



LITERATURE REVIEWS

Norrish, J., Robinson, J. & Williams, P. (2011).

POSITIVE EMOTIONS

“HAPPINESS CONSISTS MORE IN SMALL CONVENIENCES OR PLEASURES THAT OCCUR EVERYDAY, THAN IN GREAT PIECES OF GOOD FORTUNE THAT HAPPEN BUT SELDOM.” *Benjamin Franklin*

A core goal of positive education is to help students anticipate, initiate, experience, prolong, and build positive emotional experiences. It is believed that helping young people to live lives high on positive emotions such as joy, gratitude, hope, pride, love, awe, and inspiration is a worthy goal in itself. In addition, recent research has found that experiencing positive emotions has benefits for mental and physical health, social relationships, and academic outcomes (Lyubomirsky, King, & Diener, 2005). This review explores why cultivating positive emotions is a worthy endeavour and how this can be achieved. More specifically, the aims are to: (a) overview research on the benefits of positive emotions; and (b) explore savouring and gratitude as simple strategies for achieving sustained, enhanced positive emotional experiences.

What are positive emotions and why are they adaptive?

Fredrickson and Branigan (2005) define emotions as short-lived experiences that produce changes in physiology, thoughts, and behaviours. In the academic literature, positive emotions fall within the umbrella term positive affect which also includes longer lasting positive moods (Diener, 2000). According to Russell's (1980) circumplex model, positive emotions can be high activation (e.g., joy, excitement) or low activation (e.g., contentment). Importantly, experts agree that

positive emotions are more than the absence of negative emotions (Diener & Emmons, 1984). For example, feeling happy or excited is more than not feeling sad or bored. Helping members of school communities to live lives high in positive emotions (e.g., contentment, joy, and excitement) may be considered a worthy goal in itself. Indeed, positive emotions are believed to be powerful signals that life is going well (Fredrickson, 2009). Furthermore, frequently experiencing positive affect is proposed to be one of the three components of subjective well-being (along with infrequent experience of negative affect and feeling satisfied with life) which is considered an important outcome in psychological research (Diener, 2000). Overall a life high on positive emotions may be considered an indicator of good mental health, competence, and goal achievement.

In addition to being a signal of good mental health, positive emotions are believed to produce valuable benefits in important life domains. Lyubomirsky, King, and Diener (2005) conducted a meta-analysis of 293 cross-sectional, longitudinal, and experimental studies (resulting in a sample of over 275,000 participants) and found that positive emotions had a causal influence on social outcomes (e.g., social interactions and relationships); work outcomes (e.g., productivity and absenteeism); physical health outcomes (e.g., immune functioning and vitality); personal outcomes (e.g., creativity and energy); and psychological outcomes (e.g., resilience, self-confidence, and self regulation). Lyubomirsky et al. concluded that living a life high on positive emotions leaves individuals better equipped physically, psychologically, and socially to flourish and cope with the

challenges of life.

Broaden-and-build

Fredrickson's (2001, 2004) broaden-and-build theory provides an explanation for why positive emotions equip individuals for future success. The theory is based on two separate but related hypotheses. The first component (i.e., the broaden hypothesis) is that positive emotions broaden attention. The second component (i.e., the build hypothesis) is that broadened attention leads to increased engagement with the environment leading to the acquirement of resources over time. Research underlying these two concepts will now be considered in turn.

The fundamental assumption of the broaden hypothesis is that positive emotions widen attention and focus. Fredrickson (2001, 2004) proposes that negative emotions (e.g., fear, anger, sadness) are experienced in situations perceived as threatening. Therefore, attention is restricted or narrowed and individuals engage in specific-action tendencies such as fleeing, repelling, or attacking. In contrast, positive emotions widen focus and lead to broad, creative, and flexible thinking. Furthermore, positive emotions result in the consideration of a wider range of cognitive and/or behavioural options (also referred to as thought-action repertoires).

Support for the broaden hypothesis has come from numerous studies that have found that experiencing positive emotions in the present widens attention. Fredrickson and Branigan (2005) conducted two studies whereby 104 American college students were shown film clips designed to evoke different emotions (i.e., amusement, contentment, neutrality, anger, and anxiety). In the first study, participants allocated to the amusement and contentment conditions were found to pay attention to global visual stimuli whereby participants allocated to the neutral, anger, and anxiety conditions were found to focus on specific elements of the stimuli. In the second study, participants allocated to the positive emotion conditions displayed superior performance on a Twenty Statement Test (that requires individuals to generate lists of behaviours that they would like to do) than participants allocated to the negative or neutral conditions, leading the authors to conclude that positive emotions broaden thought-action repertoires. In addition, there is substantial evidence that positive emotions are associated with flexible and creative thinking (Isen, Daubman, & Nowicki, 1987). Taken together, these results support an association between positive emotions and broad and creative thinking.

The second tenant of the broaden-and-build hypothesis, is that broadened attention leads to increased engagement with the environment (Fredrickson, 2001). This increased engagement with the environment leads to a building of physical, social, intellectual, and psychological resources. For example, the experience of interest may lead to exploration and investigation, perhaps resulting in increased knowledge and understanding (Fredrickson & Joiner, 2002). Overtime,

increased interaction with the environment leads to enhanced capacity to flourish, capitalise on opportunities, cope with challenges, and deal with adversity (Fredrickson, 2009).

Richards and Huppert (2011) reported the results of a longitudinal, cohort study of 3,035 individuals and found that participants' positive and negative behaviours when they were young (i.e., 13 to 15 years old) predicted adaptive outcomes at midlife (i.e., mean age = 53). More specifically, significant, positive associations were found between positivity during adolescence and emotional health, frequency of social contact, and quality of social engagements during midlife. This finding provides longitudinal evidence that positive experiences build important resources over time. In further support for the broaden-and-build hypothesis, Fredrickson, Cohn, Coffey, Pek, and Finkel, (2008) conducted a study that invoked positive emotions through loving-kindness meditations. Adult participants (N = 139) were randomly assigned to a six week loving-kindness meditation program or to a non-active control condition. Compared to controls, participants allocated to the loving-kindness condition were found to report increased positive affect, self acceptance, and life satisfaction; more positive relationships with others; improved physical health; and decreased symptoms of depression. Fredrickson and Joiner (2002) propose that experiencing positive emotions is integral to flourishing in that positive emotions lead to upward spirals of well-being over time.



POSITIVE EMOTIONS AND PHYSICAL HEALTH

Pressman and Cohen (2005) conducted a substantial review of research into the association between positive affect and physical health. Pressman and Cohen suggest that methodological limitations and measurement inconsistencies make any firm conclusions impossible at this stage. However, they suggest preliminary or tentative evidence that positive emotions are good for physical health (particularly in terms of longevity, morbidity, and pain). In a study of 180 Catholic nuns Danner, Snowdon, and Friesen, (2001) found that the emotional content of autobiographies written when the nuns were young (i.e., mean age = 22 years) predicted longevity. More specifically, nuns who had positive emotional content in their writings when they were novitiates were found to live on average 10 years longer than those with little or negative emotional content.

There are several reasons why positive emotions could have a beneficial impact on health. For example, Pressman and Cohen (2005) suggest that experiencing positive emotions may encourage individuals to value life and their health and therefore engage in proactive behaviours such as exercising and eating well. Furthermore, positive emotions may equate with the release of hormones and neurotransmitters that have a protective and beneficial impact on health. Similarly, there have been several studies that have associated positive emotions with increased immune functioning (Pressman & Cohen, 2005).

Positive emotions may also have protective physiological consequences via the activation of the parasympathetic nervous system and the reduction of the stress response. According to Fredrickson, Mancuso, Branigan and Tugade's (2000) undoing hypothesis, positive emotions are incompatible with negative emotions and may correct (or undo) some of the adverse physiological consequences of negative emotions that are associated with the flight or fight response (i.e., cardiovascular reactivity, increased blood pressure). In two experimental studies of 175 and 180 participants, Fredrickson et al. found positive emotions partially reversed the adverse cardiovascular effects of an anxiety inducing task supporting the notion that positive emotions have a protective impact on health. While further research is needed to fully clarify the underlying mechanism, it seems plausible that positive emotions promote and protect physical wellness. Combining this with research on the psychological and social implications of positive emotions provides a strong case for integrating positive emotions as an essential component of the positive education model.

THE LOSADA-RATIO

Some theorists believe that it is the ratio of positive to negative emotions that is important for well-being. Fredrickson and Losada (2005) reviewed literature on flourishing individuals, business teams, and marriages and proposed that a ratio of positive to negative emotions of above 2.9 leads to flourishing (i.e., high well-being, resilience, functioning, and growth). One reason that the frequency of positive emotions may need to outweigh the frequency of negative emotions is that humans display a negativity bias. That is, because negative emotions are protective against danger, they are often stronger and more influential than positive emotions (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). Therefore, a higher frequency of positive emotions is required to overcome the salience of negative experiences and maintain well-being and mood.

Fredrickson and Losada (2005) tested their ratio theory in two studies of 87 and 104 participants. Individuals in each sample reported their experience of positive and negative emotions over a period of 28 days. They also completed a measure of flourishing. In both samples, individuals with positive: negative ratios of 2.9 or above met the criteria for flourishing, while those with ratios lower than the threshold did not.

Appreciating the spectrum of human emotions

While cultivating positive emotions is believed to have numerous benefits, negative emotions should not be avoided or suppressed. Held (2004) warns against the tyranny of the positive attitude or the danger of promoting the idea that positive emotions and thoughts must be continuously experienced. This may lead to harmful attempts to obtain and maintain positive moods without recognition of the natural variations in emotional experience. A related risk is that individuals may feel guilt or shame for experiencing valid and normal unpleasant reactions to stress or negative life events or that they may try to suppress their natural emotional reactions. Importantly, negative emotions facilitate quick and appropriate responses to threats and dangers. Indeed, Fredrickson (2004) proposes that all emotions have important functions and are imperative for survival and well-being.

In sum, when applying the model of positive education, it is important to encourage individuals to cultivate and enhance positive emotions without avoiding, suppressing, or denying negative reactions or emotions. An overarching objective is to help students understand that all emotions are normal, valid, and important parts of life. For example, Ben-Shahar (2007) recommends giving oneself the permission to be human or the freedom to experience the whole gamut of human emotions. Furthermore, as positive emotions are fleeting in nature, the key is not to grasp positive states too tightly, but to increase the frequency of positive emotions throughout daily life (Fredrickson, 2009).

THE CHALLENGE OF INCREASING POSITIVE EMOTIONS

While a worthy goal, increasing positive emotions may be surprisingly challenging. According to the hedonic adaptation theory, individuals quickly acclimatise to changes in their environments and, as a result, emotional responses remain remarkably stable over time (Diener, Lucas, & Scollon, 2009). One explanation for this is that experiencing a stimulus blunts sensitivity to the stimulus and therefore, increased exposure is required to gain an emotional response.

In contrast, Fredrickson (2009) explains that positive emotions are transient (or state like) and not a function of predetermined, stable personality traits. Therefore, increasing the quality and frequency of positive emotional experiences is possible. More specifically, Fredrickson's (2009) positivity toolkit includes 12 strategies for achieving a higher ratio of positive to negative emotions thereby enhancing the likelihood of flourishing. The twelve strategies are: (1) be open and curious about your surroundings and experiences; (2) cultivate high quality, respectful, and reciprocal relationships; (3) engage in acts of kindness and altruism; (4) develop healthy distractions or strategies for use during times of excessive rumination or negativity; (5) dispute unhelpful, negative thought patterns; (6) spend time in nature and beautiful settings; (7) explore and apply your strengths; (8) meditate and cultivate mindfulness; (9) practice loving kindness meditations; (10) be grateful and appreciate the good things in life; (11) practice savouring; and (12) visualise future possibilities and the successful achievement of important dreams and goals. Two particular strategies that have been researched and explored as successful strategies of increasing the frequency of positive emotions are savouring and gratitude.

Savouring

Savouring is defined as behaviours or cognitive habits that act to prolong or maximise the impact of positive emotions and experiences (Bryant, 2003). Bryant and Veroff (2007) posit that savouring can be about the past, present, or future. Savouring about the past involves reminiscing, sharing experiences with others, and thinking back to past successes. Savouring in the present involves deliberately focusing attention on enjoyable experiences. Savouring in the future involves anticipating future events and making exciting plans. In contrast, dampening involves behaviours that detract from positive experiences, for example, suppression, distraction, or fault finding (Quoidbach, Berry, Hansenne, & Mikolajczak, 2010).

Several research studies have found that savouring increases positive emotions and well-being. Bryant (2003) found that individuals' perceptions of their ability to savour were positively correlated with indicators of well-being (e.g., positive affect, optimism, subjective

well-being, and self-esteem) and negatively correlated with indicators of distress (e.g., guilt, hopelessness, depression, and negative affect). Bryant, King, and Smart (2005) explored the impact of reminiscence (i.e., the process of remembering the past) in two studies and found that individuals who frequently reminisced reported more positive emotional experiences than those who did not. Interestingly, participants encouraged to reminisce through cognitive imagery reported greater well-being benefits than those encouraged to reminisce through memorabilia suggesting that visual imagery is an especially powerful savouring strategy.

Quoidbach et al. (2010) conducted an experimental study of 282 participants and found that savouring strategies focused on being present in the moment, vividly remembering or anticipating positive events, and sharing events with others (i.e., capitalising) were associated with subjective well-being. In contrast, suppression strategies of fault finding, ruminating, and distracting were associated with decreased subjective well-being. Taken together, these studies support the power of savouring as a strategy for maximising positive emotions derived from life experiences.

Gratitude

Another way of increasing positive emotions is by cultivating gratitude. Gratitude is defined as thankfulness or feelings of appreciation that result from perceived fortune or the kindness of others (McCullough, Emmons, & Tsang, 2002). Wood, Froh, and Geraghty (2010) propose that individuals with dispositional gratitude have a tendency to notice and appreciate good outcomes in the world. There has been substantial correlational research that has found gratitude to be associated with good mental and physical health (Wood et al., 2010). For example, in a study of 154 adolescents (mean age = 12.14), gratitude was found to have positive associations with psychological outcomes (i.e., subjective well-being and optimism) and social outcomes (i.e., pro-social behaviour and social support). Interestingly, in this sample, females reported higher gratitude than males, but males were found to derive more gratitude from family relationships than females (Froh, Yurkewicz, & Kashdan, 2009).

There are several reasons why gratitude may effectively enhance positive emotions and well-being. Gratitude is believed to encourage the savouring of positive experiences thereby maximising the satisfaction that is derived from them (Froh, Kashdan, Ozimkowski, & Miller, 2009). Gratitude may direct attention to positive experiences and combat the negativity bias. Similarly, individuals with a grateful disposition have been found to be less focused on materialistic pursuits and more satisfied with what they already have than less grateful people (Froh, Emmons, Card, Bono, & Wilson, 2011; Polak & McCullough, 2006). Furthermore, gratitude has been found to play an important role in relationship formation, development, and enhancement (Algoe, Haidt, & Gable,

2008).

Gratitude is also believed to activate the broaden-and-build model of positive emotions. Froh, Bono, and Emmons (2010) conducted a study of 700 adolescents (aged 10 – 14) and found that adolescents who reported high gratitude at one time point reported higher life satisfaction and more social well-being six months later than those with initial low levels of gratitude. The authors proposed that gratitude led to upward spirals of well-being over time. Overall, it seems that gratitude is an effective strategy of enhancing positive emotions and other valued outcomes.

A common gratitude intervention focuses on attending to daily blessings or things that happen each day for which one is grateful (often referred to as the three good things activity). Froh, Sefick, and Emmons (2008) randomly assigned 11 classes of students (aged 11 to 14) to: (a) a three good things condition; (b) a condition that involved listing daily hassles; or (c) a neutral control condition. Students allocated to the gratitude condition reported more satisfaction with school experience than students allocated to the other two conditions; and enhanced well-being relative to students in the hassles condition. The benefits of the three good things intervention has also been found to lead to increased well-being in adult samples (Emmons & McCullough, 2003; Seligman, Steen, Park, & Peterson, 2005). However, a criticism of several gratitude studies is the use of comparison conditions that cultivate negative affect (i.e., focusing on daily hassles). Further research that uses more neutral control conditions would be valuable.

Another common gratitude intervention involves conducting a gratitude visit or an explicit display of appreciation for someone important to you. In a randomised controlled trial of adult participants, Seligman et al. (2005) found that individuals randomly allocated to a gratitude visit condition reported increased symptoms of well-being and decreased symptoms of depression for one month after the visit relative to individuals allocated to a control condition. Similarly, Froh, Kashdan et al., (2009) randomly allocated 89 students to a gratitude visit condition or a comparison control condition. Interestingly, Froh, Kashdan et al. found that adolescents with low initial levels of negative affect experienced more benefits from the gratitude visit than those with high levels of positive affect. This suggests that cultivating gratitude may be an especially powerful strategy for individuals with low frequency of positive emotions. Overall it appears that savouring and gratitude are effective strategies for cultivating positive emotions and enhancing well-being.

SUMMARY AND CONCLUSIONS

In summary, while negative emotions often lead to withdrawal and behaviour restriction, experiencing positive emotions are believed to lead to an individual engaging with their environment in an adaptive manner (Fredrickson, 2009). Over time, this is proposed to result in increased social, psychological, and cognitive resources and to empower individuals to flourish in challenging environments. Indeed, empirical research suggests that positive emotions have a causal role in promoting mental and physical health and achieving success in social, work, and academic domains (Lyubomirsky et al., 2005). While individuals' tendency to adapt to the circumstances of their lives (Diener et al., 2009) make achieving sustainable increases in positive emotions challenging, researchers have found that strategies such as savouring positive experiences and cultivating gratitude can lead to increased positive emotions. Overall, positive emotions are believed to be an integral and invaluable element of the model of positive education and provide a unique contribution to individual flourishing.



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RECOMMENDED RESOURCES

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- Fredrickson's website provides summaries of her theories and free access to journal articles on her research: <http://www.unc.edu/peplab/home.html>
- Jeffrey Froh is a leading researcher in gratitude and youth and has published numerous studies and review papers in the field. All of his publications are listed in the public domain via his website: http://people.hofstra.edu/Jeffrey_J_Froh/



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