How Can Fredrickson’s Broaden-and-Build Theory Enhance Personal Resources?

Jennifer Danilowski
Keiser University, USA

Abstract: Positive psychology has garnered great attention towards understanding how individuals develop personal resources to enhance wellbeing and flow. Fredrickson’s (1998) broaden-and-build theory suggests when individuals imbue various personal resources with more positive affect, individuals are more likely able to develop greater resilient assets as a result.

The branch of positive psychology seeks to ascertain how positive emotional states can be effective in promoting long term effects in wellbeing and overall positive affect. Evolutionarily, positive emotions have been dismissed due to the difficulty surrounding exploration of individual positive states, as well as of the individual components or responses defining them. These identifying components include muscle tone, cardiovascular alterations, facial output, attention and recognition and cognition (Fredrickson & Cohn, 2010). Despite this difficulty in original identification of positive versus negative emotions, a large body of empirical evidence suggests that maintaining a positive affect promotes more advantageous outcomes, including monetary successes, problem solving acuity, physiological health, enhanced personal relationships, and increased longevity (Cohn, Fredrickson, Brown, Mikels, & Conway, 2009). Additionally this theory suggests a state that is the opposite of our natural fight or flight responses, which have been previously associated with detrimental health outcomes. This paper seeks to provide evidence for the broaden-and-build theory of positive emotions, for why positive emotions were evolutionarily significant, and for how their identification was essential for the expansion of the psychological field.

The Study of Positive Emotions

The study of human emotions and their individual psychological states have been prevalent within the field for much of its history; however, rarely was the focus so great concerning the positive emotional curve. Researchers within the field of positive psychology have been attempting to clarify what has been considered an unclear line between positive emotions and similar positive affect or mood (Fredrickson & Cohn, 2010). Clinicians have been seeking compromise within the individual definitions of emotions, suggesting that they are “best conceptualized as multicomponent response tendencies—incorporating muscle tension, hormone release, cardiovascular changes, facial expression, attention, and cognition” (Fredrickson & Cohn, 2010, p. 778). Emotional states are generally characterized by moments in time, which typically have a short duration, lasting from minutes to hours, and have some personal attachment which provides significant individual meaning (Fredrickson & Cohn, 2010). Mood states, however, differ from emotional states, inasmuch that they have increased duration, lasting days or months.

Fredrickson’s (1998) initial research into the field of positive emotions resulted in the discovery that many psychologists minimized the importance of the positive scale and its contributions to a well-rounded and authentic individual. This lack of empirical evidence surrounding positive emotions stems partially from an evolutionary basis that hypothesized originally that positive emotions did not play a role in natural selection of dominant traits that
propagated the species. Traits such as fear, anger, and aggression were considered more advantageous as they were elicited in response to threatening situations, engaging individuals in a fight or flight reaction promoting specific physiological and cognitive cues (Brans, Koval, Verduyn, Lim, & Kuppens, 2013). Additionally, there has been less of a preponderance of positive emotions than negative ones, in terms of facial recognition, English-language associations, and identification of positive emotions when intertwined with negative states (Fredrickson, 1998). Furthermore, the initial engenderment of psychology was to discover determinants for underlying problems and psychopathologies, of which negative emotions and affects played a significant role. Positive emotions, conversely, posed rather few problems, making research efforts to understand positive emotions insignificant in comparison. Researchers of emotions had also compartmentalized emotions under one model of understanding, formerly suggesting that the majority of emotions fell under the category of “specific action tendencies” that promoted physiological action responses in relation to autonomic brain activation (Fredrickson, 1998, p. 302). Within the empirical evidence established by Fredrickson (1998), the engenderment of positive psychology, specifically the broaden-and-build theory, enhances and enriches personal resources designed to increase wellbeing.

**The Broaden and Build Theory**

Fredrickson’s (1998) broaden-and-build theory was engendered from the urge to move beyond the isolation models regarding all emotions, and promote the understanding of positive emotions as a formidable function in building personal resources and resiliencies (as cited in Fredrickson & Cohn, 2010). Prior beliefs regarding negative emotions under the action tendency research additionally suggested that negative emotions had a debilitating effect of narrowing focus, such as through the fight or flight responses elicited through fear or terror (Fredrickson & Cohn, 2010).

Fredrickson (1998) proposed that when positive emotions are employed, individuals have greater capacity to broaden and enhance cognitive ability, and engage in more open-minded and flexible responses to a multitude of stimuli, along both the positive and negative spectrum (as cited in Fredrickson & Cohn, 2010). Some of the elements prevalent within this theory are the study of interest, excitement, flow, exploration, contentment, and joy, often recognized as happiness (Fredrickson, 1998; Fredrickson & Cohn, 2010). These positive emotional states have been shown to increase appraisal dimensions inherent in emotional recognition, and furthermore, have been shown to enhance motivation and mastery of concepts (Isen, 2010).

The broaden-and-build theory also posits that the appraisal nature of positive states has a lasting effect which, in addition to broadening attentional focus, has the capacity to build resources in an upward and transformative fashion (Fredrickson & Cohn, 2010). This theory also suggests that the building of resources is more durable than the initial states that led to their development due to the integrative effects of resources; in essence these resources scaffold upon one another producing greater gains than independent factors would alone (Fredrickson & Cohn, 2010). From an evolutionary standpoint, the broaden-and-build theory explains how certain adaptations, such as exploration and creativity, have led to development of greater overall resources and increased the likelihood of increased survival, lifespan longevity, and capacity to procreate (Fredrickson & Cohn, 2010). For example, the evolutionary urge to seek out and explore areas that would provide more natural resources for the survival of a cultural unit, or the creativity that has inspired modern conveniences.

Schiffrin and Falkenstern (2012) have supported the broaden-and-build model of development through the identification of how certain resources contribute to enhanced
adaptsions in cognitive, social, and physiological capacities. Cognitively, positive emotional states have led to increased understanding of complex concepts, or problem solving skills, and greater ability to make connections between disparate concepts. For example, students with more positive emotional states have exhibited substantially higher Graduate Record Exam scores than those who have had negative emotional states (Lyubormirsky, Boehm, Kasri, & Zhen, 2011, as cited in Schiffrin & Falkenstern, 2012).

In addition, individuals who engage in more positive behaviors are better able to make interpersonal connections, to deepen meaningful relationships, to become more attentive towards others, to evoke greater empathy, and to develop trust resources are less likely to engage in stereotyping and antisocial behaviors than their counterparts (Fredrickson & Cohn, 2010). Research into social benefits of positive emotions has also expanded the understanding of how positive affect relates to hormone release and of the importance of neurological activation, such as social awareness and altruistic behaviors (Fredrickson & Cohn, 2010). Evolutionarily, individuals who were more socially engaged further increased the chance of population survival by participating as a community during times of crisis (Schiffrin & Falkenstern, 2012).

Physiological resources are closely linked with social development, such as interaction with others or play, insomuch that it generates development of fine motor skills, increase in strength, coordination, and stamina (Fredrickson & Cohn, 2010; Olcar, 2013). Cause and effect relationships evidenced by Woo and Sharps (2003) supports that physical activity can act as a form of negative emotional release, such as when utilizing exercise to counteract stressors; further evidence indicated that regular exercise has been shown to increase longevity through the reduction of detrimental psychological and physiological health effects.

**Play and Exploration as Impacted by Broaden-and-Build**

One of the prevalent themes in positive psychology is the implication that exploration and inventiveness had evolutionary impact on our ancestry due to the fact that exploration can build greater personal resources. Olcar (2013) suggested that one of the benefits of exploration also falls into the seven emotionally innate systems, which include seeking, or exploration, and play. Play and exploration have been considered genetically advantageous because they incorporate elements that improve cognitive and social functioning that would not be engaged through regular means (Olcar, 2013). According to Olcar (2013), play, or the impulses to engage in practice behaviors distinct from authentic experiences, are processed through the frontal cortex and engage neuronal activation. This suggests the act of play generates more coherent emotional reactions to various stimuli than would be generated if play were not carried out. Educationally speaking, engaging younger students in project based learning – based on real-world modelling – allows children to engage in behaviors and cultural practices that are inherent in real-world settings (“Five Year-olds,” 2007). Children additionally develop abilities such as cooperation, problem-solving skills, coordination, identification, and communication, enriching their transfer of classroom concepts into their environment.

In research developed by Panksepp (1993) one of the predominant functions of play is its ability to promote the activation of positive emotional states and moods, which in turn elevates flexible cognitions and creativity. Play, being a state of practice for real world concepts, allows individuals to experience a gamut of emotions within the safety and security of the environment of engagement. To this end, younger children who engage in play behaviors have the opportunity to identify emotions earlier and with greater acuity than those who do not, and this in turn provides for greater identification as adults. For instance, one situation in which children have evidenced resource adaption in educational environments involves going through the actions of
taking a trip, including piloting a plane, going to the airport, checking in bags, and purchasing a ticket (“Five Year-olds,” 2007). When individuals engage in positive emotions and play in an explorative environment, Fredrickson (1998) posited that these newly acquired skills will be remembered more thoroughly, and will increase cognitive schemas over time because they were learned in a safe environment (Olcar, 2013). Furthermore, these thought-action systems that promote emotional behavioral arrangements develop psychological factors that increase wellbeing, such as positive social learning and the continuance of positive emotional feelings.

**Broaden-and-Build Posit Positive Emotions Generate Change**

Fitzpatrick and Stalikas (2008) introduced the concept of flourishing, a schema that positive psychologists have introduced in traditional forms of psychotherapy, and that has been earnestly suggested as an integral part of therapeutic research. Researchers further suggest while positive emotions are neither an antidote for all problems, nor the absence of negative emotions, it is important to recognize the recognition of both for successful therapeutic treatments and outcomes.

In terms of therapy, the broadening research model proposed in the broaden-and-build theory is essential for laying the groundwork for universal modalities of therapeutic change. This can occur when the client expands on new ideas, has greater reappraisal of situations or cognitions, integrates new behaviors, defines more advantageous solutions, and has more invigorating experiences (Fitzpatrick & Stalikas, 2008). This is also seen over several different modalities of therapeutic approaches, such as alterations in autonomic thought patterns of a behavioral approach, and deeper perception and accounts of traumatic events in a constructivist approach (Fitzpatrick & Stalikas, 2008). When these different modalities are studied at length, we can see how the broadening fundamentals as a part of the broaden-and-build theory present the foundation for more universal approaches for therapeutic design, and how they would produce greater outcomes.

The second tenet of broaden-and-build theory suggests that the building of personal resources within a therapy setting is essentially tied into positive emotional change (Fitzpatrick & Stalikas, 2008). Beutler, Clarkin, and Bongar (2000, as cited in Fitzpatrick & Stalikas, 2008) executed extensive research, which indicated that positive emotional focus has been linked to depression reduction. Additionally, shifting personal attentional focus from key words such as anger, resentment, and depression, to terms such as joy, flow, and happiness, yielded more positive results when incorporated into treatment sessions (Fitzpatrick & Stalikas, 2008). One important note about this research is that a paradigm shift needs to occur with psychologists in order to effectively administer treatments based on the broaden-and-build model of positive emotions. In this sense, therapists would have to shift conscious focus from negative emotional arousal to attachments based on positive attentional facilitation.

One of the techniques utilized by clinicians is to harness the feelings and personal links generated by positive events and outcomes to scaffold positive emotional arousal. This creates a spiral effect that has a dual purpose; firstly, it causes the client to recognize positive emotional situations which broaden cognitive and psychological focus into other similar situations, and secondly, it creates an adaptive mechanism wherein the client generates greater feelings based on the original stimuli, solidifying the spiral effect of understanding (Fitzpatrick & Stalikas, 2008). However, it is essential that the client learns to recognize both sets of emotions and their causations in order to identify and reduce the incidence of maintaining a negative mood or emotional state. Understanding and identification is a key component to positive engagement therapies as it incorporates the client’s values and objectives (Fitzpatrick & Stalikas, 2008).
Building Resilience

Although most of the research into the broaden-and-build theory has illustrated how, theoretically, cognitive, psychological, and social changes can be increased, in regards to short term effect, this paper will now focus on how this research has longitudinal applications. One of the ways in which broaden-and-build is defined is through the broadening of positive emotional understanding and building resources as a result. However, can these positive resources lead to more fruitful and fulfilled life gratification? Cohn et al. (2009) have expressed confidence that positive emotions deepen resiliencies that do in fact illuminate life happiness and contentment, specifically, ego resilience. Ego resilience is an adaptive ability that enables one to integrate oneself into changing environments without succumbing to life stressors, and to mitigate stressors and rebound from stressful events more substantially than those with low ego resilience (Cohn et al., 2009).

In their original research, Cohn et al. (2009) studied the effects of life satisfaction and positive traits associated with ego resilience on university students. The foundation of the research suggested that, when measured over a month period of time, ego resilience will increase due to the manufacture of positive emotions and restoration of functional traits associated with happiness (Cohn et al., 2009). The study consisted of 120 university students of various ages who agreed to submit daily reports via computer on their emotional states utilizing a modified “Differential Emotions Scale” (Fredrickson, 2003, as cited in Cohn et al., 2009, p. 363). This scale rated various subsets of both positive and negative emotions and differentiated whether or not they fell into the category of life satisfaction or ego reliance (Cohn et al., 2009). The results of the study confirmed the research hypothesis, which showed, in fact, that university students who were more aware of their positive versus negative correlates built a substantially wider range of resources that combatted daily life stressors (Cohn et al., 2009). Additionally, because of this awareness individuals were more contented in daily life and resisted negative emotions more efficiently than individuals who ranked lower on ego resilient scales (Cohn et al., 2009). An important factor of this study is that research findings did not show that individuals with higher ego resilience were less likely to experience negative emotions; on the contrary, they experienced the same emotional gamut. The thought-provoking research outcome was that they were more fortified against long-term effects and adopted more formidable resources to reduce future incidences of the negative emotional reoccurrence. One notation on this research is that while these findings substantiate the functionalities of positive psychology and the broaden-and-build theory of happiness and contentment, the body of research is still limited because there have been few longitudinal research studies corroborating this evidence.

Fredrickson et al. (2003) documented additional research of resilient traits related to the coping management skills and the usage of these emotional regulation strategies during times of crisis. Fredrickson et al. proposed study originally was conducted to determine if resilient traits established further validation for the broaden-and-build theory, but they expanded the study to investigate if individuals who have been exposed to traumatic events maintained the same resiliencies in light of the terrorist attacks on September 11, 2001. Fredrickson et al. additionally hypothesized that resilient individuals are not only able to maintain a positive outlook in light of crisis, but are able to thrive. Participants were university students who agreed to participate in the original research held in March of 2001 and agreed to the follow-up research conducted at the end of September 2001 (Fredrickson et al., 2003).

In the March evaluation, researchers utilized a coping response inventory which rated current stressors on a 4 point scale and asked participants various questions, including how they
would handle certain stressful situations and if they had the ability to see the good in bad situations. This scale was to assist researchers in their attempt to determine valance and emotional stability within the respondent body (Fredrickson et al., 2003). In the follow-up, researchers asked respondents more open-ended questions regarding their overall views of the September 11th attack. Although the wake of the terrorist attacks shook the American people, and resulted in many individuals feeling the detrimental effects of psychological and physiological stressors in the weeks and months following the attack, researchers discovered a phenomenal outpouring of positive emotions. While not immune to feelings of depression and anguish, individuals also experienced joy at seeing loved ones, survivors gratitude, satisfaction in everyday experiences, and blessings towards others less fortunate (Fredrickson et al., 2003). In support of the second hypothesis, Fredrickson et al. discovered individuals who had already demonstrated high levels of trait resiliencies and coping mechanisms, and who had engaged in frequent positive emotional building, experienced the least amount of stress and depression from these attacks. Furthermore, indicators of resilience were also determined by the individual’s preexisting optimism, tranquility, and overall life satisfaction (Fredrickson et al., 2003).

Generalized situations of play, or what has been considered practice for life events, can allow for compartmentalization of emotions and traits that will later have future implications for growth and resilience. However, in times of crisis, the theoretical application of practice may not be as rapidly accessed due to overwhelming emotional factors, undoing the practiced psychological and physiological arousal (Fredrickson et al., 2003). However, despite overwhelming negative emotions resultant from crisis, this research illustrates how positive emotions, when supported and scaffolded upon productive resources can support individuals’ development of coping resources and resilience.

**Job Satisfaction and Educational Emphasis from Broaden-and-Build**

One of the aspects of broaden-and-build is the ability to adapt to environmental stimuli and build resources that mitigate negative emotions while simultaneously spiraling positive emotions. The adaptations have been shown to be beneficial in areas of therapeutic application, crisis management and coping skill development, but now we are seeking to explore how positive emotions can be facilitative in everyday situations, such as educational and career pursuits. Wright et al. (2007) have studied the significant effects of positive emotions and resource development to support psychological wellbeing and enhance job satisfaction and performance. The hypothesis of this research sought to test if the enhancement of skills and abilities related to specific job performance output could be an evaluator of increased job performance (Wright et al., 2007).

Empirical findings illustrate that when individuals who display satisfactory psychological skills creating a stable foundation and work ethic, experience high levels of job satisfaction, their job performance is enhanced (Wright et al., 2007). Furthermore, this evidence suggests that the broaden-and-build model would support work related influences that could bolster job performance from within individual companies. For example, individual units within company organizations or managerial teams could benefit from team building practices, and employee-focused events that would encourage individuals to consider themselves part of the company community.

Additionally, managerial teams can be trained to assist individuals within the company to become better trained in their field, or to motivate individuals to become more autonomous. Even having family oriented resources such as childcare services and onsite psychologists have been shown to mitigate workplace stress and enhance job performance (Wright et al., 2007).
Evidence also corroborated the prior research conducted by Wright and Staw (1999, as cited in Wright et al., 2007) that examined the impact of these resources to facilitate persistence of job performance over time. Although this evidence is limited by the location and participant factors, it may be beneficial to examine how these factors could be evaluated in alternative occupations and trades.

Evidence of broaden-and-build within the category of job satisfaction and job performance may be found in the experiences of student teachers participating in an abroad immersion program designed to enhance cultural knowledge, and facilitate effective teaching. Stachowski et al. (2008) studied the immersion program for student teachers and discovered correlates between successful completions of the program and success in the community. Education is a highly evolving field and requires the eagerness and attention of new teachers in the field to be constantly evolving in order to meet the demands of its ever-changing composition. This falls under the category of broaden-and-build as these student teachers are developing the resources necessary to elevate education through realistic and relevant exchanges of scholarship (Stachowski et al., 2008). Many of the qualitative reports provided by participants offered recollections ways in which their own experiences were broadened by the community in which they were located, and based on their personal connections to these experiences. One of the accounts of a student teacher highlighted their experience on a Navaho Indian reservation as initially being what she considered a mission to “save people,” and which moved to a desire to motivate and make a difference (Stachowski et al., 2008, p. 48). Both the resulting optimism and the hopefulness expressed in these accounts are components of broaden-and-build traits.

Furthermore, Stachowski et al. (2008) noted that an individual’s ability to make interpersonal connections, to foster appreciation for diversified cultures, and to develop an understanding of global communities, promotes the development of the resources to make a more positive difference.

**Conclusion**

The basis for Fredrickson’s (1998) broaden-and-build theory states that individuals who engage in more positive thinking and behaviors are better able to adapt to their environments, elicit more fulfilling lives, engage in greater personal resource development, and that this engagement can enhance factors that would promote health longevity. One caveat to this research, however, is this field of study is relatively new, and few longitudinal studies have been issued to show the effects over time. Fredrickson and Branigan (2005) posited that only two decades of research has been conducted on the effects of positive emotions, and few studies with the external validity and neutral control groups that would evidence the strength of positive versus neutral emotions. Thus, this research remains unclear as to the strength of positive emotions and their attributions. Future research analyzing the strengths and weaknesses of this theory could contribute greatly to this developmental model, in lieu of other more widely recognized theories that isolate single emotions rather than identifying how they work in tandem (Lewis, Haviland-Jones, & Barrett, 2010). What remains, however, is the current research is highly supportive of the effects of positive emotions to manufacture future evolutionary resources.

But how do we apply this to our lives, and what does this mean for the future of psychology? This research confirms the benefits of the newly engendered but rapidly expanding field of positive psychology and the benefits of the broaden-and-build body of research. Furthermore, the broaden-and-build theory establishes that building interpersonal resources is essential to maintaining a more fulfilling life.
References


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