

Positive Health

The secret of health for both mind and body is not to mourn for the past, worry about the future, or anticipate troubles, but to live in the present moment, wisely and earnestly. Buddha.

Health is a cornerstone of a holistic model of positive education. Within the model, health is defined as practising sustainable habits for optimal physical and psychological health that are developed from a sound knowledge base. Evident by this definition is the notion that health consists of multiple components and that complete health is achieved when a person is physically, mentally, socially, and emotionally well.

Positive health plays an integral role within the model of positive education for several reasons. First, helping members of the school community to live healthy, vital, energetic, and resilient lives is essential to flourishing which is the overall goal of the positive education framework. Second, the importance of promoting mental and psychological health is underscored by high rates of depression, anxiety, and other mental health problems during adolescence (Sawyer et al., 2000). Third, as many major health conditions are preventable, a valuable aim is to help young people develop health behaviours that will have a beneficial impact over the life course. Fourth, health is important for effective learning and there is evidence to suggest that students who thrive physically and psychologically also perform well in their studies (World Health Organization, 2011).

The purpose of this summary is to outline research that informs the health domain of the model of positive education. First, discussion will explore the importance of holistic health and the mind-body connection. Discussion will then focus on important strategies for increasing and improving health. While health is a broad and comprehensive topic this review will focus on the following components that are integral to the model of positive education: (1) mindfulness; (2) optimism; (3) resilience; and (4) general health behaviours, such as nutrition, exercise, and sleep.

Holistic health and the mind-body connection

While historically the mind and the physical body have been considered and studied separately, recently there has been increased focus on holistic health whereby the entire person is considered as an integrated and interconnected entity (Hassed, 2008). This holistic approach to health is consistent with the World Health Organization's (1948) definition of health as "a state of

complete physical, mental, and social well-being and not merely the absence of disease or infirmity". Keyes (2002, 2005) proposes that complete health consists of several related factors: (1) physical health and well-functioning physiological systems; (2) subjective/emotional health or positive affective evaluations of life and the ability to manage and regulate emotions effectively; (3) social health or the presence of warm, trusting relationships and the capacity to interact effectively with others; and (4) psychological health including the ability to handle challenges and feelings of confidence about the future. More information on Keyes' model of complete health is provided in the summary on flourishing.

In addition to an exploration of physical, psychological, social, and emotional components of health, is an understanding of how different human systems complement and mutually influence each other. Increasingly scientific and health communities are recognising the mind-body connection or the impact that thoughts and emotions have on physiological systems and vice-versa (Novack, Cameron, & Epel, 2007). A simple example of the mind-body connection is the flight or fight response: when the *mind* perceives something as threatening the *body* demonstrates a strong physical and physiological reaction such as increased heartbeat and distribution of blood to the muscles (Hassed, 2008). Evidence for the mind-body connection is provided by numerous studies that suggest a reciprocal relationship between mental/psychological health and physical health (Chida & Steptoe, 2008; Pressman & Cohen, 2005). Due to this strong connection, cognitive strategies such as mindfulness have valuable physical and psychological consequences.

Mindfulness

Mindfulness is defined as purposefully paying non-judgemental attention to what one is experiencing in the current moment (Melbourne Academic Mindfulness Interest Group, 2006). While the mind has a tendency to focus on future worries or past disappointments, mindfulness involves focusing on current sensory experiences. The objective is to welcome and accept the current state including any emotions, thoughts, and perceptions (Kabat-Zinn, 2003). There are a range of mindfulness approaches and modalities (e.g., mindfulness-based stress reduction, mindfulness-based cognitive behavioural therapy). However, the majority of approaches include *formal* practice such as guided meditations and *informal* practice such as focusing on the breath or bringing open and accepting awareness to activities of daily living (Hassed, 2008).

Mindfulness is believed to have a positive impact on the physical body, in particular a calming of the stress response and improvement of immune functioning (Hassed, 2008). In addition, mindfulness creates a state of relaxed attention that enables the individual to achieve more flexibility in their psychological and physical responses to various situations (Greenberg & Harris, 2011). Regularly practicing mindfulness is believed to lead to deeper self-awareness and increased capacity to manage emotional responses effectively (Black, Milam, & Sussman, 2009). Indeed, studies and reviews of mindfulness programs have consistently found it to be effective in improving health and preventing ill-health in adult populations (Baer, 2003; Grossman, Niemann, Schmidt, & Walach, 2004).

Mindfulness research in children and adolescents is in the formative stages but initial results are promising (Burke, 2010). In a meta-analysis of 16 studies of mindfulness therapies in children and youths (age ranging from 6 to 18 years), mindfulness programs were found to have a beneficial impact on physical health (e.g., cardiovascular functioning), mental health (e.g., symptoms of anxiety), and behavioural outcomes (e.g., social skills, attention, problematic school behaviours) with moderate effect sizes across all outcome variables (Black et al., 2009). Similar results were found in a review of fifteen mindfulness studies in children and adolescents, suggesting that mindfulness has a key role to play in students' health (Burke, 2010).

Research suggests that regular mindfulness practice is essential for beneficial outcomes. Huppert and Johnson (2010) conducted a study where a sample of 155 adolescent boys (aged 14 and 15) were allocated to a four week, 40-minute mindfulness program or to a control condition that involved classes as usual. Contrary to expectations, there were no significant differences between students in the mindfulness group or students in the control group on measures of resilience or psychological wellbeing after the program ended. However, analysis of the data of students who completed the mindfulness training yielded some interesting results. Within this group, mindfulness practice was a significant predictor of wellbeing change with students who regularly practiced mindfulness reporting improvements in psychological wellbeing. This finding suggests that learning about mindfulness is not enough – mindfulness techniques must be applied and practiced regularly for benefits to be obtained. Burke (2010) proposed recommendations for the use of mindfulness in schools including: amending the length of the mindfulness practice to cater for shorter attention span compared with adults, the use of active forms of mindfulness such

as walking meditations and yoga, and, where possible, the inclusion of key adults in students' lives such as parents, caregivers, and teachers, to reinforce the practice across important life domains.

Optimism

Optimism involves people's expectations about the future (Seligman, 2006). An optimistic person is hopeful about future possibilities and feels confident about his or her ability to overcome challenges and achieve future goals (Carver, Scheier, & Segerstrom, 2011). Optimism is associated with persistence in the face of failure and resilience against disappointments (Seligman, 2011). In contrast, pessimism is associated with a sense of hopelessness and low confidence and self-efficacy (see the positive accomplishment domain for a related discussion on hope). Importantly, the goal is to cultivate *realistic optimism*, or sense of the self as worthwhile and the future as promising, in contrast to self-deceptions and/or irrational, delusional beliefs about the self and the world (Schneider, 2001; Seligman, 1995).

Central to optimism is an understanding of *attributions* or *explanatory styles* (Seligman, 1995, 2006). An explanatory style relates to the causes people attribute to good and bad events, with three key influential factors: permanence, pervasiveness, and personalisation. A person with an optimistic explanatory style views good events as permanent and bad events as temporary, with the opposite being true for a pessimistic explanatory style. For example, a bad score on a maths test may be explained as either: (a) I didn't study enough for the test, I will do better next time (temporary, optimistic); or (b) I am never going to be good at maths (permanent, pessimistic).

Pervasiveness concerns the extent to which good or bad events are viewed as related to other life domains. An optimistic explanatory style is associated with the view of positive events as pervasive and universal and negative events as specific to one life domain. Once again, this association is reversed for a pessimistic explanatory style. For example, a disappointing result at a swimming competition may be explained as: (a) I am terrible at sports (universal, pessimistic); or (b) my athletic strengths and talents are in team sports (specific, optimistic). The third aspect of explanatory style is personalisation or whether good and bad events are attributed to internal or external causes. An optimistic style is associated with crediting the self with good outcomes and external circumstances for disappointing outcomes. A pessimistic explanatory style is associated with self-blame for negative outcomes and crediting external causes for good outcomes. For example, the formation of a new friendship may be explained by: (a) I am a worthy, friendly person

with a lot to offer others (internal, optimistic); or (b) she must be a nice person to go out of her way for someone like me (external, pessimistic).

The benefits of optimism for health are well-established (Seligman, 2011). According to Carver, Scheier, and Segerstrom (2011) optimism is associated with enhanced ability to cope with stressful situations, increased engagement with health behaviours that protect physical wellbeing, and thriving social relationships. In a meta-analytic review of 83 studies, Rasmussen, Scheier, and Greenhouse (2010) found that optimism was significantly associated with a range of physical health outcomes including mortality, immune functioning, cardiovascular health, physical symptoms, and pain. In a specific example, Peterson, Seligman, and Vaillant (1988) reviewed responses to an open-ended questionnaire filled out by Harvard graduates in the early 1940s. They coded the responses based on whether they displayed characteristics of optimistic or pessimistic explanatory styles. Thirty five years later, participants were assessed by a physician; those with an optimistic explanatory style displayed superior health outcomes to those with a pessimistic explanatory style. As well as being a strong predictor of physical health, optimism is a key component of psychological resilience.

Resilience

Reivich et al. (2010) explain that resilience is “the ability to grow and thrive in the face of challenges and bounce back from adversity. Resilience enables you to take calculated risks and capitalise on opportunities”. While negative and stressful life events invariably lead to unpleasant emotions such as grief, frustration, sadness, or disappointment, a resilient person maintains effort and hope in the face of adversity. Furthermore, resilient people take risks. For example, a highly resilient student may feel confident to put up his or her hand to ask for help, or try out for the school play despite feeling nervous and apprehensive. Low levels of resilience are often associated with depression (Gillham, Brunwasser, & Freres, 2008; Seligman, Schulman, DeRubeis, & Hollon, 1999). Reivich and Shatté (2002) propose that resilience comprises of 7 factors: (1) the ability to manage and regulate emotions; (2) the capacity to control impulses; (3) optimism; (4) flexible thinking; (5) empathy; (6) self-efficacy and confidence in one’s ability to achieve goals; and (7) reaching out and the willingness to connect with others.

Substantial research has focused on the promotion of resiliency in schools (Neil & Christensen, 2007; Stewart, Sun, Patterson, Lemerle, & Hardie, 2004). One approach that has

been the subject of substantial research is the Penn Resiliency Program (PRP; Gillham et al., 2008). The PRP is a school-based resiliency program that is based on a cognitive-behavioural framework and is aimed at children aged between 10 and 14 years. The program aims to enhance resilience and prevent depression by teaching young people social problem solving skills and cognitive and behavioural skills including cultivating an optimistic explanatory style, disputing automatic negative thoughts, and generating alternative actions when faced with challenges (Gillham et al., 2007).

In the initial evaluation of the program, Jaycox, Reivich, Gillham, and Seligman (1994) delivered the PRP to 69 students (aged 10 to 13) who were at risk for depression, they were compared to a control group of 73 age-matched students. They found that participants in the PRP condition had fewer symptoms of depression and displayed improved behaviour relative to controls at post-test and at six month follow up time points. In addition, at two year follow up, Gillham, Reivich, Jaycox, and Seligman (1995) found that students in the PRP group had reduced symptoms of depression relative to the control group. Since its development, the PRP has been examined in various samples including children who are at-risk of depression (Gillham, Hamilton, Freres, Patton, & Gallop, 2006); rural school children (Roberts, Kane, Thomson, Bishop, & Hart, 2004), and children with parents who are divorced (Zubernis, Wright Cassidy, Gillham, Reivich, & Jaycox, 1999). A recent meta-analysis by Brunwasser, Gillham, and Kim (2009) of 17 studies (total N = 2,498) found that students who complete the PRP exhibit significantly lower symptoms of depression up to 12 months post-intervention than controls (with moderate effect sizes). Taken together, these studies provide substantial evidence that the PRP is an effective method of helping students become more resilient and prevent depression and mental ill-health.

General health behaviours

In addition to specific strategies such as mindfulness, optimism, and resilience, the positive health domain includes general preventative behaviours that promote healthy growth and development. General health behaviours important to the positive education model include, but are not limited to, nutrition, exercise, sleep, sexual health, and stress management. The preventative effects of healthy behaviours on physical and mental health are well established (Hassed, 2008). In particular, the influence of good diet (Dauchet, Amouyel, Hercberg, & Dallongeville, 2006) and exercise (Warburton, Whitney Nicol, & Bredin, 1996) on health are irrefutable. Furthermore, sleep

(Moseley & Gradisar, 2009; Pasch, Laska, Lytle, & Moe, 2010) and risk-taking behaviours (Kelley, Schochet, & Landry, 2004) are health topics especially relevant to adolescence as a stage of human development.

As with all components of the model of positive education, the objective is to promote health behaviours through explicit and implicit school practices. Within the classroom, lessons on physiology, human biology, physical education, and psychology help students develop understanding of how the mind and body work and how health can be promoted. Healthy choices and behaviours are also promoted through implicit practices such as access to good nutrition and safe and plentiful exercise facilities within the school community.

Summary and conclusions

Within the model of positive education, health is defined as practising sustainable habits for optimal physical and psychological health that are developed from a sound knowledge base. The positive health domain of the model of positive education recognises the explicit links between physical health and student flourishing and learning. The aim is to cultivate students who have a clear understanding of their own physical and mental functioning and who are committed to regularly practicing health promoting behaviours. For example, a goal is for students to understand the mind-body connection and how their thoughts influence their physical bodies and vice versa.

Core elements of the positive health domain include mindfulness, optimism, and resilience. Mindfulness, or paying non-judgemental attention to the current experience, is increasingly gaining recognition as an effective strategy for nurturing physical and psychological health within a school context (Black et al., 2009; Burke, 2010). Realistic optimism, defined as the expectation that good things will happen, is consistently linked with good health, with a healthy explanatory style being an especially powerful agent (Seligman, 2006, 2011). A worthwhile aim in educational settings is to help students cultivate resilience. The established effectiveness of the PRP has important ramifications as it emphasises that increasing self knowledge and learning important cognitive and social skills can help people to become more resilient and resistant to depression and mental ill-health. Furthermore, it establishes schools as important institutions for cultivating these skills and capacities in to a broad audience.

The model of positive education places students' health and wellbeing at the forefront of education. The aim is to cultivate good health through explicit teaching and learning and through

implicit strategies that promote safe and regular health behaviours and practices. Of vital importance is the recognition of general health behaviours such as good nutrition, exercise, sleep, and stress-management. Overall, it is recognised that a commitment to students' mental and physical health and wellbeing helps children and adolescents to live vital, thriving, and flourishing lives.

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