrong treatment implementation is a major threat to validity, as there are different teachers responsible for the delivery and implementation of the program to students.

According to Cook and Campbell (1979), this threat can be minimised by attempting to standardise the treatment and the way it is implemented across different classes and schools. In this thesis, it was not possible to completely control the treatment implementation. However, in order to address and attempt to minimise this threat to validity, a number of conditions occurred.
1. **Teachers were provided with Professional Development**

A one-day professional development workshop took place prior to the commencement of the HeadStrong program to provide all teachers who implemented the intervention with the necessary information on the implementation of the program. Teachers participated in activities that equipped them with knowledge of the delivery of the program, accompanied by a teacher curriculum resource, which included the specific learning activities delivered in the HeadStrong program.

2. **Information on implementation of the HeadStrong program**

After completion of implementation, teachers who delivered the HeadStrong program were interviewed. Information was collected on how they implemented the HeadStrong program.

**Extraneous Variance in the Experimental Setting**

Extraneous variance comprises features of the research, excluding the treatment intervention, which could affect the scores on the dependent variables and as a consequence inflate the error variance (Shadish, Cook & Campbell, 2002). As the research took place in a school, controlling the extraneous variance was unachievable due to the nature of the educational settings. It is recognised that students had different teachers who were responsible for implementing the HeadStrong program.

**4.6.3.3 Threats to External Validity**

According to Cohen, Manion & Morrison (2011), external validity refers to whether the results can be generalised to a wider population, i.e. if the findings are transferable. There are a number of evident threats to external validity when
conducting quantitative research which concern generalisability. These threats are outlined in Table 4.5 and discussed further as they pose a major threat.

### Table 4.5: Threats to external validity

<table>
<thead>
<tr>
<th>Threats to external validity</th>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction of selection and treatment</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Interaction of setting and treatment</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Interaction of history and treatment</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**Interaction of Selection and Treatment**

Cook and Campbell (1979) state this threat is related to whether the cause-effect relationship can be generalised to other groups of students. In this study, there may have been characteristics of the students involved which caused them to respond to the treatment in a particular way or perhaps the teachers who implemented the HeadStrong program were more disposed to teaching mental health. It would therefore be difficult to generalise the findings across other groups.

**Interaction of Setting and Treatment**

The schools involved in this study came from non-government, catholic and independent schools from the Central West region of New South Wales. The findings of this study therefore, may be generalised to other schools considered similar within the educational sector involved. It would however, be problematic, to generalise the findings to schools who differed from those that were involved in this study, for example schools in metropolitan areas or schools in other countries.

**Interaction of History and Treatment**
It is difficult to generalise the findings to future educational settings as there may be changes in the way PDHPE is taught given the introduction of a national curriculum. The push for schools and PDHPE teachers to adopt and implement the Australian national curriculum could act as a powerful change agent if mental health, more particularly, the HeadStrong program was included. It would, however be valuable to carry out future research of this nature to monitor students’ attitudes and intentions towards help-seeking for mental health issues and establish both the degree and effects of change.

4.6.3.4 Threats to Construct Validity

Factor Analysis
As the original survey was administered to an adult population, it was important to complete a factor analysis on the questionnaire to ensure it was appropriate to use with an adolescent population. The Bartlett’s Test of Sphericity value is significant (p < 0.001) and therefore an exploratory factor analysis is appropriate.

Exploratory Factor Analysis
Exploratory factor analyses with Principal Component extraction and Direct Oblimin using SPSS v20 were computed for scores on the 24 items of the Inventory of Attitudes towards Seeking Mental Health Services (IASMHS). The unforced solution produced six factors for the 24 items (see Appendix 7). Inspection of the eigenvalues and scree plots for each of the exploratory factor analyses found that there were two components much higher than the other components on the scree plot producing eigenvalue of 4.566 and 2.775, responsible for 19.024% and 11.558% of the total variance. There was a steep decline evident on the scree plot (see Appendix 8) between the initial and second components to the
remaining components, which produced eigenvalues lower than 1.826. Such evidence suggests that there may be two overarching components of the IASMHS. Examination of this unrestricted solution left the researcher to conclude that there were two factors in the six factor solution that appeared to be related and possibly derived from the same theme.

However, as the original instrument reported on three scales within the IASMHS, a three factor restriction was examined. It was found that the reliability of one of the scales was quite low ($\alpha = .611$). It was therefore necessary to force a two factor structure after examination of the scree plot and eigenvalues as mentioned above. In the constrained factor analyses a two factor solution provided the most interpretable scales. Appendix 9 presents the two factor solution involving the inclusion of items with factor loadings greater than 0.5. This solution generated scales of 7 and 5 items respectively. The two factors are described in the following sub-sections, where the reliability and construct validity of each scale is investigated and reported.

### 4.6.4 Factor One Indifference to Stigma

Factor one may be interpreted as *indifference to stigma*. The strongest loading items on this factor were “I would be uncomfortable seeking professional help for psychological problems because people in my social or school circles might find out about it” (.653) “Having been diagnosed with a mental disorder is a blemish on a person’s life” (.642) and, “I would feel uneasy going to a professional because of what some people would think” (.590). Table 4.6 below presents each of the items that constitute this factor, *indifference to stigma*. 

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<table>
<thead>
<tr>
<th>Item</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Important people in my life would think less of me if they were to find out that I was experiencing psychological problems.</td>
<td>.508</td>
</tr>
<tr>
<td>16. I would be uncomfortable seeking professional help for psychological problems because people in my social or school circles might find out about it.</td>
<td>.653</td>
</tr>
<tr>
<td>17. Having been diagnosed with a mental disorder is a blemish on a person's life.</td>
<td>.642</td>
</tr>
<tr>
<td>20. I would feel uneasy going to a professional because of what some people would think.</td>
<td>.590</td>
</tr>
<tr>
<td>24. I would be embarrassed if my neighbour saw me going into the office of a professional who deals with psychological problems.</td>
<td>.542</td>
</tr>
</tbody>
</table>

The internal consistency (Cronbach’s alpha) of forming these items into a scale were investigated for the pre-, post- and follow-up occasion. The reliability statistics presented below in Table 4.7 show that the respondents answered the six items in an internally consistent fashion on all occasions ($\alpha = .748$; $\alpha = .771$; $\alpha = .769$) and indicated that the item responses could simply be added together to form a scale score (Tukey’s test of additivity).
Table 4.7: Pre-, Post- and follow-up occasion reliability statistics for indifference to stigma

<table>
<thead>
<tr>
<th>Occasion of Testing</th>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>.748</td>
<td>.745</td>
<td>5</td>
</tr>
<tr>
<td>Post</td>
<td>.771</td>
<td>.771</td>
<td>5</td>
</tr>
<tr>
<td>Follow-up</td>
<td>.769</td>
<td>.767</td>
<td>5</td>
</tr>
</tbody>
</table>

To establish the construct validity of the indifference to stigma scale a one-way analysis of variance and Tukey's test of additivity were conducted. Question 23 “Had I received treatment for psychological problems, I would not feel that it ought to be covered up” was used as the independent variable and the “indifference to stigma” scale was the dependent variable. It was hypothesised that if students responded to the items on the indifference to stigma scale with “agree” or “somewhat agree” they would respond to item 23 “Had I received treatment for psychological problems, I would not feel that it ought to be covered up” in a similar fashion. The results of the Tukey’s test of additivity (Appendices 10a, 10b & 10c) on all three occasions, at pre-intervention (F=18.268, (df= 4, 357), p < 0.001), post-intervention (F=8.668, (df= 4, 307), p < 0.001) and follow-up occasion (F=9.488, (df= 4, 199), p < 0.001) indicate that this scale is likely to possess high construct validity and measures indifference to stigma.
4.6.5 Factor Two Help-Seeking Propensity

Factor two may be interpreted as *help-seeking propensity*. The strongest loading items on this factor were “If I were experiencing a serious psychological problem at this point in my life, I would be confident that I could find relief by seeking help from a professional” (.714) “I would want to get professional help if I were worried or upset for a long period of time” (.666) and, “I would willingly talk about personal matters to an appropriate person if I thought it might help me or a member of my family” (.636). Table 4.8 below presents each of the items that constitute this factor, *help-seeking propensity*.

Table 4.8: Items in Factor Two Help-Seeking Propensity

<table>
<thead>
<tr>
<th>Item</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. If good friends asked my advice about a psychological problem, I might suggest that they see a professional.</td>
<td>.582</td>
</tr>
<tr>
<td>8. If I were experiencing a serious psychological problem at this point in my life, I would be confident that I could find relief by seeking help from a professional.</td>
<td>.714</td>
</tr>
<tr>
<td>10. If I were to experience psychological problems, I could get professional help if I wanted to.</td>
<td>.611</td>
</tr>
<tr>
<td>13. It would be relatively easy for me to find the time to see a professional for psychological problems.</td>
<td>.577</td>
</tr>
<tr>
<td>15. I would want to get professional help if I were worried or upset for a long period of time.</td>
<td>.666</td>
</tr>
<tr>
<td>19. If I believed I was having a mental breakdown, my first inclination would be to get professional help.</td>
<td>.526</td>
</tr>
</tbody>
</table>
22. I would willingly talk about personal matters to an appropriate person if I thought it might help me or a member of my family.

The internal consistency (Cronbach’s alpha) of forming these items into a scale were investigated for the pre-, post- and follow-up occasion. The reliability statistics presented below in Table 4.9 show that the respondents answered the eight items in an internally consistent fashion on all occasions (\(\alpha = .781; \bar{\alpha} = .789; \bar{\alpha} = .791\)) and indicated that the item responses could simply be added together to form a scale score (Tukey’s test of additivity).

Table 4.9: Pre-, Post- and follow-up occasion reliability statistics for help-seeking propensity

<table>
<thead>
<tr>
<th>Occasion of Testing</th>
<th>Cronbach’s Alpha Based on Standardized Items</th>
<th>Cronbach’s Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>.781</td>
<td>.784</td>
<td>7</td>
</tr>
<tr>
<td>Post</td>
<td>.789</td>
<td>.802</td>
<td>7</td>
</tr>
<tr>
<td>Follow-up</td>
<td>.791</td>
<td>.798</td>
<td>7</td>
</tr>
</tbody>
</table>

To establish the construct validity of the help-seeking propensity scale a one-way analysis of variance and Tukey’s test of additivity were conducted. Question 2 “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” was used as the independent variable and the “help-seeking propensity” scale was the dependent variable. It was hypothesised that if students responded to the items on the help-seeking propensity scale with “agree” or “somewhat” they would respond to item 2 “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” in a similar fashion. The results of the Tukey’s test of additivity (Appendices 11a, 11b & 11c) on all three occasions, at pre-intervention (F=17.395, (df= 4, 357), p < 0.001), post-intervention (F=32.003, (df= 4, 307), p < 0.001) and follow-up occasion (F=25.018, (df= 4, 199), p < 0.001) indicate that this scale is likely to possess high construct validity and measures help-seeking propensity.

4.6.6 Survey Administration
The pen-and-paper pre-intervention, post-intervention and follow-up questionnaires were administered to Stage 5 students in both the control group and the intervention group at the commencement and completion of the program. The questionnaires were distributed by the Personal Development, Health and Physical Education teachers of these Stage 5 classes. Only students who had returned their consent form participated in the completion of the questionnaires. All students in the intervention group, regardless of returning the consent form or not participated in the HeadStrong program. The HeadStrong program is a resource designed to be included in the PDHPE curriculum and consent is not needed to teach this content to Stage 5 students.
The pre-intervention questionnaire took approximately 30 minutes for the Stage 5 students to complete. All students in the intervention schools began the HeadStrong program after completion of the pre-intervention questionnaire; students in the control schools continued with usual classes that contained unrelated content to the material presented in the HeadStrong program. The post-intervention questionnaire of the Stage 5 students took place after the completion of the HeadStrong program. The post-intervention questionnaire took approximately 30 minutes to complete and was identical to the pre-intervention survey. The follow-up questionnaire of the Stage 5 students took place six months after the start of the implementation of the project. The follow-up questionnaire took approximately 30 minutes to complete and was identical to the pre- and post-intervention surveys.

Table 4.10: Different times and teaching schedules that participants in the control and intervention groups followed

<table>
<thead>
<tr>
<th>Term/Year</th>
<th>Control Group</th>
<th>Intervention Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term 1</td>
<td>Completion of pre-intervention questionnaire</td>
<td>Completion of pre-intervention questionnaire</td>
</tr>
<tr>
<td>2013</td>
<td>• Completion of regular PDHPE curriculum content, not linked with HeadStrong content</td>
<td>Administration of HeadStrong content</td>
</tr>
<tr>
<td></td>
<td>• Completion of post-intervention questionnaire</td>
<td>• Completion of post-intervention questionnaire</td>
</tr>
<tr>
<td>Term 4</td>
<td>Completion of follow-up intervention questionnaire</td>
<td>Completion of follow-up intervention questionnaire</td>
</tr>
<tr>
<td>2013</td>
<td>• Can now introduce</td>
<td></td>
</tr>
</tbody>
</table>

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4.6.7 Survey Data Analysis

4.6.7.1 Post hoc data preparation and preliminary analysis

The data were analysed using Statistical Program for Social Sciences (SPSS) software. Statistical analysis was conducted on the pre-intervention, post-intervention and follow-up surveys, exploring the data for entry errors and normality. An initial assessment for any pre-intervention group differences (intervention versus control) in demographics and attitudes towards help-seeking for mental health issues was performed. The descriptive data generated from the survey were reported in discrete categories and treated as nominal data. Initially, an independent t test was performed on the age of participants to establish if the random assignment of participants to control and intervention groups resulted in a successfully age-balanced group. Categorical demographic scores including school gender, school type and school region were compared using chi-square ($\chi^2$) for the same purpose. Chi squared is “a simple non-parametric test of significance, suitable for nominal data where observations can be classified into discrete categories and treated as frequencies” (Burns, 2000, p. 212). Chi-squared is used in circumstances similar to that of an ANOVA (i.e. comparing scores between groups) but is used on categorical data that does not follow a normal distribution (Burns, 2000). Categorical scores were compared pre-intervention to ensure groups were equal. Where significant pre-intervention differences existed in the balance of a variable, a one-way analysis of variance (ANOVA) was conducted to identify any pre-existing differences between groups on the two dependent variables (i.e. indifference to stigma and help-seeking propensity). Analysis of variance
ANOVA is a way of testing for mean differences and can compare two or more treatment conditions (Burns, 2000). Burns (2000) describes ANOVA as a hypothesis testing procedure used to determine if mean differences exist for two or more samples or treatments. Through using ANOVA, the differences found between samples can be established as sampling error or actual systematic treatment effects that have caused scores in one group to be different from scores in other groups (Burns, 2000). According to Hancock and Mueller (2010) when analysing data, between-groups analysis of variance is one of the most commonly used techniques to discover whether an independent variable causes variation in an outcome measure, the dependent variable. If significant differences in the dependent variable were identified due to imbalanced groups, the demographic variable was included as a covariate in the final stage of analysis (i.e. ANCOVA).

4.6.7.2 Primary analysis
To assess for differences in changes between groups, a 2x3 repeated measures analysis of covariance (ANCOVA) using two groups (control versus intervention) at three time points (pre-intervention, post-intervention and follow-up). Planned within-subject contrasts were assessed for statistically significant differences in the changes between groups. Differences were expressed as means (±SD) and were considered significant when p<0.05.

4.6.7.3 Analysing Likert Scale Data with ANOVA
This research involved assessing Likert scale data by the parametric ANOVA. Since Likert scale data are ordinal in nature, it could be argued that it should be analysed by non-parametric statistics (e.g. Freidman's ANOVA). “Treating ordinal scales as interval scales has long been controversial” (Jamieson, 2004, p. 1212). A number of studies have revealed
that the Likert response format generates empirically interval data at the scale level, from this it can be stated, it is more appropriate to use the parametric rather than non-parametric ANOVA for this thesis (Carifio & Perla, 2008; Jamieson, 2004). Figure 4.1 illustrates the examination of significant difference within and between groups.

![Figure 4.1: Application of ANCOVA within and between the control and intervention groups](image)

**4.7 Data Source Two: Individual Interviews with Stage 5 Students**

**4.7.1 Site and Participants**

Stage 5 students who participated in the HeadStrong program in the intervention group and completed the pre-intervention, post-intervention and follow-up questionnaires were invited to be interviewed. The students and their parent/s indicated their willingness to participate in the individual interview by ticking a box on the consent form provided before the commencement of the study. While there were potentially 794 students in the student sample, it was envisaged that only a small percentage of parents would consent to their child being interviewed because of the sensitive nature of the topic. Fifteen interviews were conducted with students.
4.7.2 Interview Design and Justification

Burns (2000) defines an interview as a verbal interchange where information, beliefs or opinions are obtained from another respondent. Interviews can be structured, semi-structured, or unstructured and take the form of singular, face-to-face verbal interchange, face-to-face group exchange, mailed or self-administered questionnaires, and telephone surveys (Fontana & Frey, 2000).

Structured interviews can be known as standardised interviews where every respondent receives the same questions in the same specific order, with close-ended questions allowing for a non-conversational approach and no flexibility (Burns, 2000). This allows for ease of qualitative analysis and comparisons between groups.

Semi-structured interviews include a guide which the interviewer follows however wording is not fixed and allows for greater flexibility than structured, close-ended questions (Burns, 2000). Finally, unstructured, or open-ended interviewing takes the form of a conversational tone where there is no standardised list of questions between the interviewer and respondent (Burns, 2000). Semi-structured interviews were used for this study allowing for flexibility throughout the interviews. There are both advantages and disadvantages to conducting interviews. According to McBurney and White (2004) face-to-face interviews have the advantage of establishing a rapport with the participants being interviewed. Another advantage of face-to-face interviews is that interviewers may be able to notice if, or when, participants misunderstand a question (McBurney & White, 2004). With the interviewer being present, they can explain the meaning of the question and probe for more complete responses when brief answers are given. In addition to this,
conducting face-to-face interviews has a benefit of a high response rate as opposed to mail questionnaires (Burns, 2000). Other advantages that Burns (2000) makes note of are; the use of probing to encourage more complete answers, establishment of rapport to encourage higher level of motivation among respondents, visual observation of participants’ non verbal communication and ability to control the sequence of the items, disallowing the respondent to anticipate what will be asked in the interview ahead.

The interview schedule for the Stage 5 student individual interviews (see Appendix 12) was divided into the following sections:

- Section 1: Health Literacy;
- Section 2: Help Seeking Attitudes;
- Section 3: Help Seeking Intentions;
- Section 4: Perceived Barriers to Help Seeking;
- Section 5: Perceived Facilitators of Help Seeking; and
- Section 6: Efficacy of the HeadStrong Program.

As illustrated in Table 4.11, each section of the interview schedule aligned with the outlined research questions of this thesis.
<table>
<thead>
<tr>
<th>Research Question</th>
<th>Stage 5 Individual Interview Questions addressing research questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> What do regional young people understand by the notion of “help-seeking”?</td>
<td>• If your best friend asked what it meant to “help-seek” how would you explain it?</td>
</tr>
<tr>
<td></td>
<td>• What do you think help-seek means in relation to poor mental health?</td>
</tr>
<tr>
<td><strong>2.</strong> What attitudes do regional young people have to help-seeking for mental</td>
<td>• How would you describe people who experience poor mental health?</td>
</tr>
<tr>
<td>health problems?</td>
<td>• Would you want important people in your life, like friends and family, to know if you were experiencing a mental health problem?</td>
</tr>
<tr>
<td></td>
<td>• If a good friend asked your advice about a mental health problem, what would you suggest they do?</td>
</tr>
<tr>
<td></td>
<td>• How would you feel if your friends found out that you were help-seeking for a mental health problem?</td>
</tr>
</tbody>
</table>
| 3. What perceived barriers prevent regional young people from seeking help for mental health problems? | • Would there be differences in the way you help-seek if you were experiencing poor physical health in comparison to poor mental health?
• Do you think that regional young people are more or less likely to help-seek for mental health problems than their urban peers?

| • What sorts of things, or who might stop or prevent you, from help seeking? (stigma, friends might tease you, seen as weakness, I can look after myself, service too far away, someone might see me)
• What factors do you think contribute to regional young people being more or less likely to help-seek for mental health problems than their urban peers? |

<p>| 4. What perceived facilitators assist regional young people to seek help for mental health problems? | • What sorts of things, or who might support you or encourage you, to help seek? (I know the signs of poor mental health, my aunty had depression so I know that you need help) |</p>
<table>
<thead>
<tr>
<th>5. What are regional PDHPE teachers’ perceptions of the ability of the HeadStrong program to enhance the mental health literacy of Stage 5 students?</th>
<th>N/A</th>
</tr>
</thead>
</table>
| 6. What are regional Stage 5 students’ perceptions of the ability of the HeadStrong program to enhance their mental health literacy? | • What do you think you have learned from the HeadStrong program? (signs, symptoms, who to go to, challenges facing young people, mood disorder facts and statistics, at-risk personality types, coping strategies, fears of seeking help, how to find the right help)  
• Do you think that your attitudes to mental health have changed as a result of participating in the HeadStrong program? If so, in what way/s? (attitude)  
• Do you think you would be more likely to help-seek as a result of your participating in the HeadStrong program? If so, why? (intention) |
4.7.3 Interview Administration
Within this study, face-to-face individual interviews were conducted with Stage 5 students to evaluate the efficacy of the HeadStrong resource. Interviews were conducted by the researcher, took approximately 30 minutes, and were digitally recorded to retain data. The interviews occurred in the PDHPE lesson immediately after completion of the last lesson in the HeadStrong program. The interviews were conducted in a quiet space/room in the schools’ library or an available space in which the students felt at ease.

4.8 Data Source Three: Face-to-face Interviews with Personal Development, Health and Physical Education Teachers

4.8.1 Site and Participants
Interviews with PDHPE teachers in the intervention group were conducted in their school setting. The teachers indicated their consent to participate in the individual interviews through a consent form provided before the commencement of the study. All consenting PDHPE teachers, 10 in total, were interviewed to ensure a breadth of school type in the data.

4.8.2 Interview Design and Justification
Similarly to the individual interviews conducted with the Stage 5 students, semi-structured interviews were conducted with the Personal Development, Health and Physical Education teachers. Through individually interviewing the teachers, a rapport can be established (McBurney & White, 2004). The individual interviews with the PDHPE teachers (see Appendix 13) were divided into the following sections:

- Section 1: Health Literacy;
- Section 2: Help Seeking Attitudes;
- Section 3: Help Seeking Intentions;
- Section 4: Perceived Barriers to Help Seeking;
- Section 5: Perceived Facilitators of Help Seeking; and
- Section 6: Efficacy of the HeadStrong Program.

As illustrated in Table 4.12, each section of the interview schedule aligned with the outlined research questions of this thesis.
Table 4.12: PDHPE teacher interview question alignment with research questions

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Individual PDHPE teacher Interview Questions addressing research questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What do regional young people understand by the notion of “help-seeking”?</td>
<td>• As a result of students participating in the HeadStrong program, do you think they understand what it means to “help-seek” for mental health problems?</td>
</tr>
<tr>
<td>2. What attitudes do regional young people have to help-seeking for mental health problems?</td>
<td>• Do you think the HeadStrong program has decreased the stigma associated with mental health problems? If so, how?</td>
</tr>
<tr>
<td></td>
<td>• Do you think that regional young people are more or less likely to help-seek for mental health problems than their urban peers?</td>
</tr>
<tr>
<td>3. What perceived barriers prevent regional young people from seeking help for mental health problems?</td>
<td>• What sorts of things, or who might stop or prevent students from help seeking? (stigma, friends might tease them, seen as weakness, can look after themselves, service too far away, someone might see them)</td>
</tr>
<tr>
<td></td>
<td>• What factors do you think contribute to regional young people being more or less likely to help-seek for mental health problems than their urban peers?</td>
</tr>
<tr>
<td>4. What perceived facilitators assist regional young people to seek help</td>
<td>• What sorts of things, or who might support or encourage students, to help seek? (know the signs of poor mental health, positive past experiences, familiarity with</td>
</tr>
<tr>
<td>Question</td>
<td>Response</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>5. What are regional PDHPE teachers’ perceptions of the ability of the HeadStrong program to enhance the mental health literacy of Stage 5 students?</td>
<td></td>
</tr>
<tr>
<td>- Do you think the HeadStrong program is an effective resource to increase students’ mental health literacy levels? If so, why?</td>
<td></td>
</tr>
<tr>
<td>- Do you think students’ attitudes to mental health have changed as a result of participating in the HeadStrong program? If so, in what way/s? (attitude)</td>
<td></td>
</tr>
<tr>
<td>- Do you think students would be more likely to help-seek as a result of participating in the HeadStrong program? If so, why? (intention)</td>
<td></td>
</tr>
<tr>
<td>- What support or services would further assist regional young people to seek help for mental health problems?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. What are regional Stage 5 students’ perceptions of the ability of the HeadStrong program to enhance their mental health literacy?</th>
<th>N/A</th>
</tr>
</thead>
</table>
4.8.3 Interview Administration

Face-to-face individual interviews with Personal Development, Health and Physical Education teachers who delivered the HeadStrong program took place to evaluate the efficacy of the resource. Interviews were conducted by the researcher and took place at a time suitable for each individual PDHPE teacher, either during lunch or a free period. The individual face-to-face interviews took approximately 30 minutes to complete and were digitally recorded to retain the interview data. Interviews were conducted at a convenient venue at each individual teacher's school.

4.9 Data Source Two and Three: Analysing the Interview Data

The interview data were analysed using coding and intra- and inter-textual analysis to determine themes (Maykut & Morehouse, 1994). According to Burns (2000) coding involves classifying material, in this case, the interview data, into themes, issues, topics, concepts or propositions. Intra-textual analysis firstly took place as key themes were identified within each of the Stage 5 individual interviews and the PDHPE teacher interviews. Maykut and Morehouse (1994) outline intra-textual analysis of interview data to involve placing units of meaning into theme labels and provisional categories. Intra-textual analysis took place on the units of meaning, in this case, the quotes from Stage 5 student or PDHPE teacher interviews. Inter-textual analysis also occurred as key themes were identified across Stage 5 individual interviews and across the PDHPE teacher interviews. Theme labels were organised into provisional categories and the method of inter-textual analysis compared these categories to highlight and establish a representation of the overall themes of the research data collected. In addition to this, tables were created in order to
collate examples from the performed coding and intra- and inter-textual analysis. Identified themes from the Stage 5 individual interview transcripts and the PDHPE teacher interview transcripts were aligned with the research questions of the study. In addition to this, Ajzen's Theory of Planned Behaviour was used as a framework to analyse and explain the interview data.

4.9.1 A Conceptual Analysis

According to Yin (2011) the process of analysing qualitative data follows a general five-phased cycle. The five phases in the cycle of qualitative data analysis include compiling, disassembling, reassembling, interpreting and concluding (Yin, 2011).

Yin (2011) states the phases of the analytic process do not form a linear sequence, but rather have recursive and iterative interactions. Figure 4.2 depicts the complete cycle of qualitative analysis. The five phases are displayed, with arrows showing the sequencing among the five phases (Yin, 2011). Figure 4.2 portrays the likelihood of the qualitative analysis cycle to occur in a non-linear fashion as the two-way arrows convey that the researcher can go back and forth between two phases repeatedly (Yin, 2011).
Figure 4.2: The five phases of analysis and their interactions

The first phase of analysis, *Compiling*, involves methodically organising the original data and creating a ‘database’, or orderly set of records (Yin, 2011). According to Yin (2011) the phase of compiling within the analytic cycle allows the researcher to organise the qualitative data in an orderly fashion before formal analysis begins. In relation to this thesis, compiling the data involved gathering and organising the transcripts of the individual Stage 5 student interviews and the individual PDHPE teacher interviews. Once all the original data were compiled, in a ‘database’, such as a folder system, the second phase of the cycle began.

The second phase of the analytic cycle is *Disassembling* the data in the database (Yin, 2011). Disassembling the compiled data involves breaking it down into smaller pieces or fragments and may be repeated numerous times. This phase involves initial or Level 1 coding, in which similar fragments of the interview data are assigned codes. This process was undertaken with the transcripts of the Stage 5 student and PDHPE teacher interviews. This initial coding is sometimes referred to as *in vivo* coding (Saldaña, 2009). In vivo coding
involves assigning a label to a section of data using the interview participant’s own words that appear in the data set. This ensures that the key element of what is being described remains captured as the concepts stay as close as possible to the participants’ own words.

In the third phase of Yin's (2011) qualitative analysis, *Reassembling*, the researcher can discover emerging patterns in the data which has been disassembled. Reassembling the data uses substantive themes to re-organise the disassembled data into different sequences or groupings. Yin (2011) states these reassembled data can be depicted graphically, arranged in lists, or in other tabular structures. Similarly to the disassembling phase, the reassembling phase can be repeated several times to reveal emerging patterns within the qualitative data. From these emerging patterns and themes, the data can then be interpreted.

The fourth phase of analysis involves *Interpreting* the reassembled data (Yin, 2011). According to Yin (2011) the interpreting phase of qualitative data analysis involves the researcher giving meaning to the reassembled data and data arrays. Within this phase the researcher develops a comprehensive interpretation which encompasses all data, discovering deep meaning and highlighting main themes within the research which form a basis for understanding for the entire study (Yin, 2011).

The final analytic phase within the cycle is *Concluding* (Yin, 2011). Within the concluding phase the researcher presents the main data or empirical findings and draws conclusions from the entire study to highlight the broader significance of the research (Yin, 2011). The researcher relates the conclusions drawn to the interpretation phase previously
conducted, raising the findings of the study to a higher conceptual level and presenting an overarching statement or series of statements which display the implications of the research study (Yin, 2011). In this final stage of the analytic cycle, this thesis presents the overarching themes in the form of statements which present the findings of the study. The concluding phase underlines the significance of the research and provides implications for future research.
Table 4.13: Relationship between research questions, data collection and analyses

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Data Source</th>
<th>Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What do regional young people understand by the notion of “help-seeking”?</td>
<td>Student interviews</td>
<td>Thematic analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yin's (2011) analytic process</td>
</tr>
<tr>
<td>2. What attitudes do regional young people have to help-seeking for mental health problems?</td>
<td>Student questionnaire</td>
<td>Chi Squared</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ANOVA</td>
</tr>
</tbody>
</table>
5. What are regional PDHPE teachers’ perceptions of the ability of the HeadStrong program to enhance the mental health literacy of Stage 5 students?  
Teacher interviews  
Thematic analysis  
Yin’s (2011) analytic process  
Ajzen’s Theory of Planned Behaviour (1985)

6. What are regional Stage 5 students’ perceptions of the ability of the HeadStrong program to enhance their mental health literacy?  
Student interviews  
Thematic analysis  
Yin’s (2011) analytic process  
Ajzen’s Theory of Planned Behaviour (1985)
4.10 Triangulation

A commonly used technique to improve the internal validity and to ensure that the data collected are reliable is known as triangulation (Burns, 2000; O'Toole & Beckett, 2010). Triangulation contributes to qualitative analysis by verifying and validating the data through checking consistency of findings generated by the different data-collection methods used and the different data sources within the same method (Burns, 2000). Janesick (2000) states that triangulation is a process of using multiple perceptions to clarify meaning, verifying the repeatability of an observation or interpretation. In this thesis triangulation occurred as three data sources were used: survey Stage 5 students; individual interviews with Stage 5 students; and individual interviews with PDHPE teachers. The researcher recognises that there was no formal collection of data, for example observations of teachers facilitating the HeadStrong program with students, and this is recognised as a limitation to the study. Another aspect to consider in the research design is reliability.

4.11 External Reliability

External reliability refers to the ability of the study to be replicated. For qualitative data this is a difficult criterion to satisfy as qualitative data is drawn from social and cultural contexts that are changing and evolving. LeCompte and Goetz (1982) “recognise it is impossible to freeze a social setting and the circumstances of an initial study to make it replicable in the sense in which the term is used employed” (as cited in Bryman, 2008, p. 376). More appropriate measures of evaluating qualitative research include examining the trustworthiness of the data collection tools and procedures for administration. Trustworthiness includes four criteria:
1. Credibility;

2. Transferability;

3. Dependability; and


Bryman (2008) parallels credibility with the notion of internal validity. The credibility of the study determines its acceptability to others. To establish credibility within a study, it must be ensured that the research is carried out according to the standards of good practice, and that the research findings are submitted to participants who were studied for authentication of appropriate understanding of the respondents’ social world (Bryman, 2008). In relation to this research, Stage 5 students’ and PDHPE teachers’ interview transcripts were returned to the participants for “member checking”. Member checking involves the interview participants reading and validating that the content of the transcripts are an accurate representation of the interview process (Bryman, 2008).

Transferability parallels external validity and refers to the possible transferability of findings to other contexts (Bryman, 2008). In this thesis, the results of the research may be used to extrapolate to the implementation of the HeadStrong program in other Australian states and territories.

Dependability means that the researcher will undertake an audit trail that includes complete records of all the phases of the research process (Bryman, 2008). A tabulated list of data items were compiled to ensure the dependability of the data collection for this research.
Confirmability ensures that the researcher avoids swaying the conduct of the research and findings derived from it through the input of any personal values or theoretical inclinations (Bryman, 2008). The HeadStrong program was facilitated by PDHPE teachers in the sample secondary schools and data were gathered using a validated survey instrument (Mackenzie et al., 2004). While the researcher interviewed both Stage 5 students and the PDHPE teachers in the intervention sample, the ethical protocols for conducting research was adhered to and the use of member checking of interview transcripts assisted in ensuring confirmability.

4.11.1 Reflexivity

Reflexivity addresses issues of the researcher’s identity and the implications for data collection and analysis (Taylor & White, 2001). A reflexive analysis:

“interrogates the process by which interpretation has been fabricated: reflexivity requires any effort to describe or represent to consider how that process of description was achieved, what claims to ‘presence’ were made, what authority was used to claim knowledge.” (Fox, 1999, p. 220, as cited in Taylor & White, 2001).

Taylor and White (2001) believe acting reflexively means that practitioners will subject their own and others’ knowledge claims and practices to analysis. Therefore an essential factor to consider in this research project was my position within the research.

As an individual with both a professional (studying at a regional University) and personal (resident of a regional NSW town) vested interest in regional areas, I viewed the need to
investigate the issue of help-seeking and young people’s mental health in these areas as very important. I attended a regional university and gained a Bachelor of Education (Health and Physical Education) (Honours, Class 1). In this undergraduate degree the PDHPE curriculum document is studied. This document includes a focus on young people and their mental health. As a young person with a particular interest in health education and promotion, young people, and experience teaching secondary students, I viewed their mental health as important and therefore brought a positive lens to the viewing of the data.

4.12 Ethical Considerations

4.12.1 Confidentiality
Confidentiality can be guaranteed when conducting surveys and interviews (Burns, 2000). To ensure confidentiality, the researcher administering the surveys, and conducting the interviews guaranteed the respondents that the information that was provided during the interview process will not be revealed (Burns, 2000).

4.12.2 Anonymity
According to Burns (2000) an anonymous study is one in which the identification of who provided the data cannot be recognised. In this thesis survey data were entered using a respondent number and data analysed and reported as aggregates. As such no individual student was able to be identified. In addition to aggregating survey data, the use of pseudonyms ensured anonymity of interview respondents. Participants' names were replaced with pseudonyms when conducting data analysis and reporting findings.
4.12.3 Ethical Clearance

As this thesis is part of the larger study being conducted by Black Dog Institute, Section 5 (the Inventory of Attitudes Toward Seeking Mental Health Services) of the student survey received ethical clearance from the UNSW (See Appendix 14). In addition to this, supporting ethics was cleared for the student surveys through two dioceses of the Catholic Education Office (See Appendix 15 & 16).

Ethical approval for the Stage 5 student and PDHPE teacher interviews received ethical clearance from the Charles Sturt University Human Research Ethics Committee, the University of New South Wales Human Research Ethics Committee, the Diocese of Bathurst Catholic Education Office and the Archdiocese of Canberra and Goulburn Catholic Education Office. This is outlined in Table 4.14 below.
Table 4.14: Where ethical approval was sought and received for the larger study titled “A randomised controlled trial of the HeadStrong program”

<table>
<thead>
<tr>
<th>Study</th>
<th>Title of Study</th>
<th>Where ethical approval was sought from</th>
<th>Ethical Approval Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Larger Study</td>
<td>A randomised controlled trial of the HeadStrong program</td>
<td>University of New South Wales Human Research Ethics Committee</td>
<td>YES HREC Ref: # HC12629 (See Appendix 14)</td>
</tr>
<tr>
<td>Larger Study</td>
<td>A randomised controlled trial of the HeadStrong program</td>
<td>Charles Sturt University Human Research Ethics Committee (HREC)</td>
<td>YES Protocol number issued: 2013/012 (See Appendix 17)</td>
</tr>
<tr>
<td>Larger Study</td>
<td>A randomised controlled trial of the HeadStrong program</td>
<td>Catholic Education Office – Diocese of Bathurst</td>
<td>YES (See Appendix 15)</td>
</tr>
<tr>
<td>Larger Study</td>
<td>A randomised controlled trial of the HeadStrong program</td>
<td>Catholic Education Office – Archdiocese of Canberra and Goulburn</td>
<td>YES (See Appendix 16)</td>
</tr>
<tr>
<td>Individual Study</td>
<td>The efficacy of a preventative intervention on regional young people's attitudes towards help-seeking for mental health issues</td>
<td>Charles Sturt University Human Research Ethics Committee (HREC)</td>
<td>YES Protocol number issued: 2013/024 (See Appendix 18)</td>
</tr>
</tbody>
</table>
4.12.4 Intellectual Property
As a component of the larger study undertaken by Black Dog Institute, the data arising from survey Section 5 and PDHPE teacher and Stage 5 student interviews are the intellectual property of the researcher.

4.13 Chapter Summary
Chapter Four has outlined the pragmatic and methodological decisions made for the collection and analysis of data in this thesis. This thesis adopted a mixed method approach to data collection with both survey (quantitative) and interview (qualitative) sources of data.

The following two chapters will comprehensively address the research questions and present the findings of this study. Chapter Five will examine the collated results from student data and Chapter Six will follow thereafter, examining the collated results from teacher data. The findings are presented as themes and discussed in relation to the reviewed mental health literature, the learning activities in the HeadStrong program, and Ajzen's Theory of Planned Behaviour. Chapter Seven will discuss the results gleaned from the survey and interview data analysis.
Chapter Five: Student Results and Preliminary Discussion

Examining their Attitudes and Intentions to Help-Seek for Mental Health Issues

5.1 Introduction

Chapter Five is the first of two results chapters and presents the findings from the Inventory of Attitudes toward Seeking Mental Health Services (IASMHS) followed by the results of the qualitative data analysis of the interviews with Stage 5 (Years 9 & 10) students from the intervention schools in the study.

Chapter Five presents the results of the quantitative analysis of the pre-, post- and follow up survey completed by Stage 5 students from both the intervention and control schools in the research sample. The findings of the quantitative data analysis reported students' attitudes to help-seeking. Informed by Ajzen's Theory of Planned Behaviour (1985), it was then necessary to investigate students' help-seeking intentions. These intentions are informed by students' perceptions of the barriers to and facilitators of help-seeking, and act as predictors of students' help-seeking behaviour (Ajzen, 1985). The results are presented as themes and discussed in relation to the reviewed mental health literature, the learning activities in the HeadStrong program, and Ajzen's Theory of Planned Behaviour (1985). Here it is important to note, that establishing a relationship between the HeadStrong program and students' intention to help-seek was not the only purpose of this analysis. Findings were also reported and discussed as representations of students' mental health literacy, their intentions to help-seek, and their perceptions of those factors that enable or constrain their help-seeking intentions.
5.2 Inventory of Attitudes towards Seeking Mental Health Services: Student Results

The results of the preliminary data analysis of the surveys distributed to Stage 5 students in the study highlight differences in help-seeking attitudes between student subgroups. The primary analysis examines the two sub-scales created from the factor analysis explained in Chapter Four. Help-seeking propensity and indifference to stigma are examined at the pre- and post-intervention and six month follow-up occasions. Relationships are explored within and between groups.

5.2.1 Preliminary analysis

Results of the pre-intervention demographics analysis revealed that the intervention group was significantly older (0.44 years, \( p<0.001 \)) and had significantly higher openness scale (1.02, \( p<0.05 \)). Pre-intervention demographics analysis also revealed a statistically significant difference in school type (\( p<0.05 \)), school gender (\( p<0.05 \)) and school region (\( p<0.05 \)). All other demographics were not statistically significantly different between groups.

5.2.2 Primary analysis

Table 5.1: Observed means (M) and standard deviations (SD) for outcome variables at pre- and post-intervention and six month follow-up for intervention and control conditions. In the column “p-value of time x condition interaction”, 1= pre, 2= post and 3= follow-up.
Table 5.1: Observed means (M) and standard deviations (SD) for outcome variables at pre- and post-intervention and 6 month follow-up for intervention and control conditions. In the column “p-value of time x condition interaction”, 1= pre, 2= post and 3= follow-up.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Condition</th>
<th>Pre</th>
<th>Post</th>
<th>Follow-up</th>
<th>p-value of time</th>
<th>p-value of time x condition interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>1v2</td>
</tr>
<tr>
<td>Indifference to Stigma</td>
<td>Intervention (n=109)</td>
<td>7.257</td>
<td>4.446</td>
<td>7.505</td>
<td>4.449</td>
<td>6.844</td>
</tr>
<tr>
<td></td>
<td>Control (n=57)</td>
<td>8.105</td>
<td>4.883</td>
<td>8.597</td>
<td>4.964</td>
<td>8.000</td>
</tr>
<tr>
<td>Help-Seeking Propensity</td>
<td>Intervention (n=109)</td>
<td>18.220</td>
<td>5.320</td>
<td>18.294</td>
<td>5.123</td>
<td>18.064</td>
</tr>
<tr>
<td></td>
<td>Control (n=57)</td>
<td>19.474</td>
<td>5.251</td>
<td>19.000</td>
<td>5.519</td>
<td>19.105</td>
</tr>
</tbody>
</table>
The null hypothesis was accepted as the within- and between-groups analyses showed that there were no statistically significant differences in students' mean score for help-seeking propensity or indifference to stigma from the pre- to the post-intervention occasion, the pre-intervention to the six month follow-up occasion, or the post-intervention to the six month follow-up occasion of testing.

5.3 Student Interview Results

As described in Chapter Four, 789 students from NSW Central West Catholic and Independent Schools formed the purposively selected sample for this thesis. From the five intervention schools, 15 students consented to participate in a face-to-face interview with the researcher. Of the 15 students interviewed, eight were male and seven were female. Seven of the 15 students in the sample attended Catholic Schools, and eight attended Independent schools. Interviews were conducted to gather data to answer the following research questions:

- **RQ1**: What do regional young people understand by the notion of help-seeking?
- **RQ3**: What intentions do regional young people have to help-seek for mental health issues?
- **RQ4**: What perceived barriers prevent regional young people from help-seeking for mental health issues?
- **RQ5**: What perceived facilitators assist regional young people to help-seek for mental health issues?

The preceding research questions act as organisers for presenting the results of the analysis of the Stage 5 student interview data.
5.4 Examining Regional Young People's Understandings of Help-seeking

It is important to reinforce that students' mental health literacy informs their attitudes and intentions to help-seek. As previously defined in Chapter Two, the term mental health literacy refers to:

knowledge and beliefs about mental disorders which aid their recognition, management or prevention. Mental health literacy includes the ability to recognise specific disorders, knowing how to seek mental health information, knowledge of risk factors and causes, of self-treatments, and of professional help available; and attitudes that promote recognition and appropriate help-seeking. (Jorm et al., 1997, p.182)

Understanding of help-seeking is not limited to a definition or description but rather is inclusive of what help-seeking means, where young people can go to seek help, and how to recognise when they need to help-seek. Therefore, developing recognition of the signs and symptoms of a mental health issue contributes to mental health literacy.

The analysis of the interview transcripts indicated that the students' mental health literacy was demonstrated by their knowledge of the signs and symptoms of mental health issues, and their understandings of help-seeking sources. Jorm et al. (2006) express the importance of mental health literacy, stating that a lack of appropriate recognition of mental disorders may lead to delays in help-seeking and inappropriate help-seeking.
5.4.1 Knowledge of the Signs and Symptoms of Mental Health Issues

The Stage 5 students identified a broad range of signs and symptoms which were indicators of a person experiencing a mental health issue. These descriptions were coded during the thematic analysis as: i) emotion, ii) physical appearance, and iii) social behaviour.

5.4.1.1 Emotion

The first of the three themes identified was emotion. The PowerPoint presentation included in the HeadStrong program (Appendix 19) indicated that a telltale sign of a mental health issue was “the loss of joy or ability to enjoy or feel happy about anything”. In addition, Learning Activity 1 in Module 1 of the HeadStrong program required students to position a variety of signs and symptoms along a continuum from “mentally well” to “mentally unwell”. The aim of the activity was to assist students to identify when individuals are experiencing mental health issues. In their interview responses, students noted that people experiencing a mental health issue exhibited emotions that were generally negative in nature. Students referred to a person with a mental health issue as being “sad”, “not real flash”, “feeling a bit down” or “depressed”.

Lucy\(^1\) stated they may “... have all depressing thoughts”, as well as offering an alternative description by stating that a person with a mental health issue might be “... trying to be more cheerful and bubbly and trying to, you know, be that energetic person”. Lucy’s comment indicated that she understands the breadth of mood states that a person with mental health issue may experience. Katie suggested that a

\(^1\) Pseudonyms assigned to all participants to ensure anonymity
sign of someone experiencing a mental health issue was “big mood swings”. Similarly, Luke stated “I think by like the mood changes they have and how they think about things” and Brad discussed how the young person might be “a bit more moody”. These references to mood are an indication that the students have developed aspects of their mental health literacy.

Hazen et al. (2008) state that during the stage of adolescence young people experience emotional developmental tasks. These developmental tasks include emotional separation from parents, forming membership of a recognised peer group, and development of a personal identity (Hazen et al., 2008). As young people negotiate these developmental tasks, they may demonstrate mood changes and emotional negativity. A display of these emotional signs may be merely attributable to the young person’s developmental stage rather than an indication of a mental health issue. However, it is significant to consider that the AIHW (2011) confirm that mental health issues affect an individual’s emotional wellbeing. Therefore, in order to develop mental health literacy, young people need to be able to differentiate between normal mood changes and the signs and symptoms of mental health issues. The second theme identified from the data analysis related to the appearance of individuals experiencing a mental health issue.

5.4.1.2 Appearance
Students referred to physical traits, features or characteristics that typified people with mental health issues. These characteristics were represented by comments such as “how they looked”, “the way they walked” and “how they presented themselves”. Students described people experiencing mental health issues as appearing physically different by expressions such as:
... they'd probably try putting their hair down like the Emos (Charles);
their eyes might look different (Lucy);
probably have bags under their eyes (Annalise);
they may act differently in the way they walk (Jessica);
and
their body, how they move ... they move with their shoulders and they might crouch ... (Charles).

These responses are reflective of some of the signs of mental health issues which were presented to students in the HeadStrong program. Module 1 Activity 3: Destigmatising mental illness of the HeadStrong program highlighted that individuals experiencing mental issues may not appear physically different. Students did indeed recognise that some people experiencing a mental health issue may not have a changed physical appearance. Charles commented “...you could dress normal and you could act normal but your mental health could not be all there ... sometimes they could be perfectly fine, you think they’re perfect, but they’re really struggling inside”. Further student statements included:

they’d look just normal (Tom);
they’re the same (Emilie); and
I don’t think they look any different to anyone else (Tegan).

Module 1 Learning Activity 3, in the HeadStrong program required students to identify myths or misconceptions about mental health issues. Statements such as “You can pick a person with a mental illness just by looking at how they behave in public” were presented to students in the learning activity with the aim of assisting them to clarify their understandings of mental health issues. The students' responses revealed their ability to identify the myths relating
to the appearance of people experiencing mental health issues. The third theme identified to describe individuals experiencing mental health issues was coded as social behaviour.

5.4.1.3 Social Behaviour

As stated in the HeadStrong resource, the program aims to teach students the “Telltale Signs of a Mood Disorder” and states as these symptoms worsen, the young person will withdraw from all of the activities they used to enjoy, such as school, sports and social groups. In their interviews, students commented that people experiencing a mental health issue may appear “withdrawn”, elaborating on this adjective by stating:

... they exclude themselves (Katie);
... they are more unsocial (Emilie);
... [they’re] sort of less social (Brad);
... they just stand off to the side, or don't get involved in any conversation (Tegan); and
... they’re quiet (Annalise).

These comments illustrated that changes in an individual's social health signaled the existence of a mental health issue. These responses corresponded with the definition of mental illness provided by the Commonwealth of Australia which states mental illness “... significantly interferes with an individual's cognitive, emotional or social abilities” (2010, p. 30).

Students perceived people experiencing mental health issues as acting differently from their normal behaviour and described these behaviours in a negative light. Students stated:
They act a bit differently than they usually would. Just maybe a bit recklessly or carelessly. (Tom);
Because they were acting different to the way they usually were. Oh, if they're active, like maybe just not wanting to do anything. (Andrew); and
I'd start seeing differently in a more negative way I suppose. (Matt).

The data analysis revealed that students were aware of a breadth of signs and symptoms of a mental health issue. The AIHW (2011) states an individual's perceptions, emotions, behaviour and social wellbeing are affected by mental health issues. The students identified signs of a mental health issue as including changes in emotion and social behaviour: further evidence of their mental health literacy.

If young people are equipped with sufficient mental health literacy to enable them to help-seek when they first experience or notice a sign or symptom of a mental health issue, the burden of disease could be reduced as a result of a greater number of young people receiving treatment (Wright et al., 2005). Furthermore, Ajzen's TPB claims if young people have sufficient mental health literacy skills to recognise the signs and symptoms of mental health issues and acknowledge the need to seek appropriate support, then they are more likely to assume they have control over their behaviour. Therefore, it was essential to identify the students’ mental health literacy in relation to another aspect of students' mental health literacy: help-seeking.

5.4.2 Knowledge of Help-seeking
Knowledge of help-seeking assists to shape individuals' attitudes to help-seeking. As defined by Fishbein and Ajzen (1975) attitudes are a predisposition and viewed as an
underlying variable that is assumed to guide or influence behaviour. According to Ajzen's TPB, if students have an understanding of help-seeking, and develop positive attitudes and intentions to help-seeking, then the likelihood of their undertaking the behaviour is enhanced.

The HeadStrong program aims to improve students' mental health literacy and subsequently, influence their resultant behaviour. Students in the sample demonstrated mental health literacy relating to help-seeking, using statements such as “looking for help”, “looking for support”, “asking for help”, “advising them”, and “offering advice on how to cope”. The descriptions suggest that students were aware of the meaning of help-seeking in relation to mental health issues. Module 3: Reaching out: helping others of the HeadStrong program included learning activities relating to health and support services for mental health issues. The data analysis of the Stage 5 students’ interview transcripts revealed that students were aware of the different avenues for help-seeking, by identifying examples of both informal and formal sources of help. Students identified examples of formal sources of help as including school counsellors, psychiatrists, professionals, therapists and doctors. Informal sources of help reported by students, included friends and family and parents. Given that teachers were the facilitators of the HeadStrong program, it was of interest to note that “teachers” were only identified by one student as an avenue for help-seeking.

5.5 Regional Young People’s Intentions to Help-seek

The Theory of Planned Behaviour states that intention influences behaviour. Fishbein and Ajzen (1975) define intention as the direct probability that an individual will perform an action or behaviour. Therefore, it is important to investigate young people's intention to help-seek for mental
health issues in order to predict their behavioural performance (Doll & Ajzen, 1992).

The data analysis of the interview transcripts explored the intentions of students to help-seek for mental health issues. As described in Chapter Two, young people are experiencing mental health issues (Muir et al., 2009) and are reluctant to seek help (Rickwood et al., 2005). In contrast to the Rickwood and colleagues’ findings, students in the research sample indicated they did intend to help-seek if they experienced a mental health issue. Evidence of these help-seeking intentions was illustrated by comments such as: “yeah I would”, or “I probably would”, with Charles presenting an interesting response. When asked about his intention to help-seek he stated:

I wouldn’t be ashamed of going and seeking help because I would rather be in a good state of mind for coping with problems than keeping my popularity up.

Charles espoused intent to help-seek, despite his belief that seeking help would influence what others thought or might think of him. His response indicated an aspect of perceived stigma: a realisation that due to existing stigma, his popularity may be affected as his peers would disapprove of this intent to carry out the behaviour of help-seeking. Research by Calear et al. (2011) expresses that perceived stigma is an inhibiting factor impacting on appropriate help-seeking behaviours. Furthermore, Corrigan’s (2004) research illustrates how stigma diminishes self-esteem and deprives individuals of social opportunities through social disapproval. Charles' response suggests that he is not deterred by the perception of what other people may think and subsequently is not deterred from actual performance of the behaviour; thus challenging the subjective norm (Ajzen, 1985).
Module 2 Activity 6: A day in the life of..., in the HeadStrong program aims to minimise stigma and increase students' understanding of, and sense of empathy for, people experiencing a mental health issue. Through exploring stories about young people who have experienced a mental health issue, the Module 2 activity aims to decrease the stigma associated with mental health issues and as a result, encourage students to help-seek.

Despite stating the intention to help-seek, Stage 5 students still showed some reluctance to help-seek immediately, by suggesting that they would delay the behaviour of help-seeking. Students indicated they would seek help, however not all would access assistance immediately. Students indicated their initial delayed intention to help-seek by statements such as:

Well yeah if it kept progressing for a week or a bit more... (Adam);
... I'd probably stick it out... if it was something I was enduring for a long time, I'd probably go and see someone (Tom); and
... yeah, it’d take a while, but I would (Emilie).

This delay in help-seeking may be attributable to a number of factors. Jorm et al.’s (2006) study stated delays in help-seeking may be due to limited mental health literacy and a lack of appropriate recognition of mental health issues. According to Thompson, Issikadis and Hunt's (2008) study, factors contributing to a delay in help-seeking were slow problem recognition and younger age at onset. Therefore within the research sample, it was not surprising that students stated that they would delay help-seeking as existing research supports the finding that longer help-seeking delays are
associated with younger age at onset. This is a consistent finding with studies such as Thompson et al. (2008) and Christiana et al. (2000) confirming this delay to seek help is evident amongst young people. Thompson et al. (2008) state this could be due to emerging symptoms being recognised as normal during this adolescent stage. It was evident however, from the students' responses to questions relating to help-seeking including knowledge of signs, symptoms of mental health issues and sources of help, that they had developed aspects of their mental health literacy. A further explanatory factor which may be attributed to delayed help-seeking relates to regionality.

Fuller et al.'s (2000) research states that there is an existing self-reliant culture in regional areas and young people want to initially try to deal with any issues that arise by themselves. This delay in help-seeking could be further explained by applying Ajzen's TPB, aspects of control beliefs. Young people's control beliefs relate to their sense of self and emerging adult identity (Ajzen, 2002). If young people do not have sufficient mental health literacy skills to recognise the signs and symptoms of mental health issues, they will not acknowledge the need to seek appropriate support, as they may assume their behaviour is normal to the developmental stage of adolescence and their emerging adult identity.

Students also qualified whether they would help-seek as dependent on “how bad it was”. Data from Thompson et al.'s (2008) study reported that problem recognition was one of the most significant barriers in prompting help-seeking for mental health issues. The HeadStrong resource, in particular Module 2: The low down on mood disorders, provides students with knowledge about mental health issues and the ability to recognise the signs and symptoms of these disorders. By
equipping students with mental health literacy regarding problem recognition, the delay to help-seek for mental health issues could be reduced.

According to Ajzen’s TPB, through problem recognition, young people are more likely to assume that they have control over their behaviour. By recognising the severity of the mental health issue, students’ perceived behavioural control increases, and subsequently their ability to put behaviour into practice. In the process of help-seeking for mental health issues, the recognition of the problem is the first step and claimed by Wilson et al. (2011) to be the most important.

The data analysis illustrated that students felt both an existing personal and perceived stigma of mental health issues. Students’ responses indicated negative perceptions of those experiencing poor mental health, and signaled potential feelings of embarrassment if people found out they were experiencing a mental health issue. According to Kelly and Jorm (2007) these stigmatising attitudes are not uncommon, and can lead to feelings of fear, avoidance, bias, anger or distrust towards people with mental disorders. According to Ajzen's TPB, if young people have negative perceptions of mental health issues, resulting in negative and stigmatising attitudes, their intention to help-seek for mental health issues will be restricted.

Hodges et al. (2007) claim the incidence of mental health issues is more prominent in regional areas and a reluctance to help-seek for mental health issues is intensified in these regions due to a number of barriers. Supporting Hodges et al.’s (2007) claim, the data analysis of the interviews revealed that students believed regional young people were less likely to help-seek for mental health issues than their urban peers.
When questioned as to the factors that contributed to the difference in help-seeking between regional and urban young people, students provided a variety of responses. The factors influencing regional young people's help-seeking included difficulty of access, anonymity and confidentiality, an existing self-reliant, independent attitude and stigma. These factors are outlined by researchers (Ciarrochi et al., 2003; Griffiths et al., 2006; Jorm et al., 2006; Rickwood et al., 2005; & Rickwood et al., 2007) as barriers to help-seeking and were complementary to the data collected regarding perceived barriers existing for young people in regional areas.

5.5.1 Preferred Sources of Help
The data analysis revealed that students had knowledge of different sources of support for mental health issues. Students did not seem to differentiate between help-seeking from informal and formal sources. Here it is important to note, that there was a difference in responses between where the students themselves would seek help if they were experiencing a mental health issue, and where they suggested others could help-seek. The majority of students' comments about where they would seek help included “mum or dad” (Luke), “my parents” (Lucy, Nicole, Brad, Tegan, Jessica & Tom) and “family” (Adam, Matt, Emilie & Andrew). However, when providing advice on where others should help-seek, the majority of responses included “a counsellor” (Charles, Anthony, Nicole, Tom, Matt, Emilie, Katie, Tegan, Annalise & Jessica) or a “professional” (Adam, Lucy, Matt, Emilie, Tegan & Andrew). Parents and friends were commonly identified by students as their preferred source of help, while professionals such as counselors or psychiatrists were the least preferred sources of help and advice. This is an interesting finding as the developmental psychology literature suggests at this age, young people are breaking away from being dependent on
their parents and searching for their own identity (Hazen et al., 2008). While the students revealed they would seek help from their parents, research suggests during adolescence young people's friends come to the forefront of importance and peer groups are relied on more heavily for support (AIHW, 2011).

### 5.5.1.1 Informal Sources of Help

Stage 5 students stated they would first talk to a good friend or their parents if experiencing a mental health issue. Interview responses included “… I'd see family first and then just see if they could help comfort me.” (Adam), “First I would, you know, tell my mum, tell my parents and you know, they’d know who to talk to, where to find someone.” (Lucy) and “… I would start off with my family” (Matt). Further examples of family being the first source of help in which students would seek help included comments from Tegan stating “I’d definitely talk to my parents first”, Jessica who claimed “I’d see my parents first”, and Nicole who identified she would talk to “First my parents”. Informal sources of help were also identified by Emilie who stated she would seek help from “Friends and family first …” and Charles who claimed “I would first talk to one of my good friends”. These findings support Rickwood et al.’s (2005) study which revealed that young people are more likely to help-seek from informal sources rather than accessing formal help-seeking sources. Talking to parents and friends provides young people with a supportive, comfortable avenue to help-seek as they do not feel pressured by the formality of a psychologist. Rickwood et al. (2007) further state young people who are experiencing any mental health issues are more likely to help-seek from people they know and trust.
5.5.1.2 Formal Sources of Help

Formal sources of help were also identified as a source of help however school counsellors and professional psychiatrists were the least preferred source of help. These findings further support Rickwood et al.’s (2005) findings that reveal high school students do not like to share their most personal experiences with strangers, have difficulty in trusting professional sources of help, and fear embarrassment. Accessing psychological help from professionals may be associated with stigma and act as a barrier to help-seeking, thus explaining why the students reported formal sources of help as the least preferred. A fear of stigma of mental health issues is present amongst young people and relates to fears concerning the confidentiality of professional help services (Rickwood et al., 2007; Rickwood et al., 2005). The barriers and facilitators to help-seeking are examined later in this chapter.

5.5.1.3 Other Sources of Help

Module 3 Activity 7: The help-seeking journey and activity 8: Supporting somebody who may be experiencing a mood disorder, of the HeadStrong program provide students with knowledge of “other sources of help”. A number of websites outlining information on mental health, and advice and support regarding mental health issues were presented in these activities. Websites are often preferred sources of advice as they act as self-help treatments for mental health issues, and ensure anonymity of and confidentiality for the user. Of note, is that none of the students identified help-seeking sources which did not involve direct contact with people. In addition to this, self-help treatments were not identified by the sample as a source of help. This is in contrast to Rickwood et al.’s (2007) study where sources such as the internet, were identified to be increasingly utilised by young people.
5.6 Perceived Barriers to Help-seeking for Regional Young People

The PowerPoint included in the HeadStrong program presents students with learning activities that relate to barriers associated with the fear of help-seeking. These fears include i) being perceived as weak, ii) being labelled, iii) lack of confidentiality, iv) being forced to take medication, and v) being hospitalised. Students were questioned about the barriers that might prevent them, or other individuals from help-seeking for mental health issues. The data analysis revealed a number of barriers to help-seeking including i) difficulty of access, ii) anonymity and confidentiality, iii) a self-reliant, independent attitude, and iv) stigma.

5.6.1 Difficulty of Access

Difficulty accessing sources of help for mental health issues arose as a barrier for students. Four themes resulted from the data analysis: i) population size; ii) financial access; iii) geographic location; and iv) lack of resources and services.

5.6.1.1 Population Size

Students recognised that population size influenced their ability to access help because of the reduced numbers of people to assist them when needed. Anthony indicated “... since there's fewer people around ... there'd probably be less people to talk to” [when help-seeking for mental health issues]. It was evident from this interview comment that Anthony believed that young people living in regional areas are less likely to help-seek for mental health issues. Nicole suggested that “... people in the city have a lot of people around them, and doctors”. These comments suggest that regional young people in the sample recognise the impact of population size on their ability to access both formal and informal sources of help.
5.6.1.2 Financial Access

The AIHW (2011) highlight the fact that health is predisposed not only by biological factors, but also by the social and economic circumstances of daily life. Fuller et al. (2000) recognise that the physical environment of rural areas is recognised as one of isolation, coupled with environmental hazards and economic downturn. These conditions can lead to mental stress and emotional strain. It can be noted that due to this financial difficulty, regional young people’s health may be affected. Purcell et al. (2011) state young people have become more vulnerable to mental health issues due to the fast rate of change in our economic environments. If young people are suffering from a mental health issue, and are unable to seek help due to financial difficulties, this can seriously upset the developmental course of adolescence and limit a young person’s potential (Purcell et al., 2011).

Financial difficulties were highlighted as a barrier to accessing services. Charles stated “some people can’t afford it ... it’s a financial problem”. Quine et al.’s (2003) study revealed cost as a perceived barrier to accessing health services. According to Quine et al. (2003) there are few doctors available and as a result of high demand there is limited bulk billing in rural and regional areas. It appears from students’ responses that young people perceive care and services for mental health issues as unaffordable. Furthermore, Newnham et al. (2008) state that young people living in these areas are disadvantaged in terms of employment, as opportunities are more limited and when unemployed, they are more prone to be jobless for longer than those living in major cities. Unemployment subsequently results in the inability of young people to access health care services.
5.6.1.3 Geographic Location
It was evident from students' comments that they considered distance as a barrier to help-seeking for mental health issues. Matt suggested that the barrier “... could be physical, like where you live; you might not live close to professional help.”. Emilie confirmed the belief that limited access due to geographic location was a barrier to seeking help with her response “...some people don’t have access ...we're out in the middle of nowhere”.

Quine et al.’s (2003) study supports this view and claims that for young people, access to health services is further prohibited in these areas due to distance and infrequent public transport. Geographic isolation has a detrimental effect on regional young people's health as they may feel isolated and alone due to the distance (Fuller et al., 2000) which in turn may prevent them from help-seeking for mental health issues.

5.6.1.4 Lack of Resources and Services
A further barrier to help-seeking for regional young people indicated by students was the lack of both resources and services. Charles commented “Like if the school doesn’t have a school counsellor and you go to go to a psychiatrist and you ask them how much for a session and you can't afford it at that time.”, while Lucy claimed “… there might be less help available”. Participants reinforce this existing barrier for regional young people with responses including [there is a] “… lack of resources” (Brad) and “… there's less opportunities, like less doctors” (Annalise).

This commentary supports Hodges et al.’s (2007) study where it was revealed many young people are reluctant to help-seek as they do not have ready access to treatment for mental health issues. Students highlighted difficulty of access as a
barrier to help-seeking for mental health issues. It was evident from these responses that students believed regional areas did not provide adequate access to services for young people suffering from mental health issues.

Kelly et al. (2007) states it is important to focus on improving young people's mental health literacy by informing them of i) early changes produced by mental health issues, ii) the best types of help available to them, and iii) the knowledge and skills to access this help. If young people living in regional areas do not have access to services which improve their mental health literacy, this becomes a barrier to help-seeking thus resulting in a lack of appropriate recognition of mental health issues and inappropriate help-seeking (Jorm et al., 2006).

Population size, financial access, geographic location and lack of resources and services all act as barriers for young people when accessing mental health services. The overarching barrier of difficulty of access discussed above also relates to confidentiality and anonymity when accessing mental health services in regional settings.

5.6.2 Anonymity and Confidentiality
Hodges et al.'s (2007) study elaborates on the disadvantages experienced by those young people living in a regional area. These disadvantages include concerns about lack of anonymity and confidentiality. Supporting Hodges et al.’s (2007) research, students in the research sample referred to anonymity and confidentiality as barriers to help-seeking. For example:

In smaller towns everyone kind of knows each other and everyone, if you went to see someone it would get
around pretty quickly that everyone would know, who might not want it. (Matt);
I think people, they’d be worried about other people finding out … everyone knows everyone, so they’d see you walking in yeah. (Katie);
I think in regional areas everyone sort of knows everyone. Word gets around faster. (Tegan); and
‘Cause it’s like a small community, everyone would find out, and they won’t keep it to themselves. (Annalise).

It was evident from the students’ responses that when help-seeking, they wished to remain anonymous. A fear of lack of confidentiality when seeking professional help has been highlighted in previous studies (Rickwood et al, 2007; Rickwood et al., 2005). According to Ajzen’s TPB, the lack of confidentiality, as evidenced in the interview responses, impacts on the intent of young people to help-seeking for mental health issues. Ajzen’s TPB claims that existing attitudes influence the intent to perform the behaviour. Therefore when individuals have a behavioural belief that there is limited confidentiality when help-seeking, this influences their attitudes and thus they are less likely to have intent to carry out the behaviour. This can have a detrimental effect on the health status of young people. A fear of lack of confidentiality can result in serious disruptions to young people’s growth and development, eroding their quality of life, and overall health status (ABS, 2010).

5.6.3 An Existing Self-reliant, Independent Attitude
Fuller et al. (2000) describe people living in regional areas as having a self-reliant nature which differs from those populating urban areas. Fuller et al. (2000) state the self-reliant, independent nature of regional cultures has individuals ignoring emotional and mental distress and, not
responding to, or seeking help for mental health issues. The data analysis of the interviews provided evidence of this independent attitude representative of regional culture. Adam stated that “... people in the country have a reputation for trying to handle things themselves” and Brad believed that “... you'd get the occasional bloke who'd just frown upon it, like think that you were less ... you’d be going against the stereotype of the typical Aussie country person if you saw a shrink”.

Furthermore, Nicole and Tegan pointed out that a deterrent to help-seeking was the belief that “people don't want to be seen as weak”. This barrier is highlighted in Module 1: Mood and mental wellbeing in the HeadStrong program, more specifically in the PowerPoint presentation in the section titled “Fears of seeking help”. The resource states “it is difficult for people to say that they need help”. There is a perception that in particular young males are in some way weak or inferior because they are not able to manage the problem by themselves. A further compounding factor to help-seeking is gender, with boys more likely than girls to repress and deny problems and more frequently manage on their own (Barker, 2007). In relation to Ajzen's TPB those living in regional areas tend to have a normative belief that they should be able to look after themselves. According to Ajzen (2002) normative beliefs regard the normative expectations of other people. Students’ comments illustrate that young people living in regional areas do not want to appear “weak” and suggest that they will not help-seek for mental health issues due to their embedded attitude of a self-reliant culture. Highlighted in the previous section, (6.3 Regional young people's intentions to help-seek) it was revealed that students stated they would help-seek if experiencing a mental health issue, however when asked about barriers which would prevent young people from
help-seeking they said that others may not help-seek as there is a fear of being seen as weak.

5.6.4 Stigma

Stigma is noted by Meadows et al. (2012) to be a shameful mark of difference on a person which dehumanises them, often branding them publicly or socially from others. Students’ responses relating to the perceived barrier of stigma have been coded as i) personal stigma, which exists when an individual has personal internalised negative attitudes or thoughts or ii) perceived stigma, where an individual has a perception that others hold negative attitudes (Griffiths et al., 2006; Jorm et al., 2006).

5.6.4.1 Personal Stigma

Embarrassment was identified as a barrier to help seeking for mental health issues. Adam suggests that “… you may be embarrassed about it, you just don’t want people to find out” while Annalise stated that people would “… probably feel embarrassed” in addition to Andrew who identified a barrier as “feeling embarrassed like if someone would find out”.

These data support Corrigan’s (2004) study which identifies stigma as a deterrent for individuals receiving treatment for mental health issues. Furthermore, the students’ interview responses support Calear et al.’s (2011) study which reveals that being younger in age acts as a predictor of personal stigma. The existing stigma associated with the behaviour of help-seeking influences attitudes, consequently, influencing intention to enact the resultant behaviour (Ajzen, 1985). Researchers suggest that personal stigma can be addressed by educating young people about mental health literacy in order to increase early and appropriate help-seeking attitudes, and
enhance young people’s intention to help-seek for mental health issues (Wilson et al., 2011).

### 5.6.4.2 Perceived Stigma

As previously outlined informal sources of help were identified by students in the sample as the most preferred avenue of help-seeking, however, when the students were asked if they would want important people in their life, like friends and family, to know if they were experiencing a mental health issue, mixed responses were provided. Katie stated “Probably not, no”, supported by Tom who claimed “not all of them”. A number of comments further indicated that students would not want their friends to know if they were experiencing a mental health issue with Luke claiming “… no, I wouldn’t really want to tell my friends” and Annalise stating “I wouldn’t tell my friends …”. An interesting finding was Charles’ conflicting response. Initially Charles identified friends as the first source of help which he would approach if experiencing a mental health issue. However, when asked if he would want friends to know if he was experiencing a mental health issue, he claimed “no … not my friends so much” with the reason being “Sometimes you don’t really want people to know if you’re weak”. These responses brought to light another aspect of stigma.

Perceived stigma was identified as another barrier to help-seeking for mental health issues as students feared being labelled and judged by others. Adam stated “…people may put a label to you, they might think that you know, you’re not normal”. Tom also identified this fear claiming individuals “… don’t want to get labelled”.

The HeadStrong PowerPoint acknowledges that the stereotype of a person who experiences mental health issues is still quite
negative, reiterating that young people fear that if they seek help from a counsellor or psychologist, they will be labelled by peers, family and friends. According to developmental psychology literature (Hazen et al., 2008), it is during the stage of adolescence when individuals begin to focus on how others identify them, and being labelled as mentally ill acts as a barrier to help-seeking. Evidence of this fear of labeling was highlighted in the interview responses. Corrigan’s (2004) study notes that labeling as a result of mental health issues needs to be avoided in order to encourage people to seek help for mental health issues.

According to Calear et al. (2011) perceived depression stigma was revealed to be more prominent than personal depression stigma in the Australian adolescent population. Data from the interviews support the findings from this literature. The following quotations act as evidence, for example:

... you might get labelled and people wouldn’t talk to you as much (Matt);
Probably being judged the most. And like once you are diagnosed, kind of like, you might not be able to do certain things (Emilie); and
Judgement, yeah definitely (Brad).

The second determinant of intention, known as subjective norm, is as a result of normative beliefs (Ajzen, 2002). Subjective norm is the perceived social pressure by an individual to carry out the behaviour (Ajzen, 1991). By applying Ajzen's TPB this would explain the students' responses, outlining the existing subjective norm as the stigma associated with help-seeking.

Additionally, perceived stigma acting as a social barrier which signaled the prevention of the behaviour of help-seeking was
evident in the student responses. Ajzen’s TPB states that an individual's beliefs and perceptions of what other people may think about particular behaviours may deter young people from actual performance of the behaviour. The existing perceived stigma, evidenced in the data, act as a deterrent for young people to enact the help-seeking behaviour. Given that friends were identified as a source of help, the students also suggested that friends were a barrier to help-seeking. When discussing what factors or people would prevent them from help-seeking the students remarked that:

Sometimes your friends might, if they find out you're going to a psychiatrist they will block you out, they'll think you're crazy, like start calling you names (Charles); Oh, like maybe if my friends found out and like started sort of bullying me about it, just because like I have mental problems, that it's not really, I wouldn't really like that to happen. (Luke); Probably social status would be the biggest one. (Tom); and ...

friends seeing you as different. (Brad).

The HeadStrong PowerPoint outlines that one of the significant fears for many young people is “being different” or “not fitting in with their peers”. This concern acts as a barrier to help-seeking. Perceived stigma is further expressed by Reavley and Jorm (2011) who state young people with mental disorders can feel abnormal and socially disconnected. These stigmatising attitudes prevalent amongst young people have an adverse affect on the quality of life of those with a mental health issue (Reavley & Jorm, 2011).

In addition to a fear of being labelled, the data analysis revealed a number of other reasons for students not wanting their significant others to know if they were experiencing a
mental health issue. Students did not want to be seen differently stating they:

... might be frowned upon. I guess. Fear of being frowned upon. (Brad);
I think they would treat me a bit differently (Tegan);
Sometimes you don't really want people to know if you're weak... (Charles); and
... find it embarrassing. (Annalise).

The student comments support Reavley and Jorm's (2011) study that illustrated that stigmatising attitudes towards people with mental disorders are common among adolescents. Feelings of embarrassment, alienation and abnormality were used as phrases by the students to describe how they would feel if their friends found out they were help-seeking for a mental health issue. Anthony conveyed his feelings stating “I'd probably be embarrassed”, along with Katie who also claimed “I'd be embarrassed”. In addition to this, Annalise stated “I’d probably feel embarrassed ... ‘Cause you’re not normal”. Responses from students further emphasised the existing stigma with participant comments claiming “… self-esteem would come down …” (Nicole) and “… feel a bit alienated” (Tom).

The data presented in this section highlight stigma acting as a barrier to help-seeking for mental health issues. Researchers state that negative feelings towards those with mental health issues can affect the well-being of the individual (Calear et al., 2011), increase their psychological distress (Griffiths et al., 2006) and inhibit them from executing appropriate help-seeking behaviours.
5.7 Perceived Facilitators of Help-seeking

As a result of thematic analysis, a number of perceived facilitators which support or encouraged students to help-seek arose. These facilitators have been categorised into three themes including i) support from family, friends or other people, ii) knowing someone who had experienced a mental health issue, and iii) the extent of the situation, for example if it was affecting other aspects of their lives.

5.7.1 Support

Support in the form of family, friends and other trusted people was highlighted as a facilitator to help-seeking by students in the study. Students claimed support from “family” was a facilitator to the behaviour of help-seeking. In addition, “friends” were also noted as facilitators which encouraged individuals to help-seek. Nicole suggested “… encouragement from other people” would act as a facilitator for the intention and behaviour of help-seeking. Furthermore, Adam and Annalise recognised there was a link between trusted relationships and the intention to help-seek, outlining “… talking to people they can trust”. This relationship between trusted friends and family, and the behaviour of help-seeking, adds confirmatory data to Rickwood et al.’s (2007) study which illustrated that young people who have existing trusted relationships are more likely to help-seek for their personal and emotional problems. Furthermore, Hampshire and Nicola’s research (2011) states that family and friends of young people should be exposed to knowledge of mental health, so they can identify when young people are struggling and how they can assist them. Having established that trusted relationships was a facilitator to help-seeking for mental health issues, it is therefore important to provide young people with a supportive, comfortable person to act as a source of help-seeking.
5.7.2 Knowledge of Someone who had Experienced a Mental Health Issue

Rickwood et al. (2005) claim young people who have positive attitudes to seeking professional help are more likely to espouse intention to seek help for mental health issues. Knowing, and talking to someone who has experienced and received help for a mental health issue, can improve young people’s attitudes and as a result, act as a facilitator to help-seeking behaviour (Rickwood et al., 2005). Data from this study support Rickwood et al.’s (2005) results, as students highlight talking to people who have experienced mental health issues to act as a facilitator to the intention, and behaviour of help-seeking. Examples of these student responses included:

Well you might talk to someone who’s experienced the same problem and see what they did. (Adam); and
If maybe I’d had someone who’d suffered a mental health problem before ... (Anthony).

5.7.3 Severity of the Mental Health Issue

The extent of the severity of the mental health issue and whether the mental health issue was impacting on other aspects of the young person’s life was highlighted by students as a facilitator to carrying out the behaviour of help-seeking. Responses included:

I’ll say if it was affecting other stuff, like gym, school, and relationships, I'd probably go (Brad);
How bad the situation was ... if you notice big changes in your own behaviour and stuff. Yeah. And like the degree of how serious it is (Katie); and
... go see someone because you're acting strange or something (Andrew).
Calear et al.'s (2011) previously mentioned study revealed personal stigma to be more prevalent at a younger age and therefore a deterrent to the behaviour of help-seeking. However, an encouraging finding, reported by Thompson et al. (2008), concurring with Christiana et al. (2000), is that younger generations help-seek for mental health issues more quickly upon recognition of the signs and symptoms than older people. According to Thompson et al. (2008) this trend could be due to the decreasing negative attitudes towards mental health issues among these younger people, as well as increasing public awareness of effective treatments. The HeadStrong resource is a tool which can be used to address these issues and further encourage young people to help-seek for mental health issues by destigmatising attitudes, and providing students with knowledge of mental health issues and effective treatments for these problems. Recognition of the signs and symptoms of mental health problems, as evidenced by the student responses, i.e. changes in behaviour, acting “strange”, affecting other aspects of individuals' lives, promote increased control beliefs in young people. As previously mentioned, Ajzen (2002) states control beliefs are beliefs about existing factors that may promote or hinder performance of the behaviour. Therefore, according to Ajzen's TPB (2002) if young people have sufficient mental health literacy skills to recognise these signs and symptoms, and acknowledge the need to seek appropriate support, they are more likely to assume they have control over the behaviour of help-seeking.
5.8 The Efficacy of the HeadStrong Program

5.8.1 Mental Health Literacy
From the data analysis, it was evident that students believed the HeadStrong program was useful in increasing their mental health literacy and assisting them to understand what it meant to help-seek for mental health issues. Student comments regarding mental health literacy changes were coded as i) knowledge of signs and symptoms, ii) sources of help, iii) barriers to help-seeking, and iv) facilitators of help-seeking.

5.8.1.1 Knowledge of signs and symptoms
According to Adam knowledge of signs and symptoms of mental health issues arose from participation in the HeadStrong program. Adam explained “… because you sort of learn a bit more about it and what can happen and what things prevent them and can lead to them”. Further evidence of increased knowledge of mental health issues included students learning of:

... different types of depression (Tegan);
... different types of depression and mental health problems. (Annalise); and
... ways that you can start to figure out if someone may be suffering from mental health issues (Anthony).

It was apparent from student responses that after participating in the HeadStrong program, students perceived they had an increased knowledge of mental health issues, signifying mental health literacy.

5.8.1.2 Sources of help
In addition to the comments relating to signs and symptoms, students claimed that as a result of participating in the HeadStrong program, they became aware of where to help-seek for mental health issues and different sources of help. Tegan
commented “Before I didn’t really know where I could go, who to talk to. Now I know where to go and who to talk to”. Similar to this, Charles responded claiming “After the program I learnt maybe my friends can help me, my family …”. In addition to this, student responses included knowledge of:

... the definitions of the people that you can go see to help. Like the difference between a psychologist and a psychiatrist. (Lucy);
We've learnt about who you can go to for help, like the Counsellor and tutors … (Tom); and
... school counsellors and doctors, therapists. (Jessica).

These responses reveal that students had the knowledge of where to access help: an indicator of mental health literacy. Students attribute the increase in their mental health literacy, to the participation in the HeadStrong program.

5.8.1.3 Barriers to help-seeking
Knowledge of barriers to help-seeking for mental health issues can be attributable to mental health literacy. Data analysis demonstrated students had an understanding of existing barriers to help-seeking for mental health issues. A number of students highlighted stigma as a barrier with comments including:

Barriers – Yeah, so like there's popularity and then you're, people labelling you and things like that (Matt);
Yeah like the stereotypes and the, like yeah, mainly just being labelled like a nutter, and like loopy and stuff. (Brad);
... the social status one. That might prevent you … (Tom); and
Things like the peer pressure or self-consciousness might prevent you from seeking help or if you thought they weren’t going to be helpful. (Lucy).
It was evident from these responses that students were aware of the stigma that exists, acting as a barrier to accessing help for mental health issues, and creating a fear of being labelled by others. Further evidence of this can be seen in Anthony’s response where he states “Yeah the things that sort of prevent people from seeking help for mental health issues. Just like having people find out and just sort of being nervous and sort of being in denial about having a mental health problem.” This reveals the stigma associated with mental health issues is identified by students as a barrier when help-seeking, and according to Anthony, Lucy, Tom, Brad and Matt, this was taught throughout the HeadStrong program.

However, although student responses revealed mental health literacy was evident, there was still apparent internalised stigma as students did not want others to know if they had a mental health issue and were wary of seeking help immediately. Therefore, students failed to internalise the lessons learnt from HeadStrong in regard to the destigmatisation relating to accessing help for mental health problems.

Accompanying stigma as a barrier to help-seeking, finance was highlighted as an additional barrier. Katie stated “… the money side of stuff” would inhibit individuals when help-seeking for mental health issues. Annalise signaled lack of facilities in rural areas as a barrier, with her comment “Yeah, like if you're in the country or something and you don't have many facilities to go and visit …”.

The data analysis revealed a number of identified barriers, which students indicated were learnt from their participation in the HeadStrong program. Students’ comments supported
the efficacy of the HeadStrong program in improving their knowledge of existing barriers to help-seeking for mental health issues, and as a result, their mental health literacy.

5.8.1.4 Facilitators of help-seeking
When asked what students had learnt from the HeadStrong program, data analysis revealed students had an understanding of existing facilitators of help-seeking for mental health issues. Adam stated “Yeah well, playing sport helps you know ‘cause you’re with everyone and setting goals to do things like that”, whilst Annalise contributed support as a facilitator to help-seeking with a comment “Yeah like people that support you more, like people that you can trust”. It was evident from these responses that students could identify facilitators of help-seeking and according to Adam and Annalise, this was taught throughout the HeadStrong program.

5.8.2 Help-seeking Attitudes
All respondents claimed the HeadStrong program changed their attitudes toward the stigma associated with mental health issues, and their associated attitudes to help-seeking for mental health issues. Student comments regarding attitudinal changes were categorised into i) an increase in knowledge or ii) students becoming more accepting of those with mental health issues.

5.8.2.1 Increase in Knowledge
According to Katie, from the initial commencement of the HeadStrong program to its completion she claimed “I’m a bit more educated. I’ll probably judge a bit less people, ‘cause there’s more people, it’s really not rare.” Supporting the increase in mental health literacy attributable to participation in the program Anthony explained:

... I understand more about mental health issues and
what sort of effects they can have on people yeah it sort of makes you think sort of more, makes you think more about people who have the issues and it makes you sort of stop to think before you judge them.

Katie and Anthony’s comments were an indication that students’ stigmatising attitudes to individuals with mental health issues had changed. These attitudinal changes resulted from increased knowledge of mental health issues, which they attribute to participating in the HeadStrong program. Participant comments including “I didn’t really know about mental health before, now I kind of understand it a bit more. Yeah. Now I understand what they are going through” (Tegan) and “I can get a bit of a grasp about, like, I suppose what they’re going through, like and, it’s not their fault” (Brad) are further reflections of the efficacy of the program. Ajzen’s Theory of Planned Behaviour, explains that as a result of students’ increased understanding their attitudinal change to help-seeking is enhanced.

5.8.2.2 More Accepting
The notion of acceptance was evident in student comments. This was as a sign of the HeadStrong program having an effect on student attitudes towards individuals with mental health issues. Matt made comment [it] “... makes you get more of an insight of what they’re going through and what they’re facing, so you’re kind of, not respect, or I suppose respect them a bit more and a bit more accepting. Yeah.”. Further evidence of students’ heightened acceptance included comments such as:

I’ve thought differently about it, like I’ve never actually really knew that there was until we actually started doing it, and then, I found out a lot about it and like, now if somebody does have something serious or think I know, like not to think of them differently and just make them
feel good about it. (Luke);
I think it's made me have a little bit more respect for people ... I used to think that they were weird, but now I'm sort of thinking that everyone's basically probably going to go through it, in their life stage, may. (Annalise);
... it's just something normal that happens to people sometimes. (Tom);
I think I've definitely become more aware of it, because of how common it is. (Lucy); and
Well, just because they have a mental health disorder it doesn't really change who they are. (Andrew).

It was apparent from student responses that after participating in the HeadStrong program, students were more accepting of those experiencing mental health issues and therefore had the potential to assist to improve young people's attitudes towards help-seeking.

5.8.3 Intention to Help-Seek
When asked if students were now more likely to help-seek for mental health issues, as a result of participating in the HeadStrong program, all student respondents claimed they had a greater intent to help-seek. Data analysis of student comments revealed evidence such as:

... I'd want to seek professional help faster than I would have done before, you know. (Matt);
... I would have been too embarrassed or, to go and tell anyone, or have anyone find out. But now I think that I would go and ask someone about it. (Andrew);
I've learnt you have to help yourself and people can't make you do stuff that you don't want to or stop you from doing what you want to do. So if like your friends make jokes about depressed people that might make you feel that I don’t want to go because then they'll start
making fun of me. So, but after that [HeadStrong] I just stopped worrying and whatever people say they can say it’s not going to affect me. The program has learnt to listen to myself not other people which is good (Charles); I would if something did happen. You would go and see someone, like your family … (Adam);
... you don’t have to be ashamed for doing that [help-seeking] because lots of people suffer from mental health issues. (Anthony)
... I would probably be more likely now to know how to seek help and that it’s, you know, the right thing to do. (Lucy); and
Yes, it’s less scary and I realise there's more options if I did have any problems. (Katie).

Student comments illustrated the connection between participation in the HeadStrong program and their increased intent to help-seek for mental health issues.

Although students were able to identify signs and symptoms of mental health issues and some student responses signaled increase intent, there were contradictory responses provided in relation to what students would do, and what they would advise others to do. As discussed, students disclosed they would not seek help if someone, such as family and friends were to find out they were help-seeking for a mental health issue. However, responses revealed students claimed they would not judge anyone experiencing a mental health issue and would advise them to seek-help.

5.9 Summary
Chapter Five has identified and explained the themes which arose from the data analysis of Stage 5 students’ interviews. Existing literature guided the discussion and the learning
activities in the HeadStrong resource have aided in the explanation of the results. Ajzen’s TPB has further assisted to explain the influence of and relationship between attitude, intention and behaviour. By applying Ajzen's theoretical framework, if students have positive, destigmatised attitudes, then their intention to help-seek for mental health issues is subsequently positively influenced, and furthermore may impact on their resultant behaviour.

It was revealed that students have developed recognition of signs and symptoms of mental health issues and displayed mental health literacy in relation to help-seeking for mental health issues. Students were aware of different avenues for help-seeking, identifying both informal and formal sources of help. Students espoused intent to help-seek if they were experiencing a mental health issue, however, the students indicated dissimilar strategies for others as opposed to what they would do when help-seeking for mental health issues.

Although intent was highlighted through the data analysis, student responses still showed reluctance regarding the behaviour to seek help, suggesting they may delay help-seeking for mental health issues. Furthermore students reported that it would depend on the severity of the mental health issue, rather than identifying the signs and symptoms that stimulated them to immediately seek help. In addition to this, the data analysis illustrated that students experienced personal and perceived stigma, holding negative perceptions of those experiencing mental health issues and signaling potential feelings of embarrassment if people found out they were experiencing a mental health issue. However, analysis revealed that after participation in the HeadStrong program, these feelings were somewhat positively altered and students
saw individuals experiencing mental illness as normal and their own intent to help-seek was enhanced.

Chapter Five identified how the sample of Stage 5 students responded to the notion of help-seeking, their intent to help-seek and their perceived barriers of, and facilitators to, the behaviour of help-seeking. Chapter Six will now reveal the data analysis of the responses gathered from PDHPE teacher who implemented the HeadStrong program. Chapter Six will provide teachers’ perspectives of the barriers and facilitators of help-seeking for regional young people experiencing mental health issues. Additionally, Chapter Six will evaluate the efficacy of the HeadStrong program in increasing student mental health literacy, decreasing stigmatising attitudes and increasing young people’s intent to help-seek for mental health issues.
Chapter Six: PDHPE Teachers’ Perceptions of Young People’s Intent to Help-Seek for Mental Health Issues and the Efficacy of the HeadStrong Program

6.1 Introduction
The purpose of this Chapter is to present the results of the qualitative data analysis. The data included interviews with PDHPE teachers from the intervention schools in the study. As a result of data analysis of the teacher interviews, it was evident that there were significant replications of the themes that emerged from the analysis of the student interviews. In Chapter Five these themes were explained in light of the literature relating to mental health, Azjen’s Theory of Planned Behaviour and the learning activities in the HeadStrong resource. Given that these themes have already been explained in Chapter Five, the literature will be taken as “read” in Chapter Six, except in those cases where original themes have arisen from the teacher interview data analysis.

As described in Chapter Four, 10 PDHPE teachers from the five intervention schools consented to participate in a face-to-face interview with the researcher. Interviews were conducted to gather data from the perspective of PDHPE teachers in order to answer the following research questions:

- What do regional young people understand by the notion of “help-seeking”?
- What intentions do regional young people have to help-seek for mental health issues?
- What perceived barriers prevent regional young people from help-seeking for mental health issues?
• What perceived facilitators assist regional young people to help-seek for mental health issues?
• What are regional PDHPE teachers’ perceptions of the ability of the HeadStrong program to enhance the mental health literacy of Stage 5 students and their attitudes and intentions to help-seek for mental health issues?

6.2 Teachers’ perceptions of regional young people’s intent to help-seek

The data analysis of the interview transcripts illustrated that teachers’ perceptions varied as to whether young people would indeed have intent to help-seek for mental health issues. Examples of teachers’ responses include:

... hopefully they will. (Donald);
So I think, yes, that people are more likely to. (Joshua);
I'm so appreciative of the fact that they are more likely to I think. (Amy);
I think more likely to now than they would have five years ago ... (Christine); and
Yeah, I think girls would, yeah. (Graeme).

It was apparent from these responses that some teachers in the sample perceived that students did intend to help-seek for mental health issues. However, in contrast, other teachers in the sample perceived that students would not seek help as evidenced by responses such as “No”, “probably not”, “I think they would be reluctant” and “generally no” (Jason, Steven, Kevin, Sam & James). The data analysis revealed that teachers held varying views of regional young people’s intent to help-seek for mental health issues. These results have implications in regard to the efficacy of the HeadStrong program and the health outcomes of regional young people.
6.3 Teachers’ advice regarding where to help-seek
The analysis of the PDHPE teacher interview transcripts indicated differences from those perspectives held by students in relation to sources of help for a mental health issue. The most frequent response suggested by teachers was to seek help from *formal* sources such as a “school counsellor” or “counsellor” (Donald, Jason, Joshua, Steven, Graeme, Kevin & Amy). Given that the school counsellor is related to the school environment, it is not surprising that teachers flagged this as a source of help for students. Furthermore, suggesting a school counsellor, or counsellor in general, suggests that teachers perceive professional sources of help as useful. In contrast, students identified informal sources of help to assist them to deal with mental health issues. Accessing psychological help from professionals may be associated with stigma and act as a barrier to help-seeking, thus explaining why the students reported informal sources of help as the most preferred.

Teachers self-identified as an additional source of help suggesting that they were “…the first port of call” (James). Not surprisingly, further formal sources of help-seeking included school services, such as “a head tutor”, “boarding leaders”, “year coordinators”, and “pastoral coordinators”. Additionally, teachers acknowledged external professional agencies including “Headspace” and “the Black Dog Institute”. It was apparent from these responses that teachers perceived formal sources as a valued avenue for students to help-seek when experiencing mental health issues.

Informal sources of help were less frequently identified by teachers. Interestingly, only a few teachers acknowledged parents as able to support young people. Given that the literature suggests that a sense of connectedness to family is significant in increasing help-seeking (Rickwood et al., 2007),
parental support is paramount. Only Jason, Joshua and Christine identified “parents” as a source for help-seeking.

As another source of help participants highlighted “online things” (Steven) and “websites” (James). Donald also made comments about “Yeah, internet sites ...” being an avenue for students to access help, which was accompanied by Joshua’s comment of “... a website ...” as a source of help. These online sources of help offer anonymity and confidentiality for young people (Griffiths & Christensen, 2006). Another interesting point was made by Donald, who stated “country kids are more likely to look at things on the internet”, and “they’re just as likely to look at technologies, so use internet based sources”. These suggestions demonstrated that teachers perceived online sources of help as a viable avenue of help as students could access them, regardless of their geographic location. With confidentiality a major issue in small rural towns (Hodges et al., 2007), accessing mental health services via online services ensures young people’s identities remain anonymous (Griffiths & Christensen, 2006). Interestingly however, the students in the study sample failed to identify websites and other online sources as viable sources of help.

Only Kevin, identified “friends” as someone students could talk to if experiencing a mental health issue. The lack of identification of friends as a source of help indicated that teachers would not readily advise them as an avenue of support. In contrast, students’ responses illustrated that they would seek help from their friends.

6.4 Perceived barriers to help-seeking for regional young people
Teachers were questioned regarding the factors that prevent students from help-seeking for mental health issues. The data
analysis revealed a number of barriers to help-seeking including i) stigma, ii) gender, iii) lack of confidentiality, iv) an independent attitude, v) lack of mental health literacy, vi) access to services, and vii) cost. A discussion of each of these factors follows.

6.4.1 Stigma
According to Sam:

“I think number one, that stigma attached ... and that fear and that of being judged and just generally stigma associated does prevent them from actively seeking help if they feel they do have a problem.”

Stigma associated with mental health issues acts as a barrier to help-seeking for regional young people. As noted in Chapter Six, this stigma can be classified as i) personal stigma, which exists when an individual has personal internalised negative attitudes or thoughts or ii) perceived stigma, where an individual has a perception that others hold negative attitudes (Griffiths et al., 2006; Jorm et al., 2006). Teacher responses have been coded according to these two classifications and are further examined in the following discussion.

6.4.1.1 Personal Stigma
Embarrassment was identified by teachers as a barrier for students who were help-seeking for mental health issues. Graeme suggested “I think probably sometimes that embarrassment around peers ... they might be sort of embarrassed to even bring it up at home.” This comment suggests teachers perceive that students have internalised negative thoughts associated with having a mental health issue. These negative perceptions inhibit students from help-seeking for mental health issues, as they feel embarrassed and do not want their family or friends to know that they have a
mental health issue. It is therefore apparent that teachers perceive this internalised stigma deters students from accessing help for mental health issues. Chapter Five revealed that if students were experiencing a mental health issue they would help-seek from informal sources. However personal stigma was still apparent, as although students identified family and friends as the preferred sources of help, they still did not want them to know about their mental health issues. As highlighted in Chapter Five, a strategy to reduce stigma involves improving young people’s mental health literacy (Wilson et al., 2011), which subsequently results in increased early and appropriate help-seeking attitudes and intentions to seek help.

6.4.1.2 Perceived stigma

A number of teachers highlighted that students feared others finding out about their poor mental health, and feared their negative response. James stated “... who was going to find out ... was the biggest worry from them all.” Similarly, Donald claimed:

The stigma, and they might be worried about, yeah, being seen as weak or having to go on medication or being seen as different. I think, yeah, other people finding out and being ridiculed [is a barrier to help-seeking for young people].

Jason further highlighted this barrier stating students “... fear of what people might say about them”. Teachers’ perceptions of the existing perceived stigma present among young people could explain why only one teacher advised “friends” as an avenue for students to help-seek for mental health issues. Another explanation could be that teachers perceived friends of students to not have the appropriate knowledge or capacity to advise or assist those experiencing mental health issues.
Perceived stigma was identified throughout the data analysis, as teachers claimed students feared being labelled and judged by others. Kevin stated “... stigma ... fear of, as I say of being labelled. Fear of what teachers’ perceptions will be, parents' perceptions will be, society you know”. Sam also identified this fear claiming students “… fear and that of being judged and just generally that stigma associated does prevent them from actively seeking help if they feel they do have a problem”. Furthermore, Kevin claimed “I reckon there’s a fear of that, if people know, you know that if I’m seeking help that I'm crazy or whatever. So overall, yes they’d be reluctant”. It was apparent that a fear of being labelled and judged by others was perceived by teachers as a prevalent barrier for regional young people. These findings suggest that in the sample studied perceived stigma acts as a social barrier to help-seeking intent.

6.4.2 Gender

Gender difference was highlighted as a factor influencing young people's likelihood of seeking help. For example, Donald stated “boys in particular are less likely to talk to someone about their feelings, whereas a girl may be comfortable about it”. Similarly Joshua noted “we're certainly seeing fewer boys than girls who are prepared to help seek”. Graeme proposed a reason for this difference between genders by suggesting “that he found a lot of that old, you know, I'm tough enough, I don't have to you know, I can deal with it myself attitude [among young males]”. These findings support the literature in that males are more likely to deny problems they may be experiencing, or manage on their own (Barker, 2007) whilst females tend to be more aware of symptoms of illness (Cotton et al., 2006) and are more likely to use social support systems to seek help (Barker, 2007).
6.4.3 An existing independent attitude

When exploring barriers to students help-seeking, the data analysis of the teacher interviews provided evidence of the self-reliant, independent attitude of regional young people. This culture acted as a preventative measure to students help-seeking. Teacher responses revealed:

... adolescent males, maybe, with that sort of farming background, they don’t like to talk about some of their issues. (Jason);

[students believe] I'm tough enough, I don't have to you know, I can deal with it myself and that sort of thing. (Graeme);

... it’s not seen as tough to talk about your feelings ... their father might not be talking about it, they don’t talk about it, and it is quite a, yeah, a culture of tough and rugged ... deal with your problems yourself kind of attitude rather than getting help (Donald); and

I think it goes back to the stigma. And do I really have a problem, or don’t I, or just suck it up princess type thing. And I think that’s a cultural thing, ... type of cultural environment they grow up in ... culture of just get over it. (Joshua).

Teacher comments illustrate that young people living in regional areas do not help-seek for mental health issues due to their embedded attitude of self-reliance. Similarly to the student responses, teachers perceive that students believe young males are weak if they do not deal with problems by themselves. Teachers' comments illustrate this independent attitude of regional cultures which encourages young people to either manage their problems by themselves, or ignore their mental health issues and consequently not receive the help they need.
6.4.4 Confidentiality
Teachers perceived lack of confidentiality as an additional barrier for students when help-seeking. Jason's comment that “Confidentiality ... they might be concerned if they come and speak to someone, maybe they might tell someone else”, was an illustration of this perceived barrier to help-seeking. In addition, James stated that students “... don’t feel confident in talking about that sort of issue ... that other people would find out”. It was evident from students' comments in Chapter Six, that students also perceived a lack of confidentiality impacted on their likelihood of accessing help for mental health issues. Therefore, it was perceived by both students and teachers that if students fear their mental health issues will be disclosed to others, they are less likely to seek help and receive treatment. If students do not seek help and receive treatment for mental health issues, as highlighted in Chapter One, this has significant detrimental effects on their wellbeing, functioning and development in adolescence (Mission Australia, 2014).

6.4.5 Lack of mental health literacy
Data from this study highlights a lack of mental health literacy among regional young people as a barrier to the behaviour of help-seeking. Examples of teacher responses highlighting students' lack of health literacy included:

... some of them wouldn't understand what a counsellor does and what their role is ... I don't think they understand the benefit of just talking through things. (Steven);
Lack of knowledge about where to access it. (Kevin);
... didn’t know what was out there and what was going to happen (James); and
I think they are scared about what happens next, and I think that's probably what might prevent them [from
They don’t know what might happen for them (Jason).

Lack of knowledge of what mental health services offer, what they do, and how they can be accessed, impacts on young people's intention to help-seek for mental health issues as they do not have sufficient mental health literacy to do so. According to Ajzen’s Theory of Planned Behaviour, if young people do not have sufficient mental health literacy skills, they are less likely to assume they have control over the behaviour of help-seeking.

6.4.6 Access to services
The ability of young people to access services was outlined by teachers as a barrier to help-seeking for regional young people. Joshua stated “I think access to services ...” was a barrier when help-seeking for mental health issues, whilst Sam indicated [there is] “not as many services available out here for them”. Similarly James claimed “... there wasn’t anything really available”. This commentary reveals many regional young people do not have ready access to services for mental health issues and this acts as a barrier when carrying out the behaviour of help-seeking. It was apparent from these responses that teachers perceived regional areas as proving inadequate in providing young people access to mental health services.

6.4.7 Cost
A financial barrier was highlighted by Kevin, stating students might have “concerns about cost perhaps, that it’s going to be expensive and how are they going to pay for it”. It was evident from Kevin's response that financial difficulty was seen to limit students in their ability to access services and help-seek
for mental health issues. Teacher responses portrayed that they perceived young people as unable to access services due to their cost and therefore limited their intent to help-seek.

It was evident from teacher responses that there were a number of perceived barriers which had the potential to inhibit regional young people help-seeking for mental health issues. In contrast there were a variety of perceived facilitators of help-seeking for mental health issues.

6.5 Perceived facilitators of help seeking for regional young people
As a result of the performed thematic analysis, a number of perceived facilitators to help-seeking for mental health issues arose. The data analysis revealed a number of facilitators to help-seeking which have been categorised into three themes including i) support, ii) mental health literacy, and iii) access to services.

6.5.1 Support
Having support was highlighted as a facilitator to help-seeking by teachers in the study. Teachers identified a number of avenues of help-seeking for students with a mental health issue. For example:

I think, yeah, talking about it in class from an early age so they think it's normal (Donald);
I guess definitely being able to talk about it in class (Sam);
In the school environment it would be just having the support there ... having the support network there for them, where kids would feel comfortable with someone ... PE teachers ... (Jason);
Role models (Joshua);
The support they get when they help seek. (Christine);
Just having teachers encouraging them to do it. (Steven);
Yeah, and just having that whole school approach, it's not just our subject area. (Amy); and
... the friendship group (James).

It was evident from these responses that teachers perceived that if students had support and encouragement from familiar sources, perhaps within the school environment, that they were more likely to help-seek for mental health issues. This is not surprising, as support was also highlighted by students in Chapter Five as a facilitator to help-seeking. Furthermore, given that the literature suggests that having existing trusted relationships increases the likelihood of an individual to help-seek (Rickwood et al., 2007) then support from teachers, friends, parents and schools is paramount to the encouragement of help-seeking behaviours.

**6.5.2 Mental health literacy**

Teachers were aware of the need for and importance of mental health literacy, highlighting it as a facilitator to help-seeking for mental health issues. Christine’s comment “Knowing where to help-seek. Knowing it’s normal in a sense, or it's not an obscure thing to do, it’s a very accepting thing to do and a good thing to do.” and Kevin’s response “... knowledge about it and the ways that they can do it and who they can access and all those sorts of things” reveal having knowledge on mental health issues, and who and where to access help (mental health literacy) can act as a facilitator for students when help-seeking. The HeadStrong program aims to increase students' mental health literacy and in effect, increase students' attitudes and intent to help-seek for mental health issues. From participants' responses, it was evident teachers recognised the importance of mental health literacy in
increasing students’ intent to help-seek for mental health issues.

6.5.3 Access to services
Interestingly, although access to services was highlighted previously by teachers as a barrier to help-seeking, a number of teachers also deemed it a facilitator to students when help-seeking for mental health issues. Amy commented positively about “... the exposure of information and resources here at school” while Joshua outlined “... opportunities ... that they can access straight away” and “having access” supports students to help-seek. Donald and James reinforce that having access to services acts as a facilitator of help-seeking. Teachers’ responses conveyed students to be more likely to help-seek when “... having services available ...” and “... having services I guess that are available that are appropriate and just have that really approachable appeal ...”. It was evident from these responses, that teachers perceived adequate access to services in regional areas as a facilitator for young people suffering from mental health issues. It is important to note here, that access to mental health services was identified as both a barrier and a facilitator. Lack of access to services, was obviously identified as a barrier while adequate access was identified as a facilitator. The data analysis revealed a number of perceived barriers and facilitators existing for regional young people when help-seeking for mental health issues. In order to address these barriers and enhance the aforementioned facilitators, the efficacy of the HeadStrong program was examined.
6.6 The efficacy of the HeadStrong program

6.6.1 The implementation of the HeadStrong program
All teachers interviewed stated they would re-use the HeadStrong program. However, a number of alterations were suggested by teachers regarding the implementation of the resource. A number of themes arose from the data analysis in relation to the delivery of the HeadStrong program and teachers suggested a number of alterations. These themes were coded into four categories including i) pragmatic delivery of the program, ii) time, and iii) academic ability of students.

6.6.1.1 Pragmatic delivery of the program
In regard to implementation of the HeadStrong resource, teachers commented on the pragmatic delivery of the program. For example:

- From A to Z ... I just started with the first lesson and did it that way, did it lesson by lesson, activity by activity. Pretty much to the book. (Christine);
- ... we give a little bit of an introduction into mental health ... then pretty much start the presentation and go through basically slide by slide (Graeme); and
- ... using the PowerPoints and the activities that were outlined in the program ... followed it step by step. (James).

These responses revealed teachers delivered the HeadStrong resource according to the directions advised in the resource, by using the PowerPoint presentation, and sequentially following the designated learning activities.

In support of the pragmatic delivery of the program, Steven made comment on the organisation and structure of the resource, stating [it was] “Good how the activities were set out with time limit and what is needed for the lesson.” This
response showcased the ease of delivery of the program for teacher implementation, as it provided teachers with learning activities supported by a time frame and resources needed for each lesson.

6.6.1.2 Time
Although in general, teachers suggested that the HeadStrong resource was user-friendly, a number of teachers highlighted issues in relation to the time required to deliver the resource. Sam declared “I felt it did go on a bit long ... if I was to run it again, there would be things that I would leave out, so it didn’t take up as much time as it did”. James also stated “... it took a lot longer than we expected. That was probably the only downside”. Further teacher comments in relation to time included:

... had difficulty time-wise completing everything ... by the end of the unit was kind of jumping around though just trying to get as much done as possible (Donald);
... we actually found that to actually complete every single activity within it, we knew it was going to be difficult. (Joshua);
... there were quite a few situations where it just didn’t come about ... we've looked at only a few slides on the PowerPoint which is something that I really was hoping we'd revisit ... the timeframe, ... it just hasn’t worked for us (Amy);
I would have liked to do the extension activities with my guys but just didn’t get to it, basically with the time. (Christine); and
... the PowerPoint, maybe not having to go through the whole thing, because it was really effective but at stages it’s kind of just flicking through ... slides just to get through it because it’s quite time consuming ... more
just focusing on your discussions ... having time to explore (Donald).

It was evident from these responses that teachers perceived there was a need to either have more time to deliver the program, or minimise the program content and learning activities.

6.6.1.3 Academic ability of students
An issue pointed out by some teachers was the academic ability of students in their class and their inability to fully participate in the program. Donald claimed “I had the bottom Year 9 class, so academically it took a lot longer to do each of the activities”. Christine thought that “Some of the slides they couldn’t interpret as well as what I would have expected them to.” Students’ academic ability needs to be taken into account when reporting on the efficacy of the HeadStrong program and when recommending alterations.

6.6.2 Mental health literacy
From the data analysis, it was evident that teachers believed the HeadStrong program was useful in increasing students' mental health literacy and assisting them to understand what it meant to help-seek for mental health issues. Teacher comments revealed “yes”, “I think they gained knowledge of help-seeking ...” from participation in the HeadStrong program. Evidence of improved student mental health literacy was highlighted in the data analysis of the teacher interviews. Donald commented “I think they, in general would be able to recognise some symptoms ...” while Kevin supported this claiming students know “... what to look out for”. As mentioned in Chapter Six, improved mental health literacy has a positive influence on individual’s attitudes and resultant intent to help-seek for mental health issues. It is therefore
apparent that positive efficacy of the HeadStrong program was emerging from the thematic analysis conducted.

In addition to the comments relating to signs and symptoms, teachers claimed that as a result of participating in the HeadStrong program, students were aware of where to help-seek for mental health issues. Teacher responses included students’ knowledge of:

I think in terms of where can I go and access some information, and who can I approach and see, definitely. (Joshua);
... where to go and get help, but also how to make sure that they’re not scared of seeking help (Steven);
... who you can access, who's in part of your support network. (Kevin);
... they would be able to tell you where to go for help. I mean, I just handed back their assignments not long ago, and – that are on where to go for help and that, and most of them could answer it really well. (Jason); and
... kids had ... come to, yeah people to seek help here within the school and also started to access sort of services and things in the local community. (James).

These responses reveal that teachers perceive that their students have the knowledge of where to access help: one indicator of mental health literacy.

6.6.3 Help-seeking attitudes
The majority of respondents claimed the HeadStrong program changed students' attitudes toward the stigma associated with mental health issues, and their associated attitudes to help-seeking for mental health issues. Teacher comments regarding students' attitudinal changes were coded as i) change in vocabulary, ii) removing the stereotype, iii) physical and
mental illness similarity, iv) realisation of prevalence of mental health issues, and v) normality of having a mental health issue.

6.6.3.1 Change in vocabulary
According to Donald there was a change in students’ vocabulary as indicated by comments relating to individuals with mental health issues from the initial commencement of the program to its completion. Donald explained:

... we just had an initial discussion and there was some comments from a few kids who just, yeah, don't have the understanding and ... comments like, “Oh, you’d be crazy, or you're weird”, and things like that when we were doing the initial things with placing the cards, and then by the end, yeah, I didn’t notice yeah, comments along those lines.

Donald’s comment was an indication that students’ stigmatising attitudes to individuals with mental health issues had changed as a direct result of participation in the HeadStrong program. Azjen's Theory of Planned Behaviour indicates that a change in stigmatising attitudes, has a positive impact on the likeliness of young people to help-seek.

6.6.3.2 Removing the stereotype
Teachers claimed that students’ attitudes were changed as a result of participating in the HeadStrong program, stating that the negative association with a person suffering from a mental health issue was removed. Evidence of these claims included:

... they understand that ... it doesn't mean that they should be locked up in a, you know, an institution or something like that. (Kevin);
... they did very much understand that there was a negative association with mental health and I think they
were able to remove themselves from that stigma and see it in a different way. (Sam); and
... by the end of it they definitely had a much deeper understanding of what mental health was and there was none of that sort of negative stereotypes. (James).

It was apparent from teacher responses that after participating in the HeadStrong program, students understood the nature of the “mentally ill” stereotype and they gained a deeper understanding of what it was like to be an individual suffering from mental health issues. With increased knowledge of stereotypes students are more likely to have intent to carry out the behaviour of help-seeking.

6.6.3.3 Physical and mental illness similarity
Teachers perceived that due to participation in the HeadStrong program, students recognised, that just like physical illness, mental illness can be treated. Donald made comment [it is] “…just like having a, yeah, the broken leg analogy was kind of used where you get treatment and it gets fixed ...”. Jason and Steven also made reference to this recognition with comments including:

... if you had a broken arm, you’d go on and get it fixed. So those sorts of – saying it’s an illness, you need to go and see a doctor when you get sick (Jason); and
... like any other sickness that can come, it can go and can be treated, it can be managed. (Steven).

It is apparent from these comments that teachers perceived that students had gained an increased understanding of mental health issues from participation in the HeadStrong program. This increased understanding related to the notion that mental illness can be “fixed” and treated, just like physical illness. As previously explained in Chapter Five, by
Ajzen’s Theory of Planned Behaviour, as a result of improved understanding, stigma associated with mental health issues is decreased and student attitudes to help-seeking are enhanced.

6.6.3.4 Realisation of the prevalence of mental health issues
Realisation of the prevalence of mental health issues was recognised by teachers as a sign of the HeadStrong program having an effect on students’ attitudes towards the stigma associated with mental health issues. Teachers delivered content to students explaining “… how many people actually go through mental health problems and the kids really realised, “Wow, that’s a lot.” (Donald). Graeme said when delivering the resource, it was good “… having those statistics and showing how many people suffer it”. Steven stated “… going through the figures of how many people actually get it … hit home to them, like during their life that they probably, well, definitely will be involved.” Joshua’s statement “I think for them that was, “Oh, right, it’s actually common” … they were quite shocked to think how many people are affected by mental health …” demonstrated that students had begun to realise the prevalence of mental health issues. The HeadStrong resource assisted students to recognise that they, or someone they know, will currently, or one-day be affected by a mental health issue.

6.6.3.5 Normality of having a mental health issue
Teachers commented that as the HeadStrong program was delivered, students came to the realisation that if you have a mental health issue you are still “normal”. Donald stated “… it's normal and it can be treated, and they realised that they’re not any different” Steven claimed students recognised those with mental health issues as “… just normal people … like any other sickness that can come, it can go and can be treated, it can be managed.” It was apparent from teacher responses that
recognition of having a mental health issue to be *normal* assisted in improving young people's attitudes to help-seeking for mental health issues which according to teachers, were resultant from their participation in the Head*Strong* program.

6.6.4 **Intention to help-seek**

When asked if students were more likely to help-seek for mental health issues, as a result of participating in the Head*Strong* program, teachers perceived students to have higher intent to help-seek. Data analysis of teacher comments revealed evidence such as:

- ... knowing the, where to go and how common that mental problems are they're less likely to think they're isolated and they can't do anything about it. (Donald);
- ... they have a huge variety of places they can go now ... I think that they know it's not just the counsellor (Jason);
- I think that that helped them with different things they could seek help with, not just the counsellor but other areas they could seek help with (Steven);
- ... knowing about who to access for help, who their support networks are, they can, you know identify that and be able to go there much more easily. (Kevin); and
- ... they've developed that skill and been able to search and research and seek information if they need to. (Sam).

James illustrated a direct positive outcome of the students' participation in the Head*Strong* program stating “... kids have already come forward. They've already spoken to us about finding help ... they'd actually self-identified...” This comment displays the perceived clear connection between participation in the Head*Strong* program and increased student intent to help-seek for mental health issues. According to James, the self-identification of a mental health issue and
acknowledgement of the need to help-seek, resulting in the behaviour of approaching teachers for assistance in finding help was directly attributable to participation in the HeadStrong program.

6.7 Chapter Summary
Chapter Six has presented the results of the thematic analysis of PDHPE teachers’ interview responses. The chapter revealed the themes which arose from the data analysis. Teachers highlighted both formal and informal avenues for students to help-seek when experiencing mental health issues. However, formal sources of help were clearly favoured from a teachers’ perspective. The perceived barriers of help-seeking for mental health issues among young people were identified by teachers to include stigma, gender, lack of confidentiality, a self-reliant, independent attitude, lack of mental health literacy, access to services and cost. The perceived facilitators of help-seeking were also identified and included support, mental health literacy and access to services.

The efficacy of the HeadStrong program was explored, with teacher responses revealing both positive and negative opinions regarding the implementation of the resource. An overriding theme was the lack of time to cover all components of the HeadStrong resource. It was revealed that teachers held varying perceptions of young people's intent to help-seek for mental health issues. However, teachers’ perceptions of the effect of the HeadStrong program on students’ attitudes and intentions towards help-seeking for mental health issues were positive, claiming that the resource assisted to increase student mental health literacy, decrease stigmatising attitudes and improve their intention to help-seek.
Chapter Six identified how the sample of PDHPE teachers perceived young people's intent to help-seek for mental health issues, and their perceived barriers of, and facilitators to, the behaviour of help-seeking, and evaluated the HeadStrong resource. Chapter Seven will highlight the similarities and differences between the findings of the student survey and interview responses, and student and teacher perceptions. Chapter Seven will provide further insight into young people’s attitudes and intent to help-seek for mental health issues.
Chapter Seven: Discussion and Comparison of Results

7.1 Introduction
The purpose of this chapter is to discuss and compare the results of the survey and interview data analysis. Here it is important to note that several data sources formed the bank of data that were analysed. Surveys and interviews were conducted with Stage 5 students, and their PDHPE teachers were interviewed to investigate the following research questions:

1. What do regional young people understand by the notion of “help-seeking”?
2. What attitudes do regional young people have about help-seeking for mental health issues?
3. What intentions do regional young people have to help-seek for mental health issues?
4. What perceived barriers prevent regional young people from help-seeking for mental health issues?
5. What perceived facilitators assist regional young people to help-seek for mental health issues?
6. What are regional PDHPE teachers’ perceptions of the ability of the HeadStrong program to enhance Stage 5 students’ attitudes about, and intention to help-seek for mental health issues?
7. What are regional Stage 5 students’ perceptions of the ability of the HeadStrong program to enhance their attitudes about, and intention to help-seek for mental health issues?

In order to provide an in-depth understanding of the attitudes and intentions young people had to the behaviour of help-
seeking, questionnaires were used to ensure a breadth of data were gathered from a large sample of participants, while interviews were conducted from two groups of key stakeholders: students and their PDHPE teachers. This chapter points to the significance of the research and the implications of the findings for regional young people, their PDHPE teachers, and the HeadStrong resource. This chapter is organised by firstly presenting the limitations which may account for the lack of statistical significance resulting from the survey findings. Secondly, students' and teachers' interview responses are discussed and compared. Finally, research implications are presented, and research findings aligned with research questions.

The discussion of results is informed by Ajzen's Theory of Planned Behaviour (TPB). As fully detailed in Chapter Three, the theoretical framework of Ajzen's Theory of Planned Behaviour examines an individual's attitudes and intent towards the performance of behaviour. According to Ajzen's Theory of Planned Behaviour (TPB), intentions are influenced by attitudes towards the behaviour, subjective norms, and perceptions of behavioural control. Ajzen's determinants of behaviour are discussed in Chapter Seven, and aligned with the findings of this thesis. Conflicting and confirmatory data are presented and discussed, contributing to an informed understanding of the existing barriers to, and facilitators of, help-seeking for mental health issues, and young people's attitudes and intent to perform the resultant behaviour of help-seeking.

7.2 Student Survey Responses
As presented in Chapter Five, the quantitative survey data collected from the student surveys revealed no statistically significant results. The aim of this section of the thesis is to
present the factors that had the potential to contribute to the lack of statistical significance of the survey results and propose reasons for the contrasting results between the data analyses of the interviews with Stage 5 students.

7.2.1 Limitations for Survey Research
There were no similarities drawn between the survey analysis and interview data analysis. There were a number of compounding variables that influenced this outcome. These variables are acknowledged and highlighted in Table 7.1 and explained.

Table 7.1: Limitations for survey research

<table>
<thead>
<tr>
<th>Variable</th>
<th>Limitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument</td>
<td>▪ Number of questions</td>
</tr>
<tr>
<td></td>
<td>▪ Language used</td>
</tr>
<tr>
<td></td>
<td>▪ Time to complete</td>
</tr>
<tr>
<td>Teacher</td>
<td>▪ Attitude to research and the implementation of the research study</td>
</tr>
<tr>
<td></td>
<td>▪ How teachers present the survey</td>
</tr>
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<td></td>
<td>▪ Adherence to protocol of survey distribution</td>
</tr>
<tr>
<td></td>
<td>▪ Sample size - recruitment and gaining consent</td>
</tr>
<tr>
<td></td>
<td>▪ Delivery in class - no observation of teacher delivery</td>
</tr>
<tr>
<td></td>
<td>▪ Inconsistent delivery</td>
</tr>
<tr>
<td></td>
<td>▪ Rapport of the teacher</td>
</tr>
<tr>
<td></td>
<td>▪ Teacher pedagogical variability - no observations</td>
</tr>
<tr>
<td></td>
<td>▪ Teacher commitment to the research process</td>
</tr>
</tbody>
</table>
7.2.1.1 Instrument
The survey used for the collection of data for the larger study contained a total of 96 questions. The survey instrument used for this study (IASMHS) was section 5 of 6 sections, in the larger survey document. Teachers noted the considerable time that students took to complete the survey, commenting that the survey was lengthy in nature. Teachers proposed as students attended to section 7 (IASMHS), students levels of concentration were relatively low. The survey results may therefore be limited by the number of survey questions and the time required to complete the larger survey.

In addition to the number of included questions the language used in the larger survey instrument may have been inappropriate for student use. Although the IASMHS was altered to ensure age-appropriate language for the sample population, informal conversations with teachers revealed some students required assistance with the definition of terms in the survey. Teachers reported that students, particularly those students with low literacy levels had difficulty completing the survey. Therefore, the incomparable results between quantitative and qualitative analysis could be contributable to the language used in the larger survey.

7.2.1.2 Teacher
The fact that the surveys were administered in a range of schools and classes could be a limitation to the survey results. One school in the study did not adhere to the outlined
protocols and failed to complete all three sets of surveys. During data collection, teachers flagged that it was difficult to gain consent from students' parents to participate in the study. This factor presented as a limitation to a recruitment and sample size.

It is also necessary to acknowledge variability in teacher pedagogy in the delivery of the HeadStrong program. Pedagogic variability may account for lack of significant change of students' help-seeking propensity or indifference to stigma.

Another factor which poses a limitation to the quantitative results is the teachers’ attitude to research and the implementation of the study protocols. Teacher attitudes to distributing surveys and their involvement in the research study varied considerably. Several teachers were less than enthusiastic in distributing surveys thus having the potential to impact on the study results. Teachers' manner of survey distribution to students may have impacted on their enthusiasm to complete the surveys and ultimately effect student responses in a negative way, leading to a possible cause of the incomparable results between survey and interview data.

7.2.1.3 Program

The HeadStrong program was generally well received by teachers and students. All teachers who implemented the HeadStrong resources stated they would re-use the HeadStrong program at their school. However, the length of the program and the time teachers had to deliver the resource to students was presented as a limitation. It was evident from the thematic data analysis of teacher interview responses, that teachers needed more time to deliver the program, or fewer
learning activities needed to be included. This presents as a limitation for the use of the HeadStrong program.

7.3 Comparing Student and Teacher Interview Responses

This section of the discussion compares the teachers' and students' interview responses and presents implications and recommendations for future research.

7.3.1 Findings

7.3.1.1 Help-seeking

In relation to accessing help, students claimed they would help-seek for mental health issues and identified the primary sources they would use to help-seek as friends and family. Student responses revealed formal sources such as school counsellors and professional psychiatrists as the least preferred avenue to help-seek. However, there was a discord in the advice students were providing to others and the advice they themselves were adopting. Although students identified friends and family as their preferred source of help, in contrast to this, students suggested others seek help from counsellors and professionals. This disjunction in advice lends itself to the idea that an existing stigma associated with seeking help from professional sources remained present for the students.

These lack of preference for formal help-seeking sources of help were attributable to fears relating to lack of anonymity and confidentiality of professional services. Teachers and students identified a lack of confidentiality as a barrier to help-seeking for mental health issues. This was reiterated throughout the thematic analysis of student and teacher interview data, revealing young people to fear their mental
health issues would be disclosed to others in regional settings. Ajzen’s (2000) Theory of Planned Behaviour (TPB) would attribute this research outcome to the determinant of intention: subjective norm. The social pressure of stigma acts as a deterrent toward the behaviour of help-seeking. Students and teachers made reference to an existing perceived social pressure in regional areas, attributed to young people managing their problems by themselves, or ignoring mental health issues. In addition to this, students had an unfavourable opinion of professional services, further heightened by the belief that in regional towns there is an increased possibility of lack of confidentiality if young people were to help-seek from professional sources. Aligning with Ajzen's determinant of intention: attitudes towards the behaviour, these findings reveal students are least likely to help-seek from formal sources of help.

The findings indicated that stigma acted as barrier to help-seeking. Although students claimed they were open to the notion of help-seeking, the severity of the issue and temporal barriers inhibited their help-seeking intention, signalling that an aspect of stigma was still associated with the behaviour of help-seeking for mental health issues.

Thematic analysis of teacher responses revealed contrasting results to students' responses. Although students identified family and parents as avenues to seek help, teachers did not identify parents as a source of help for students experiencing mental health issues. Teachers recommended accessing professional formal sources of help, in direct contrast to students, who preferred help-seeking from informal sources.

Teachers were uncertain if students would help-seek if they were experiencing a mental health issue. Aligning with
findings from the student interviews, teachers perceived students to fear being labelled or judged by others if they were found to be experiencing a mental health issue. The social barrier of stigma, associated with the action of help-seeking for mental health issues, is reinforced by Ajzen’s determinant of intention: subjective norm. The results of the teacher and student responses indicated differences relating to stigma. Students claimed they would not judge anyone experiencing a mental health issue, however it was the students who disclosed that they would not help-seek if someone, such as friends and family were to find out: signalling an aspect of personal stigma still associated with the notion of help-seeking and experiencing a mental health issue.

These findings contribute to the idea that when mental illness is at “arm’s length” students will not judge others and will provide them with advice to access help. However, if students are personally affected their internalised thoughts signal existing stigma, as they do not wish others to judge them or discover they are help-seeking for mental health issues.

7.3.1.2 HeadStrong Resource
The HeadStrong resource aimed to increase mental health literacy. Data analysis revealed that after participation in the HeadStrong program, students were able to identify signs and symptoms of mental health issues and also demonstrated the ability to understand the notion of stereotypes and the stigma associated with mental illness.

In addition to this, the HeadStrong program assisted students to identify different sources of help-seeking (formal and informal), and interview responses indicated that the students recognised the importance of others seeking help for mental
health issues. However, students did not appreciate the need for themselves to seek help unless the condition was sustained and interfering with multiple life aspects: an indication of prevailing stigma. Interview responses from students illustrated that an existing personal and perceived stigma associated with mental health issues remained. Negative perceptions were still present, signaling potential feelings of embarrassment for students if others discovered they were experiencing a mental health issue. Ajzen's *subjective norm*, accounts for the avoidance of the behaviour of help-seeking, restricting intent to immediately and openly help-seek for mental health issues.

### 7.4 Implications

Collectively, the results from this study have implications for i) young people's attitudes and intentions towards help-seeking for mental health issues; and ii) the culture of help-seeking in regional areas. Each will be discussed in turn in accompaniment to alignment with the Head*Strong* program.

#### 7.4.1 Regional young people's understanding of the notion of “help-seeking”

The presence of prevention programs to improve regional young people's mental health knowledge, attitudes, and intent towards help-seeking for mental health issues is an important contribution to education. This study demonstrates the perceived effectiveness of the Head*Strong* program as a primary health intervention in improving regional young people's knowledge of mental health issues.
7.4.2 Young people’s attitudes and intentions towards help-seeking

Students in the study developed aspects of mental health literacy which could be attributable to participation in the HeadStrong program. Both students and teachers perceived the HeadStrong resource to improve student knowledge of mental illness and increase acceptance of those who may be experiencing a mental health issue. However, these values were not personally internalised by students. In order to use the HeadStrong program to increase students’ intention to help-seek for mental health issues, and decrease the perceived stigma associated, students need to be provided with opportunities to rehearse and refine help-seeking skills. If students are mental health literate, and equipped with the skills needed to help-seek for mental health issues, they are more likely to carry out the behaviour.

7.4.3 Factors affecting regional young people’s attitudes and intentions to help-seek for mental health issues

7.4.3.1 Stigma

Based on the qualitative results, it is apparent that regional young people are relatively unlikely to immediately and openly help-seek for mental health concerns due to the internalised stigma associated with the behaviour. Findings revealed personal and perceived stigma were still evident amongst the sample of regional young people. Thus, there is an identified need to further assist young people to modify their attitudes relating to perceived stigma.

Teacher interview responses provided data that suggested students seek help from formal sources. Teachers are aware of the different types of avenues and sources of help, and therefore are more likely to suggest professional sources.
However, teachers in the study failed to recognise that regional young people prefer to help-seek from informal avenues. Implications arise from this discord as students have different preferential sources of help than their teachers.

**7.4.3.2 Lack of confidentiality and anonymity**

Further implications associated with help-seeking exist for regional communities. It is evident from both the literature and the data analysis, that confidentiality and lack of anonymity are factors that inhibit the behaviour of help-seeking in regional areas. The self-reliant culture evident in both the student and teacher responses, is a further reason why young people are postponing the behaviour of help-seeking for mental health issues. In regional settings, young people are aware of the lack of anonymity that exists if they help-seek from formal sources of help, such as a professional psychologist. The notion of visibility when seeking help from formal avenues is problematic for regional young people. The finding that students in regional areas are more likely to help-seek from friends and family is therefore not surprising. These conversations between friends and family would not be seen as out-of-the-ordinary, so there would be no visibility and stigma associated with the help-seeking behaviour. This research is important for rural and regional communities as it demonstrates the necessity to change the attitudes, intentions and culture of help-seeking in regional areas.

**7.4.3.3 Labelling**

Although findings reveal young people are more likely to help-seek from informal sources, such as friends and family, the developmental psychology literature states adolescence is a difficult time where young people are developing a sense of identity and are finding where they “fit in”. Therefore, in relation to the action of help-seeking for mental health issues,
findings revealed young people in regional areas do not want to be seen as weak, judged by others, or labelled. This has an impact on their help-seeking intentions and behaviours as during this developmental stage, young people do not want to appear different. Young people in regional communities fear being labelled due to the lack of confidentiality existing when help-seeking from professional sources of help.

7.4.3.4 Self-reliant culture
In relation to the influencing variable of geographic location, the self-reliant, independent culture existing in regional areas, holds implications for student intention to help-seek for mental health issues. Both student and teacher responses revealed the nature of help-seeking in rural and regional areas lends itself to individuals dealing with problems themselves and not asking for help. Students in regional areas state that they mask their problems and try to deal with them by themselves, often stating that help-seeking is delayed.

As highlighted, there are multiple factors influencing regional young peoples’ attitudes and intentions to help-seeking for mental health issues. As the needs of young people in rural and regional areas are shaped by different factors to metropolitan areas, resources addressing their mental health literacy, and attitude and intention to help-seek for mental health issues, may need to be modified accordingly.

7.5 Thesis Findings
To assist the reader Table 7.1 briefly summarises the research findings of this thesis.
Table 7.2: Summary of Research Findings

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Thesis Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What do regional young people understand by the notion of “help-seeking”?</td>
<td>Students identified informal sources of help to assist them to deal with mental health issues. The most frequent response suggested by teachers was to seek help from <em>formal</em> sources such as a “school counsellor” or “counsellor”.</td>
</tr>
<tr>
<td></td>
<td>In relation to the HeadStrong program, both teachers and students believed the resource was useful in increasing students’ mental health literacy (signs and symptoms and where to help-seek). (Chapters Five and Seven).</td>
</tr>
<tr>
<td>2. What attitudes do regional young people have about help-seeking for mental health issues?</td>
<td>A difference in responses was revealed between where students <em>themselves</em> would seek help if they were experiencing a mental health issue, and where they suggested <em>others</em> could help-seek. Students identified family or friends as an avenue to seek-help themselves, whilst they would advise others to seek-help from a counsellor or professional. This signaled perceived stigma continued to prevail and impact on regional young people's attitudes to help-seek for mental health issues.</td>
</tr>
</tbody>
</table>
In addition to this, students indicated they *would* seek help, however not all would access assistance immediately. A delay in help-seeking was evident, signaling students attempted to deal with mental health issues themselves before help-seeking. (Chapters Five and Seven).

### 3. What intentions do regional young people have to help-seek for mental health issues?

The student research sample indicated they *did* intend to help-seek if they experienced a mental health issue. The timing and openness of the behaviour of help-seeking was identified as problematic. However, teachers held varying views of regional young people's intent to help-seek for mental health issues.

### 4. What perceived barriers prevent regional young people from help-seeking for mental health issues?

The sample of Stage 5 students and PDHPE teachers identified stigma, confidentiality, difficulty of access and a self-reliant, independent culture as barriers to help-seeking.

Students further identified a lack of anonymity, whilst teachers highlighted gender differences and a lack of mental health literacy as barriers to help-seeking for mental
health issues. (Chapters Two, Five, Six and Seven).

5. What perceived facilitators assist regional young people to help-seek for mental health issues?

Stage 5 students and PDHPE teachers identified support as a facilitator of help-seeking for mental health issues.

Teachers additionally highlighted access to services and mental health literacy as further facilitators to the behaviour of help-seeking.

Students identified knowing someone who had experienced a mental health issue and the severity and duration of the situation (e.g. if it was affecting other aspects of their lives) as a facilitator to help-seeking. (Chapters Two, Five, Six and Seven).
6. What are regional PDHPE teachers’ perceptions of the ability of the HeadStrong program to enhance Stage 5 students’ attitudes about, and intention to help-seek for mental health issues? PDHPE teachers in the sample perceived the HeadStrong program changed students' attitudes toward the stigma associated with mental health issues, and associated attitudes to help-seeking for mental health issues. Teachers perceived that as a result of participating in the HeadStrong program, students had a greater intent to help-seek. (Chapters Six and Seven).

7. What are regional Stage 5 students’ perceptions of the ability of the HeadStrong program to enhance their attitudes about, and intention to help-seek for mental health issues? Stage 5 students in the sample perceived the HeadStrong program to change their attitudes towards help-seeking for mental health issues. Students perceived that as a result of participating in the HeadStrong program, they had a greater intent to help-seek (Chapters Five and Seven).
7.6 Recommendations

7.6.1 Recommendations for Research
The following recommendations are offered for related research in the field of mental health education.

- The thesis reports on the findings of a study conducted with regional young people and teachers in Independent and Catholic Schools acting as a research sample. It is suggested that future research include government schools to enable validation across differing school contexts.

- The thesis identifies that stigma continues to prevail as a barrier to help-seeking for regional young people. The notion of visibility and accessing professional help is problematic for young people in regional areas. These results signal the need for research related to school and community culture, particularly in regional areas.

7.6.2 Recommendations for Mental Health Promotional Resources
The following recommendations are offered for designers and implementers of mental health promotion resources:

- Further opportunities for students to practice skills associated with help-seeking need to be included in future reiterations of the HeadStrong resource. Evidence from drug education literature (McBride, 2003; Tobler et al., 1999) suggest providing opportunities for young people to practice skills is effective in promoting behavioural change. Findings in the current study presented in this thesis revealed that a main source of help identified by students was their friends.
Subsequently, it is important that young people’s friends and peers are equipped with the appropriate skills to direct friends to a breadth of help-seeking sources. In addition young people need to develop communication skills in order to encourage each other to seek help from formal professional sources. School is an advantageous setting for this to take place as classrooms provide a safe rehearsal space for these skills to be developed. In the classroom setting students have peers with whom they're connected and teachers who can act as support networks. HeadStrong create further learning experiences which provide young people with opportunities to practice the skills of asking for help. For example:

i) How do you ask a friend to help;

ii) How do you respond to a friend asking for help; and

iii) How do you know the sources of help and how do you recommend your friends to seek-help.

- Teachers receive further professional development by HeadStrong personnel, that raises their awareness of students’ preferred sources of help, and models a breadth of pedagogical approaches to the facilitation of the program.

- HeadStrong include an information section at the front of the curriculum resource package which includes information for teachers, highlighting who students prefer to seek help from and why. This would provide support and explanation for the additional skill-based student activities included in the HeadStrong resource.
• The thesis supports the effectiveness of the HeadStrong program in increasing the mental health knowledge of young people, however based on the results of this research, it is recommended that decreasing the stigma associated with help-seeking for mental health issues needs additional attention. Whilst students do not believe there is a stigma associated with mental health issues when considering their peers, they do not adopt the same attitudes when carrying out help-seeking behaviours for themselves. Thus perceived stigma is still present.

• As the needs of young people in rural and regional areas are shaped by different factors to metropolitan areas, resources addressing their mental health literacy, and attitude and intention to help-seek for mental health issues, may need to be modified accordingly. Therefore it is recommended that the HeadStrong resource is modified to explicitly cater for the needs of regional young people and reflect the regional context. For example, the resource needs to include skill rehearsal activities related to help-seeking and stigma.

Students’ participation in the HeadStrong Resource has not had the widespread effect on mental health help-seeking that this thesis hypothesised. Evidence from significant mental health promotion literature (Rowling, 2007b; 2009; 2015) suggests that mental health promotion needs to be embedded in a whole school approach. This promotion needs to take place not only in the PDHPE classroom and be the sole responsibility of the PDHPE teachers, but include the school’s broader practices and community. Based on the Health Promoting Schools’ literature and previous mental health promotion intervention studies (Rowling,
2009) the researcher acknowledges that the HeadStrong Resource forms only one part of the whole school approach to mental health. Thus the final recommendation points to the necessity for the HeadStrong resource to be part of a planned approach to mental health promotion that recognises that a resource is merely an aspect of a school based program (Rowling, 2007b; Samdal & Rowling, 2013).

7.7 Final Comment
This thesis provides insight into the barriers to and facilitators of help-seeking for regional young people. This research has far-reaching implications for young people, and the notion of help-seeking in regional areas. Additionally, this thesis evaluates the efficacy of the HeadStrong program in improving young people's knowledge, attitudes and intentions to help-seek for mental health issues and provides advice on how the primary health intervention HeadStrong can further destigmatise regional young people's help-seeking behaviours.
References


Appendices

Appendix 1: How HeadStrong links to the NSW Stage 5 PDHPE Syllabus

How HeadStrong links to your Curriculum: New South Wales

The HeadStrong teaching and learning activities are divided into 5 modules that link directly to NSW syllabus outcomes and content from the Stage 5 PDHPE syllabus.

<table>
<thead>
<tr>
<th>Module</th>
<th>Topic</th>
<th>Syllabus Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 1</td>
<td>Mood and mental wellbeing</td>
<td>This module is an introduction to the concepts of mental health and wellbeing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exploring the nature of moods, indicators of a mood disorder, and stigma.</td>
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<tr>
<td></td>
<td></td>
<td>Outcome 5.5: A student analyses attitudes, beliefs, and consequences related to</td>
</tr>
<tr>
<td>Module 2</td>
<td>The low down on mood disorders</td>
<td>health.</td>
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<tr>
<td></td>
<td></td>
<td>Students learn about: Supporting others</td>
</tr>
<tr>
<td>Module 3</td>
<td>Reaching out: helping others</td>
<td>Building resilience and exercising the mind - good mental health and wellbeing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>is not merely the absence of illness.</td>
</tr>
<tr>
<td>Module 4</td>
<td>Helping yourself</td>
<td>Proposing, developing and implementing local actions to raise awareness,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>displace myths and reduce stigma.</td>
</tr>
<tr>
<td>Module 5</td>
<td>Making a difference</td>
<td>Students learn about: Affirming diversity</td>
</tr>
</tbody>
</table>

HeadStrong is also aligned with the Australian Health and Physical Education Curriculum. Download ‘How Head Strong links to the Australian Curriculum’ at: www.HeadStrong.org.au
Appendix 2: Inventory of Attitudes Toward Seeking Mental Health Services

Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS)

The term professional refers to individuals who have been trained to deal with mental health problems (e.g., psychologists, psychiatrists, social workers, and family physicians). The term psychological problems refers to reasons one might visit a professional. Similar terms include mental health concerns, emotional problems, mental troubles, and personal difficulties.

For each item, indicate whether you disagree (0), somewhat disagree (1), are undecided (2), somewhat agree (3), or agree (4):

1. There are certain problems which should not be discussed outside of one’s immediate family. ........ [0 1 2 3 4]
2. 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.................... [0 1 2 3 4]
3. I would not want my significant other (spouse, partner, etc.) to know if I were suffering from psychological problems................................. [0 1 2 3 4]
4. Keeping one’s mind on a job is a good solution for avoiding personal worries and concerns........ [0 1 2 3 4]
5. If good friends asked my advice about a psychological problem, I might recommend that they see a professional. ................................. [0 1 2 3 4]
6. Having been mentally ill carries with it a burden of shame. ........................................ [0 1 2 3 4]
7. It is probably best not to know *everything* about oneself................................. [0 1 2 3 4]
8. 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. ............. [0 1 2 3 4]
9. People should work out their own problems; getting professional help should be a last resort. ....... [0 1 2 3 4]
10. If I were to experience psychological problems, I could get professional help if I wanted to........ [0 1 2 3 4]
11. Important people in my life would think less of me if they were to find out that I was experiencing psychological problems................................. [0 1 2 3 4]
12. Psychological problems, like many things, tend to work out by themselves. .......................... [0 1 2 3 4]
13. It would be relatively easy for me to find the time to see a professional for psychological problems. ....... [0 1 2 3 4]
14. There are experiences in my life I would not discuss with anyone. ........................................ [0 1 2 3 4]
15. I would want to get professional help if I were worried or upset for a long period of time. ........... [0 1 2 3 4]
16. I would be uncomfortable seeking professional help for psychological problems because people in my social or business circles might find out about it. .... [0 1 2 3 4]
17. Having been diagnosed with a mental disorder is a blot on a person’s life. .............................. [0 1 2 3 4]
18. There is something admirable in the attitude of people who are willing to cope with their conflicts and fears without resorting to professional help. ............. [0 1 2 3 4]
19. If I believed I were having a mental breakdown, my first inclination would be to get professional attention................................................................. [0 1 2 3 4]
20. I would feel uneasy going to a professional because of what some people would think. ................ [0 1 2 3 4]
21. People with strong characters can get over psychological problems by themselves and would have little need for professional help. ......................... [0 1 2 3 4]
22. I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family. ................................. [0 1 2 3 4]
23. Had I received treatment for psychological problems, I would not feel that it ought to be “covered up.” ....... [0 1 2 3 4]
24. I would be embarrassed if my neighbor saw me going into the office of a professional who deals with psychological problems. .......................... [0 1 2 3 4]

Note: No permission is required to use this inventory.
Appendix 3: Larger Black Dog Institute Survey

SECTION 1

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week.

There are no right or wrong answers. Do not spend too much time on any statement.

1) I found it **hard to wind down**.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not apply to me at all</td>
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<td>Applied to me to some degree, or some of the time</td>
<td>Applied to me to a considerable degree, or a good part of the time</td>
<td>Applied to me very much, or most of the time</td>
</tr>
</tbody>
</table>

2) I was aware of dryness of my mouth.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
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<th>3</th>
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</tr>
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</table>

3) I couldn't seem to experience any positive feeling at all.

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<thead>
<tr>
<th></th>
<th>0</th>
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<th>3</th>
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</tr>
</tbody>
</table>
4) I experienced difficulty breathing (e.g., breathing fast, not being finding it hard to breath even when not doing physical

<table>
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</tr>
</tbody>
</table>

5) I found it difficult to work up the energy/motivation to do things.

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
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</tr>
</tbody>
</table>

6) I tended to over-react to situations.

<table>
<thead>
<tr>
<th>0</th>
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<th>3</th>
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</thead>
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</tr>
</tbody>
</table>

7) I experienced shaking (e.g., in the hands).

<table>
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<tr>
<th>0</th>
<th>1</th>
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<th>3</th>
</tr>
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</tr>
</tbody>
</table>
apply to me at all
me to some degree, or some of the time
to a considerable degree, or a good part of the time
me very much, or most of the time

8) I felt that I was using a lot of nervous energy.

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Applied to me very much, or most of the time</td>
<td></td>
</tr>
</tbody>
</table>

9) I was worried about situations in which I might panic and make a fool of myself.

<table>
<thead>
<tr>
<th>0</th>
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<th>3</th>
</tr>
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<tbody>
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<td></td>
</tr>
</tbody>
</table>

10) I felt that I had nothing to look forward to.

<table>
<thead>
<tr>
<th>0</th>
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<th>3</th>
</tr>
</thead>
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<td></td>
</tr>
</tbody>
</table>
### 11) I found myself getting stirred up/disturbed/worked up

<table>
<thead>
<tr>
<th></th>
<th>0</th>
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<th>2</th>
<th>3</th>
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</tr>
</tbody>
</table>

### 12) I found it difficult to relax.

<table>
<thead>
<tr>
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</tr>
</tbody>
</table>

### 13) I felt down-hearted and blue.

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<thead>
<tr>
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<th>3</th>
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</tr>
</tbody>
</table>

### 14) I was mad at/disturbed by anything that kept me from getting on with what I was doing.

<table>
<thead>
<tr>
<th></th>
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<th>1</th>
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</tr>
</tbody>
</table>
15) I felt I was close to panic.

<table>
<thead>
<tr>
<th></th>
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<th>3</th>
</tr>
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</tr>
</tbody>
</table>

16) I was unable to become enthusiastic about anything.

<table>
<thead>
<tr>
<th></th>
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<th>3</th>
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</tr>
</tbody>
</table>

17) I felt I wasn't worth much as a person.

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<thead>
<tr>
<th></th>
<th>0</th>
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<th>3</th>
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<tr>
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<td>Applied to me to a considerable degree, or a good part of the time</td>
<td>Applied to me very much, or most of the time</td>
</tr>
</tbody>
</table>

18) I felt that I was rather touchy.

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<thead>
<tr>
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<td>Applied to me very much, or most of the time</td>
</tr>
</tbody>
</table>
19) I was aware of the action of my heart even when I wasn't doing physical activity (e.g., sense of heart rate increase, heart missing a beat).

<table>
<thead>
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<th>3</th>
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<td>Applied to me very much, or most of the time</td>
</tr>
</tbody>
</table>

20) I felt scared without any good reason.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
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<th>3</th>
</tr>
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<tr>
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<td>Applied to me very much, or most of the time</td>
</tr>
</tbody>
</table>

21) I felt that life was meaningless.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
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<th>3</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Applied to me very much, or most of the time</td>
</tr>
</tbody>
</table>
## SECTION 2

This section is about how you might have been feeling recently.
For each sentence, please say how much you have felt this way **in the past week**.

If a sentence was true about you most of the time, circle **True**.
If a sentence was only sometimes true, circle **Sometimes**.
If a sentence was not true about you, circle **Not true**.

### 22) I thought there was nothing good for me in the future.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not true</td>
<td>Sometimes</td>
<td>True</td>
<td></td>
</tr>
</tbody>
</table>

### 23) I thought that life wasn't worth living.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not true</td>
<td>Sometimes</td>
<td>True</td>
<td></td>
</tr>
</tbody>
</table>

### 24) I thought about death and dying.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not true</td>
<td>Sometimes</td>
<td>True</td>
<td></td>
</tr>
</tbody>
</table>

### 25) I thought my family would be better off without me.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not true</td>
<td>Sometimes</td>
<td>True</td>
<td></td>
</tr>
</tbody>
</table>

### 26) I thought about killing myself.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
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<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not true</td>
<td>Sometimes</td>
<td>True</td>
<td></td>
</tr>
</tbody>
</table>
SECTION 3

School bullying occurs when you are deliberately and repeatedly mistreated by another student or a group of students from your school.

School bullying comes in many forms. Please say how much you have been affected by the different forms of school bullying, by responding to the following items.

Part 1

1.1) Over the past month, how often have you been physically bullied? (e.g., hit, pushed, punched, kicked, etc.)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rarely or never</td>
<td>A few times</td>
<td>Many times</td>
<td>Almost every day</td>
</tr>
</tbody>
</table>

1.2) How hurtful was your experience of physical bullying?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not hurtful</td>
<td>Slightly hurtful</td>
<td>Quite hurtful</td>
<td>Very hurtful</td>
</tr>
</tbody>
</table>

1.3) How unsettling was physical bullying to your life? (e.g., disrupting schoolwork, social life, home life, etc.)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not disruptive</td>
<td>Slightly disruptive</td>
<td>Quite disruptive</td>
<td>Very disruptive</td>
</tr>
</tbody>
</table>
Part 2

2.1) Over the **past month**, **how often** have you been **verbally** bullied? (e.g., teased, yelled at, called names, spoken to in a mean or threatening way, etc.)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tbody>
<tr>
<td></td>
<td>Rarely or never</td>
<td>A few times</td>
<td>Many times</td>
<td>Almost every day</td>
</tr>
</tbody>
</table>

2.2) **How hurtful** was your experience of **verbal bullying**?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tbody>
<tr>
<td></td>
<td>Not hurtful</td>
<td>Slightly hurtful</td>
<td>Quite hurtful</td>
<td>Very hurtful</td>
</tr>
</tbody>
</table>

2.3) **How unsettling** was **verbal** bullying to your life? (e.g., schoolwork, social life, home life, etc.)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
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<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not disruptive</td>
<td>Slightly disruptive</td>
<td>Quite disruptive</td>
<td>Very disruptive</td>
</tr>
</tbody>
</table>
Part 3

3.1) Over the **past month**, how often have you been socially bullied? (e.g., excluded from social groups, had rumours spread about you, left out of activities, not invited to events, etc.).

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rarely or never</td>
<td>A few times</td>
<td>Many times</td>
<td>Almost every day</td>
</tr>
</tbody>
</table>

3.2) **How hurtful** was your experience of **social** bullying?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not hurtful</td>
<td>Slightly</td>
<td>Quite hurtful</td>
<td>Very hurtful hurtful</td>
</tr>
</tbody>
</table>

3.3) **How unsettling** was **social** bullying to your life?

(e.g., schoolwork, social life, home life, etc.)

<table>
<thead>
<tr>
<th>1</th>
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</thead>
<tbody>
<tr>
<td>Not disruptive</td>
<td>Slightly</td>
<td>Quite</td>
<td>Very disruptive disruptive disruptive</td>
</tr>
</tbody>
</table>
Part 4

4.1) Over the past month, how often have you been cyber bullied? (e.g., sent hurtful messages online or via text, had embarrassing photos or videos posted about you, harassed via social networking sites, received prank calls to your mobile phone, etc.)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Many times</td>
<td>Almost every day</td>
<td></td>
</tr>
</tbody>
</table>

4.2) How hurtful was your experience of cyber bullying?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
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<td>Slightly hurtful</td>
<td>Quite hurtful</td>
<td>Very hurtful</td>
<td></td>
</tr>
</tbody>
</table>

4.3) How unsettling was cyber bullying to your life? (e.g., schoolwork, social life, home life, etc.)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<td>Quite disruptive</td>
<td>Very disruptive</td>
<td></td>
</tr>
</tbody>
</table>
SECTION 4

Please read the following statements. Below each you will find seven numbers, ranging from “1” (Strongly Disagree) on the left to “7” (Strongly Agree) on the right. Circle the number which best indicates your feelings about that statement.

For example, if you strongly disagree with a statement, circle the number “1”. If you are neutral, circle “4”, and if you strongly agree, circle “7”, etc.

27) When I make plans, I follow through with them.

0 1 2 3 4 5 6 7

Strongly Disagree  Strongly Agree

28) I usually manage one way or another.

0 1 2 3 4 5 6 7

Strongly Disagree  Strongly Agree

29) I am able to depend on myself more than anyone else.

0 1 2 3 4 5 6 7

Strongly Disagree  Strongly Agree

30) Keeping interested in things is important to me.

0 1 2 3 4 5 6 7

Strongly Disagree  Strongly Agree
<table>
<thead>
<tr>
<th>31</th>
<th>I can be on my own if I have to.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[ ] Strongly Disagree</td>
</tr>
<tr>
<td></td>
<td>[ ] Strongly Agree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>32</th>
<th>I feel proud that I have accomplished things in life.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[ ] Strongly Disagree</td>
</tr>
<tr>
<td></td>
<td>[ ] Strongly Agree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>33</th>
<th>I usually take things in my stride.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[ ] Strongly Disagree</td>
</tr>
<tr>
<td></td>
<td>[ ] Strongly Agree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>34</th>
<th>I am friends with myself.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[ ] Strongly Disagree</td>
</tr>
<tr>
<td></td>
<td>[ ] Strongly Agree</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>35</th>
<th>I feel that I can handle many things at a time.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[ ] Strongly Disagree</td>
</tr>
<tr>
<td></td>
<td>[ ] Strongly Agree</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>36</th>
<th>I am determined.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[ ] Strongly Disagree</td>
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<tr>
<td></td>
<td>[ ] Strongly Agree</td>
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<table>
<thead>
<tr>
<th>37</th>
<th>I seldom wonder what the point of it all is.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[ ] Strongly Disagree</td>
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<tr>
<td></td>
<td>[ ] Strongly Agree</td>
</tr>
</tbody>
</table>
38) I take things one day at a time.
Strongly Disagree Strongly Agree

39) I can get through difficult times because I've experienced difficulty before.
Strongly Disagree Strongly Agree

40) I have self-discipline.
Strongly Disagree Strongly Agree

41) I keep interested in things.
Strongly Disagree Strongly Agree

42) I can usually find something to laugh about.
Strongly Disagree Strongly Agree

43) My belief in myself gets me through hard times.
Strongly Disagree Strongly Agree
44) In an emergency, I'm someone people can generally rely on.
0 1 2 3 4 5 6 7
Strongly Disagree
Strongly Agree

45) I can usually look at a situation in a number of ways.
0 1 2 3 4 5 6 7
Strongly Disagree
Strongly Agree

46) Sometimes I make myself do things whether I want to or not.
0 1 2 3 4 5 6 7
Strongly Disagree
Strongly Agree

47) My life has meaning.
0 1 2 3 4 5 6 7
Strongly Disagree
Strongly Agree

48) I do not continually think about things that I can't do anything about.
0 1 2 3 4 5 6 7
Strongly Disagree
Strongly Agree

49) When I'm in a difficult situation, I can usually find my way out of it.
0 1 2 3 4 5 6 7
Strongly Disagree
Strongly Agree
50) I have enough energy to do what I have to do.

0 1 2 3 4 5 6 7
Strongly Disagree
Strongly Agree

51) It's okay if there are people who don't like me.

0 1 2 3 4 5 6 7
Strongly Disagree
Strongly Agree
The term **professional** refers to individuals who have been trained to deal with mental health problems (e.g., psychologists, psychiatrists, social workers, and medical doctors).

You might visit a professional to help you with psychological problems. Psychological problems might also be called **mental health concerns, emotional problems, mental troubles, and personal difficulties.**

For each item, indicate your level of agreement using the scale provided.

52) There are certain problems which should not be discussed outside of one's immediate family.

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53) 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.

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56) If good friends asked my advice about a psychological problem, I might suggest that they see a professional.

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57) Having been mentally ill means being ashamed.

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58) It is probably best not to know everything about oneself.

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59) If I were experiencing a serious psychological problem at this point in my life, I would be confident that I could find relief by seeking help from a professional.

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Undecided</th>
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60) People should work out their own problems; getting professional help should be a last resort.

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61) If I were to experience psychological problems, I could get professional help if I wanted to.

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62) Important people in my life would think less of me if they were to find out that I was experiencing psychological problems.

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63) Psychological problems, like many things, tend to work out by themselves.

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64) It would be relatively easy for me to find the time to see a professional for psychological problems.

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</table>
65) There are experiences in my life I would not discuss with anyone.

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66) I would want to get professional help if I were worried or upset for a long period of time.

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<td>Somewhat disagree</td>
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</table>

67) I would be uncomfortable seeking professional help for psychological problems because people in my social or school circles might find out about it.

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</table>

68) Having been diagnosed with a mental disorder is a "black mark" on a person's life.

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</table>

69) There is something positive about the attitude of people who are willing to cope with their conflicts and fears without resorting to professional help.

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<td>Somewhat disagree</td>
<td>Agree</td>
<td></td>
</tr>
</tbody>
</table>
70) If I believed I was having a mental breakdown, my first thought/motivation would be to get professional help.

0  1  2  3  4  
Disagree  Somewhat Undecided Somewhat Agree
disagree  agree

71) I would feel uneasy going to a professional because of what some people would think.

0  1  2  3  4  
Disagree  Somewhat Undecided Somewhat Agree
disagree  agree

72) People with strong characters can get over psychological problems by themselves and would have little need for professional help.

0  1  2  3  4  
Disagree  Somewhat Undecided Somewhat Agree
disagree  agree

73) I would willingly talk about/share personal matters to an appropriate person if I thought it might help me or a member of my family.

0  1  2  3  4  
Disagree  Somewhat Undecided Somewhat Agree
disagree  agree

74) If I received treatment for psychological problems, I would not feel that it ought to be “covered up”.

0  1  2  3  4  
Disagree  Somewhat Undecided Somewhat Agree
disagree  agree
75) I would be embarrassed if my neighbour saw me going into the office of a professional who deals with psychological problems.

<table>
<thead>
<tr>
<th></th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Undecided</th>
<th>Somewhat agree</th>
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SECTION 6

Please read the following items, and indicate your level of agreement with each item using the scale provided.

76) People with depression could snap out of it if they wanted.

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<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
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</table>

77) Depression is a sign of personal weakness.

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78) Depression is not a real medical illness.

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79) People with depression are dangerous.

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80) It is best to avoid people with depression so you don’t become depressed yourself.

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81) People with depression display changeable behaviour are unpredictable.

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82) If I had depression I would not tell anyone.

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83) I would not employ someone if I knew they had been depressed.

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84) I would not vote for a politician if I knew they had been depressed.

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Appendix 4: Altered Inventory of Attitudes Toward Seeking Mental Health Services

SECTION 5

The term professional refers to individuals who have been trained to deal with mental health problems (e.g., psychologists, psychiatrists, social workers, and medical doctors).

You might visit a professional to help you with psychological problems. Psychological problems might also be called mental health concerns, emotional problems, mental troubles, and personal difficulties.

For each item, indicate your level of agreement using the scale provided.

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<th>Statement</th>
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<td>Somewhat agree</td>
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<tr>
<td>Agree</td>
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</tbody>
</table>

58) It is probably best not to know everything about oneself.

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Agree</td>
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<tr>
<td>Somewhat disagree</td>
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<tr>
<td>Agree</td>
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</tbody>
</table>

59) If I were experiencing a serious psychological problem at this point in my life, I would be confident that I could find relief by seeking help from a professional.

<table>
<thead>
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<th>0</th>
<th>1</th>
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<tbody>
<tr>
<td>Agree</td>
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<td>Undecided</td>
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<tr>
<td>Somewhat disagree</td>
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<td>Agree</td>
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</table>

60) People should work out their own problems; getting professional help should be a last resort.

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<tr>
<td>Agree</td>
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<td>Somewhat disagree</td>
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<td>Somewhat agree</td>
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<tr>
<td>Agree</td>
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</tbody>
</table>
61) If I were to experience psychological problems, I could get professional help if I wanted to.

0 0 0 0 4
Disagree Somewhat Undecided Somewhat Agree
disagree disagree disagree agree

62) Important people in my life would think less of me if they were to find out that I was experiencing psychological problems.

0 0 0 0 4
Disagree Somewhat Undecided Somewhat Agree
disagree disagree disagree agree

63) Psychological problems, like many things, tend to work out by themselves.

0 0 0 0 4
Disagree Somewhat Undecided Somewhat Agree
disagree disagree disagree agree

64) It would be relatively easy for me to find the time to see a professional for psychological problems.

0 0 0 0 4
Disagree Somewhat Undecided Somewhat Agree
disagree disagree disagree agree

65) There are experiences in my life I would not discuss with anyone.

0 0 0 0 4
Disagree Somewhat Undecided Somewhat Agree
disagree disagree disagree agree
66) I would want to get professional help if I were worried or upset for a long period of time.

<table>
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</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Somewhat</td>
<td>Undecided</td>
<td>Somewhat</td>
<td>Agree</td>
<td></td>
</tr>
</tbody>
</table>

67) I would be uncomfortable seeking professional help for psychological problems because people in my social or school circles might find out about it.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
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<th>3</th>
<th>4</th>
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</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Somewhat</td>
<td>Undecided</td>
<td>Somewhat</td>
<td>Agree</td>
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</tr>
</tbody>
</table>

68) Having been diagnosed with a mental disorder is a “black mark” on a person’s life.

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</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Somewhat</td>
<td>Undecided</td>
<td>Somewhat</td>
<td>Agree</td>
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</tr>
</tbody>
</table>

69) There is something positive about the attitude of people who are willing to cope with their conflicts and fears without resorting to professional help.

<table>
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<th>0</th>
<th>1</th>
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<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Somewhat</td>
<td>Undecided</td>
<td>Somewhat</td>
<td>Agree</td>
<td></td>
</tr>
</tbody>
</table>

70) If I believed I was having a mental breakdown, my first thought/motivation would be to get professional help.

<table>
<thead>
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<th></th>
<th>0</th>
<th>1</th>
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<th>3</th>
<th>4</th>
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<tbody>
<tr>
<td>Disagree</td>
<td>Somewhat</td>
<td>Undecided</td>
<td>Somewhat</td>
<td>Agree</td>
<td></td>
</tr>
</tbody>
</table>
71) I would feel uneasy going to a professional because of what some people would think.

<table>
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<th></th>
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<tbody>
<tr>
<td>Disagree</td>
<td>Disagree</td>
<td>Somewhat</td>
<td>Undecided</td>
<td>Somewhat</td>
<td>Agree</td>
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<td>disagree</td>
<td>agree</td>
<td></td>
<td>agree</td>
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</tr>
</tbody>
</table>

72) People with strong characters can get over psychological problems by themselves and would have little need for professional help.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Disagree</td>
<td>Somewhat</td>
<td>Undecided</td>
<td>Somewhat</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td>disagree</td>
<td>agree</td>
<td></td>
<td>agree</td>
<td></td>
</tr>
</tbody>
</table>

73) I would willingly talk about/share personal matters to an appropriate person if I thought it might help me or a member of my family.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
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<th>4</th>
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<tbody>
<tr>
<td>Disagree</td>
<td>Disagree</td>
<td>Somewhat</td>
<td>Undecided</td>
<td>Somewhat</td>
<td>Agree</td>
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<tr>
<td></td>
<td>disagree</td>
<td>agree</td>
<td></td>
<td>agree</td>
<td></td>
</tr>
</tbody>
</table>

74) If I received treatment for psychological problems, I would not feel that it ought to be “covered up”.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Somewhat</td>
<td>Undecided</td>
<td>Somewhat</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td>disagree</td>
<td>agree</td>
<td></td>
<td>agree</td>
<td></td>
</tr>
</tbody>
</table>

75) I would be embarrassed if my neighbour saw me going into the office of a professional who deals with psychological problems.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Disagree</td>
<td>Somewhat</td>
<td>Undecided</td>
<td>Somewhat</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td>disagree</td>
<td>agree</td>
<td></td>
<td>agree</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 5: Remaining threats to internal validity

The major threats to internal validity were discussed in the method section of this thesis; Chapter 4, Section 4.8.1. The remaining minor threats to internal validity are dealt with in the following sub-sections.

Ambiguous Temporal Precedence
This is a threat to validity when it is unclear whether the cause precedes the effect and thus the temporal precedence is not clear (Shadish, Cook & Campbell, 2002). In this research design, there is no ambiguity as to which occasion or which direction change occurs. The participants in this study were measured on a pre-, post- and follow-up occasion, allowing any changes that occur on either the post- or follow-up occasion to be attributable to the HeadStrong intervention or other factors that may operate during the period of research as there is clear temporal precedence.

Regression
This is considered a threat to validity when participants are selected to receive treatment (allocated to the intervention group) because of a pre-test measure (Shadish, Cook & Campbell, 2002). In this study, participants were assigned to either the control or intervention group through randomised stratified sampling, therefore regression was not a threat to internal validity in this thesis.

Testing
According to Shadish, Cook and Campbell (2002) sometimes taking a test once will influence scores when the test is taken again, due to practice or familiarity and therefore can pose a threat to internal validity. In this study, the IASMHS was administered to participants on three occasions; pre- and post-
intervention, and at the six month follow-up occasion. The threat to internal validity of testing was dealt with as there was a time-lapse period of approximately eight weeks between pre- and post-intervention testing, and approximately six months after pre-testing to the follow-up testing occasion. Participants were not provided a copy of the questionnaire to keep and as the IASMHS examines attitudes towards help-seeking there were no “wrong” or “right” answers as such which students could study or discuss.

**Instrumentation**

The internal threat to validity of instrumentation occurs when an observed effect might be a result of changes made to the measuring instrument from pre-, post- and follow-up testing occasion (Neuman, 2003). In relation to this research design, the Inventory of Attitudes towards Seeking Mental Health Services (2004) was used on all three testing occasions and was identical in every aspect. Therefore, instrumentation is not a threat to validity.

**Additive and interaction effects of threats to internal validity**

According to Shadish, Cook and Campbell (2002), threats to internal validity can interact and operate simultaneously in research and the production of effects could be mistaken as an outcome of the treatment. Selection-maturation, selection-history and selection-instrumentation are identified by Shadish, Cook and Campbell (2002) as three possible interactions. Each interaction is discussed in the following sub-sections.

**Selection-maturation**

The selection-maturation interaction is a threat to internal validity when non-equivalent groups are selected that mature
at different rates over the course of the research and as a result, affect the outcome (Shadish, Cook & Campbell, 2002). In this study, participants were from the same secondary school stage level, which means that groups were similar in age, therefore this poses a minor threat to internal validity. Pre-intervention data will be used to establish any initial differences between groups.

**Selection-history**

Selection-history is a threat to internal validity when non-equivalent groups have been selected that also come from different settings and thus this may affect outcome variables (Shadish, Cook & Campbell, 2002). This is a minor threat as schools in the study were assigned using randomised stratified sampling to either the control or intervention group. Pre-intervention data will be examined to determine participants' attitudes towards help-seeking for mental health issues.

**Selection-instrumentation**

Selection-instrumentation is a threat when participants in the study score at different mean levels on a test that has ceiling or floor effects (Cook & Campbell, 1979; Shadish, Cook & Campbell, 2002). This is considered in the analysis phase of the research where pre-intervention data will be examined to determine participants' attitudes towards help-seeking for mental health issues.
Appendix 6: Remaining threats to statistical conclusion validity

Two major threats to statistical conclusion validity were identified and discussed in Chapter 4, Section 4.8.2 of this thesis. The remaining minor threats to statistical conclusion validity are addressed in the following sub-sections.

*Low statistical power*
This is a threat to statistical conclusion validity when the sample size is too small and is set too low, increasing the chance of a Type II error, where the null hypothesis is accepted when there could in fact be a difference (Cook & Campbell, 1979). In this research the sample size is adequate and is satisfactory for the statistical tests employed. The main statistical test employed is an analysis of covariance. The power of each probability calculated is presented in the output. This enables a reasonable estimate to decide that this threat to validity is minor.

*Violated assumptions of statistical tests*
Analysis of covariance procedures which were used in this research are robust to violations of normality. When violation of the assumption of uncorrelated errors are detected, then transformation of the dependent variable will be undertaken to ensure the assumptions are met.

*Fishing and the error rate problem*
This is a threat to statistical conclusion validity when repeated tests for significant results and relationships are performed and are not corrected for the number of tests which can lead to increased statistical significance (Shadish, Cook & Campbell, 2002). In this research, one procedure used to correct this is
applying the Bonferroni Correction to make sure that over all of the tests the error rate does not go beyond the $\alpha = 0.5$ level. Additionally, conservative multiple comparison follow-up tests such as Tukey in analysis of covariance tests were used.

**Unreliability of measures**
If reliability of a measure is low, then it cannot be relied upon to register true changes. This would reveal a threat to statistical validity. However, in this study, the reliability of the dependent variables are above the acceptable level of exploratory research (Cronbach’s alpha > 0.6).

**Heterogeneity of units (respondents)**
This poses a threat when differences in any of the respondents in the treatment group interact with the major dependent variables increasing error variance (Cook & Campbell, 1979). In this study, this threat is reduced as the within-subject error depends on differences in each participant’s pre-, post- and follow-up test results.
### Appendix 7: Table of Pattern Matrix of the 24 items in the IASMHS

<table>
<thead>
<tr>
<th>Item</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. I would want to get professional help if I were worried or upset for a long period of time</td>
<td>0.773</td>
</tr>
<tr>
<td>8. 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</td>
<td>0.719</td>
</tr>
<tr>
<td>10. If I were to experience psychological problems, I could get professional help if I wanted to</td>
<td>0.642</td>
</tr>
<tr>
<td>19. If I believed I were having a mental breakdown, my first inclination would be to get professional attention</td>
<td>0.613</td>
</tr>
<tr>
<td>13. It would be relatively easy for me to find the time to see a professional for psychological problems</td>
<td>0.611</td>
</tr>
</tbody>
</table>
5. If good friends asked my advice about a psychological problem, I might recommend that they see a professional.

22. I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family.

2. 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.

18. There is something admirable in the attitude of people who are willing to cope with their conflicts and fears without resorting to professional help.

12. Psychological problems, like many things, tend to work out by themselves.
<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>People with strong characters can get over psychological problems by themselves and would have little need for professional help</td>
<td>0.605</td>
</tr>
<tr>
<td>9</td>
<td>People should work out their own problems; getting professional help should be a last resort</td>
<td>-0.327 0.566</td>
</tr>
<tr>
<td>4</td>
<td>Keeping one’s mind on a job is a good solution for avoiding personal worries and concerns</td>
<td>0.506</td>
</tr>
<tr>
<td>20</td>
<td>I would feel uneasy going to a professional because of what some people would think</td>
<td>0.802</td>
</tr>
<tr>
<td>16</td>
<td>I would be uncomfortable seeking professional help for psychological problems because people in my social or business circles might find out about it</td>
<td>0.769</td>
</tr>
<tr>
<td>No.</td>
<td>Statement</td>
<td>Value 1</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>24.</td>
<td>I would be embarrassed if my neighbour saw me going into the office of a professional who deals with psychological problems</td>
<td>0.721</td>
</tr>
<tr>
<td>23.</td>
<td>Had I received treatment for psychological problems, I would not feel that it ought to be “covered up”</td>
<td>-0.377</td>
</tr>
<tr>
<td>1.</td>
<td>There are certain problems which should not be discussed outside of one's immediate family</td>
<td>0.715</td>
</tr>
<tr>
<td>3.</td>
<td>I would not want my significant other (spouse, partner, etc.) to know if I were suffering from psychological problems</td>
<td>0.572</td>
</tr>
<tr>
<td>14.</td>
<td>There are experiences in my life I would not discuss with anyone</td>
<td>0.360</td>
</tr>
<tr>
<td></td>
<td>Having been mentally ill carries with it a burden of shame</td>
<td>0.743</td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>17.</td>
<td>Having been diagnosed with a mental disorder is a blot on a person's life</td>
<td>0.351</td>
</tr>
<tr>
<td>11.</td>
<td>Important people in my life would think less of me if they were to find out that I was experiencing psychological problems</td>
<td>0.349</td>
</tr>
<tr>
<td>7.</td>
<td>It is probably best not to know <em>everything</em> about oneself</td>
<td>0.833</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 21 iterations.
Appendix 8: Graph of Scree Plot for exploratory factor analysis conducted on IASMHS
Appendix 9: Pattern Matrix of the 24 items in the IASMHS forced to two factor structure and suppressed values below .50.

<table>
<thead>
<tr>
<th>Item</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. 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</td>
<td>0.714</td>
</tr>
<tr>
<td>15. I would want to get professional help if I were worried or upset for a long period of time</td>
<td>0.666</td>
</tr>
<tr>
<td>22. I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family</td>
<td>0.636</td>
</tr>
<tr>
<td>10. If I were to experience psychological problems, I could get professional help if I wanted to</td>
<td>0.611</td>
</tr>
<tr>
<td>5. If good friends asked my advice about a psychological problem, I might recommend that they see a professional</td>
<td>0.582</td>
</tr>
<tr>
<td>13. It would be relatively easy for me to find the time to see a professional for psychological problems</td>
<td>0.577</td>
</tr>
<tr>
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<tr>
<td>---</td>
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</tr>
<tr>
<td>19.</td>
<td>If I believed I were having a mental breakdown, my first inclination would be to get professional attention</td>
</tr>
<tr>
<td>4.</td>
<td>Keeping one's mind on a job is a good solution for avoiding personal worries and concerns</td>
</tr>
<tr>
<td>2.</td>
<td>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</td>
</tr>
<tr>
<td>23.</td>
<td>Had I received treatment for psychological problems, I would not feel that it ought to be “covered up”</td>
</tr>
<tr>
<td>1.</td>
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<td>16.</td>
<td>I would be uncomfortable seeking professional help for psychological problems because people in my social or business circles might find out about it</td>
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<td>17.</td>
<td>Having been diagnosed with a mental disorder is a blot on a person's life</td>
</tr>
<tr>
<td>20.</td>
<td>I would feel uneasy going to a professional because of what some people would think</td>
</tr>
<tr>
<td>Number</td>
<td>Statement</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>24.</td>
<td>I would be embarrassed if my neighbour saw me going into the office of a professional who deals with psychological problems</td>
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<td>21.</td>
<td>People with strong characters can get over psychological problems by themselves and would have little need for professional help</td>
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<td>11.</td>
<td>Important people in my life would think less of me if they were to find out that I was experiencing psychological problems</td>
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<tr>
<td>6.</td>
<td>Having been mentally ill carries with it a burden of shame</td>
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<tr>
<td>12.</td>
<td>Psychological problems, like many things, tend to work out by themselves</td>
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<tr>
<td>9.</td>
<td>People should work out their own problems; getting professional help should be a last resort</td>
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<tr>
<td>14.</td>
<td>There are experiences in my life I would not discuss with anyone</td>
</tr>
<tr>
<td>18.</td>
<td>There is something admirable in the attitude of people who are willing to cope with their conflicts and fears without resorting to professional help</td>
</tr>
</tbody>
</table>
3. I would not want my significant other (spouse, partner, etc.) to know if I were suffering from psychological problems.

7. It is probably best not to know *everything* about oneself.

Extraction Method: Principal Component Analysis.  
Rotation Method: Oblim with Kaiser Normalization.  
  a. Rotation converged in 8 iterations.
## Appendix 10: Tukey’s Test of Additivity Results for Indifference to Stigma Scale

### Appendix 10a: Tukey’s Test of Additivity Results for the Pre-Intervention Occasion for Indifference to Stigma Scale

<table>
<thead>
<tr>
<th>Timepoint 1</th>
<th>Subset for alpha = 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>1</td>
</tr>
<tr>
<td>Agree</td>
<td>77</td>
</tr>
<tr>
<td>Somewhat agree</td>
<td>55</td>
</tr>
<tr>
<td>Somewhat disagree</td>
<td>37</td>
</tr>
<tr>
<td>Undecided</td>
<td>172</td>
</tr>
<tr>
<td>Disagree</td>
<td>21</td>
</tr>
<tr>
<td>Sig.</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Means for groups in homogenous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 44.791.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type 1 error levels are not guaranteed.

### Appendix 10b: Tukey’s Test of Additivity Results for the Post-Intervention Occasion for Indifference to Stigma Scale

<table>
<thead>
<tr>
<th>Timepoint 2</th>
<th>Subset for alpha = 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>1</td>
</tr>
<tr>
<td>Agree</td>
<td>51</td>
</tr>
<tr>
<td>Somewhat agree</td>
<td>58</td>
</tr>
<tr>
<td>Undecided</td>
<td>13</td>
</tr>
<tr>
<td>Disagree</td>
<td>27</td>
</tr>
<tr>
<td>Somewhat disagree</td>
<td>37</td>
</tr>
<tr>
<td>Sig.</td>
<td>.569</td>
</tr>
</tbody>
</table>
Means for groups in homogenous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 46.250.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type 1 error levels are not guaranteed.

**Appendix 10c: Tukey’s Test of Additivity Results for the Follow-up Occasion for Indifference to Stigma Scale**

<table>
<thead>
<tr>
<th>Timepoint 3</th>
<th>N</th>
<th>Subset for alpha = 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Agree</td>
<td>33</td>
<td>4.5152</td>
</tr>
<tr>
<td>Somewhat agree</td>
<td>38</td>
<td>5.6316</td>
</tr>
<tr>
<td>Undecided</td>
<td>97</td>
<td>8.1649</td>
</tr>
<tr>
<td>Somewhat disagree</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td></td>
<td>.858</td>
</tr>
</tbody>
</table>

Means for groups in homogenous subsets are displayed.


b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type 1 error levels are not guaranteed.
Appendix 11: Tukey’s Test of Additivity Results for Help-Seeking Propensity Scale

Appendix 11a: Tukey’s Test of Additivity Results for the Pre-Intervention Occasion for Help-Seeking Propensity Scale

<table>
<thead>
<tr>
<th>Timepoint</th>
<th>N</th>
<th>Subset for alpha = 0.05</th>
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<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Disagree</td>
<td>25</td>
<td>13.9200</td>
</tr>
<tr>
<td>Somewhat disagree</td>
<td>30</td>
<td>15.0000</td>
</tr>
<tr>
<td>Undecided</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td>Somewhat agree</td>
<td>105</td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>116</td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td></td>
<td>.822</td>
</tr>
</tbody>
</table>

Means for groups in homogenous subsets are displayed.


b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type 1 error levels are not guaranteed.

Appendix 11b: Tukey’s Test of Additivity Results for the Post-Intervention Occasion for Help-Seeking Propensity Scale

<table>
<thead>
<tr>
<th>Timepoint 2</th>
<th>N</th>
<th>Subset for alpha = 0.05</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Disagree</td>
<td>19</td>
<td>11.4211</td>
</tr>
<tr>
<td>Undecided</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Somewhat disagree</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Somewhat agree</td>
<td>87</td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>118</td>
<td></td>
</tr>
</tbody>
</table>
Means for groups in homogenous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 38.033.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type 1 error levels are not guaranteed.

**Appendix 11c: Tukey’s Test of Additivity Results for the Follow-up Occasion for Help-Seeking Propensity Scale**

<table>
<thead>
<tr>
<th>Timepoint 3</th>
<th>Subset for alpha = 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Somewhat</td>
<td>16</td>
</tr>
<tr>
<td>disagree</td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>9</td>
</tr>
<tr>
<td>Undecided</td>
<td>48</td>
</tr>
<tr>
<td>Somewhat</td>
<td>54</td>
</tr>
<tr>
<td>agree</td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>77</td>
</tr>
<tr>
<td>Sig.</td>
<td></td>
</tr>
</tbody>
</table>

Means for groups in homogenous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 22.129.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type 1 error levels are not guaranteed.
Appendix 12: Stage 5 Students Individual Interview Schedule

Section 1: Health Literacy
- If your best friend asked what it meant to “help-seek” how would you explain it?
- What do you think help-seek means in relation to poor mental health?

Section 2: Help Seeking Attitudes
- How would you describe people who experience poor mental health?
- Would you want important people in your life, like friends and family, to know if you were experiencing a mental health problem?
- If a good friend asked your advice about a mental health problem, what would you suggest they do?
- How would you feel if your friends found out that you were help-seeking for a mental health problem?
- Would there be differences in the way you help-seek if you were experiencing poor physical health in comparison to poor mental health?

Section 3: Help Seeking Intentions
- If you were experiencing poor mental health, do you think you would seek help?
- If you were experiencing poor mental health what would you do? (Who might you talk to? Whom might you visit?)
- Do you think that regional young people are more or less likely to help-seek for mental health problems than their urban peers?
- What factors do you think contribute to regional young people being more or less likely to help-seek for mental health problems than their urban peers?
Section 4: Perceived Barriers to Help Seeking
- What sorts of things, or who might stop or prevent you, from help seeking? (stigma, friends might tease you, seen as weakness, I can look after myself, service too far away, someone might see me)

Section 5: Perceived Facilitators of Help Seeking
- What sorts of things, or who might support you or encourage you, to help seek? (I know the signs of poor mental health, my aunty had depression so I know that you need help)

Section 6: Efficacy of the HeadStrong Program
- What do you think you have learned from the HeadStrong program? (signs, symptoms, who to go to, challenges facing young people, mood disorder facts and statistics, at-risk personality types, coping strategies, fears of seeking help, how to find the right help)
- Do you think that your attitudes to mental health have changed as a result of participating in the HeadStrong program? If so, in what way/s? (attitude)
- Do you think you would be more likely to help-seek as a result of your participating in the HeadStrong program? If so, why? (intention)
Appendix 13: Individual PDHPE Teacher Interview Schedule

Section 1: Health Literacy
- As a result of students participating in the HeadStrong program, do you think they understand what it means to “help-seek” for mental health problems?
- If a student asked your advice about a mental health problem, what would you suggest they do?

Section 2: Help Seeking Attitudes
- Do you think the HeadStrong program has decreased the stigma associated with mental health problems? If so, how?

Section 3: Help Seeking Intentions
- Do you think that regional young people are more or less likely to help-seek for mental health problems than their urban peers?
- What factors do you think contribute to regional young people being more or less likely to help-seek for mental health problems than their urban peers?

Section 4: Perceived Barriers to Help Seeking
- What sorts of things, or who might stop or prevent students from help seeking? (stigma, friends might tease them, seen as weakness, can look after themselves, service too far away, someone might see them)

Section 5: Perceived Facilitators of Help Seeking
- What sorts of things, or who might support or encourage students, to help seek? (know the signs of poor mental health, positive past experiences, familiarity with people who have experienced mental health problems)
Section 6: Efficacy of the HeadStrong Program

- Do you think the HeadStrong program is an effective resource to increase students' mental health literacy levels? If so, why?
- Do you think students’ attitudes to mental health have changed as a result of participating in the HeadStrong program? If so, in what way/s? (attitude)
- Do you think students would be more likely to help-seek as a result of participating in the HeadStrong program? If so, why? (intention)
Appendix 14: Ethical Clearance from UNSW

HUMAN RESEARCH ETHICS COMMITTEE (HREC)

06-Dec-2012

Professor Helen Christensen
Sydney NSW 2052

Dear Professor Christensen,

HREC Ref: # HC12629

A randomised controlled trial of the HeadStrong Program

The Human Research Ethics Committee considered the above protocol at its meeting held on 04-Dec-2012 and is pleased to advise it is satisfied that this protocol meets the requirements as set out in the National Statement on Ethical Conduct in Human Research*. Having taken into account the advice of the Committee, the Deputy Vice-Chancellor (Research) has approved the project to proceed.

Would you please note:-

- approval is valid from 04-Dec-2012 to 03-Dec-2017;

- you will be required to provide annual reports on the study's progress to the HREC, as recommended by the National Statement;

- you are required to immediately report to the Ethics Secretariat anything which might warrant review of ethical approval of the protocol (National Statement 3.3.22, 5.5.7: http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/e7_2.pdf) including:
  - serious or unexpected outcomes experienced by research participants (using the Serious Adverse Event proforma on the University website at http://research.unsw.edu.au/human-ethics-forms-and-proformas);
  - proposed changes in the protocol; and
• unforeseen events or new information (eg. from other studies) that might affect continued ethical acceptability of the project or may indicate the need for amendments to the protocol;

• any modifications to the project must have prior written approval and be ratified by any other relevant Human Research Ethics Committee, as appropriate;

• if there are implantable devices, the researcher must establish a system for tracking the participants with implantable devices for the lifetime of the device (with consent) and report any device incidents to the TGA;

• if the research project is discontinued before the expected date of completion, the researcher is required to inform the HREC and other relevant institutions (and where possible, research participants), giving reasons. For multi-site research, or where there has been multiple ethical review, the researcher must advise how this will be communicated before the research begins (National Statement 3.3.22, 5.5.7: 
  http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/e72.pdf);

• consent forms are to be retained within the archives of the MEDFA - Medicine Faculty Administration and made available to the Committee upon request.

Sincerely,

Michael Grimm
Presiding Member
Human Research Ethics Committee

* http://www.nhmrc.gov.au
Appendix 15: Ethical Clearance from Bathurst Diocese

7 February 2013

Ms Lindy Cavanagh  
Charles Sturt University  
Panorama Avenue  
Bathurst NSW 2795  

Via email: lcavanagh@csu.edu.au

Dear Lindy,

Thank you for your application to conduct research within the Diocese of Bathurst. I understand you would like to contact James Sheahan Catholic High School Orange, La Salle Academy Lithgow, St. Joseph’s Catholic School Oberon and MacKillop College Bathurst in order to conduct the study titled “A Randomised Controlled Trial of the HeadStrong Program”. Approval is hereby given for you to conduct this study.

As we have already received your completed forms, we will now notify the schools and advise the Principals of our preliminary approval. You now have permission to approach the Principals of these schools. As you no doubt appreciate, it is the prerogative of any Principal whom you might approach to decline your invitation to be involved in this study or to withdraw from involvement at any time.

The privacy of the school and that of any school personnel or students involved in your study must, of course, be preserved at all times and comply with requirements under the Commonwealth Privacy Amendment (Private Sector) Act 2000.

It is a condition of approval that when your research has been completed you will forward a summary report of the findings and/or recommendations to this office as soon as practicable after results are to hand.

Please do not hesitate to contact me at this office if there is any further information you require. I wish you well in this undertaking and look forward to learning about your findings.

Yours sincerely,

[Signature]

Mrs Jenny Allen  
Executive Director of Schools
Appendix 16: Ethical Clearance from Canberra and Goulburn Diocese

26 February 2013

Ms Lindy Cavanagh
308 William Street
BATHURST NSW 2795

Dear Ms Cavanagh,

I am writing in response to your request to undertake research titled “A Randomised Controlled Trial of the Headstrong Program” at Hennessy Catholic College, Young in the Archdiocese of Canberra and Goulburn.

Your request has been approved subject to the following:

1. The Principal gives final permission for research to be carried out in his/her school. This letter of approval should accompany any approach to schools or teachers.
2. A completed National Criminal History Record Check (www.crirmtrac.gov.au) should be provided to the School Principal at the commencement of the research. The Principal will forward the documentation to Mrs Mary Dorian, Head of Religious Education and Curriculum Services at the Catholic Education Office. Please note that the research must not take place with children unless there is an appropriate adult supervisor.
3. Mrs Dorian is to be contacted immediately should your research differ in any way from that proposed.
4. Confidentiality of findings and anonymity of students is adhered to. The research must comply with the requirements of the Commonwealth Privacy Amendment (Private Sector) Act 2000.
5. That upon completion of your research a copy of your report is forwarded to me.

Mrs Dorian’s contact details are:

Telephone: (02) 6234 5412
Fax: (02) 6234 5496
Email: mary.dorian@catholic.edu.au

Yours sincerely,

Miro Najdecki
Director

“The Future Starts Today, Not Tomorrow”. John Paul II

PO Box 3317, Manuka ACT 2603. Telephone: (02) 6234 5455. Facsimile: (02) 6239 6567
Email: mira.najdecki@cg.catholic.edu.au www.ccg.catholic.edu.au

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Appendix 17: Ethical Clearance from CSU for larger study

30 January 2013

Ms Lindy Cavanagh
School of Human Movement Studies
BATHURST CAMPUS

Dear Ms Cavanagh,

Thank you for advising the Human Research Ethics Committee (HREC) that your project entitled "A randomised control trial of the Houndstrong program" has been approved by the University of New South Wales (UNSW) Human Research Ethics Committee.

The Charles Sturt University (CSU) HREC operates in accordance with the National Health and Medical Research Council’s National Statement on Ethical Conduct in Research Involving Humans and as such accepts other fully constituted HREC’s determinations.

Consequently I am pleased to advise your project has been approved by CSU HREC for a twelve-month period from 30 January 2013.

The protocol number issued with respect to this project is 2013/012. Please be sure to quote this number when responding to any request made by the Committee.

Please note the following conditions of approval:

- all Consent Forms and Information Sheets are to include either the CSU logo or letterhead, if possible. Students should liaise with their Supervisor to arrange to have these documents printed;
- you must notify the Committee immediately in writing should your research differ in any way from that proposed. Forms are available at http://www.csu.edu.au/_data/assets/word_doc/0010/176833/ehre_anurep.doc
- you must notify the Committee immediately if any serious and or unexpected adverse events or outcomes occur associated with your research, that might affect the participants and therefore ethical acceptability of the project. An Adverse Incident form is available from the website as above;
- amendments to the research design must be reviewed and approved by the Human Research Ethics Committee before commencement. Forms are available at the website above;

Version 2

www.csu.edu.au

CRICOS Provider Numbers for Charles Sturt University are 00005F (NSW), 01647G (VIC) and 029509 (ACT). ABN: 83 876 708 551
• if an extension of the approval period is required, a request must be submitted to the Human Research Ethics Committee. Forms are available at the website above;
• you are required to complete a Progress Report form, which can be downloaded as above, by 30 January 2014 if your research has not been completed by that date;
• you are required to submit a final report, the form is available from the website above.

YOU ARE REMINDED THAT AN APPROVAL LETTER FROM THE CSU HREC CONSTITUTES ETHICAL APPROVAL ONLY.

If your research involves the use of radiation, biological materials, chemicals or animals a separate approval is required from the appropriate University Committee.

The Committee wishes you well in your research and please do not hesitate to contact the Executive Officer on telephone (02) 6338 4628 or email ethics@csu.edu.au if you have any enquiries.

Yours sincerely

Julie Hielke
Executive Officer
Human Research Ethics Committee
Direct Telephone: (02) 6338 4628
Email: ethics@csu.edu.au

Cc: Dr Deb Clarke Dr Matthew Winslade
Appendix 18: Ethical Clearance from CSU for individual study

18 February 2013

Ms Lindy Cavanagh
C/- Dr Deb Clarke
N1 Allen House
BATHURST CAMPUS

Dear Ms Cavanagh,

Thank you for the additional information forwarded in response to a request from the Human Research Ethics Committee (HREC).

The CSU HREC reviews projects in accordance with the National Health and Medical Research Council’s National Statement on Ethical Conduct in Research Involving Humans.

I am pleased to advise that your project entitled “The efficacy of a preventative intervention on rural young people’s attitudes towards help-seeking for mental health issues” meets the requirements of the National Statement; and ethical approval for this research is granted for a twelve-month period from 18 February 2013.

The protocol number issued with respect to this project is 2013/024. Please be sure to quote this number when responding to any request made by the Committee.

Please note the following conditions of approval:

- all Consent Forms and Information Sheets are to be printed on Charles Sturt University letterhead. Students should liaise with their Supervisor to arrange to have these documents printed;
- you must notify the Committee immediately in writing should your research differ in any way from that proposed. Forms are available at: http://www.csu.edu.au/_data/assets/word_doc/0010/176833/ehre_annrep.doc
- you must notify the Committee immediately if any serious and or unreported adverse events or outcomes occur associated with your research, that might affect the participants and therefore ethical acceptability of the project. An Adverse Incident form is available from the website: as above;
- amendments to the research design must be reviewed and approved by the Human Research Ethics Committee before commencement. Forms are available at the website above;

www.csu.edu.au

CPICOG Provider Numbers for Charles Sturt University are 00000F (NSW), 01947G (VIC) and 00950E (ACT). ABN: 93 679 708 951
• if an extension of the approval period is required, a request must be submitted to the Human Research Ethics Committee. Forms are available at the website above;
• you are required to complete a Progress Report form, which can be downloaded as above, by 18 February 2014 if your research has not been completed by that date;
• you are required to submit a final report, the form is available from the website above.

YOU ARE REMINDED THAT AN APPROVAL LETTER FROM THE CSU HREC CONSTITUTES ETHICAL APPROVAL ONLY.

If your research involves the use of radiation, biological materials, chemicals or animals a separate approval is required from the appropriate University Committee.

The Committee wishes you well in your research and please do not hesitate to contact the Executive Officer on telephone (02) 6338 4628 or email ethics@csu.edu.au if you have any enquiries.

Yours sincerely

[Signature]

Julie Hicks
Executive Officer
Human Research Ethics Committee
Direct Telephone: (02) 6338 4628
Email: ethics@csu.edu.au
Cc: Dr Deborah Clarke Dr Matthew Williams

This HREC is constituted and operates in accordance with the National Health and Medical Research Council’s (NHMRC) National Statement on Ethical Conduct in Human Research (2007)
Appendix 19: Website link to HeadStrong resource and program


Appendix 20: PowerPoint presentation included in the HeadStrong program
Navigating the Mental Health Maze
Depending on the assessment, your doctor could order you to:

- **School Counselor**
  - They're trained in counseling and helping people resolve issues.
  - They can give you tools to cope with stress.
  - They can refer you with other services within your community.

- **Psychologist**
  - More education.
  - Emphasis on modifying behaviors.
  - Typically focuses on cognitive behavior therapy.

- ** Psychiatrist**
  - Medical doctor who specializes in diagnosing and treating mental illness.
  - Prescribes medication.
  - May also provide counseling.
The benefits of Good Therapy

- Denial, Fear, Sadness, Anger, Relief

- I think we really got somewhere today.

- Right

- Therapy: A vital relationship.
Touching on **Medication**

**BEFORE**

**AFTER**
Appendix 21: How HeadStrong links to the draft National Curriculum