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Resilience in secondary schools: a review of available interventions aimed at  
improving student mental health.

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**Master of Teaching**

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## **Declaration of Candidate**

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

Signed:

**Ingrid Sierp**

June, 2018

## Abstract

Statistics suggest that mental illness now affects 5-10% of young people from as early as age six. The exact reasons for the increased prevalence of mental illness are unknown, however, it is thought to be linked to a decrease in the resilience levels of young people, where they do not possess the knowledge or skills needed to overcome the everyday stressors that are associated with adolescence. In light of this, there has been an increased focus on designing and implementing programs to develop resilience and positive mental health in young people. Schools are an ideal setting for the implementation of such programs as young people spend extended periods of their time there. Teachers are able to build positive relationships with their students and act as role models of resilient behaviour. Given that the state of student mental health is unique to every school environment, it is difficult for teachers and school leaders to determine which program would be most suited to their needs. All resilience-building programs share common aims, however, they differ in several areas including targeted demographic, timeframe, delivery method and specific outcomes. Schools cannot know which program will be the best fit for their students without directly implementing each one. The aims of this study were to determine which resilience-building/wellbeing programs are available to secondary schools in Australia, and in what setting would each of these programs provide the greatest improvement to the mental health of secondary school students? It examined the resilience-building/wellbeing programs *MindMatters*, the *Gatehouse Project*, the *beyondblue Secondary Schools Program*, *SenseAbility* and the *Penn Resiliency Program*. The programs were evaluated using a framework of questions designed to provide schools with the most relevant information. The information gathered related to target demographic, program length, program content, program delivery, and program outcomes. It was found that some programs, like *MindMatters* and the *Gatehouse Project*, are simply a guiding framework and require a large amount of staff professional development before the content is able to be delivered to the students. Other interventions, like the *beyondblue Secondary Schools Program* and *SenseAbility*, provide schools with a complete set of resources and require no formal staff training, thus can be implemented immediately. Some programs, like the *Gatehouse Project* and the *beyondblue Secondary Schools Program*, are targeted at a selected age-range, whereas others are suitable for all ages. Some programs, like *SenseAbility*, have a poor research base. In some instances there have been no randomised, controlled trials to evaluate the efficacy of the programs, despite widespread implementation. The ability of each

program to develop student wellbeing is discussed within this report, alongside the management implications for schools. When determining the best practice for the development of student mental health and wellbeing, schools need to understand the motivation and behaviour of their students. Evidence-based models are available to assist schools in this understanding, and are discussed here. Numerous resilience/wellbeing programs exist, however, they are not all appropriate for an Australian school setting, nor for implementation in a secondary school. This study enables teachers and school leaders to make informed decisions regarding the suitability of different resilience/wellbeing programs to develop the mental health of their students.

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# CHAPTER 1: INTRODUCTION

## 1.1 Introduction

This study reviews the definition of resilience and attempts to further define it in relation to high school students. It explores the current state of mental health in secondary students and attempts to define the schools' role in developing student wellbeing, as a prevention or intervention to mental illness. This study will provide a detailed evaluation of existing resilience-building/wellbeing programs to assist schools in choosing a program that suits their unique circumstances.

This chapter provides a brief background into the concept of youth mental illness and the importance of resilience. This chapter also describes the problem statement, the purpose of the study, the research questions, and the significance of the study.

## 1.2 Background of Study

Current research into wellbeing and resilience comes as a result of the increasing prevalence of anxiety and depression in young people (Australian Bureau of Statistics, 2007; Department for Education and Child Development, 2016a). Incidences of mental illness in young people are higher than ever before, with children as young as six now being affected (Campbell, 2004; Department of Education and Child Development, 2018). There is a direct focus on developing the wellbeing/resilience of young people so as to prevent the onset of, or act as an intervention to mental illness (Seligman, Ernst, Gillham, Reivich, & Linkins, 2009). Where once research into resilience was unifaceted, it now has roots in many different disciplines. It is now known that resilience is a developmental process that can continuously change throughout a person's life (Cicchetti, 2010; Egeland, Carlson, & Sroufe, 1993; Kim-Cohen, 2007). Due to concerns of the

mental health of youth, it has become common practice for schools to incorporate student wellbeing into their curriculum (Waters, 2011). Students spend a large amount of their time at school, so it becomes an ideal agent for improving mental health (Seligman et al., 2009). In Australia, Federal and State policy provide schools with frameworks for developing wellbeing curriculum (Department for Education and Child Development, 2016b; Department of Education, 2013), however, schools may also employ independently-run programs targeted at developing student wellbeing. Such programs include *MindMatters* (Wyn, Cahill, Holdsworth, Rowling, & Carson, 2000), the *Gatehouse Project* (Patton, Glover, Bond, Butler, Godfrey, Pietro, & Bowes, 2000), *SenseAbility* (Irwin, Sheffield, & Holland-Thompson, 2010a, 2010b, 2010c, 2010d, 2010e), *beyondblue Secondary Schools Program* (beyondblue, 2018a) and the *Penn Resiliency Program* (Reivich & Gillham, 2010). These programs are a valuable resource to schools as they can act as a preventative measure against mental illness for majority of students, and as an intervention to students who may already be suffering from mental illness (Campbell, 2004).

### **1.3 Statement of Problem**

While all resilience-building programs share common aims, they differ in several areas including targeted demographic, timeframe, delivery method and specific outcomes. Schools cannot know which program will be the best fit for their students without directly implementing each one. The mental health of students is unique to each school (Child Health Promotion Research Unit, 2006), and so teachers must search for a program that best suits their circumstances. Searching for the appropriate program can be a tedious process, full of conflicting information. For example, the *MindMatters* (2014b) Programs Guide states that '*BounceBack!*' is a suitable wellbeing program for years 7 and 8, however, upon direct investigation at the *BounceBack!* homepage (Noble & McGrath, n.d.), the program is said to be targeted at years Foundation to 6.

## **1.4 Purpose of Study**

The purpose of this study is to define the concept of resilience, to explore the relationship between resilience and high school students, to outline the current state of young people's mental health, to explore the schools' role in developing student resilience, and to provide a detailed evaluation of specific resilience-building programs using a predetermined framework.

## **1.5 Research Questions**

This research seeks to answer the following questions:

1. What resilience-building/wellbeing programs are available to secondary schools in Australia and what is their focus?
2. In what setting would each of these programs provide the greatest improvement to the mental health of secondary school students?

## **1.6 Significance of Study**

This study will offer a simpler alternative, for teachers and schools, when picking an appropriate resilience/wellbeing program that suits their school's individual needs. It will provide them with a detailed evaluation of available programs, where specific features of each are clearly outlined. This novel approach will enable schools to easily access all the necessary information needed in one document rather than spending valuable time searching for information that may be misleading.

## **1.7 Project Scope and Limitations**

The project scope of this study was resilience-building/wellbeing studies that were created or implemented in Australia. Numerous studies exist that evaluate one or a few resilience-building programs (Bond, Patton, Glover, Carlin, Butler, Thomas, & Bowes, 2004; Dix, Slee, Lawson, &

Keeves, 2012; Evans, Mullett, Weist, & Franz, 2005; Norrish, Williams, O'Connor, & Robinson, 2013; Oades, Robinson, & Green, 2011; Patton et al., 2000; Waters, 2011), however, there is need for a scoping review of multiple programs.

For the purposes of this study only programs that were designed for implementation in Australian schools were included in this study so that any findings or recommendations that are made are more applicable to schools in Australia resilience/wellbeing programs that were created prior to the 21<sup>st</sup> century were excluded from this study, as the perception of resilience changed in that time. It is crucial that schools receive the most appropriate and innovative information that is available. Programs were also excluded if their target was primary school students only. Program specificity is important because the prevalence of particular mental illnesses can differ depending on the age of the students (Fazel, Hoagwood, Stephan, & Ford, 2014).

Due to the short timeframe, one limitation of this study is that it does not evaluate every resilience/wellbeing program that exists (within the abovementioned parameters). Instead, this study aimed to evaluate the most widely known programs in an attempt to supply schools with the most relevant information.

## **1.8 Ethics**

This paper provides a review of the literature and no primary research was conducted. According to the National Health and Medical Research Council (2007) as there is no research being conducted with human participants, ethical clearance is not required. Specifically, this research is considered to be 'negligible risk research', meaning that it is exempt from ethical review (section 5.1.22b of the National Statement on Ethical Conduct in Human Research).

## **1.9 Thesis Organisation**



## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter explores the relevant literature pertaining to the research questions of this thesis.

The literature review provides past and present definitions of the concept of resilience, and explores the relationship between resilience and high school students, the current state of young people's mental health, and the schools' role in developing student resilience. The chapter concludes with a summary of the literature presented and an insight into the literature gaps.

### **2.2 Defining resilience**

The term 'resilience' has been defined in many ways. The concept originated in the late 1800's to early 1900's when researchers were investigating the physiological aspects of coping, and the psychological effects of stress (Tusaie & Dyer, 2004). Early research on resilience was indirect, and came out of medical and psychological research. Dawber, Meadors, and Moore Jr (1951) examined the epidemiology of disease in adults and argued that individuals had resilience if they managed to stay disease free. Garmezy (1974) investigated the psychological effects of schizophrenia in adults and found that some patients displayed higher levels of adaptive functioning. Whilst Garmezy's discovery was somewhat coincidental, other investigations, such as the longitudinal study by Werner and Smith (1989), deliberately investigated the levels of 'protective factors' (or resilience) displayed by children who were exposed to conditions that may have been detrimental to their wellbeing, such as perinatal stress. Being able to overcome some hardship, or protect oneself against setbacks, was presumed to be the result of an individual's psychological/physiological makeup.

Definitions of resilience have become more refined, and research into it has increased significantly. Pooley and Cohen (2010) suggest that this is due to a change in attitudes from within the disciplines of psychology and social work. Studies from within these disciplines have concentrated less on human nature's negatives (glass half empty) and more on the positives (glass half full), thus shifting from research on how are all these things affecting us, to how can we make these things have less of an effect on us? Luthar (2006) and Masten and Obradović (2006) suggested that a person's environment and social influences also contribute to a person's resilience. It's now argued that resilience is a developmental process, not an inherent trait, which continuously changes throughout one's life (Cicchetti, 2010; Egeland et al., 1993; Kim-Cohen, 2007). Egeland et al. (1993) describe it as a transactional process that occurs due to the interaction between biological, genetic, psychological, sociological and environmental factors. The developmental outcome will be unique to each person's experiences and the way in which they respond to such interactions.

Historically, resilience has been studied within the medical/psychological disciplines. Windle's (2011) literature review located resilience within multidisciplinary settings. This placed its roots within the realm of developmental psychology, but saw resilience from different perspectives informing research, policy and practice (Windle, 2011). Windle (2011) concluded that resilience is intertwined with normal everyday life and, therefore, studies of it must be multidisciplinary. Thus, while studies like Tusaie and Dyer (2004), Garmezy (1974), Werner and Smith (1989), Luthar (2006) and Masten and Obradović (2006) were specific on the origins of resilience, it is much more disciplinarily diverse. Like Windle (2011), Tusaie and Dyer (2004) see resilience as being multidisciplinary, although they refer to it as originating from all different 'domains'. They suggest that individuals may vary in resilience characteristics, e.g. an individual who experiences an

impoverished, abusive childhood may demonstrate high education and work resiliency by overcoming setbacks within their schooling, resulting in a successful career, but may display low levels of psychosocial resilience, by not being able to maintain an intimate relationship. This idea of 'resilience characteristics' may help to explain different triggers of stress operating for different individuals. For example, an individual with strengths in the domain of school/work performance may have lower levels of stress, and higher corresponding levels of resilience than a person whose resilience characteristics lie within a different domain. If we are able to understand where an individual's 'resilience strengths' lay, we may be able to better cater to their developmental needs by building up their resilience in areas that are lacking.

Noble in fact argues that there are many different definitions of resilience but all refer to the capacity of the individual to overcome odds and demonstrate the personal strengths needed to cope with setbacks or adversity (Noble, n.d.). Thus, resilience may mean different things to different people.

### **2.3 Resilience in high school students**

With respect to high school students, resilience encompasses a plethora of different things. Some resilient behaviours can simply be observed, for example, a student may be under considerable parent pressure and in fear of failing, yet still tries his/her hardest; a student may love science and fails every test, but by less each time; or a student may have extremely bad acne and is often teased, but still comes to school every day. Other examples of resilience are evident in key statistics (Department for Education and Child Development, 2016a). For example, 83.6% of year 8/9 students were found to have a medium to high level of cognitive engagement (e.g. trying a different approach when finding something hard), and 64.9% of year 8/9 students were found to

have a medium to high level of perseverance (e.g. how often they stuck to a plan once they had made one, and persisted with schoolwork until they were done with it) (Department for Education and Child Development, 2016a). Martin and Marsh (2008) argue that the abovementioned examples are not examples of resilience, but of 'academic buoyancy'. They suggest, that when referring to the setbacks students encounter, the term resilience is more suited to the 'acute or chronic adversities' that students encounter, whereas the term buoyancy applies better to the everyday ups and downs. For example, if a student were dealing with poverty or violence throughout their schooling and still attended school and remained engaged, then they would be considered to be resilient (Martin & Marsh, 2008). If, however, a student faced setbacks and challenges of everyday life, such as juggling part-time work with study, Martin and Marsh (2008) would see them as being academically buoyant, not resilient. Teachers need to be aware of students' unique situations as they are likely to require completely different support strategies.

Reis, Colbert, and Hébert (2004) looked into differing 'resilience levels' as a possible explanation for underachievement in academically talented students. They noticed that not all talented students reach expected levels of achievement. They found that academically talented students who did well, not only had higher levels of resilience, but also had a greater level of protective factors at work, such as a supportive adult in their lives and peer support at school. They suggest that the reason for the underachievement of other equally talented students was due to the risk factors in their lives overshadowing their protective factors, thus reducing their resilience levels. Such risk factors include lack of peer support, sibling drop-out or absence of positive parental role models. Their study highlights the need for a student's protective factors to be greater than any risk factors they are exposed to in order to develop resilience.

The idea that protective factors can contribute to the maintenance of one's wellbeing is not new (Garmezy 1974), but the novelty is schools using this information to incorporate the development of protective factors into their wellbeing curriculum. Lee, Cheung, and Kwong (2012) argue that in addition to risk factors and protective factors, the development of resilience relies on positive adaptation. They propose that, together, these three components make up the critical conditions for the development of resilience. Positive adaptation is a crucial addition to the Reis, Colbert and Hébert theory of risk factors versus protective factors because students need to be able to *adapt* to their adverse conditions that are affecting them, and achieve *positive* adaptation from protective factors.

Resilience, in high school students, is multifaceted and depends on whether we look at it as a capacity, process or result (Lee et al., 2012). Resilience as a *capacity* is a person's ability to adapt to changes and stressful events in a positive way. For example, a student may display such capacity by responding calmly and effectively to a scenario in which they receive four assignments, each for different subjects, which are due on the same day. Other students with a lower capacity may panic. Resilience as a *process* is the ability to return to normal functioning, with the help of protective factors, after encountering a stressful event. For example, a student may be in the middle of studying for year 12 exams when they learn that a relative has passed away. Some students will, after some time, be able to continue with their study and sit their exams, while others may not be able to return to school at all. Resilience as a *result* refers to the positive and beneficial outcomes that come from overcoming a stressful event. For example, a student completing their Research Project may have encountered many issues along the way, which they have overcome. As a result they have developed knowledge and experience and needed to avoid/quickly overcome similar issues if they were to arise in the future.

The idea that resilience is comprised of a series of traits has encouraged researchers like Martin and Marsh (2008) to see if this can be used to assist others in developing resilience. They suggest that the predictors lie under three groups; physiological, school and engagement, and family and peers. Examples of physiological predictors include motivation, control, sense of purpose and self-efficacy. School and engagement predictors include enjoyment of school, class participation, relationships with teachers, regular attendance, extra-curricular activities and being challenged. Family and peer predictors include family support, a positive bond with an adult, a network of friends and peer commitment to education (Catterall, 1998; Finn & Rock, 1997; Martin & Marsh, 2008). Students who display resilient behaviour fit within these predictor groups. Martin and Marsh (2008) suggest that if we are able to develop and maintain these traits in students, then this will develop their resilience.

## **2.4 Prevalence of mental illness in high school students**

Presently, students' emotional wellbeing is equally as at risk as their physical health (Hayhurst, Hunter, Kafka, & Boyes, 2015). Incidences of anxiety are increasing, with 5-10% of young people, beginning at age six, currently suffering from the mental illness. Approximately 80% of those affected do not seek help from health services (Campbell, 2004; Department of Education and Child Development, 2018). The reasons for not seeking help are unknown, though perhaps social stigma plays a part (Corrigan, 2004). Students might also be reluctant to share their condition with their teacher for the same reason, or because they fear being singled out in front of their classmates. Depression is also on the rise and it is estimated that 3.7% of all young people in Australia are effected at any given time (Department of Education and Child Development, 2018). Nearly 20% of young people are thought to have experienced clinical depression by the time they

complete high school (Seligman et al., 2009) and twice as many teenage girls are affected as boys (Bailey, Baker, Cave, Fildes, Perrens, Plummer, & Wearing, 2016). Anxiety and depression often occur simultaneously as co-morbidities and it's estimated over half of people who suffer from depression will also experience symptoms of anxiety (Australian Bureau of Statistics, 2007). It is also common for depression to directly lead to the onset of anxiety and vice-versa (Australian Bureau of Statistics, 2007). Campbell (2004) claims that despite the high prevalence that is reported, the number of young people suffering from mental illness is still underestimated. Whether there is truth to this statement, it is hard to say, as the information stems from a trail of studies quoting similar opinions and no hard evidence.

Underestimated prevalence may come about as a result of non-reporting on student surveys. If students are not reporting their illness or seeking help, their morbidity is likely to go unnoticed. Contrarily, Seligman et al. (2009) questions whether the rising level of mental illness diagnoses are overrepresented, and are a result of increased awareness/reporting. Belfer (2008) discussed the difficulty of obtaining accurate data on mental health prevalence in young people. He notes that the definition or recognition of mental illnesses varies and have different interpretations depending on the classification system. He comments that '[there is a] lack of capacity to gather consistent, meaningful epidemiological data'. This suggests that all data currently gathered on mental illness prevalence in young people is inaccurate, which is a major cause for concern.

Instances of mental health diagnoses are occurring in younger people. Where once anxiety was seen as a disease of adulthood (Seligman et al., 2009), children as young as six are now reportedly suffering from the mental illness (Campbell, 2004; Department of Education and Child

Development, 2018). Seligman et al. (2009) comments on the paradox that exists, because whilst there are better overall living conditions in the present-day, the prevalence of mental disease is still increasing, and in younger people. They comment 'everything is better, that is, everything except the human morale'. They suggest that reasons for such a drop in human morale are not genetic, biological or ecological, but resultant of modernity. This 'drop in human morale' could be attributed to a decline in the resilience of young people. Perhaps mental illness is developing as a result of young people losing their ability to overcome odds and demonstrate the personal strengths needed to cope with setbacks.

Sources of psychological distress in young people include coping with stress, school and study problems, depression, family conflict, bullying and emotional abuse (Bailey et al., 2016). Stressful life events precede the onset of depression too often to occur purely by chance (Kendler, Kuhn, Vittum, Prescott, & Riley, 2005). Young people experience a period of developmental change, where they become exposed to more stressors than they've previously experienced. The way a student responds to such stressors will determine whether they overcome it or become consumed by it. Kendler et al. (2005) suggests that humans display a wide variety of responses to stressors and that some people are sensitive to stress while others are resistant. Black Dog Institute (2017) has labelled the phenomenon 'stress diathesis', where stress-sensitive people are more likely to develop a mental illness in response to stress exposure.

Classrooms are diverse places, and it is likely that the students within it will respond differently to stress. Young people who suffer from a mental illness, like anxiety or depression, have lower academic achievement, peer relationship problems and impaired social skills (Campbell, 2004). Initial episodes of depression in adolescence are a prominent risk factor in youth suicide and

suicidal ideation, and such episodes form a precursor for future episodes in adult life (Campbell, 2004; Pine, Cohen, Cohen, & Brook, 1999). Seligman et al. (2009) suggests that the high levels of depression amongst young people could be counteracted by what they refer to as 'the synergy between learning and positive emotion' that can be taught in schools. This notion is supported by Fredrickson's (1998) review, which found that positive emotion broadens a person's attention span and cognition, and builds their intellectual and social resources. Seligman et al. (2009) states that skills that increase resilience, positive emotion, engagement and meaning can be taught to school students to further increase levels of life satisfaction.

## **2.5 The Schools' role in developing student resilience**

Students spend a lot of time at school and so it is the ideal location for mental health promotion and intervention (Seligman et al. 2009). Prevention and early intervention of mental illness are crucial for the adolescent period (Campbell, 2004). Schools are seen to help develop student resilience, as part of student 'wellbeing', which is a large component of a school's Duty of Care. Schools can use wellbeing programs to act as a preventative measure to a majority of students, and as an intervention to students who may already be suffering from mental illness (Campbell, 2004). Wellbeing and resilience act as a counteractive measure to mental illness, a vehicle for increasing life satisfaction, and as an aid to better learning and more creative thinking (Seligman et al., 2009). Mak, Ng, and Wong (2011) found a positive correlation between resilience and life satisfaction, and lower levels of student depression. They also found that positive views of self, the world and the future were important factors in the maintenance of wellbeing. This suggests that students who poses these traits/views are less likely to suffer from a mental illness. Schools need to help develop these traits in their students in order to fulfil their role in the fostering of student wellbeing.

Federal and state government policies exist to assist schools in fostering and developing student wellbeing; examples include the '*National Safe Schools Framework*' (Department of Education, 2013) and the '*Wellbeing Framework for Learning and Life*' (Department for Education and Child Development, 2016b). The Government also funds the National School Chaplaincy Program (Department of Education and Child Development, 2016) to support schools in promoting the wellbeing of students by pastoral care services in schools. Schools need to develop programs out of these frameworks, or employ existing programs, to deliver to the students.

Pastoral care, also referred to care group or home room, is often used to implement wellbeing-based programs (Child Health Promotion Research Unit, 2006). Cross, Lester, and Barnes (2011) suggest there are four main aims of pastoral care: to promote health and wellbeing, to build resilience, to enhance academic care, and to build human and social capital. Given the increasing prevalence of mental illness in young people, a lesson solely dedicated to wellbeing is an invaluable prevention/intervention resource. Pastoral care enables students to build a positive relationship with their teachers. Building meaningful relationships with teachers/adults is an integral part of developing resilience (Cross, Lester, & Barnes, 2014). The idea that pastoral care can be used to foster the health and wellbeing of the students is not new though, and in recent years it has become more inclusive and is seen as being intricately linked with the academic curriculum (Child Health Promotion Research Unit, 2006; Cross et al., 2014). This follows the notion that teachers are responsible for the 'academic care' of the students as well as their teaching discipline (Child Health Promotion Research Unit, 2006; Cross et al., 2014). Some pastoral care services, like those run under National School Chaplaincy Program (Department of Education and Child Development, 2016), are available to schools at a heavily subsidised cost, depending on their level of disadvantage. The nature of the pastoral care service is decided by the school,

following consultation with the school community, however, students are not obliged to participate in the program.

Schools may employ their own method of developing student resilience. Students in New Zealand participated in a 10-day developmental voyage on the ship, the Spirit of New Zealand (Hayhurst et al., 2015). The program focused on developing teamwork, cooperation, problem-solving, social communication and self-esteem. These qualities were conveyed via positive encouragement and the successful completion of many challenges encountered during the voyage. This study suggests that the mode in which resilience-building programs are delivered doesn't matter so long as the students are learning the skills and strengths to adapt to past, present and future adversity (Hayhurst et al., 2015).

There are programs targeted specifically at the prevention of mental illness, such as SPARX-R, moodGYM and lifeSTYLE (Black Dog Institute, 2017; Perry, Werner-Seidler, Calear, Mackinnon, King, Scott, Merry, Fleming, Stasiak, Christensen, & Batterham, 2017), however, these interventions are targeted at 'at risk' young people and are used to delay/avoid the development of mental illness. A resilience-building program, however, would target *all* students and provide them with the skills necessary to avoid any setback they are faced with in their lives, big or small. Burns (1996) commends such programs because they enable students to develop social competence, autonomy, sense of purpose and future, and problem-solving strategies. Seligman et al. (2009) states that there is often a lack of empirical evidence for most programs, however, believes that the benefits they provide are notable.

Examples of wellbeing/resilience-building programs include: *MindMatters* (Wyn et al., 2000), the *Gatehouse Project* (Patton et al., 2000), *SenseAbility* (Irwin et al., 2010a, 2010b, 2010c, 2010d, 2010e), *beyondblue Secondary Schools Program* (beyondblue, 2018a) and the *Penn Resiliency Program* (Reivich & Gillham, 2010). These programs share an underlying goal of improving student wellbeing and resilience, however, they differ in delivery and in specific outcomes. Picking a suitable program can be difficult for schools. They need to decide in their goals and understand what would work best for *their* students. Schools need to gather information from different groups within the school community, and sometimes even from the broader community (Cross et al., 2014). Currently, schools must carry out their own research on the different programs that are available. This process could become very time-consuming, given that the programs themselves, and any studies that have conducted primary evaluations, are documented in peer-reviewed journal articles. There is a need to compile such information into one effective document for the benefit of those seeking a resilience-building program.

## **2.6 Literature Gap**

The following literature gaps have been identified. There are a limited number of primary research articles that have evaluated the implementation of resilience/wellbeing programs. Existing review-type articles are based on only one aspect of wellbeing, like positive education, and do not provide and extensive evaluation of all aspects of a program. Existing articles do not provide an evaluation framework from which to compare and contrast resilience/wellbeing programs.

## **2.7 Summary of the Literature**

The literature surrounding resilience and youth mental health is increasing. Now, more than ever, resilience is viewed as a life skill needed to maintain positive mental health. The prevalence of mental illness, such as anxiety and depression, in young people is increasing, and the age of

mental illness development is ever decreasing. Resilience-building/wellbeing programs have been shown to act as a preventative measure against the development of mental illness, and as an intervention to existing mental illness in young people. Schools play a major role in the maintenance and development of student resilience/wellbeing, as students spend a significant part of their adolescence there. Therefore, schools provide the perfect platform from which to deliver wellbeing content to students. Resilience-building/wellbeing programs can be developed by the school under guidelines from Government frameworks, or can be implemented directly from existing, independent programs.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter describes the research process used to gather information regarding the concept of resilience, the relationship between resilience and high school students, the current state of young people's mental health, the schools' role in developing student resilience, and of specific resilience-building programs. It also provides justification for the data collection and sampling procedure. A description of the data analysis is also provided, and the paragraph concludes with a discussion on the reliability and validity of this research.

### **3.2 Methodology**

The main focus of this review was to explore the connections between resilience and secondary school students, and specifically, the programs that can be used to assist in resilience development for the prevention of mental illness. Consequently, the research questions of this study were to investigate which resilience/wellbeing programs are available to secondary schools in Australia, and in which settings would each program provide the greatest improvement to the mental health of students. A qualitative research approach was used to gather all information regarding resilience, youth mental health and wellbeing programs. A framework of questions was created to evaluate the programs in order to provide teachers and schools with a comprehensive review.

### **3.3 Data collection Method**

The review began with a broad search of the literature using the research databases ERIC, A+Education, DELTAA, Google Scholar, PubMed, and Science Direct. A list of general search terms, like 'resilience', 'resilience in schools', 'resilience programs', 'care group' and 'high school student

concerns' was compiled and used to find review-type articles as a starting point. Systematic and meta-analytic reviews provided an overview of the research and brought forward key articles in the field of resilience and resilience-building. The key articles were summarised and compiled to form an annotated bibliography. These key articles were used to ascertain the gaps in the literature and provided the basis for the paragraphs regarding the definitions and history of resilience. A further search using terms like 'anxiety and depression in young people' and 'student mental health statistics' brought forward articles that formed the basis of the paragraphs relating to the prevalence of mental illness in young people. The articles used were contemporary – written in the last 10 years – as older data would not have been applicable to current students. The search then became more specific, with terms like 'resilience-building programs in schools' and 'students, adversities and resilience'. The results of this search provided articles relating to resilience and wellbeing programs that have been created for schools.

### **3.4 Sampling Procedure**

Articles found during this literature search were filtered for country of origin, and only studies undertaken in an Australian context were included in this review. The reason for this inclusion criterion was so that any findings or recommendations that are made on the basis of these studies will be more applicable to schools in Australia. From these articles, a list of applicable resilience-building programs was generated. The programs were excluded from this review if they were created prior to the 21<sup>st</sup> century, as the perception of resilience changed in that time. It is crucial that schools receive the most appropriate and innovative information that is available. Programs were also excluded if their target was primary school students only. It is essential that the programs evaluated are specifically designed to build resilience in secondary students because their needs are different to students in primary school. Program specificity is important because

the prevalence of particular mental illnesses can differ depending on the age of the students (Fazel et al., 2014).

### 3.5 Data Analysis Method

The programs chosen for evaluation were *MindMatters* (Wyn et al., 2000), the *Gatehouse Project* (Patton et al., 2000), *SenseAbility* (Irwin et al., 2010a, 2010b, 2010c, 2010d, 2010e), *beyondblue Secondary Schools Program* (beyondblue, 2018a) and the *Penn Resiliency Program* (Reivich & Gillham, 2010). They were evaluated using a framework of questions which were generated via an adaptation of the method of Kaminstein (2017). The questions are based on the information that is most relevant to the schools when choosing an appropriate program (Table 1).

**Table 1. The evaluation framework based on the method of Kaminstein (2017).**

Question Number	Questions used to evaluate the resilience/wellbeing programs
1	What is the purpose of the program?
2	Who is the suggested target of the program?
3	How is the content delivered to students?
4	What is the length of the program?
5	Did the program improve student resilience/wellbeing?
6	What methodology is used to evaluate the effectiveness of the program?
7	Could there have been improvements to the program?
8	In which setting would this program provide optimal results?

### 3.6 Reliability and Validity

The repeatability, and thus the reliability, of this study can be achieved by using the same search terms and databases to bring forward the resilience/wellbeing articles and programs that were used in this evaluation. A full list of articles used can be found among the references. The internal

validity of the findings in this study become apparent when viewing the articles/programs used for evaluation.

### **3.7 Summary**

The research methodology began by placing the topic within the qualitative research setting. Data collection methods used in this research have been provided and inclusion/exclusion criteria have been explained. The data analysis method was presented and justified through its use in another previous study. A discussion on the reliability and validity of the study was provided, focusing on issues that are relevant to this study. The research findings are presented in Chapter 4 and a discussion of the findings, relating to the research questions, is presented in Chapter 5.

## **CHAPTER 4: RESEARCH FINDINGS**

### **4.1 Introduction**

This chapter presents the findings of the study, based on the evaluation of resilience-building/wellbeing programs available in Australia. A summary of the findings can be found in Table 2. The programs were evaluated using the framework of questions, which were generated via an adaptation of the method of Kaminstein (2017). The questions comprise information most relevant to the schools when choosing an appropriate resilience-building/wellbeing program.

## 4.2 Overview

In order to provide readers with an overview of the evaluations carried out in this study, the findings have been summarised in Table 2.

**Table 2. A comprehensive summary of the resilience/wellbeing programs evaluated in this study**

Program Name	Program Type	Program Target	Program Delivery	Program Length	Program Impact	Evaluative Bodies	Potential improvements	Suitable implementation setting
<i>MindMatters</i>	Wellbeing & resilience framework (focus on mental health)	Secondary school (Years 8-12)	<ul style="list-style-type: none"> <li>▪ 20 provided modules</li> <li>▪ Schools actively involved in development of curriculum</li> <li>▪ extensive staff training</li> </ul>	<ul style="list-style-type: none"> <li>▪ 20 hours of content</li> <li>▪ Adaptable to lengthen or shorten</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased student communication</li> <li>▪ Increased students seeking help</li> </ul>	<ul style="list-style-type: none"> <li>▪ ACER</li> <li>▪ Dept. of Health (SA)</li> <li>▪ minimal peer review</li> </ul>	<ul style="list-style-type: none"> <li>▪ Limit amount of staff professional development</li> <li>▪ Limit amount of time required to implement program</li> </ul>	<ul style="list-style-type: none"> <li>▪ Schools seeking 'whole school' approach</li> <li>▪ Schools with developed infrastructure</li> <li>▪ Schools willing to put in the time</li> </ul>
<i>Gatehouse Project</i>	Wellbeing & connectedness framework	Secondary school (Years 8-10)	<ul style="list-style-type: none"> <li>▪ Content delivered in five stages</li> <li>▪ Schools actively involved in development of curriculum</li> <li>▪ extensive staff training</li> </ul>	<ul style="list-style-type: none"> <li>▪ 15 hours of content</li> <li>▪ Designed for 20 lessons</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduced student substance abuse</li> <li>▪ No change in student wellbeing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Peer-reviewed studies</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduce program complexity</li> <li>▪ Limit amount of staff professional development</li> <li>▪ Limit amount of time required to implement program</li> </ul>	<ul style="list-style-type: none"> <li>▪ Schools seeking 'whole school' approach</li> <li>▪ Schools with broad focus on connectedness</li> <li>▪ Schools wanting a long-term intervention</li> </ul>

<i>beyondblue Secondary Schools Program</i>	Wellbeing & resilience framework (focus on mental health)	Secondary school (Years 8-10)	<ul style="list-style-type: none"> <li>▪ Content divided into years 8,9 &amp; 10</li> <li>▪ Separate sessions for each year</li> <li>▪ No formal staff training required</li> </ul>	<ul style="list-style-type: none"> <li>▪ 10 sessions per year level</li> <li>▪ 30 sessions in total over the three year period</li> </ul>	<ul style="list-style-type: none"> <li>▪ No statistically significant impact on student risk factors, protective factors or depressive symptoms</li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>beyondblue</i> Report of key findings</li> <li>▪ <i>beyondblue</i> annual reports</li> <li>▪ Peer-reviewed studies</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increase target age range to include senior years</li> <li>▪ Include some staff professional development to ensure consistent implementation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Schools with a strong focus on improving mental health</li> <li>▪ Schools that are time poor</li> <li>▪ Schools seeking an immediate option</li> </ul>
<i>SenseAbility</i>	Wellbeing & resilience (strengths-based program)	Secondary school (Years 7-12)	<ul style="list-style-type: none"> <li>▪ Content provided in 7 modules</li> <li>▪ No formal staff training required</li> </ul>	<ul style="list-style-type: none"> <li>▪ Essential Skills module: up to 24 sessions</li> <li>▪ 'Sense' modules: up to 30 sessions</li> </ul>	<ul style="list-style-type: none"> <li>▪ No formal data</li> <li>▪ Positive reflections by teachers and students</li> </ul>	<ul style="list-style-type: none"> <li>▪ Schools evaluation toolkit</li> <li>▪ <i>SenseAbility</i> school survey 2012</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ensure that activities are age-appropriate</li> <li>▪ Provide a nation-wide report on the findings related to student mental health</li> </ul>	<ul style="list-style-type: none"> <li>▪ Schools with a strong focus on positive growth mindset</li> <li>▪ Schools that are time poor</li> <li>▪ Schools seeking an immediate option</li> </ul>
<i>Penn Resiliency Program</i>	Resilience-building Program (focus on positive education)	Primary and secondary school (Years 5-9) Can be adapted for additional settings	<ul style="list-style-type: none"> <li>▪ Content provided in 2 modules</li> <li>▪ Extensive staff training</li> </ul>	<ul style="list-style-type: none"> <li>▪ Designed for 12 lessons</li> <li>▪ Can be extended up to 24 lessons</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduced depressive symptoms and feelings of hopelessness</li> <li>▪ Encourages positive growth mindset</li> </ul>	<ul style="list-style-type: none"> <li>▪ Peer-reviewed studies (extensive)</li> <li>▪ Positive Psychology Center (University of Pennsylvania)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Make available to schools that are not carrying out research</li> <li>▪ Limit amount of staff professional development</li> </ul>	<ul style="list-style-type: none"> <li>▪ Schools with a strong focus on resilience and positive growth mindset</li> <li>▪ Schools willing to put in the time</li> </ul>

## 4.3 MindMatters

### **1. What is the purpose of the program?**

*MindMatters* is a national mental health initiative, targeted at secondary schools, which aims to improve the wellbeing of young people (Department of Health, 2014b; Wyn et al., 2000). It was developed from a national pilot program that ran in 1997-98 involving 24 Government, Catholic and Independent sectors (Child Health Promotion Research Unit, 2006). This pilot program was a crucial process in the development of the innovative program available today. It brought to light complexities involved in trialing a novel education program; namely, each school had its own unique background in terms of health education and mental health issues (Child Health Promotion Research Unit, 2006). The *MindMatters* program provides schools with a framework to assist them in building their own mental health strategy depending on their individual circumstances (Department of Health, 2014b). A national team provides ongoing support to teachers and schools (Knight, 2007). *MindMatters* aims to enhance the development of the school environment to ensure that all students feel safe, cared for and purposeful (Child Health Promotion Research Unit, 2006).

### **2. Who is the suggested target of the program?**

*MindMatters* is a national program that was created in Australia for Australian schools. It has, however, been seen as a viable option for schools overseas. Evans et al. (2005) examined the feasibility of the application of the *MindMatters* program in American schools. School and community stakeholder groups evaluated the program and it was found that 85% of groups thought *MindMatters* would be helpful in their local schools, especially in the areas of suicide prevention and in the prevention of bullying and harassment (Evans et al., 2005). The program's components are targeted at the teachers who then adapt the information to build the resources for their students.

The recipients of these resources are secondary school students (13 to 18 years old) in years 8 to 12 (Department of Health, 2014b).

### **3. How is the content delivered to students?**

*MindMatters* does not directly provide schools with specific lesson-type plans to deliver to their students. Instead, they provide schools with a framework that contains the information needed to create individualised programs. *MindMatters* assist schools in developing their own curriculum, classroom resources and professional development sessions (Wyn et al., 2000). *MindMatters* provides schools with the frameworks for four free online components (Table 3). Each component contains a specific number of modules. Each module contains a teaching guide, an introductory video, fact sheets and links to relevant resources to support teachers in the delivery of the content (Department of Health, 2014b). Table 3 shows that the main focus of *MindMatters* is on educating the teachers, who then in turn educate the students.

**Table 3. The components of the online framework supplied by *MindMatters*** (Department of Health, 2014b)

<b>Component</b>	<b>Module</b>	<b>Target Audience</b>
1	1.1 Getting started	School leadership
	1.2 Using data for planning and success	School leadership
	1.3 What is mental health?	Staff
	1.4 Relationships and belonging	Staff
2	2.1 Adolescent development (staff)	Staff
	2.1 Adolescent development (students)	Staff teach students
	2.2 Developing resilience	Staff
	2.3 Resilience programs and planning	Staff
	2.4 Empowering students	Staff
3	3.1 Meeting parents' information needs	Staff
	3.2 Communicating with parents	Staff
	3.3 Sharing concerns with parents	Staff
	4.1 How schools help students	Staff

4	4.2 Youth mental health difficulties	Staff
	4.3 When should I be concerned?	Staff
	4.4 Helping individual students	Staff
	4.5 Understanding friends and peers	Staff teach students
	4.6 Looking after your friends	Staff teach students
	4.7 Who can help?	Staff
	4.8 Building support pathways	Staff

#### **4. What is the length of the program?**

The recommended time spent on each module is one hour (Department of Health, 2014b). Given that there are 20 modules, the full *MindMatters* program should contain 20 hours of wellbeing material. However, because *MindMatters* is a framework for schools, the modules may be adapted to increase or decrease the time over which the content is delivered. Teachers may want to focus more on some modules than others, for example they may choose to spend more time on module 2.2 ‘Developing resilience’, depending on the perceived state of mental health in their school.

#### **5. Did the program improve student resilience/wellbeing?**

The Australian Council for Educational Research (ACER) released an evaluation of the *MindMatters* program (Australian Council for Educational Research, 2016). The evaluation reports that over 1,400 Australian schools are currently participating in the *MindMatters* program. The evaluation was conducted via three consecutive surveys of 46 schools participating in the program. Table 4 shows that over two thirds of surveyed schools found the *MindMatters* program has increased student willingness to talk to staff about something that is bothering them, and has increased student willingness to reach out to a friend who seems worried (Australian Council for Educational Research, 2016). Seeking help in circumstances where it was not sought before can be viewed as resilient behaviour (Black Dog Institute, 2017).

**Table 4. Effects of the implementation of the *MindMatters* program in 46 schools, in 2015, as found by ACER (2016)**

ACER statement	Degree of agreeance with ACER statement				
	Not able to answer at this stage	Not at all	To a minor extent	To a moderate extent	To a major extent
Staff promote and support student mental health as part of their job, irrespective of their specific roles	2	1	10	17	16
Students are more willing to admit when something is bothering them and to speak with staff	4	1	10	19	12
Students are more willing to reach out to a friend or classmate who may seem worried or isolated	5	2	8	14	17

A 2011 survey by the Principals’ Australia Institute found that 79% of principals, who’s schools were participating in the program, were satisfied or very satisfied with *MindMatters* providing strategies for classroom teachers in supporting mental health and wellbeing for students (Department of Health, 2014a). The Department of Health (2014a) suggests that it is not possible to report on the measures of mental health rates within the student population, but concedes that the high level of uptake of the *MindMatters* program may have assisted schools in creating an environment that supports mental health.

**6. What methodology is used to evaluate the effectiveness of the program?**

The Australian Council for Educational Research (ACER) is an independent organisation whose aim is to create and promote research-based knowledge, products and services (Australian Council for Educational Research, 2018). ACER have conducted numerous evaluations of the *MindMatters* program. Their evaluations involve surveying participating schools on four main areas: Awareness and Involvement, Curriculum Resource, *MindMatters* as a Key Organiser, and *MindMatters* Professional Development (Australian Council for Educational Research, 2018). They analyse their data and present publicly available reports on their findings. In this manner they are able to determine, for example, how many schools implement the program, how many schools utilise the

professional development courses available, and whether the schools see a change in the mentality/behaviour of their students. The Department of Health (2014a) also evaluate the effectiveness of the *MindMatters* program, given that it is Government funded. In their latest report, the Department of Health (2014) stated that 'based on the evaluation reports available to inform this report, it is not possible to comment on the extent to which the *MindMatters* initiative has been delivered efficiently, or if it represents value for money'. This suggests that despite the positive reviews from ACER, *MindMatters'* effectiveness in directly improving the mental health of young people is unknown.

### **7. Could there have been improvements to the program?**

When implementing a resilience/wellbeing program, schools need to ensure that there is a balance between whole school and targeted elements of mental health promotion (Wyn et al., 2000). *MindMatters* provides schools with a guiding framework only. Schools must adapt the modules provided to target specific mental health issues that exist among their students, whilst also focusing on general mental health promotion for the school as a whole. Given that the framework must first be unpacked and understood, the process of implementation may take a considerable amount of time for the school leadership to organise. Another issue is that *MindMatters* is dependent on a huge amount of staff training. There are 20 modules in the program, 18 of which are targeted at educating the staff in order for them to pass on the information to their students. As a Government funded initiative, *MindMatters* do not send facilitators/experts to visit schools and implement the modules as other such programs do. This may make *MindMatters* an unattractive option for schools who are time/resource poor.

### **8. In which setting would this program provide optimal results?**

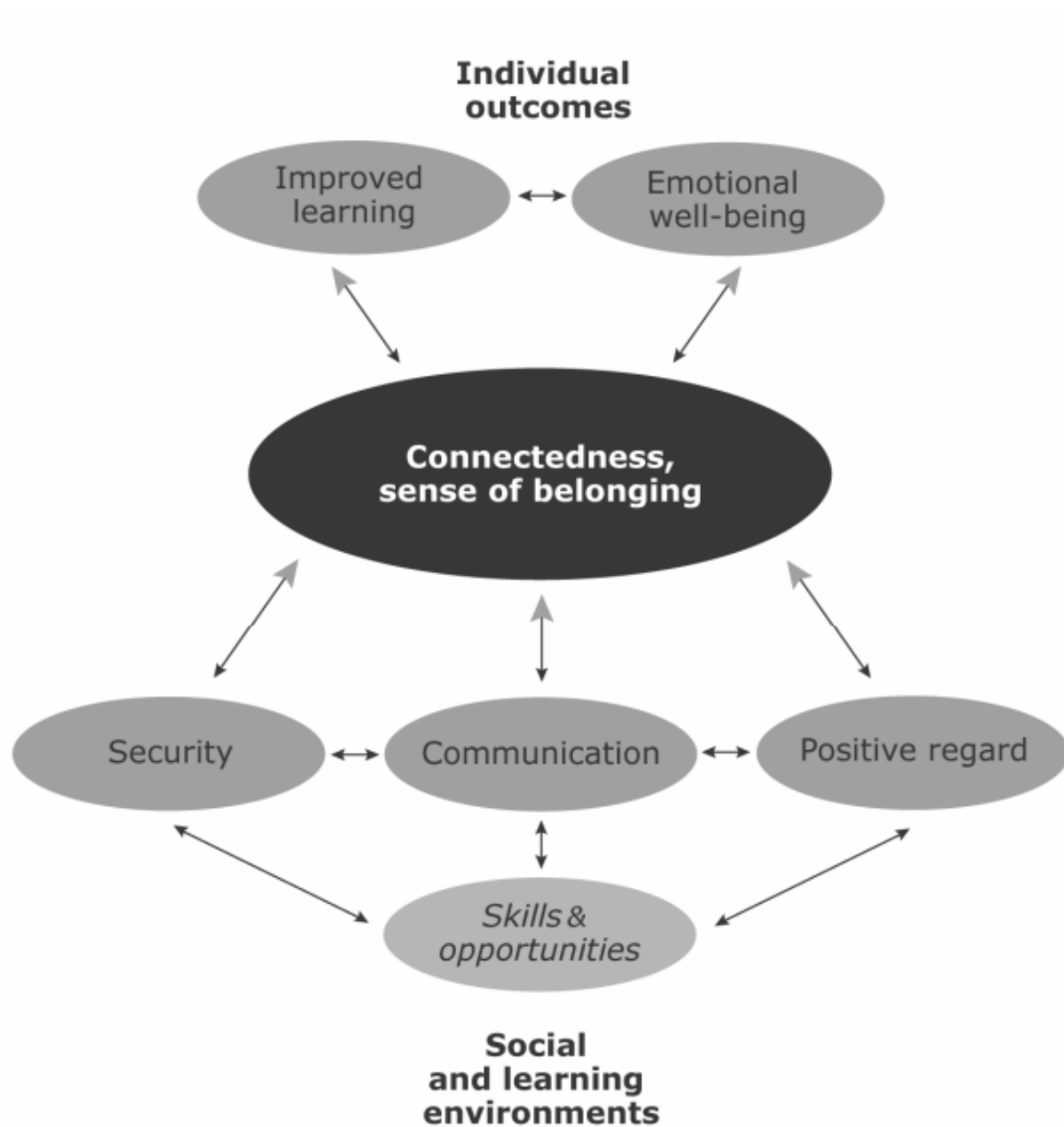
The *MindMatters* program would be best suited to schools where a whole school approach to mental health development is necessary. Only schools with the developed infrastructure to

support the program will be able to fully utilise the benefits that *MindMatters* provides (Evans et al., 2005). Due to the time needed for staff professional development, *MindMatters* would be most suited to schools with a heavy emphasis on wellbeing, not only as a standalone program, but incorporated into all subjects. This way the considerable amount of staff training would be worthwhile in terms of time and cost.

#### **4.4 The Gatehouse Project**

##### ***1. What is the purpose of the program?***

The *Gatehouse Project* is a mental health and emotional wellbeing framework developed in 1995. It was designed to improve the social learning environment in secondary schools. The project aims to promote student wellbeing, prevent adverse health outcomes in students, promote student connectedness to their schools, and develop student skills in dealing with the challenges of everyday life (Child Health Promotion Research Unit, 2006). The *Gatehouse Project* focusses heavily on the concept of connectedness to school, as it has been identified as a protective factor that can help prevent a number of adverse health outcomes for young people (Glover, Patton, Butler, Di Pietro, Begg, & Cahir, 2005). To develop student connectedness, the *Gatehouse Project* emphasises the need for healthy attachments with peers and teachers through the promotion of a sense of security and trust (Patton et al., 2000). The program identifies three priority areas that are essential to achieving its aims (Figure 1). These areas are building a sense of security and trust; enhancing skills and opportunities for good communication; and building a sense of positive regard through valued participation in all aspects of school life (Glover et al., 2005).



**Figure 1. The Conceptual framework for achieving the aims of the Gatehouse Project (Glover et al., 2005)**

**2. Who is the suggested target of the program?**

The *Gatehouse Project* was created as a research project in 1995 for implementation in selected Victorian schools. The original project concluded in 2001, however, the framework is available to be adapted as wellbeing program for secondary schools throughout Australia. The program is designed as a whole school approach and all students, from years 8 to 10 (13 to 16 years old), are the intended recipients.

**3. How is the content delivered to students?**

The *Gatehouse Project* begins with the recruitment of an 'adolescent health team' at each school. The broad representation in the adolescent health team allows the facilitation of a whole school approach that is sought after in this wellbeing program. The team is comprised of teachers, administrative staff, parents and members of the community, whose role is to examine policy and practices at their school and identify priority areas for reducing risk factors and developing mental health and connectedness (Glover et al., 2005; Patton et al., 2000). Schools are provided with an optional '*Gatehouse Project* adolescent Health Survey', which enables them to build a profile of their specific social and learning environment, as perceived by the students. This provides the adolescent health team with additional insight that will help to determine what kind of intervention is needed in their circumstances (Glover et al., 2005).

The *Gatehouse Project* whole school strategy for improving mental health is implemented in five stages (Table 5). The adolescent health team undertake the first three stages of the whole school strategy before any of the wellbeing program is implemented in the school. These first stages allow for a specific wellbeing curriculum to be developed for their school. The curriculum implemented in Stage 4 is decided upon by the adolescent health team and school leaders. During the original implementation of the *Gatehouse Program*, participating schools had access to written resources and guest speakers, throughout this five-stage process. The '*Team Guidelines for whole school change*' (2005) report provides a step-by-step program to follow, with proformas of tables, charts and mind maps to guide teams through each stage. The *Gatehouse Project* also provides teaching resources and curriculum material to accompany the team guidelines. In this way, the program is able to be utilised as a mental health initiative even after the original trial concluded.

**Table 5. Stages of the *Gatehouse Project's* whole school strategy** (Glover et al., 2005)

Stage	Process
1. Establishment	<ul style="list-style-type: none"> <li>• Establish adolescent health team</li> <li>• Raise awareness of issues</li> <li>• Involve whole school community</li> </ul>

2. Review	<ul style="list-style-type: none"> <li>• Examine current policies, programs and practices</li> <li>• Identify priorities for action</li> </ul>
3. Planning	<ul style="list-style-type: none"> <li>• Plan implementation of evidence-based strategies to enhance security, communication and positive regard</li> </ul>
4. Training and Implementation	<ul style="list-style-type: none"> <li>• Provide training and ongoing support for teachers and broader school community</li> <li>• Implement strategies</li> </ul>
5. Evaluation	<ul style="list-style-type: none"> <li>• Monitor, evaluate and communicate progress</li> <li>• Celebrate achievements</li> </ul>

#### **4. What is the length of the program?**

The *Gatehouse Project* requires a significant investment of time. The establishment of the adolescent mental health team, the review of the school's policy and practice, and the planning behind the implementation of the individualised program can take many months to achieve (Bond et al., 2004). The program then requires approximately 40 hours of staff professional development before any content can be implemented into the classroom. Schools involved in the original implementation of the *Gatehouse Project* reportedly spent 15 hours (20 lessons) with their students on the wellbeing content in the first year (Bond et al., 2004). The program is designed to achieve short and long-term goals, and so it may be continuously implemented for years in a row.

#### **5. Did the program improve student resilience/wellbeing?**

Students from various Victorian schools, who participated in the original implementation of the *Gatehouse Project*, were surveyed on their experience of the wellbeing lessons (Butler, Godfrey, Glover, Bond, & Patton, 2000). Student responses indicate that they focused heavily on what the lessons had them do rather than how the lessons affected their wellbeing (Table 6a & 6b). Of the respondents, 17% liked sharing emotion, however, 11% of students found the lessons too personal. No other data directly relating to improvement of wellbeing can be found in the survey responses to direct questions, however, greater insight was found in optional student comments. Some positive responses include '[I liked] discussing things and everyone heard and felt closer in a

weird kind of way’, and, ‘[I liked] finding out other people felt the same as me.”

Some negative responses include ‘[I didn’t like] feeling that I have to share things when I don’t want to’, and, ‘[I didn’t like that] people laughed at me, even my teacher.”

**Table 6a. Student responses on positive experiences throughout the *Gatehouse Project* wellbeing lessons** (adapted from Butler et al., 2000)

What students liked best about the lessons	Percentage of responses
Class discussions	35
Journal/Scrapbook	18
Sharing emotions/Personal reflection	17
Working with others	16
Videos/Songs/Books	10
It was easy	5
Role plays	4
Freedom	4

**Table 6b. Student responses on negative experiences throughout the *Gatehouse Project* wellbeing lessons** (adapted from Butler et al., 2000)

What students liked least about the lessons	Percentage of responses
Other people/classroom climate	17
Boring	15
Journal	12
Focus on emotions/Too personal	11
Repetitive/Went on too long	8
Too much writing	8
Unrealistic/Irrelevant	7

Bond et al. (2004) examined the 3-year implementation of the *Gatehouse Project* in 12 secondary schools in Victoria. They report that the program decreased the prevalence of ‘at risk’ behaviours like smoking and drinking, but had no apparent effect on increasing the emotional wellbeing of students,

nor any effect on the students' social relationships or on their reporting depressive symptoms. This suggests that a whole school intervention-type approach may not be the best way to develop student wellbeing.

#### **6. What methodology is used to evaluate the effectiveness of the program?**

The *Gatehouse Project* has not been formally evaluated by a body, such as ACER, however, studies have been conducted to assess the overall effectiveness of the program (Bond et al., 2004; Butler et al., 2000; Child Health Promotion Research Unit, 2006; Glover et al., 2005; Patton et al., 2000). Each of these studies discuss the findings of the program's implementation, and suggest improvements and future directions. Existing evaluations of the *Gatehouse Project* are based on a small sample though, as the program has only been trialled in one longitudinal study in Victoria. Future implementations of programs adapted from the *Gatehouse Project* may yield different results.

#### **7. Could there have been improvements to the program?**

Implementing a multi-focused intervention, such as the *Gatehouse Project*, is a very complex process. It requires a long-term commitment by schools and the willing participation of stakeholders from outside of the school. The process could be simplified if members of the adolescent health team were limited to staff from within the school. This would allow for quicker decision making and direct implementation of any changes made. The *Gatehouse Project* is reportedly dependent on 40 hours of staff training, which does not include the time spent by the adolescent health team reviewing the school's policy and practices. A reduction in the amount of staff training may make this intervention a more attractive option for schools who are time poor. Evaluations of the *Gatehouse Project* report that the program does not result in an improvement in student social and emotional wellbeing, but does decrease student substance abuse (Bond et al., 2004; Patton et al., 2000). It may be that the program, whilst attempting to achieve a whole

school approach to mental health intervention, is not specific enough to produce an effect on social and emotional wellbeing of the students (Bond et al., 2004). This suggests that multi-focused interventions do not have the specificity needed to improve all elements of wellbeing at the same time.

#### **8. In which setting would this program provide optimal results?**

The *Gatehouse Project*, or future programs that are adapted from it, is best suited to a school climate where there is a broader focus on student connectedness rather than on specific issues (Bond et al., 2004). Schools who are looking to take a whole school approach will benefit more from this program. Unlike the 'add-on' programs, the *Gatehouse Project* requires schools to evaluate their current situation and plan an in-depth program that will have a lasting effect at their school (Patton et al., 2000). It is suited to schools who are looking for a long-term mental health intervention and those who are willing to put in the preliminary work to reap the benefits.

### **4.5 beyondblue Secondary Schools Program**

#### **1. What is the purpose of the program?**

The *beyondblue Secondary Schools Program* aims to equip students with the ability to deal with adverse events, through the development of life skills, within a supportive and safe school environment (beyondblue, 2018a). The program was created as a partnership between school systems, local communities, the health sector and academics (beyondblue, 2018b). The *beyondblue Secondary Schools Program* is heavily focused on developing student resilience in order to lower the prevalence of depression. It aims to increase the awareness and understanding of depression in young people, including its impacts and available pathways for care. The program also aims to increase the schools' capacity to adapt, implement and evaluate available interventions for mental illness (beyondblue, 2018b; Sawyer, Arney, Baghurst, Clark, Graetz, Kosky, Nurcombe, Patton, Prior, & Raphael, 2000). The *beyondblue Secondary Schools Program*,

like most other programs, supports a whole school approach to promoting emotional well-being and social connectedness (beyondblue, 2018b).

**2. Who is the suggested target of the program?**

The *beyondblue Secondary Schools Program* was created through collaborative research in Queensland, South Australia and Victoria and is available to all secondary schools nationally. The program is based online and is freely accessible to any school wanting to access it from overseas. The program is targeted at secondary school students in years 8 to 10 (13 to 16 years old).

**3. How is the content delivered to students?**

The *beyondblue Secondary Schools Program* is a free online service that can be utilised by any school seeking a resilience-building/wellbeing intervention. The *beyondblue* organisation provides all resources needed to carry out the program, and no staff professional development is required for its implementation. The curriculum is a comprehensive, sequentially developed, 30-session program, which is divided over years 8, 9 and 10, with 10 sessions designated to each year level (Table 7) (beyondblue, 2018a). The curriculum is based on cognitive-behavioural theories and principles of best-practice in effective teaching (beyondblue, 2018b). The program uses a range of interactive methods of content delivery, including small-group exercises, discussions, role-plays, deep-learning tasks and quizzes (beyondblue, 2018a). The *beyondblue Secondary Schools Program* provides all necessary resources for each year level, including the teacher manual, the student workbook and example DVD clips. Teachers download the content and resources prior to each session and follow the teacher manual for implementation.

**Table 7. The components of each session provided by the *beyondblue Secondary Schools Program* (adapted from *Beyondblue*, 2018a)**

Year Level	Session Number	Content
	1	Introduction to the <i>beyondblue</i> program and resilience
	2	Images of adolescence

8	3	Me, myself, I – self-concept and self-esteem
	4	Self-talk and building self-esteem
	5	Emotions (feelings)
	6	Emotional regulation – the thinking-feeling link
	7	Emotional regulation – coping with challenges and negative emotions
	8	Planning for emotional health
	9	Assessment task
	10	Group presentations and closure
9	1	Getting on with others
	2	Relationships
	3	Communicating in relationships
	4	Feelings in relationships
	5	Thoughts in relationships
	6	Solving problems in relationships
	7	Journey into the unknown – survivor
	8	Lean on me
	9	How we'd like it
	10	We made it!
10	1	How real is that?
	2	You be the judge
	3	That's my team!
	4	Staying calm
	5	Can I help?
	6	What does it all mean?
	7	Laughter is the best medicine
	8	Have you got the time?!
	9	What lies ahead?
	10	Look how far we have come!

#### **4. What is the length of the program?**

The *beyondblue Secondary Schools Program* is a 30-session program, intended to be delivered over a three year period at a rate of 10 sessions per year. Each year the students participate in 10 consecutive weekly sessions, where each session takes between 30 and 45 minutes, depending on the implementation style of the teacher (beyondblue, 2018b). Ideally, the students begin the program in year 8 so that they can gain the full benefit of the designed curriculum for the entire three year period. Unlike many other wellbeing initiatives, the *beyondblue Secondary Schools*

*Program* does not require any formal professional development by staff. All information required to successfully implement the program is provided in each of the teacher manuals.

#### **5. Did the program improve student resilience/wellbeing?**

The original implementation of the *beyondblue Secondary Schools Program*, in 2003, spanned across 50 schools from Queensland, South Australia and Victoria (Sawyer, Pfeiffer, Spence, Bond, Graetz, Kay, Patton, & Sheffield, 2010b). Analysis was carried out after two years of the program's implementation and it was found to have made no statistically significant improvement in reducing risk factors, enhancing protective factors or reducing depressive symptoms of students (Sawyer et al., 2010b). Thus, the program had no effect on improving student wellbeing. The results were consistent with past research, which has found that achieving change in the mental health of a population is difficult, especially where a universal intervention is implemented (Sawyer, Boucher, Burns, Glover, Graetz, Hodges, Kay, Patton, Sheffield, & Spence, 2006). A later follow-up study by Sawyer, Harchak, Spence, Bond, Graetz, Kay, Patton, and Sheffield (2010a) discovered, through fidelity checks of the original study, that it took participating schools almost all of the first two years of the three year program to change their policies and practices. They suggested that student outcomes would come into effect after the third year of the intervention, and so they carried out further analysis five years post-intervention. Analysis showed results consistent with the original study, where there was no statistically significant improvement to risk factors, protective factors nor depressive symptoms of students. Sawyer et al. (2010a) suggest that these results may be due to the majority of those who fully participated in the study having relatively low levels of depression symptoms and, therefore, limited need for the intervention. They also found that students who left school during the 3-year intervention, and thus did not contribute to the overall findings of the study, had higher baseline rates of depression. This

suggests that the final results are not an accurate representation of the state of student mental health.

Although studies by Sawyer et al. (2010a) and Sawyer et al. (2010b) did not find any statistically significant results to support the *beyondblue Secondary Schools Program's* aim of reducing depressing symptoms in students, it does not mean that the program was unsuccessful. It may have been a successful preventative measure in reducing the likelihood of many students developing depression, or in improving other areas of wellbeing. Interventions implemented in schools often have difficulty improving risk factors for depressive symptoms that arise outside of the school environment, such as parental conflict, but they can improve the experiences of students whilst they are at school. It is suggested that subsequent cohorts of students, entering participating schools, may benefit more than the initial cohort who were involved in the study (Sawyer et al., 2010a).

#### **6. What methodology is used to evaluate the effectiveness of the program?**

After its initial implementation, the *beyondblue Secondary Schools Program* was evaluated in the '*beyondblue Schools Research Initiative: Report of Key Findings (2003-2005)*' (2006). The organisation beyondblue also provide an annual report that has been used to document the progress of the *beyondblue Secondary Schools Program* since its inception. Since its initial implementation the program has also been evaluated in peer-reviewed articles (Sawyer et al. 2010a; Sawyer et al. 2010b). These studies discuss the program's findings and suggest improvements and future directions. Similar to the *Gatehouse Project*, evaluations of the *beyondblue Secondary Schools Program* are limited in that the program has only been officially implemented on one occasion.

#### **7. Could there have been improvements to the program?**

The use of a wellbeing intervention to produce a long-term reduction of depressive symptoms in young people is a difficult task. The *beyondblue Secondary Schools Program* produced results similar to that of other longitudinal studies, whereby it was unsuccessful in reducing the depressive symptoms of students in 50 schools nation-wide (Sawyer et al., 2006). It may be that the program was not focused on the age group for which such an intervention would be most effective (Sawyer et al., 2010b). Sawyer et al. (2010b) comments that ‘while there are good reasons for focusing on early adolescence when attempting to reduce levels of depression, it is also a time when young people may not be ready to seriously consider changes’. This suggests that perhaps the *beyondblue Secondary Schools Program* should be targeted at senior school (year 11 and 12) in order to have the greatest effect. Throughout the initial implantation of the program there were limited details given by the teachers, as to the specific pedagogical methods that were used to deliver the content (Sawyer et al., 2010a). As the *beyondblue Secondary Schools Program* does not require any staff professional development prior to the implementation, the delivery of the content may differ significantly across classrooms and schools. It would be useful to implement a staff professional development session regarding ‘methods of delivery’ to ensure consistency across the program. Some methods may yield better results in terms of reducing student depressive symptoms, and therefore, should be utilised by all teachers.

#### **8. In which setting would this program provide optimal results?**

The *beyondblue Secondary Schools Program* is most suited to schools that have a strong focus on reducing depressive symptoms in students. The program utilises a whole school approach to improving mental health, and it would suit schools that are willing to integrate the curriculum into all classes. The *beyondblue Secondary Schools Program* does not require any formal staff professional development, so it would be suited to schools that require immediate implementation of an intervention. Similarly, the program would equally suit schools that do not

have the time to undertake a large amount of staff training, but not necessarily because they are in need of an immediate intervention.

## **4.6 SenseAbility**

### ***1. What is the purpose of the program?***

*SenseAbility* is a strengths-based program that is designed to help enhance and maintain resilience and psychological wellbeing in young people (beyondblue, 2018c; Irwin et al., 2010a). The program is based on cognitive-behavioural principles, as evidence suggests that an individual's thoughts can play a critical role in influencing their feelings and consequent behaviour (beyondblue, 2018c). Young people who possess sound social and emotional skills are generally able to better cope with the stressors associated with daily life and have better relationships with parents, teachers and peers (Irwin et al., 2010a). Increased social and emotional skills decreases the likelihood of a young person having significant mental health problems in the future. The 'strengths-based' approach of the *SenseAbility* program refers to the strategy of asking young people to concentrate on the positives in life, and within themselves, rather than on the negatives (Irwin et al., 2010a). This approach is based on the logic that if students take their focus away from their perceived 'faults' and 'defects', and instead build on their inherent qualities and things that they *do* like, they open themselves up to being more satisfied in life (Irwin et al., 2010a, 2010b, 2010c, 2010d, 2010e).

### ***2. Who is the suggested target of the program?***

The *SenseAbility* program was created for a classroom setting, but the modules can easily be adapted to benefit young people in other structured environments such as TAFE and youth organisations (beyondblue, 2018d). The program is targeted at secondary school students in years 7 to 12 (12 to 18 years old).

### ***3. How is the content delivered to students?***

The entire *SenseAbility* program is freely available online, and all modules, including their relevant resources, can be download at the schools' convenience. Alternatively, hard copies of the modules can be purchased. The program is comprised of seven modules (Table 8), with each module focusing on individual features of resilience and positive psycho-social adaptation (McLachlan, 2014). They can be delivered in a progressive sequence or as stand-alone modules, depending on the needs of the school. Each module is comprised of approximately 20 activities that form the basis of the lessons. The lessons are modelled on a student-centred style of learning that targets individual protective factors like problem-solving, coping skills, interpersonal competence, and optimistic thinking (McLachlan, 2014). The *SenseAbility* program provides schools with three extensive lesson plans complete with activities, teaching suggestions and links to the *SenseAbility* modules, however, schools are not under any obligation to use them. The program also provides schools with a delivery toolkit, which explains the modules in detail and helps teachers to integrate it into their school, as well as links to videos (beyondblue, 2018c). The implementation and delivery of the *SenseAbility* program does not require any formal staff training, however, a free professional learning program, comprised of four webinars, is available for viewing online.

**Table 8. The components of each module provided by *SenseAbility***

<b>Module</b>	<b>Components</b>
1. Essential Skills <ul style="list-style-type: none"> <li>▪ Helpful thinking and self-talk</li> <li>▪ Communication</li> <li>▪ Emotional recognition and regulation</li> <li>▪ Life problem-solving</li> <li>▪ Planning and time management</li> <li>▪ Keeping well</li> </ul>	<ul style="list-style-type: none"> <li>▪ 1 activity</li> <li>▪ 8 activities</li> <li>▪ 4 activities</li> <li>▪ 3 activities</li> <li>▪ 5 activities</li> <li>▪ 5 activities</li> </ul>
2. Sense of Self-Worth	▪ 17 activities
3. Sense of Control	▪ 19 activities
4. Sense of Belonging	▪ 32 activities
5. Sense of Purpose	▪ 18 activities
6. Sense of Future	▪ 17 activities
7. Sense of Humour	▪ 18 activities

#### **4. What is the length of the program?**

The *SenseAbility* Essential Skills module, which can be used as a stand-alone program, is comprised of six skill areas, each containing between two and four units. It is recommended that each Essential Skills unit be delivered in 45 minute sessions, which can be delivered in 12 or 24 sessions depending on the needs of the school (beyondblue, 2018c). Each of the six Sense modules can be delivered as a three or five session module, depending on the needs of the school. The number of available activities varies in each of the six modules, however, each of the sessions (whether three or five) should be delivered as 45 minute lessons. The *SenseAbility* program's six Sense modules are ideally delivered over a three year period, at a rate of 10 sessions per year. The Essential Skills module can run simultaneously or individually at a rate desired by the school (beyondblue, 2018d).

#### **5. Did the program improve student resilience/wellbeing?**

The latest *beyondblue Annual Report 2014-2015* (2016) states that 66% of Australian high schools have a *SenseAbility* kit. This number has doubled since 2006 when the project fully came into effect. The professional e-learning program has been accessed by 2,100 teachers since it became available in 2010, suggesting that *SenseAbility* is becoming a popular choice for teachers. Schools are encouraged to provide an account of their experience with the *SenseAbility* program, and staff and student comments can be used to infer the program's effects. A teacher from Victor Harbor High School, in South Australia, commented:

You can see that the kids have got more confidence. They can relate better to each other and they seem to laugh more. And they also share their emotions more. They are a very cohesive group now and I think *SenseAbility* has attributed to that (beyondblue, 2018e).

The teacher goes on to say 'happier kids is a benefit of *SenseAbility*. I conducted a survey at the end of last year and asked them what they thought about *SenseAbility* and they all said it was terrific. They really liked it' (beyondblue, 2018e). Students from Endeavor Hills Secondary Collage,

Victoria, commented 'I learnt how to fight back against negative thinking', and '[I learnt] how being positive really does change a lot of things' (beyondblue, 2011). These comments, although not a formal evaluation, suggest that the *SenseAbility* program is having a positive influence on the mental health of the students.

#### **6. What methodology is used to evaluate the effectiveness of the program?**

The *SenseAbility* program has not been formally evaluated, nor has any formal research been carried out to provide evidence of the effectiveness of the program. The *beyondblue* organisation does, however, ask participating schools to evaluate their experiences throughout the program (beyondblue, 2018c). An evaluation toolkit is available to all schools who implement the *SenseAbility* program. The toolkit has step-by-step instructions on how to perform analysis on all data and includes the proformas for student self-reporting before and after the implementation of the *SenseAbility* program. This toolkit enables schools to reflect on the effectiveness of the program, which is important for recognising any areas needing improvement, but also for demonstrating its success and sharing positive outcomes (beyondblue, 2014). McLachlan (2014) investigates the type of psychological therapy used in resilience-based programs, including *SenseAbility*. He comments that the *SenseAbility* program, being based on cognitive-behavioural therapy, is shorter in nature (10 to 20 weeks) than psychoanalytic therapy, which is ideal for a school setting. McLachlan (2014) discusses the benefit of using cognitive-behavioural techniques, such as 'cognitive restructuring', which involves training the brain to cognitively protect against vulnerabilities, on students. The learned cognitive strategies will act as neuroprotectants against mental illnesses like depression, and thus, act as a preventative measure for young people.

#### **7. Could there have been improvements to the program?**

The *SenseAbility* program aims to improve the social and emotional skills of young people through the delivery of seven targeted modules. The target age range of the program is students in years 7

to 12, however, some of the activities provided within the modules are not appropriate for senior school students. For example, Module 2 has an activity called 'Chicken Ransom', which is essentially a game of 'duck-duck-goose' (with a chicken), where the person who is 'it' must state positive things about themselves as the chicken makes its way around the circle (beyondblue, 2018c). While there is no doubt that positive self-reflection is beneficial, it is important the method of delivery is age-suitable so that the students wholly participate and do not treat it as a joke. In 2016, *beyondblue* stated that 66% of Australian schools had a *SenseAbility* kit (beyondblue, 2016). Given that the program was fully came into effect in 2006, and so many schools are now participating, there needs to be an official report, at least every couple of years, on the effectiveness of the program and whether is it improving student resilience/wellbeing. The evaluation toolkits provide a snapshot of individual school settings, but do nothing to inform on the prevalence of student mental health across the nation.

#### **8. In which setting would this program provide optimal results?**

The major principles of the *SenseAbility* program are based on cognitive-behavioural techniques, and so it would be most suitable to schools that have a strong focus on positive growth mindset and positive education. The implementation of the *SenseAbility* program does not require any formal staff professional development, as all the information is provided within each activity's guidelines, and neither does it require schools to assess their current policies and practices in order for the program to work. For this reason the program would be suited to schools that are time poor and/or seeking an immediate intervention.

### **4.7 Penn Resiliency Program**

#### **1. What is the purpose of the program?**

The *Penn Resiliency Program* is a strengths-based, resilience-building program that aims to equip individuals with a set of practical skills that can be applied in everyday life (Penn Arts & Sciences,

2018). Such skills include the ability to overcome adversity and challenges, manage stress, and thrive in personal and professional life (Positive Psychology Centre, 2007). The program uses cognitive-behavioural techniques to teach young people how to handle day-to-day stressors that are commonly experienced throughout adolescence (Seligman et al., 2009). Students learn to detect inaccurate thoughts, to evaluate the accuracy of those thoughts, and to challenge negative beliefs by considering alternative interpretations (Brunwasser, Gillham, & Kim, 2009). By changing the way they perceive negative experiences, students develop protective factors that lead to an increase in resilience. The protective factors that are targeted in the *Penn Resiliency Program* are emotion awareness and regulation, impulse control, cognitive flexibility, realistic optimism, self-efficacy and strong relationships (Reivich & Gillham, 2010). The skills taught in the program can be applied to many contexts of life, including relationships with peers and family members as well as achievement in academic or other activities (Positive Psychology Centre, 2007).

## **2. Who is the suggested target of the program?**

The *Penn Resiliency Program* has been implemented in schools in Australia, China, Portugal, the USA and the UK, and is on target for a large-scale roll-out around the world (Bastounis, Callaghan, Banerjee, & Michail, 2016; Waters, 2011). The program was created as a school-based intervention for young people from late childhood to early adolescence (10 to 14 years), however, it has been adapted for use in primary care clinics and juvenile detention centres, which cater to students up to the age of 18 (Bastounis et al., 2016; Brunwasser et al., 2009).

## **3. How is the content delivered to students?**

Currently, schools are required to be carrying out research on resilience and wellbeing in order to be able to implement the *Penn Resiliency Program*. Schools who are interested must contact the research team at the University of Pennsylvania and fill out the associated application (Positive Psychology Centre, 2007). Once the application is successful, schools are provided with all the

necessary components for the implementation of the program. The *Penn Resiliency Program* requires group leaders to be chosen at the outset. This group may consist of graduate students in psychology and education, mental health professionals, school teachers and counsellors, and will often include a member of the Penn Resiliency Team (Positive Psychology Centre, 2007). The group leaders undergo extensive training and supervision prior to the implementation of the program in the school. The *Penn Resiliency Program* is composed of two modules that target the development of the resilience-building protective factors: cognitive and social problem-solving (Table 9) (Reivich & Gillham, 2010). Traditionally, the modules are divided into 12 lessons, however, schools may choose to extend to program out to as many as 24 lessons (Bastounis et al., 2016; Positive Psychology Centre, 2007). Within each lesson, resilience concepts and skills are presented and practiced in a variety of ways. Skills are introduced through skits, role plays, short stories, or cartoons that illustrate the core concepts. Participating schools are provided with all necessary resources to run the program, including a leader’s manual, teacher’s materials, and student notebook (Positive Psychology Centre, 2007).

**Table 9. The components of each module provided by the *Penn Resiliency Program***

Module	Lesson Number	Content
Cognitive Skills	1	Link Between Thoughts and Feelings
	2	Thinking Styles
	3	Challenging Beliefs: Alternatives and Evidence
	4	Evaluating Thoughts and Putting it in Perspective
	5	Review of Lessons 1-4 (Practical Application)
Social Problem-Solving	6	Assertiveness and Negotiation
	7	Coping Strategies
	8	Graded Task and Social Skills Training
	9	Decision Making & Review of Lessons 6-8
	10	Social Problem-Solving
	11	Practical Application of Social Problem-Solving
	12	Program Review & Class Party

**4. What is the length of the program?**

The *Penn Resiliency Program* requires all group leaders to undergo an extensive training workshop prior to the implementation of the program in the school. They are trained in the research background and practical applications of resilience, optimism, and other areas of positive psychology (Positive Psychology Centre, 2007). The two modules within the *Penn Resiliency Program* are designed to be implemented consecutively, with lessons occurring on a weekly basis. Each of the 12 lessons are designed to take 90 minutes, resulting in a 12 week program, however, schools may choose to deliver the program over 18-24 lessons, which would reduce each lesson to 60 minutes, but increase the total program length to 24 weeks (Bastounis et al., 2016; Positive Psychology Centre, 2007).

#### **5. Did the program improve student resilience/wellbeing?**

Gillham, Reivich, Freres, Chaplin, Shatté, Samuels, Elkon, Litzinger, Lascher, and Gallop (2007) carried out a randomised controlled study of the *Penn Resiliency Program* in three schools. They found that, in two of the schools, the program reduced the depressive symptoms of the students throughout the 36 month follow-up period. The reason for the program's lack of effect in the third school is unknown as the researchers insist that all conditions, relating to the implementation of the *Penn Resiliency Program*, were consistent between all schools. Brunwasser et al. (2009) conducted a meta-analysis of 17 studies that evaluated the *Penn Resiliency Program* and found that the program resulted in participants having fewer symptoms of depression for at least 12 months post-intervention. Contrarily, Bastounis et al. (2016) conducted a meta-analysis of nine studies that evaluated the *Penn Resiliency Program* or its derivatives, and found no statistically significant changes in levels of student depression immediately post-intervention. The authors acknowledge though, that there is evidence that supports the effect of the intervention occurring later in follow-up studies. Seligman et al. (2009) reviewed the literature relating to the *Penn Resiliency Program* and found that its implementation resulted in reduced feelings of hopelessness

in students, and increased optimism, both immediately post-intervention and in follow-up studies 12 months later. Interestingly, Seligman (2009) found a correlation between the effectiveness of the *Penn Resiliency Program*, and the amount of training and supervision that group leaders received. The positive effects of the program were strongest when group leaders contained members of the Penn Resiliency Team or were trained directly by the team. The *Penn Resiliency Program* appears to be effective in promoting a positive growth mindset in students that participate in the program. One student stated:

I kind of thought all kids feel embarrassed all the time. Now I'm starting to see that maybe I don't need to feel this way so much; that maybe I'm worrying too much about what other kids are thinking of me- when they probably aren't even thinking about me (Reivich & Gillham, 2010).

#### **6. What methodology is used to evaluate the effectiveness of the program?**

There have been numerous controlled studies and meta-analyses that have evaluated the effectiveness of the *Penn Resiliency Program* (Bastounis et al., 2016; Brunwasser et al., 2009; Gillham et al., 2007; Reivich & Gillham, 2010; Seligman et al., 2009; Waters, 2011). In 2010 there had already been 19 controlled studies conducted, and this number is ever-increasing as research into the mental health of young people increases (Reivich & Gillham, 2010). This large representation is due to the international implementation of the *Penn Resiliency Program*. Independent evaluations of the program are also carried out by the University of Pennsylvania, in the United States of America, as this is where the *Penn Resiliency Program* was created.

#### **7. Could there have been improvements to the program?**

Currently, the *Penn Resiliency Program*, and accompanying resources, is only available to schools that are already conducting research on student resilience and wellbeing (Positive Psychology Centre, 2007). The effectiveness of the program is said to be directly linked to having a member of the Penn Resiliency Team among the group leaders at the school (Seligman et al., 2009).

Considering these individuals must fly to Australia from the USA, a simpler option may be to offer

an internet-based training program to would-be group leaders from the participating schools. The *Penn Resiliency Program* requires an extensive amount of staff training. Staff at Geelong Grammar School, in Victoria, had to undertake a 9-day training workshop in order to prepare for the implementation of the program (Positive Psychology Centre, 2007). The program would benefit from exploring different options in terms of staff professional development. Considering members of the Penn Resiliency Team are flown over from the USA and spend up to 12 months working with the school to implement the program, it is likely to be very costly. This will eliminate the *Penn Resiliency Program* as an option for many schools that do not have a large budget.

#### **8. In which setting would this program provide optimal results?**

The *Penn Resiliency Program* would be most suited to schools that have a strong focus on resilience-building and positive education. It would work equally well in a school requiring an intervention for students with existing mental health issues, as it would for a school looking to improve the positive growth mindset and wellbeing of their students. Due to the requirement of extensive staff training, the program would suit schools that are able to dedicate a large amount of time to the preliminary stages of the program's implementation.

### **4.8 Summary**

The research findings were gathered through an evaluation of available resilience-building/wellbeing programs implemented in Australia. The results demonstrated a wide variety in program aims, content, delivery, length and impact on student wellbeing. Some programs have been widely implemented, while others have only been evaluated for their original implementation. Some of the programs require extensive planning by the schools, prior to implementation, while others can be directly implemented with no training at all. Schools must first decide what kind of intervention they are looking to implement, and also determine how

much of their time and resources they are willing to put into their chosen program. Each school climate is unique and ultimately, the choice of resilience/wellbeing program will reflect the need of their students.

## **CHAPTER 5: DISCUSSION AND CONCLUSION**

### **5.1 Introduction**

This study evaluated a selection of available resilience-building/wellbeing programs that can be used by schools to promote student mental health. This chapter presents a discussion of the findings, focusing on the research questions posed in Chapter 1, makes recommendations based on the findings, and provides recommendations for further study.

### **5.2 Discussion**

This study has looked at the current state of mental health and resilience amongst young people. Alarming, 5-10% of all young people now suffer from a mental illness, such as anxiety or depression (Department of Education and Child Development, 2018). This increased prevalence of mental illness is thought to be partially linked to a decrease in resilience levels, where young people do not possess the knowledge or skills needed to overcome the everyday stressors that are associated with adolescence (Seligman et al., 2009). As a result of declining mental health and resilience levels, specialised programs have been created in an attempt to improve the wellbeing of students. The onus of delivering such programs, and with them - the development and maintenance of the mental health of young people, has fallen on the schools. This may be due to convenience, as students spend a lot of their time at school, it may be as a result of observations by teachers who have taken it upon themselves to improve the social environments within their classrooms, or it may be a government-directed initiative, where schools have been identified as the most appropriate setting for such an intervention.

The implementation of resilience-building/wellbeing program can cause management issues for schools, as they are faced with a number of important decisions. Firstly, they have to undertake a significant amount of research to determine which program is most suitable to their needs. There are many different programs available, each with different curriculum and teaching approaches, both in terms of the students they're aimed at and the teachers' teaching style. Schools are required to decide which classes the wellbeing lessons are to be held in, i.e. will the wellbeing curriculum be integrated into core classes or run as a separate program in specialised lessons? Care group/home room is a popular location for the implementation of a mental health intervention as students already have a rapport with their teacher (Child Health Promotion Research Unit, 2006). Schools then need to decide which teachers will run the wellbeing programs. If the program is run during care group, then the responsibility falls on those teachers, despite the fact that not all teachers are going to believe in the program. A lack of commitment to a program by the teacher delivering the content, will result in an inadequate experience for the students. Alternatively, teachers can be specifically selected to deliver the content to students based on their experience or desire to be involved, however, separate wellbeing lessons need to be planned. Schools must also be aware that parents/guardians may decide to exempt their child from mental health education, so there must be alternative arrangements made for such students.

To address research question one, available resilience-building/wellbeing programs were selected. Five suitable programs for evaluation; *MindMatters*, the *Gatehouse Project*, the *beyondblue Secondary Schools Program*, *SenseAbility* and the *Penn Resiliency Program*, were chosen. Analysis of the programs revealed a diversified approach. *MindMatters* and the *beyondblue Secondary Schools Program* have a strong mental health focus, where the modules are specifically designed to develop skills that aid in the prevention of mental illness in young people (Wyn et al., 2000).

These programs aim to create a safe and supportive environment within schools, so young people can excel (beyondblue, 2018a; Child Health Promotion Research Unit, 2006). While still promoting the development of resilience and wellbeing, these programs focus on empowering students to speak out when feeling depressed, and to recognise and act upon unhealthy mental states. For students speaking out, when they previously would have remained silent, is a form of resilience development (Black Dog Institute, 2017). However, other programs use more direct methods of resilience development. These include *SenseAbility* and the *Penn Resiliency Program*, which have a strong resilience-building/positive education focus. They operate on the premise that development of social and emotional skills will prevent the onset of mental illness (Irwin et al., 2010a). They teach young people to focus on positives in their lives in order to overcome everyday stressors that adolescents commonly face. In this way, problems are managed in a healthy way, instead of escalating into depressive symptoms. The *Gatehouse Project* is also designed to promote social and emotional wellbeing in young people, however, it has a greater focus on student connectedness to their school. Connectedness has been identified as a protective factor that can help prevent a number of adverse health outcomes for young people (Glover et al., 2005). Despite the diversity in these programs' approaches, they can all be used as preventative measures against mental illness for students, and as an intervention for students who may already be suffering from mental illness.

To address research question two, this study has attempted to assist schools in choosing a program that is suitable for their school environment and applicable to their students. Payton, Wardlaw, Graczyk, Bloodworth, Tompsett, and Weissberg (2000) suggest that schools use a framework to select prevention-type programs to ensure they fit the desired criteria *before* being implemented. This study removed the need for schools to carry out such research by applying a

research framework to a sample of available resilience-building programs, to determine their characteristics (Table 10). Schools and teachers can review these characteristics and make an informed decision as to which resilience/wellbeing program is most suitable to their students' needs.

**Table 10. A summary of the characteristics of the evaluated programs**

	Program focus	Suitable for all secondary school students?	Number of sessions per year	Staff PD required?	Immediate implementation available?	Peer-reviewed?
<i>MindMatters</i>	Mental health	Y	≥20	Y	N	Y
<i>Gatehouse Project</i>	Connected-ness	N	≥20	Y	N	Y
<i>beyondblue Secondary Schools Project</i>	Mental health	N	<20	N	Y	Y
<i>SenseAbility</i>	Positive education	Y	>20	N	Y	N
<i>Penn Resiliency Program</i>	Positive education	Adaptable	<20	Y	N	Y

*MindMatters*, the *Gatehouse Project* and the *Penn Resiliency Program* require substantial staff training and school policy review before the programs can be delivered to students. In the case of the *Penn Resiliency Program* this training can span up to 10 days (Positive Psychology Centre, 2007). These programs would be suitable to schools that are looking for a complete overhaul of their wellbeing curriculum, and are willing to spend large amounts of time and resources to reach the 'delivery' stage. Due to the time taken to plan and refine such a program, it is not possible to deliver the content to the students immediately (Bond et al., 2004). Schools looking for a program that is available for immediate implementation, and without the requirement of staff training, could consider either the *beyondblue Secondary Schools Program* or *SenseAbility*, as they are

available for immediate online access. Each session is already planned and contains instructions for teachers on content delivery.

The resilience-building/wellbeing programs vary in their target demographic. While all programs attempt to target the development of mental health in adolescents, some programs like the *Gatehouse Project*, the *beyondblue Secondary Schools Program* and the *Penn Resiliency Program* only target early adolescence (years 8-10). It is argued that students may not be ready to actively make changes to their mental health during this period, and such programs may be better targeted at the senior school (years 11 and 12) (Sawyer et al., 2010b). Additionally, in the senior school years, students are exposed to additional pressures, such as relationships, part-time work and extra school work (Bailey et al., 2016). Resilience-building/wellbeing programs are all the more important at this stage, as they provide students with the knowledge and skills needed to manage this additional stress, before it potentially manifests into a mental illness. Some programs are advertised as being suitable for years 8 through to 12, however, upon closer inspection of their pedagogy, seem unsuitable for students in senior years. For example, the 'Chicken Ransom' activity supplied by the *SenseAbility* program, which is essentially a game of 'Duck-Duck-Goose' (with the addition of self-reflection aspects), is not an age-suitable activity for senior schools students. When faced with such an activity, senior school students are likely to think the activity a waste of their time and cease to take the program seriously.

The resilience-building/wellbeing programs vary in length. *MindMatters* and the *Gatehouse Project* are designed to run for approximately 20 hour-long sessions. They would be suitable to schools that want to implement a wellbeing program for two terms, with one session occurring

per week. Schools looking to implement a program for a single term could consider the *beyondblue Secondary Schools Program* or the *Penn Resiliency Program*, as they comprise between 10 to 12 sessions, designed for delivery on a weekly basis. However, *beyondblue Secondary Schools Program* is designed to be implemented in one term for three consecutive years, so schools considering this program will need to commit for the entire length of the program. Schools seeking a resilience-building/wellbeing program that can be run for an entire school year, should consider *SenseAbility*. This program is adaptable for up to 54 sessions, designed for delivery on a weekly basis.

When choosing a suitable resilience-building/wellbeing program, schools and teachers need to be aware that the research base for some programs is poor. Ideally, a mental health intervention will have been trialled in randomised, controlled studies, and evidence of the program's performance would be recorded in peer-reviewed articles. Without this research foundation, the programs lack validity and reliability. This is not to say that the research behind the program's curriculum are not valid and reliable, simply that without multiple implementations and evaluations, it is impossible to measure the success of the programs themselves. The *Penn Resiliency Program* has undergone many peer-reviewed evaluations, and therefore its results can be seen as reliable, although the outcomes for one school do not dictate the outcomes for all others. The *SenseAbility* program has no known peer-reviewed studies conducted despite the organisation stating that 66% of Australian schools have a *SenseAbility* kit (beyondblue, 2016).

Determining the best practice for the development of student mental health and wellbeing requires an understanding of their motivation and behaviour, and schools may wish to explore

aspects of these before making a choice. There are several evidence-based models/theories available to assist in this understanding, including the Health Belief Model, the Theory of Planned Behaviour, the Transtheoretical Model and the Social Cognitive Theory (Glanz, Rimer, & Viswanath, 2008). The Health Belief Model is a framework that is used to explain and predict why people take action to prevent ill-health. It focusses on the attitudes and beliefs of individuals and their desire to avoid an adverse health outcome (Champion & Sugg Skinner, 2008). The Health Belief Model can be directly applied to the development of positive mental health in young people. Schools can use resilience-building/wellbeing programs to empower their students with the knowledge and skills needed to develop their mental health, but it is then up to the students as to whether they utilise that knowledge (i.e. their health belief). The knowledge and skills needed to develop positive mental health should be integrated into school curriculum and become a consistent component of students' schooling. In this way, positive mental health practices become a normal part of everyday life, and would have a positive impact on the students' attitudes and beliefs; reducing the likelihood of adverse mental health outcomes. The Theory of Planned Behaviour is a framework that is used to predict an individual's intended behaviour in situations where they have the ability to exert self-control (Montaño & Kasprzyk, 2008). It is thought that there are two direct determinants of an individual's intended behaviour; their attitude toward performing the behaviour, and how normal they believe the behaviour to be (Glanz et al., 2008). The Theory of Planned behaviour can be used to explain some of the effects of positive psychology on the state of mental health of young people, and why it is so important to model positive mental health in schools. If students are taught to focus on the positives in their lives, and they use this focus to actively control their negative thoughts and feelings, they will come to think of positivity as 'normal' behaviour. This leads to feelings of self-control when dealing with the stressors that are associated with the adolescent period. This self-control will

change the way that students behave in negative situations and lead to an overall improvement in mental health. The Transtheoretical Model, also known as the Stages of Change model, is a framework that attempts to explain the process of intentional behaviour change. It is based on the theory that people go through a number of stages when modifying their behaviour (Prochaska, Redding, & Evers, 2008). These stages are precontemplation, contemplation, preparation, action, maintenance and termination. The Transtheoretical Model offers an explanation for the need of resilience-building/wellbeing programs to be implemented in schools, consecutively through each year level. Students may not reach the 'action' stage of intentional behaviour change during their first experience of mental health curriculum. It is imperative to continuously expose students to mental health curriculum throughout their school career to ensure that they have to opportunity to work through the stages of behaviour modification at their own pace. The Social Cognitive Theory is a framework that is used to explain how people acquire and maintain certain behavioural patterns. The evaluation of behavioural change is mainly based on environment (both physical and social) and existing behaviour (McAlister, Perry, & Parcel, 2008). The Social Cognitive Theory is directly relatable to resilience-building/wellbeing programs that are implemented in schools. Such programs are designed to suit a school-specific environment, in which the desired behavioural pattern/outcome is to enable students to acquire and maintain positive mental health.

Schools spend years trying to teach their students to be independent, self-driven, free-thinking individuals. However, since schools have been given the responsibility of developing the mental health of their students, they are attempting to teach them how to feel and think, which is in some ways a great contradiction. The resilience-building/wellbeing programs often report no change in the depressive symptoms of students, despite positive comments by teachers. There is

no doubt that resilience is an essential ability to possess, however, no-matter how much effort schools put into their wellbeing programs, it will never be 100% successful.

### **5.3 Recommendations of the Study**

In order to reduce the increasing prevalence of mental illness in young people, strategies must be put into place. One such strategy is the implementation of a resilience-building/wellbeing program in secondary schools. In this setting, the programs are strategically targeted at young people during the vulnerable developmental period of adolescence. Schools can use the evaluations carried out in this study to determine which program is most suitable to their school climate. Staff should consider the following criteria when deciding on the suitability of a program: What is the major focus of the program? Does the program target the desired student cohort? How long does the program go for? Does the program require staff training? Can the program be implemented immediately? Has the program been trialled extensively? Furthermore, does its educational/psychological stance mesh with that of the school and current educational approaches? By addressing each of these criteria, schools can find a program that is the most appropriate for their needs.

In order to directly measure a program's ability to improve student mental health, it must undergo controlled trials. Only then do the results become a reliable indicator of the program's effectiveness. In light of this, it is recommended that schools choose a program that has undergone such trials.

### **5.4 Recommendations for Future Research**

To further maximise the findings of this study, programs evaluated could be broadened to include those that are external to Australia, but which have been successfully implemented overseas. This

larger sample would be beneficial to schools, because it creates a greater number of options to choose from.

In order to increase the reliability of specific programs, schools that are currently utilising/intending to use a resilience-building/wellbeing program are encouraged to conduct their own controlled trials. The research may require collaboration with a research institution, who would obtain ethical clearance for the study. The larger the research base for such programs becomes, the easier it will be for schools to decide on the most suitable option. Alternatively, the organisations behind the programs may conduct their own controlled trials and add to the information made available to schools.

## **5.5 Conclusion**

As the prevalence of mental illness in young people increases, so too does the need to develop their resilience. Resilience is crucial in a young person's ability to overcome setbacks and maintain positive social and emotional wellbeing. It has become commonplace to implement mental health interventions, like resilience-building/wellbeing programs, into schools in an attempt to counteract levels of student depression and anxiety.

Numerous resilience/wellbeing programs exist, however, they are not all appropriate for an Australian school setting, nor for implementation in a secondary school. Strategic selection criteria led this study to evaluate five applicable programs. Analysis of the programs showed that they are varied in their approach, despite the common goal of improving the mental health of young people.

Schools are encouraged to use the findings of this study to help make an informed decision in devising their mental health curriculum. This study alleviates the need to seek out numerous

sources, and provides summary tables to assist staff in determining the characteristics of the evaluated programs.

Schools must be aware that despite the curriculum of the programs being based on scientific research into the mental health of young people, without numerous randomised, controlled trials, the consistent performance of a program, which performed well during its original implementation, cannot be guaranteed.

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