

Chapter 2

Complete Mental Health in South Australian Youth: Prevalence, Measurement, and Promotion

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Seligman (2008) states that building psychological strengths to promote mental health may be the best approach to preventing or alleviating mental illness. According to the Australian Bureau of Statistics (ABS 1997), an individual with good mental health is considered to be able to handle day-to-day events and obstacles, function effectively among peers and society, and engage in health-promoting behavior. In contrast, the American Psychiatric Association (APA 2000) attests that an individual with mental illness is considered to exhibit a clinically significant behavioral or psychological set of symptoms (or is at significantly higher risk of these), and that such symptoms are associated with present distress, pain, disability, or a loss of freedom that impacts the individual's ability to function effectively.

At present, despite Seligman's call for a focus on building psychological strengths, most mental health information available to the public (e.g., brochures and general practitioner support) has focused on the elimination of mental illness, with little focus on psychological strengths and mental health. In order to address this broad issue, we set out to examine both mental health and mental illness within South Australian adolescents and to provide a baseline from which the mental health needs of young Australians may be better understood and met.

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Promotion of Mental Health in Australia

The promotion of mental and physical health has been, and remains, a priority of the Australian government. Promoting and maintaining good health is one of Australia's national research priorities, with AUD \$5 billion dollars allocated to the National Action Plan on Mental Health 2006–2011 (Council of Australian Governments [COAG] 2006). There is evidence to suggest that attempts to improve the physical health of Australian adults have been successful: The Australian Institute of Health and Welfare (AIHW 2008) has reported that since the 1950s, rates of smoking in Australian males have fallen from 75 to <20%, and deaths from cardiovascular disease have fallen 76% from their peaks in the 1960s. However, attempts to promote mental health in Australia have not met with the same success, particularly among youth. At present, mental health problems remain the largest nonfatal burden of disease in Australia, with 14% of youth aged 4–17 years (Sawyer et al. 2000) and 26% of youth aged 16–24 years (ABS 2008) reporting a mental health problem. In relation to health-risk behavior in Australian youth, 11% of young Australians (ages 14–19 years) smoke, 25% (ages 5–17 years) are overweight or obese, 24% (ages 14–19 years) drink alcohol on a weekly basis, and 62% (ages 15–24 years) are engaged in very little or no exercise (ABS 2006, 2009; AIHW 2005, 2006). Given the well-established links between mental and physical health (Shaffer-Hawkins et al. 2010), these rates of health-risk behaviors among Australian youth are causes for significant concern in the quest to improve mental health in this population.

Numerous programs have been developed and employed with the avowed intent to promote mental health in young Australians, all of which acknowledge the need for engaging, appropriate, and comprehensive strategies to respond to the specific needs of young people (McGorry et al. 2006). Few programs, however, actually promote mental health. To qualify this, it appears that the vast majority of mental health strategies and initiatives in Australia focus on the prevention or alleviation of mental illness, despite theoretical and empirical evidence that indicates that mental health is not automatically increased when mental illness is prevented or as mental illness decreases (e.g., Keyes 2005a). For example, the four strategies in Australia's current Action Plan on Mental Health (Council of Australian Governments 2006), to which funding is allocated, are to (a) reduce the prevalence and severity of mental illness, (b) reduce risk factors that contribute to mental illness, (c) increase access to health care for people with mental illness, and (d) increase the opportunities for people with mental illness to participate in the community. Therefore, the primary focus in this strategy is on the prevention and alleviation of mental illness, with an implicit assumption that the prevention and treatment of mental illness will indirectly promote mental health.

Why the Need to Promote Mental Health in Adolescence?

Adolescence typically refers to the developmental period between the ages of 12 and 20 years, and is characterized by changes in biological appearance, self-esteem, social networks, autonomy, and sexual maturation (Graber et al. 1996; Petersen and Leffert 1995; Seifert et al. 2000). Thus, while adolescence—the age of onset for most mental disorders (Kessler et al. 2005)—may be an overwhelming and stressful time, it may also provide opportunities for growth and the development of protective factors (Maggs et al. 1997). Protective factors for mental health include those psychological strengths (e.g., self-esteem or hope), contexts (e.g., stable family environment), or health-promoting behaviors (e.g., exercise or healthy diet) that act to increase the likelihood of desirable outcomes and buffer or moderate the negative influence of exposure to risk factors (Luthar 1991; Rutter 1987). Risks to mental health arise from stressors or circumstances that act to increase the likelihood of negative outcomes and decrease the likelihood of positive outcomes (Braverman 1999). Health-risk behavior is defined as participating in those activities that have a negative effect on health or are associated with undesirable consequences, such as tobacco smoking or unprotected sex (Keeler and Kaiser 2010).

Adolescence is the developmental period most commonly associated with an increased exposure to risk factors and an increased vulnerability to mental illness and/or the adoption of health-risk behavior (AIHW 2006; Larson and Ham 1993; Rowling 2006; Rutter and Smith 1995). To some degree, however, risk-taking behavior is a normal part of development as young people attempt to discover and consolidate their identities (Carr-Gregg et al. 2003), but it becomes abnormal when the type or frequency of the behavior has the potential for serious, long-term, and negative health consequences (Irwin et al. 1997). Moffitt (1993) defines two patterns of risk-taking behavior: a continuous *life-persistent* course and a temporary *adolescent-limited* involvement. It is suggested that the majority of risk-taking that stems from the perceived rewards available is adolescent-limited (i.e., rebellious image), and abandoned when prosocial behavior becomes more rewarding (Moffitt 1993). However, the combined or individual effect of mental illness, risk factors, and/or health-risk behavior in adolescence can prevent the natural development of the protective factors that, if developed early, are more likely to persist and have enduring consequences for physical and mental health (Maggs et al. 1997).

Australian Programs Employed to Promote Mental Health in Young People

Numerous efforts have been made within the research community in Australia to identify the prevalence of mental health in young people; trial programs have been designed to improve the mental health of young people, and coordination of services have been aimed at supporting young people at risk for the development of mental

illness. The effectiveness of these approaches at achieving these goals, however, is questionable due to their predominate focus on the identification and elevation of mental illness. Several noteworthy examples are introduced here, and their impacts are discussed below. The universal school-based Friends program was developed by Barrett and colleagues (Barrett et al. 2006), and has been trialed in Australia to determine whether it can help prevent the onset of anxiety and depression in young Australians. The Friends program aims to teach young people how to identify feelings, understand physiological responses, link thoughts to feelings, and develop the cognitive, physiological, and behavioral processes needed to prevent or cope with psychological distress. Roberts et al. (2003) conducted a trial of the Penn Prevention Program (PPP) to reduce the symptoms of depression in young Australians identified as being at risk of developing depression. The PPP was employed in a school setting and focused on teaching young people to identify feelings, subdue catastrophic thoughts, deal with family conflict, and develop coping skills.

Quayle et al. (2001) conducted a trial of a universal prevention program to reduce levels of depression and increase levels of self-esteem in young Australians. The program trialed by Quayle et al. focused on instructing young people about the link between thoughts and feelings, challenging pessimistic beliefs, and increasing coping skills, social skills, and problem solving. Headroom, launched in 2000, is an innovative website operated by the Child, Youth, and Women's Health Service (South Australia) that attempts to promote mental health in young Australians (ages 6–18 years), and increase health literacy and community awareness via games, information, and activities related to mental health (Headroom 2009). MindMatters, launched in 2000, is a government-funded approach targeted at young people while at school and is designed to enhance resilience; develop strategies to cope with change, loss, bullying, and harassment; and improve a child's overall understanding of mental illness (MindMatters 2009). Finally, Headspace, initially founded in 2006, is a federal government initiative that seeks to provide a national and coordinated approach to the mental health and social well-being of young Australians (ages 12–26 years), with a particular focus on the early identification of those at risk of developing mental illness (Headspace 2006).

The few studies that have attempted to describe the prevalence of mental health in Australian youth have predominately used indicators of negative functioning to do so (e.g., Sawyer et al. 2000; Zubrick et al. 1995). There is, moreover, some discrepancy evident in that some of the research has reported that up to a third of young people in Australia show significant psychological distress (Eckersley et al. 2005), while others have suggested that approximately 80% are satisfied with life and have good mental health (Smart and Sanson 2005). Thus, faced with this conflicting information, it is imperative that further information on a young person's complete mental health be obtained, and an alternative approach to assessing and promoting mental health be developed.

The main focus of the Friends program and PPP was to reduce the symptoms of anxiety and depression. While these programs were successful at achieving this in the short term, it is unclear whether or not levels of mental health were increased because no indicators of positive functioning were included in the studies that

evaluated them (Barrett et al. 2006; Lowry-Webster et al. 2001; Roberts et al. 2003). Similarly, a holistic and treatment-based approach was adopted by the Headspace and MindMatters initiatives, with an aim to increase knowledge about mental illness. However, Headspace and MindMatters arguably stopped short of actively promoting mental health because they primarily focused on providing information about and treating the symptoms of mental illness. Therefore, we argue that strategies and programs that focus on the prevention or alleviation of mental illness may be successful at doing just that, but they do not actively propel a young person toward a sustainable state of mental health, and effectively support only those who have mental health problems. In contrast, the Headroom initiative and the universal program trialed by Quayle et al. (2001) are a step in the right direction and focus on developing psychological strengths to prevent the onset of mental health problems. However, the sustainability of the benefits provided by the universal program trialed by Quayle et al. (2001) is unclear, given that no follow-up period existed beyond 6 months and given that the online and informational platform of Headroom fails to provide any practical strategies for promoting mental health and may not reach those who do not have the time, resources, or inclination to access the website.

Despite the contribution of research and programs such as those cited above, a high proportion of young Australians still experience mental health difficulties, engage in health-risk behavior, and are at risk of developing comorbid mental illness. In some part, this less-than-ideal situation may be the result of the flawed assumption that appears to underpin the promotion of mental health in Australia (i.e., that mental health can be obtained by reducing levels of mental illness), and the limited mental health information *not* based on the absence of mental illness.

With a perceived lack of alternatives, it seems the current situation has led to a failure to develop alternative strategies of identifying or attaining mental health outside of eliminating mental illness, despite empirical evidence that mental health and mental illness are not polar opposites, and the prevention or alleviation of the latter does not necessarily indicate or increase levels of the former (Keyes 2005a, 2007; Keyes and Lopez 2002). The success of any strategy based on the assumption that mental illness and mental health are opposite ends of the same continuum is therefore questionable. That is not to say that we do not acknowledge the importance of addressing mental illness, particularly given that the annual cost of mental illness is approximately AUD \$20 billion (COAG 2006). However, we suggest that a focus on mental illness is not a focus on mental health, nor does it promote mental health by default, and that the mental health needs of young Australians may be better served by an additional focus on a young person's psychological strengths.

An Alternative Approach to Mental Health

Since 1998, the field of positive psychology has contributed significantly to the conceptualization of mental health and has shown that increases in positive virtues or strengths are associated with better physical, psychosocial, and psychological

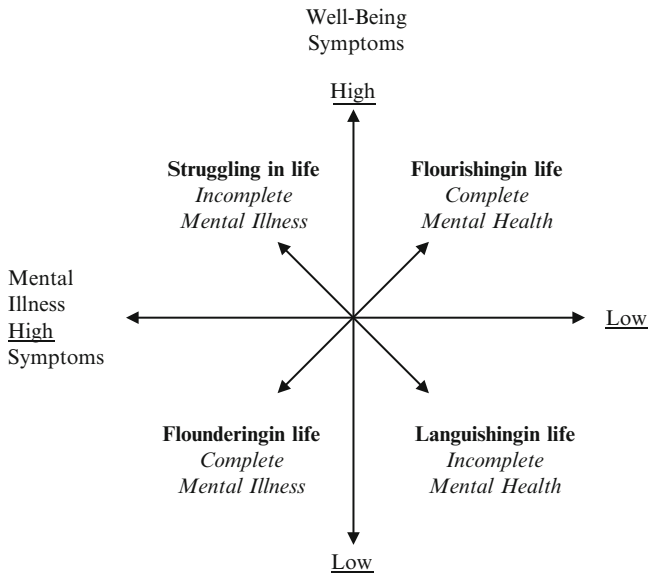


Fig. 2.1 Mental health and mental illness: the Complete State Model

functioning, and fewer symptoms of mental illness (Seligman and Csikszentmihalyi 2000; Seligman et al. 2005; Seligman 2005). It is suggested that if such a positive focus is adopted early in life, it can help develop a young person’s psychological strengths and lay the foundations of a sustained healthy life in adulthood (Licence 2004). From this perspective, the Complete State Model (Keyes and Lopez 2002) provides a valuable therapeutic and diagnostic framework for clinicians, and Snyder’s Hope Theory (Snyder et al. 1991) and Fredrickson’s Broaden and Build Theory (1998) offer two processes that can be employed to propel an individual toward a sustainable state of mental health.

The Complete State Model of Mental Health

The Complete State Model (CSM) of mental health is a diagnostic framework that conceptualizes mental health and mental illness separately, and as complete or incomplete states, as seen in Fig. 2.1 (Keyes and Lopez 2002). In this framework, Complete Mental Health (CMH) (i.e., *flourishing* in life) is not just the absence of mental illness, nor is it just the presence of high levels of subjective well-being, but rather, CMH encompasses the absence of mental illness *and* the presence of high levels of subjective well-being. Alternatively, incomplete mental health (i.e., *languishing* in life) encompasses low levels of mental illness *and* low levels of subjective well-being; incomplete mental illness (i.e., *struggling* in life) encompasses high levels of mental

illness *and* high levels of subjective well-being; and Complete Mental Illness (CMI) (i.e., *floundering* in life) encompasses high levels of mental illness *and* low levels of subjective well-being.

Practically speaking, an individual who is flourishing in life feels positive and is fulfilling their goals and aspirations, while an individual who is languishing in life lacks positive emotion and is not fulfilling their goals or aspirations in life (Grant and Cavanagh 2007). Research conducted by Keyes (2002, 2004, 2005b, 2006) has provided support for the CSM of mental health and has indicated that people classified as flourishing in life fare better than those who are not flourishing in terms of their physical, psychological, and psychosocial functioning.

In terms of a therapeutic framework, the CSM provides a way in which clinicians can organize and interpret an individual's cognitive, behavioral, and emotional functioning, and then translate aspects of these into objectives for therapy. Moreover, the CSM of mental health suggests that the objective of strategies to promote mental health must be to build those psychological strengths that can then shift people from poorer states of functioning (i.e., *languishing*, *struggling*, or *floundering*) toward a sustainable state of *flourishing* in life.

Hope Theory

The cognitive process of hope is an example of a positive psychological strength that can be employed as a mechanism to move young people toward a sustainable state of flourishing in life. According to Snyder's Hope Theory (Snyder et al. 1991), hopeful thinking consists of three elements: goal setting, *pathways* thinking, and *agency* thinking. Goals provide the anchor for the mental action sequences that are generated by successful hopeful thinking (Snyder 1994). Pathways and agency thinking are suggested to continually affect, and be affected by, each other during the goal pursuit process (Snyder 2000). Pathways thinking reflect an individual's capacity to conceptualize one or more avenues in order to arrive at a desired goal, while agency thinking reflects an individual's ability to initiate and sustain movement along a chosen pathway in order to reach that goal (Snyder et al. 1991). Successful hopeful thinking thus enables an individual to set goals, develop strategies to achieve those goals, and build and sustain the motivation to execute those strategies (Cheavens et al. 2006; Snyder et al. 1991). Hopeful thinking begins as children start to think about themselves and their goal pursuits (Snyder 2000). However, it is only upon reaching adolescence that an individual is suggested to have all the necessary cognitive resources required for successful hopeful thinking in all areas of life. According to Seifert et al. (2000), the development of formal operational thought enables a young person to emphasize the possible rather than the actual, reason systematically, and combine ideas skillfully. Relating this to hopeful thinking, it may be only during adolescence that young people can begin to envisage future goals, conceive possible and practical ways to obtain these, and envisage the practical benefits of goal pursuit in all aspects of their lives.

There is considerable evidence that high levels of hope promote physical and psychological health (Herth 1990; Nekolaichuk et al. 1999). When conceptualized cognitively, people high in hope—compared to those low in hope—not only believe that they can generate but actually generate more pathways to goals, sustain more energy to pursue goals, and view goal blockages merely as temporary setbacks (Snyder et al. 1991), even when faced with adversity (Cheavens 2000). In comparison, people low in hope set fewer goals, are more tenuous in their pursuit, are unlikely to produce alternative routes, and may view blockages as demoralizing (Snyder 2002). Thus, just as a generalized expectancy for failure can cause and sustain mental illness, it may be said that a generalized expectancy for goal success can promote mental health and protect against mental illness (Cheavens 2000). Furthermore, as hopeful thinking elicits emotion, people high in hope are suggested to experience enduring and positive emotions that are, in turn, accompanied by a zest for the pursuit of goals. This is in contrast to people low in hope, who are suggested to experience negative emotions accompanied by a lethargic attitude toward the pursuit of goals (Snyder 2002). Thus, the presence of high levels of hope appears to activate a positive upward spiral of functioning that better equips people with the skills and resources needed to overcome challenges and obtain a state of flourishing in life, while the presence of low levels of hope does not.

In terms of mental health promotion, this suggests that when faced with a challenging situation or a goal blockage, those low in hope may experience stress, which over time, elicits negative emotions. However, those high in hope will have the resources needed to redirect goal pursuit and alleviate any initial or subsequent stress that arises (Snyder 2002). There is evidence, moreover, that differences in hope levels have both short- and long-term effects. For example, compared to young people low in hope, young people high in hope report increased levels of physical and psychological functioning (Cheavens et al. 2006; Snyder et al. 2000, 1991), and the presence of high levels of psychological strengths when young is linked to positive mental health outcomes in adulthood (Arehart-Treichel 2006).

The Broaden and Build Theory of Positive Emotions

Fredrickson's Broaden and Build Theory of positive emotions (1998, 2002, 2008) states that the continued experience of positive emotions acts to broaden an individual's momentary thought–action responses (i.e., increase the range of responses available in a situation), build their enduring personal resources, and help people to cope more effectively with adversity (Fredrickson and Branigan 2005; Fredrickson and Joiner 2002; Fredrickson and Losada 2005; Fredrickson et al. 2003). Thus, while the experience of negative emotions may narrow the range of responses available in a situation and may also carry immediate adaptive benefits (i.e., fight or flight), the experience of positive emotions may widen the array of responses available and may carry indirect and long-term adaptive benefits. For example, *joy* creates the urge to play, push boundaries, be creative in one's activities, and expand involvement in life, while *interest* creates the urge to explore, learn, experience

new things, and expand the self (Fredrickson 2002). Thus, in contrast to the experience of negative emotions that, if prolonged, may lead to depression, anxiety, aggression, and health-risk behavior, the experience of positive emotions has indirect and long-term adaptive benefits because these emotions help to develop the psychological strengths and positive resources an individual needs in order to reach and sustain a state of flourishing in life (Fredrickson 2002; Fredrickson and Joiner 2002).

The Hope Activation Cycle

Drawing together elements from the three concepts described above, it therefore follows that the ability to successfully hope provides the experiences that are capable of shifting young people from poorer states of mental health toward sustainable states of positive mental health (i.e., flourishing in life). High levels of hope, according to Fig. 2.2, result in the activation of a positive upward spiral in which increases in goal success lead to increases in the experience of positive emotion (e.g., happiness). This positive emotion, in turn, increases momentary thought–actions and builds enduring personal resources (e.g., resilience), buffers against the onset of mental illness (e.g., depression), activates health-promoting behavior (e.g., physical exercise), and ultimately leads to a state of flourishing in life. However, low levels of hope may lead to a state of languishing, struggling, or floundering in life. Low levels of hope, according to the model, may or may not result in the activation of a negative downward spiral. Nonetheless, the inability to successfully hope may leave an individual susceptible to mental illness.

The model depicted in Fig. 2.2 combines two related but increasingly disparate fields of investigation that have dominated research on well-being. The *hedonic* approach, traditionally aligned with positive psychology, conceptualizes well-being as a state with high levels of positive affect, low levels of negative affect, and a high degree of life satisfaction (i.e., subjective or short-term well-being; Boskovic and Jengic 2008). The *eudaimonic* approach, traditionally aligned with positive mental health, conceptualizes well-being as the processes that lead to the sustained fulfillment and/or realization of an individual's full potential (i.e., psychological or long-term well-being; Boskovic and Jengic 2008; Keyes et al. 2002). Ryan and Deci (2001), however, suggest that well-being is best conceptualized as incorporating elements of both the hedonic and eudaimonic approaches.

Consistent with this, Keyes et al. (2002) have empirically confirmed that subjective well-being and psychological well-being *are* related and *are not* mutually exclusive concepts. In line with this, the proposed model (Fig. 2.2) similarly assumes that feeling good in the short term (i.e., via increased levels of hope and the upward spiral of positive emotions that follow) may ultimately build the psychological resources needed to live well in the long term and provide clinicians with a mechanism to increase the mental health of young people.

The ability to successfully hope, an exemplar of a psychological strength, is an important element of mental health because it provides a young person with the

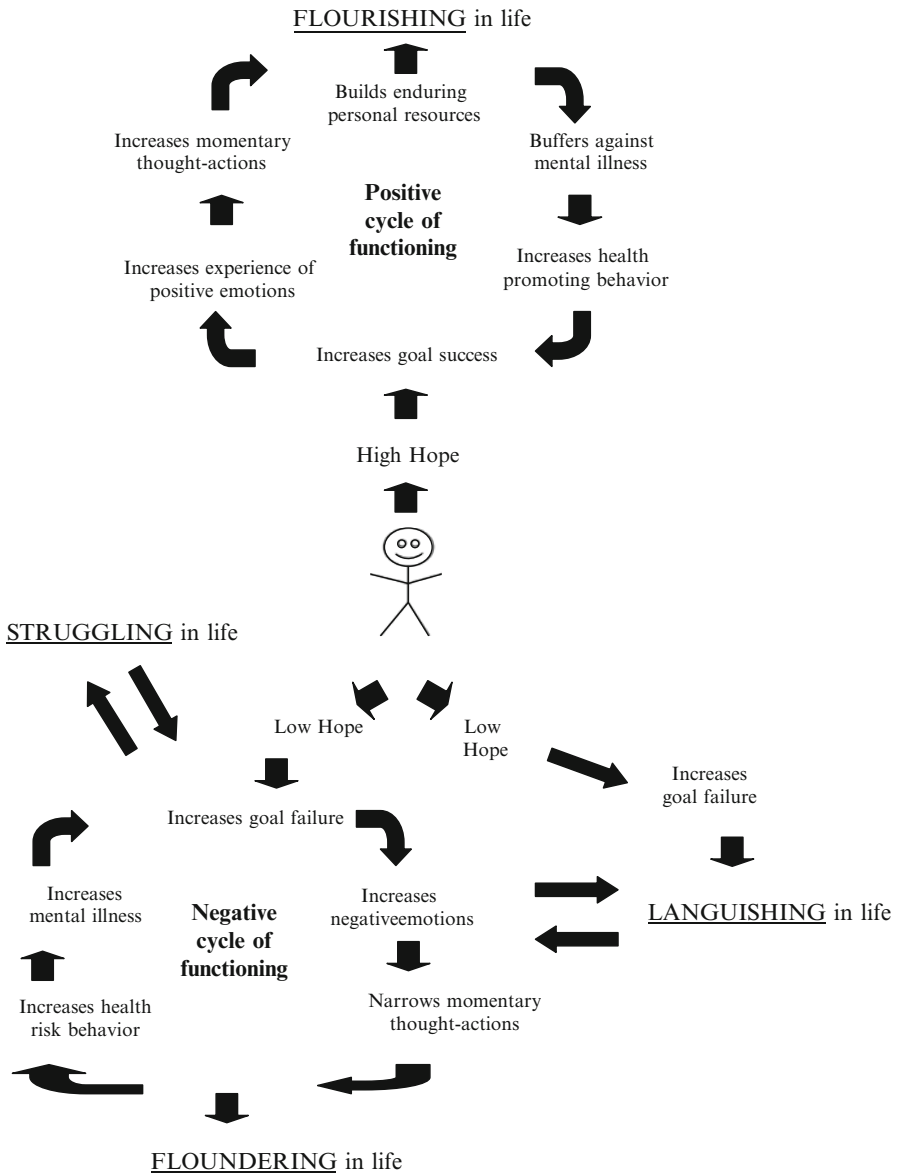


Fig. 2.2 The Hope activation cycle

skills and resources needed to reach and sustain an optimum state of mental health. This implies that psychological strengths, such as hope, can be developed to increase levels of mental health and prevent or reduce symptoms of mental illness. There is a counter argument, namely, that a baseline or genetically determined set point exists to which the symptoms of positive functioning always return following any short-term increases (Headey and Wearing 1992; Kahneman et al. 1999).

The *hedonic treadmill*, as this effect has been coined, suggests that any attempt to increase an individual's positive affect is futile, even though levels may fluctuate, as no sustained increase can ever be achieved (Brickman and Campbell 1971; Headey 2006; Headey and Wearing 1992). In contrast, research from a positive psychological perspective has indicated that (a) levels of life satisfaction can and do change over time (Fujita and Diener 2005); (b) strategies that focus on developing hopeful thinking increase subjective well-being and decrease the symptoms of mental illness (Cheavens et al. 2006); and (c) as goals change or are changed with time, a focus on goals may avoid the hedonic treadmill and ensure that increases in positive affect do not become routine, but remain a source of positive uplift (King 2008). This supports the assumptions that levels of hope—a future goal-orientated process—can be increased, and moreover, that developing hope may be an important new mental health strategies focus that is complementary to, and may be more effective than, the current focus on alleviating mental illness.

Research in Australia from a Complete Mental Health Perspective

Numerous studies in the United States have conceptualized mental health within a positive framework and reported its prevalence and relationship to various physical, social, and behavioral outcomes (Cheavens et al. 2006; Fredrickson and Branigan 2005; Fredrickson and Joiner 2002; Irving et al. 1998; Keyes 2004, 2005b, 2006; Lopez et al. 2000; Snyder 2002; Snyder et al. 1991). Excluding the research described below, very little research has adopted this focus in Australia, and none have operationalized the CSM of mental health (Keyes and Lopez 2002). Most Australian research has focused on the identification (Sawyer et al. 2000), prevalence (Boyd et al. 2000), and prevention of mental illness (Barrett et al. 2006; Lowry-Webster et al. 2001; Shochet et al. 2001), which was presumed to indirectly report mental health. Our own research aimed to expand this focus and thus to contribute to knowledge in the area of mental health from a positive psychological perspective, extending the platform from which positive mental health strategies can be developed and launched to meet the mental health needs of young Australians.

The next part of this chapter describes and summarizes the outcomes from our recent research program exploring the effective measurement of a CSM in Australian youth and the relationships between the cognitive asset of hope, complete mental health, and health-risk behaviors in young Australians.

Objectives of Research and Sample

Our research has three broad objectives. First, we have strived to describe the status of mental health in young Australians according to the four states outlined in the CSM of mental health (Keyes and Lopez 2002), to examine the relationship of these states to health-risk and health-promoting behavior, and to provide an example of

Table 2.1 Age and gender distribution of sample from SAYMHS (58% from metropolitan areas)

Age	Male <i>n</i> (%)	Female <i>n</i> (%)	Total <i>N</i>
13	502 (48)	537 (52)	1,039
14	475 (49)	496 (51)	971
15	418 (50)	414 (50)	832
16	296 (43)	392 (57)	688
17	172 (45)	211 (55)	383
Total	1,863 (48)	2,050 (52)	3,913

how multiple measures can be combined to diagnose young people as flourishing, languishing, struggling, or floundering in life. Second, we have explored the possibility that the cognitive process of hope—used as an exemplar of a psychological strength—may predict mental health in young Australians better than mental illness does and thereby support the argument for shifting the primary focus of health promotion toward building an individual’s strengths.

Finally, we have attempted to establish normative scores for the Adult Hope Scale (AHS; Snyder et al. 1991) in a young Australian population. The AHS is an effective outcome measure that allows clinicians to assess an individual’s hope levels and/or the effectiveness of therapeutic interventions. It was purported, however, that the AHS also has the potential to be used as an initial resource to identify young Australians who differ from the developmental norm in terms of their hope scores and, where appropriate, to guide interventions to help those in need of reaching and sustaining a state of flourishing in life.

The South Australian Youth Mental Health Survey (SAYMHS)

The SAYMHS was a predominantly online survey designed to collect indicators of positive and negative functioning from young people throughout rural and metropolitan South Australia ($N=3,913$; refer to Table 2.1). This age range was chosen to coincide with the ages during which a young person attends secondary school in Australia (years 8–12) and to make the results comparable to previous Australian research examining mental health in this population (Sawyer et al. 2000). The SAYMHS consists of five well-validated measures chosen to operationalize the CSM of mental health (Keyes and Lopez 2002), as well as demographic questions used to gather information on factors known to be associated with mental health, and questions on health-risk (smoking cigarettes and alcohol consumption) and health-promoting behavior (e.g., adequate sleep and exercise). The measures included were (a) the AHS (Snyder et al. 1991), (b) the Satisfaction with Life Scale (SWLS; Diener et al. 1985), (c) the Psychological Well-Being Scale (PWBS; Ryff 1989), (d) the Social Well-Being Scale (SWBS; Keyes 1998), and (e) the Depression Anxiety Stress Scale 21 (DASS-21; Lovibond and Lovibond 1995).

Details of the power analysis, sampling method, scale selection, and procedures followed during the SAYMHS have been published elsewhere (Venning et al. 2009,

2011a) but are briefly outlined below. Data collection took place in early 2007. In total, 129 schools were approached to participate (i.e., every secondary school in South Australia listed either with the Department of Education and Children's Services or listed in the 2005 Annual Report of the Advisory Committee on Non-Government Schools in South Australia that had a student population over 100 was approached). Data were recorded from 41 of the 129 schools canvassed, and while it was not possible under our funding constraints to obtain a stratified random sample, our data were drawn from schools that covered a wide geographical area and broad socioeconomic spectrum. Parental consent and student assent were gained before data collection began. Data were collected electronically from 38 schools ($n=3,315$; no missing values) and manually from three ($n=598$). Two approaches were taken to missing data collected via the manual version of the survey: if one or more of the measures were left completely blank, the entire data set for that individual was excluded; and if isolated missing values existed, mean imputation was used. No significant differences were found between the scores of participants who completed the online or the manual version of the survey, so data were merged for all analyses.

Outcomes of Research

Our first objective was to identify the prevalence and distribution of flourishing, languishing, struggling, and floundering in life in young South Australians, and to investigate the association of these states to health-risk behavior in order to better inform the development and targeting of mental health strategies. Data were drawn from the SAYMHS and combined to classify young people according to these diagnostic groups on the basis of their combined scores on the PWBS, SWBS, SWLS, and DASS-21. Results indicated that 42% of young people sampled were flourishing in life, 5% were languishing, 36% were struggling, and 17% were floundering in life. Therefore, contrary to what had been previously reported in Smart and Sanson's (2005) study (i.e., that 80% of young Australians have "good" mental health), these results suggest that <50% of young South Australians are flourishing in life.

In addition, flourishing in life was associated with more health-promoting and less health-risk behavior, while floundering in life was associated with more health-risk and less health-promoting behavior. There were, moreover, gender and regional differences in the uptake of health-risk or health-promoting behavior according to CMH states. Table 2.2 provides a description of the health behavior according to CMH states. Results have been reported in more detail elsewhere (Venning et al. 2012).

Our second objective was to examine the relationship between hope and mental health, and mental illness and mental health. It has been reported that, compared to young people low in hope, young people high in hope report increased levels of physical and psychological functioning (Snyder et al. 2000). However, whether hope predicts mental health in young people has remained empirically untested. Data were drawn from the SAYMHS, and scores from the PWBS, SWBS, and SLS were used to define the latent variable of mental health; scores from the DASS-21 comprised the latent variable of mental illness; and scores on the AHS comprised

Table 2.2 Health behavior of sample from SAYMHS ($N=3,913$) within Complete Mental Health States

	Smoke cigarettes		Consume alcohol		Exercise per week		Sleep per night	
	Yes	No	Yes	No	<5 h	>5 h	<8 h	>8 h
Flourishing ($n=1,639$) (%)	12	88	58	42	48	52	61	39
Languishing ($n=202$) (%)	18	82	62	38	61	39	72	28
Struggling ($n=1,401$) (%)	19	81	63	37	55	45	70	30
Floundering ($n=671$) (%)	27	73	69	31	61	39	76	24

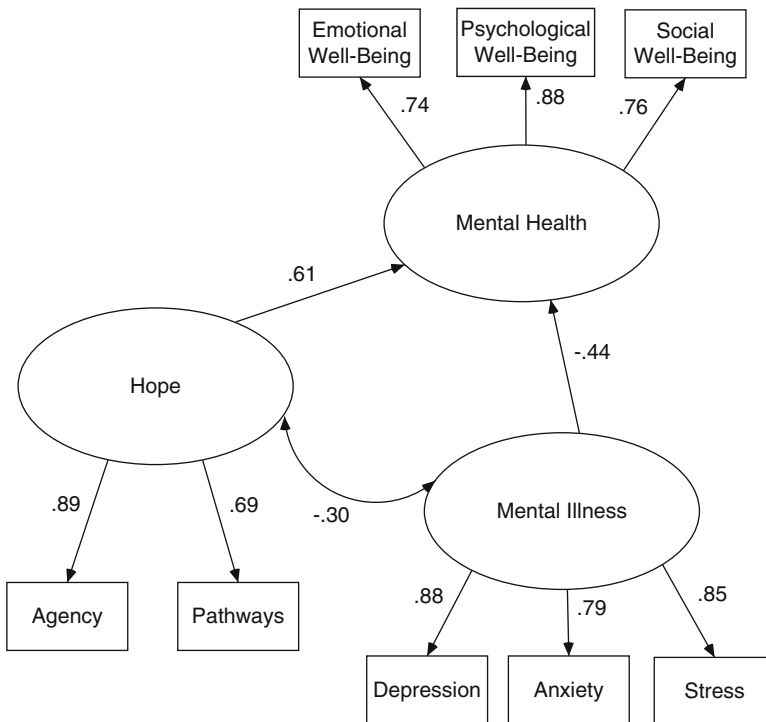


Fig. 2.3 Path-analytic model: the influence of hope and mental illness on mental health

the latent variable of hope. Confirmatory Factor Analysis (CFA) was then employed to confirm the independence of mental health and mental illness, and to examine the relationship between hope and mental health and mental illness and mental health, before the predictive nature of hope’s components to mental health were examined separately. Results (reported in more detail elsewhere; Venning et al. 2011) indicated that hope was a better predictor of mental health than was mental illness (see Fig. 2.3), and, regardless of gender, agency explained significantly more of the variance in mental health than pathways.

Our final objective was to establish normative scores for the AHS (Snyder et al. 1991) in a young Australian population. Analysis of data indicated that there was a statistically significant difference in hope scores across age (i.e., scores rose from 13 to 16 years, but dropped at 17 years) and between regions (i.e., scores were consistently lower in rural compared to metropolitan areas), and a statistically significant difference in pathways scores existed between 17-year-old males and females (i.e., females reported lower scores than males). Results have been reported in detail elsewhere (Venning et al. 2009).

Promoting a Sustainable Mental Health in Australia

The research undertaken was based on the premise that a focus on developing one's strengths (e.g., hope), rather than on preventing or treating the symptoms of mental illness, is a better way to promote a sustainable mental health. As per the Hope Activation Cycle, it is purported that the successful and continued ability to hope (an exemplar of a psychological strength) may be a vital mechanism that activates a positive cycle of functioning, which ultimately leads to a sustainable state of mental health.

Prevalence and Measurement of Complete Mental Health in Young People

This study is the first to describe mental health in Australian youth according to the states outlined by the CSM of mental health (Keyes and Lopez 2002), and indicates that the prevalence of mental health in young people in Australia has been overestimated. Indirectly, the disparity between the current results and previous results based upon a more restricted definition of mental health may indicate that previous information has been, and is, insufficient to guide the development and targeting of strategies to promote mental health in Australia. In contrast, the current information may offer a more comprehensive picture of mental health that incorporates both positive and negative symptoms of functioning. The current results also suggest that a one-size-fits-all approach to mental health is not appropriate as age, gender, and regional variations were evident not only in the prevalence of all four mental health states but also in the engagement in health-promoting and health-risk behavior, and in the development or employment of hopeful thinking. Thus, while the findings of this study may inform the development of positive mental health strategies in Australia, it also suggests that such strategies need to be tailored to address variation across age, gender, and location. Further research is needed to explore the relationships between mental health and health-risk behavior, and hope and mental health.

It is argued that Australian programs that aim to promote mental health in young people, along with the Australian National Action Plan on Mental Health (2006), undervalue the importance of psychological strengths and, in isolation, may fail to identify those young Australians who require assistance in order to flourish in life, despite the absence of mental illness. The current research provided information about mental health in a young Australian population in an attempt to reduce the reliance on negative measures of functioning as indicators of mental health, and to provide a more comprehensive picture of mental health. Additionally, this study aimed to increase the awareness and use of positive measures of functioning in identifying young people who may need assistance in order to reach and sustain a state of flourishing in life. Specifically, the current research provides an example of how multiple, positive, and freely available psychological measures can be combined to diagnose people as flourishing, languishing, struggling, or floundering in life. Moreover, the provision of Australian normative scores for the AHS, broken down by age, gender, and region, may increase its usefulness in Australian clinical or health-care settings by making hope scores more meaningful in an Australian population and, in doing so, lessen the reliance on measures of mental illness as indicators of the presence or absence of mental health.

Promotion of Complete Mental Health in Young Australians

Our study found that hope predicted mental health better than did mental illness, and that the state of flourishing in life was associated with more health-promoting and less health-risk behavior than other states. Based on the Hope Activation Cycle, it is proposed that hope has the ability to activate a positive cycle of functioning that propels an individual toward a sustainable state of flourishing in life, and therefore, a focus on hope could be a useful element of any mental health strategy targeted at young Australians. Research has indicated that around 70% of patients relapse within the first 6 months following therapy to treat the symptoms of major depression (Ramana et al. 1995).

Keyes and Lopez (2002) have reported that the limited effectiveness of such therapies may be due to a narrow focus (i.e., mental illness, not mental health) that may effectively reduce the symptoms of mental illness in the short term but, in the absence of building positive strengths, only leaves individuals susceptible to their return. Accordingly, without an explicit focus on building psychological strengths (e.g., hope), Australian initiatives may overlook the strategies needed to effectively develop and promote mental health. The current research suggests, therefore, that a focus on hope may be a part of what is missing in these programs, and its addition may increase their effectiveness, promote a state of flourishing in life, and reduce the burden of mental illness in young Australians.

Future Directions

Clearly, further investigation into the role that hope plays in a young person's mental health (outlined in Fig. 2.3) is required. This may involve the development and trial of studies that not only examine the individual components of the proposed model and use Confirmatory Factor Analysis to examine the model (or the relationship) between variables if hope is substituted for other psychological strengths, but also promote mental health in young Australians through the development and trial of a hope-focused strategy. In regard to the latter, the AHS (Snyder et al. 1991), in conjunction with the newly developed Australian normative scores, may be used to identify young Australians who report low hope scores relative to the developmental norm and investigate the effectiveness of an individual or group strategy to increase hope and promote a state of flourishing in life.

Cheavens et al. (2006) reported that, following an 8-week hope-focused therapy, adults reported increases in agency, hope, and pathways scores, but more importantly, that these increases were associated with increases *and* decreases in other psychological constructs (e.g., increases in life meaning and self-esteem, and decreases in anxiety and depression). Such findings support the notion that a hope-focused approach to mental health may be a simple and useful way for clinicians to both identify young Australians in need of assistance and to activate a positive cycle of functioning in order to propel them toward a state of flourishing in life.

This research was not the first to have discussed and championed the role of hope in mental health. Nor is it the first to suggest that building mental health, rather than repairing mental illness, is a better focus of health promotion, simply because building mental health may directly or indirectly alleviate and undo the root causes of mental illness (Duckworth et al. 2005; Keyes and Lopez 2002). Nonetheless, this research was the first to lay the foundation from which a positive approach can be launched to meet the mental health needs of young Australians. There may be some reluctance to move toward a more comprehensive and positive view of mental health because doing so would increase the number of young people that could be diagnosed with poor mental health, such that the task of promoting mental health appears insurmountable, given existing resources. Such misgivings may be countered by the observation that a positive approach to mental health enables the identification of adolescents who may have previously gone unnoticed (i.e., by the absence of strengths rather than just the presence of mental illness) and indirectly reduces the future burden of mental illness by promoting a sustainable mental health (Venning et al. 2011b).

Conclusion

It has been claimed that promoting an individual's psychological strengths, such as hope or positive emotion, may be the best weapon against mental illness (Seligman 2008). The current research embraces this perspective and represents a first step to

complement previous work based on a positive paradigm, thereby extending the platform in Australia from which positively focused strategies can be developed and launched in order to promote mental health in young people. Combined, the results suggest that a focus on positive strengths, such as hope, may play an important role in the mental health of young Australians and should be part of strategies designed to promote mental health. It is hoped that this research helps to redirect the focus of mental health policy and practice in Australia by highlighting the importance of positive symptoms of functioning—and by supporting claims that these *must* trump the negative—as a priority in developing strategies to promote a sustainable mental health and reduce the burden of mental illness, both in adolescence and beyond.

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