Positive Thinking in Coping with Stress and Health outcomes: Literature Review

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Abstract: This article reviews literature on positive thinking and its effect on the appraisal of stress, coping and health outcomes. Positive psychology is a new dimension that focuses on positive thinking, positive emotions and positive behavioral qualities that enhance human potential in various domains such as work, coping with stress and health. By thinking positively, we perceive the stress as less threatening, are able to cope with it effectively. Fredrickson's broaden and build theory of positive emotions was the theoretical framework for this article. Papers studying positive thinking, positive emotions, optimism, hope and wellbeing were included in the review. The implications for counselors, educationists and the community at large have also been discussed.

Keywords: positive thinking, positive emotions, optimism, stress, coping and health

Introduction

This paper is an attempt to review the literature on positive thinking and its effect on stress appraisal, coping and health outcomes. Positive thinking is looking at the brighter side of situations, making a person constructive & creative. Positive thinking is related with positive emotions and other constructs such as optimism, hope, joy and wellbeing. McGrath (2004) defined positive thinking as a generic term referring to an overall attitude that is reflected in thinking, behavior, feeling and speaking. Positive thinking is a mental attitude that admits into the mind; thoughts, words and images that are conducive to growth, expansion and success.

Negative thinking is thoughts that imply criticism or devaluation of self. These thoughts dominate the perception of a depressed person. People who think negatively do not expect things to go as planned therefore anticipating bad outcomes. Their coping with daily stressors becomes dysfunctional and they develop psychological and physical health problems. Historically, psychologists have been solely focused on negative mental states

leading to pathology and disorder. The influence of positive thinking, positive emotions on life satisfaction, quality of life and health outcomes was generally neglected.

However the last few years have been marked by renewed interest in positive psychology. Many researchers have examined the beneficial effects of positive thinking, positive feeling, positive emotions and positive behavioral qualities on psychological as well as physical well being (Fredrickson 2001; Seligman and Csikszentmihaly, 2000; Taylor et el., 1992).

In this article the researcher has reviewed the cross-sectional, longitudinal and experimental researches to find out whether positive thinking plays any role in the appraisal of stress, effective coping strategies and wellbeing. Positive thinking, in this article has been defined as frequent experience of positive emotions, optimism, hope and happiness. The researcher's theoretical framework was Fredrickson's broaden and build theory (1998, 2001) of positive emotions and Lazarus transactional model of stress (Lazarus & Folkman, 1984). Fredrickson's broaden and build theory (1998, 2001) of positive emotions suggests that a critical adaptive purpose of positive emotions is to help prepare the individual for future challenges. Following Fredrickson's model, Lyubomirsky (2005) suggested that people experiencing positive emotions seek to attain new goals (See also Carver, 2003). Positive thinkers encounter circumstances with optimism and if they encounter stressful situations they appraise it as controllable and use coping strategies that are functional, efficient and problem focused. Positive thinkers feel that life is going well, their goals are being met, and resources are adequate (Carver & Scheier, 1998; Cantor et al., 1991).

According to Lazarus & Folkman (1984), stress does not exist in the "event" but rather is a result of appraisal of the event that is producing stress. They asserted that the primary mediator of person environment transaction was appraisal. Stress itself is not important, but the meaning we give to the stressful situation determines the intensity of stress. Positive thinkers will appraise the stressful situation as less threatening and cope with it effectively compared to negative thinkers.

Theoretical Background

Positive thinking is related with positive psychology. The phenomena of positive psychology have been found in Greek and Eastern philosophy, the Bible, historical accounts and linguistic origins of words which provide important information about human strengths. Schimmel (2000) echoed that psychologists working on the dimension of positive psychology should explore their roots as exemplified in ancient philosophy and religious writings. Positive psychology also has its root in humanistic psychology which focuses on uniquely human issues, such as self-actualization, hope, love, health, creativity, nature, being, becoming, individuality, and meaning. Humanistic psychology is well established as the first organized form of positive psychology. It emerged in the 1950s as the third force in psychology in reaction to both behaviorism & psychoanalysis. The discipline included Abrahim Maslow, Carl Roger, & Rollo May who stressed on a phenomenological view of human experience, seeking to understand human behavior by conducting qualitative research. It tended to look beyond the medical model of psychology, in order to open up a non-pathologizing view of person.

Recently, American psychologists devoted its millennial issue to the emerging science of positive psychology, positive character, and positive institutions (Seligman & Csikszentmihalyi, 2000). In their review of different approaches to positive psychology, Seligman and Csikszentmihalyi noted that the early incarnations of humanistic psychology lacked a cumulative empirical base, and some directions encouraged self centeredness such as narcissism, egoism and selfishness. The association of humanistic discourse with narcissistic and overly optimistic worldviews is a misreading of humanistic theory. In their response to Seligman and Csikszentmihalyi (2000), Bohart and Greening (2001) noted that along with pieces on self-actualization and individual fulfillment, humanistic psychologists have also published papers on a wide range of social issues, such as the promotion of international peace and understanding, awareness of the holocaust, the reduction of violence and the promotion of social welfare and justice for all.

Positive Thinking and Coping with Stress

There is a relationship between positive thinking and stress. Occurrence of daily positive emotions serves to moderate stress reactivity (Anthony Ong, 2006). There is evidence that stress leads to heart disease (Rozanski, 1999), infectious illness (Biondiand, Zannion, 1997) and autoimmune disorders (Affleck et.al., 1997). Positive thinking and positive affect have been found to be related with distress reduction and predicting healthy outcomes (Tugade & Fredrickson, 2004; Tugade, Fredrickson & Feldman Barret, 2004). Positive emotions undo the effect of negative emotions on cardiovascular function (Fredrickson, & Levenston, 1998). A study of coping with stress following the September 11, 2001, attacks in the United States found that resilient individuals were less likely to experience depression and more likely to report increase in psychological growth after the attacks (Fredrickson, Tugade, Waugh, & Larkin, 2003). Moreover, positive emotions experienced after the attack completely mediated the relationship between resilience and coping variables. These moments of positive emotions may be viewed as opportunities to replenish ones system, which has been depleted by grief (Folkman & Moskowitz, 2000). A meta-analysis conducted by Lyubomirsky and King (2005) about the benefits of frequent positive thinking, in terms of positive affect, optimism, happiness, satisfaction with life and other related concepts, found that positive affect engenders success across multiple life domains, including work performance, social relationship, perception of self and others, sociability, activity, physical wellbeing, coping, problem solving, creativity and health.

A number of constructs have been introduced in the coping literature to explain the capacity of some individuals to maintain a positive out look during negative life circumstances. Optimism (defined as attributional style, Seligman, 1991, or as general positive expectancy, Carver & Scheier, 1991, 2001), extraversion (McCrae & Costa, 1986), sense of coherence (Antonovsky, 1988, 1993), hope (Synder,2000) and hardiness (Maddi & Kobassa, 1991) all refer to general trait that are correlated with positive affect and promote positive thinking during difficult circumstances and all have been related with positive health outcomes (e.g., Maruta, Colligan, Malinchoc, & Offord, 2000; Snyder, 2000). For example, research has demonstrated that optimistic individuals remember potentially threatening health relevant information more than pessimists (Aspinwall, 1998; Aspinwall & Brunhart, 1996). However, they use humor and positive

reframing instead of denial when coping with highly stressful events (Carver et al., 1993). One possibility is that the effects of these constructs on positive moods mediate their relation to physical health outcomes (Segerstorm, 2000). Although, these concepts differ in a variety of ways but their correlations with positive affect are well established (Clark & Watson, 1991). Carver and Scheier did a lot of research on optimists and pessimists. Optimists are quicker to accept a challenge. They engage in more focused, active coping when such efforts are likely to be productive. They are less likely to display signs of disengagement or giving up (Scheier & Carver, 2001). Optimistic women used more adaptive coping strategies and had lower level of perceived stress (Anne, 2007). Scheier and Carver (1985) found that optimistic students coped well with difficult situations during the semester and reported less physical symptoms. Optimistic women who were pregnant were more likely to engage in constructive thinking than the pessimistic ones (Park et al., 1997). Furthermore, constructive thinking also correlated negatively with anxiety and positively correlated with a positive state of mind.

Litt, Tennen, Affelect, and klock (1992) examined the reactions of people whose attempts in vitro fertilization were unsuccessful. Escape was used as a coping strategy by pessimist, which in turn caused greater distress after the fertilization failure. Strategies for maintaining positive emotions and positive thinking help buffer against stress (Folkman & Moskowitz, 2000). Most researchers concerned with the issue of finding meaning in adversity perceive it as a powerful human strength associated with the minimization of harm to an individual physical (Afflect, Tennen, Croog, and Levine, 1987) and psychological health (e. g., Davis, Nolen-Hoeksema, & Larson, 1998).

Shiota (2006) observed the effect of positive coping strategies on daily stressors. Dispositional use of positive emotions inducing coping strategy was mostly associated with positive aspects of well being. Positive emotional granularity (PEG) is the tendency to represent experience of positive emotions with precision and specificity. This exerts an important influence on coping by making the individual more attentive to the situation at hand. Therefore the person is more likely to scan coping options thoroughly and less likely to respond spontaneously (Tugade & Fredrickson 2004). Positive thinking has been effective during the resettlement stage of the immigration process. Cognitive strategies of positive comparison and optimistic thinking were utilized by the immigrants to change

the meaning of resettlement difficulties (Wong and Denial, 2007).

When studying negative effects (NA) and positive effects (PA) on coping, studies have shown that individual high in NA prefer avoidant behavior (Bolger and Zukerman, 1995; Bouchard, 2003). Other researches (Gunthert et al., 1999) have shown positive correlation between NA and perceived stressfulness. Research has shown that stress exposure varies with negative affectivity and gender (Bolger & Zukerman, 1995). In Eaton and Bradley's study (2008) participant's perception of stressfulness increased with participant's negative affectivity. NA predicted use of both emotion and avoidance focused coping.

Evidences from a variety of sources show that happy people are more satisfied with their jobs than unhappy people (Connolly & Viswesvaran, 2000). Positive effect at work has been found to be directly associated with reduced absenteeism (George, 1989). Positive thinkers appear to secure better jobs. In one study, employees high in dispositional positive affect had jobs as rated by trained observers, that had more autonomy, meaning and variety (Staw, Stutton, & Pelled, 1994). In a meta-analysis of 27 studies of affect and job satisfaction, Connolly & Viswesvaran, concluded that 10%-25% of the variance in job satisfaction was accounted for by measures of dispositional effect. Employees high in dispositional effect receive relatively more favorable evaluations from supervisors and others (Staw et al., 1994). In Staw and colleague's study, managers of high positive effects employees of three Midwestern organizations gave them higher evaluations for work quality, productivity, dependability, and creativity. Staw and Barsade (1993) found that, as rated by objective observers, those high in dispositional positive affect performed better on a manager assessment task. Positive thinkers and happy, satisfied workers are more likely to be high performers on the job and they are less likely to show absenteeism, turnover, job burnout, and retaliatory behaviors (Donovan, 2000; Locke, 1975). For example positive mood at work predicted lower withdrawal and organizational retaliation and higher organizational citizenship behavior (Donovan, 2000).

Ferreira (2006) analyzed the role of coping in the relationship between work stressors and psychological wellbeing in a sample of 464 bank employees. Work related stressors correlated positively with psychological distress and psychosomatic complaints. In Healy and Mckay's study (2000) nurse's work related stressors and coping strategies

were studied and its impact on the nurse's job satisfaction and mood disturbance was estimated. Positive correlation was found between nurse's stress and mood disturbance, and a significant negative relationship between nurse's stress and job satisfaction was found. Job and non-work stress correlated positively with behavioral, cognitive, and physiological reactions to stress as well as with negative emotionality (Hogan, Carlson, & Dua, 2002).

Positive Thinking and Health

There are two broad benefits of thinking positively under a stressful situation. For one, positive thinking will enable the person cope better. The other is that positive thinking increases the likelihood of a good outcome. Optimism has been shown to relate to higher levels of self reported vitality and mental health (Achat, Kawachi, Spiro, Demolles, & Sparrow, 2000) and lower levels of depression. There is also evidence that positive thinking may provide a sense of control in certain situations and reduce the incidence of depression (Taylor, 1983).

Positive thinking and cardiovascular diseases. The benefits of positive thinking are evident in the studies of cardiovascular health, cancer, and other diseases. There is mounting evidence that positive emotions and positive thinking have an important role to play in protecting blood pressure, and other heart ailments (Affleck, Tennen, & Croog, 1987). Afflect and colleagues studied 287 men who suffered heart attacks; about half of them reported that the heart attack led to a change in philosophy of life, including becoming more in touch with their values. Others reported that they learned the values of healthy lifestyles; 25% reported that they modified their ways of doing things so they could enjoy life more. Optimists, who are positive thinkers, evidenced better physical recovery immediately after coronary artery bypass surgery and up to 6 months post surgery (Carver & Scheier, 1993). Optimism, positive thinking and self esteem, reliably predicted sustained recoveries for those who had just undergone angioplasty (Helgeson & Fritz 1999). In a study on male war veterans, optimists, having positive thinking, were less likely to suffer from angina and heart attacks (Kubzansky, Sparrow, Vokonas, & Kawacgi, 2001) and they evidenced higher level of pulmonary functions and slower rates of pulmonary decline, a protective affect that is independent of smoking (Kubzansky, Wright, Cohen, Weiss, Rosner, & Sparrow, 2002). Recent theorizing,

however, has noted that many of the health effects of dispositional optimism parallel those predicted by positive emotions of hope (Aspinwall & Leaf, 2002).

Positive thinking & cancer. Positive effect has been shown to have a direct effect on the quality of life of cancer patients (Collins, Hanson, Mulhern, & Padberg, 1992) and to similar allergic reactions among healthy students (Laidlaw, Booth, & Large, 1996). Studies suggest that optimistic cancer patients have a better quality of life than those who are pessimistic and feel hopelessness (Schou, Ekeberg & Rauland, 2005). Carver et al., (1993) examined the ways women cope with treatment for early stage breast cancer and found that optimism was associated with a pattern of reported coping tactics that revolved around accepting the reality of the situation, placing as positive a light on the situation as possible, trying to relieve the situation with humor, and taking active steps to do whatever there was to be done. Cruess, Antoni, McGregor, et al. (2000) encouraged 34 women who had just undergone surgery with breast cancer to find meaning in the adversity. Results showed difference in cortisol; the treatment group who received behavior therapy showed lower level of this immune suppressing hormone in blood stream, than the control group.

Although many professional writers continue to extol the virtue of positive thinking, other commentators have also suggested that general injunction upon patients with cancer to think positively may have negative consequences, imposing a social or psychological burden that they can not bear (McGrath, 2004; Rittenberg, 1995) or causing them to feel guilty or worthless if things do not go well (De Reave, 1997).

Positive thinking and Immune Functioning. Individuals with attributes closely related to positive thinking have also been found to show heightened immuno competence. For example, in two separate investigations, humor was associated with enhanced immune function in participants who were predisposed to use humor as a routine coping device (Dellion, Minchoff, & Baker, 1985). Further more, sense of coherence (Antonovsky, 1993) was associated with natural killer (NK) activity among older adult facing the stress of relocation. These health benefits of positive thinking extend to other health problems such as common cold & allergic reactions (Cohen, Doyle, Turner, Alper, Ans, Skoner, 2002).

Positive emotions mediate the effect of coping with humor & immune system functioning (Dillon, Minchoff, & Baker, 1985-1986). Those with greater tendencies to

cope with humor report daily positive mood. Consequently, in response to stress, those with greater propensities to cope with humor show increases in levels of salivary immunoglobulin A (S-IgA), a vital immune system protein, which is body first line of defense against respiratory illness (Dillon et al, 1985-1986). In an experience sampling study, self report of positive emotions predicted increases in S-IgA levels, thereby enhancing immune functioning (Stone, Valdimars-Dottir, Jandorf, Cox, & Neale, 1987). Valdimarsdottir and Bovbjerg (1997) conducted a study on 48 healthy women and found that women who reported more positive mood had higher level of NK cell activity than women with less positive mood. Segerstrom, Taylor, Kemeny, et al. (1998) studied changes in NK cell activity in 50 students. There was strong relation between situational optimism and immune activity. In Penebaker, and Francis' (1993) study students who were optimistic about their success in coping with the stressors had an immune system that was better prepared to engulf and destroy cancer cells than those who were not optimistic.

Laboratory studies with rheumatoid arthritis patients examined the effect of positive thinking on autoimmune processes. Some of the patients were shown a video. A blood test was taken for changes in level of interleukin 6 (II-6), a proinflamatory cytokine associated with autoimmune disease process in rheumatoid arthritis. IL-6 level of patients who saw the film, which induced positive thinking, was compared with the patients who did not see the video. Increasing positive emotions in both studies reduced the production of immune products responsible for inflammation, pain and damage to the body's joints (Yoshino, Fujimori, KOhda, 1996; Nakajima, Hiari, and Yoshino, 1999).

Positive mood and the release of endogenous opioids are both associated with lower acute stress reactivity (Fredrickson and Levenson, 1998). Taylor et al. (1992) studied positive emotions such as optimism and psychological well-being among a sample of gay and bisexual men who were at risk of developing Acquired Immunodeficiency Syndrome (AIDS). Optimism was associated with lower levels of distress. Distress was measured by a composite index of negative affect and their specific concerns about the disease were also studied.

Research studied the lives of 40 gay men who had tested positive for HIV (Bower, Kemeny, Taylor, & Fehey, 1998; Folkman & Moskowitz, 2000). Men who

found meaning in the death of their partner had a slower rate of decline in circulating CD4 cells, which is a marker of disease progression. Also, men who found meaning in the death of their partner, had a three year longer life span than those who found no meaning (Bower et al., 1998). People who recently lost their partners to AIDS; provided spoken narratives three times: 2 weeks, 1 month, and 1 year post bereavement. Those who used positive words showed a greater positive morale and a less depressive mood (Stein, Folkman, Trabasso, & Richards, 1997). In related researches, several studies demonstrated that positive thinking promotes good health and resulted in fewer illness related physician visits over the following months compared to control participants (Penebaker, Mayne & Francis, 1997).

Positive thinking and longevity. Cohen and Pressman (2006) found association between trait positive affect with mortality (longevity), morbidity (illness onset) and reports of symptoms and pain. A research was conducted in (Danner, Snowdon, & Friesen, 2001) Notre Dame, with 180 nuns, to find out the relationship between positive thinking and longevity. The researcher estimated that nuns who had positive thinking lived an average of 10 years longer (Danner et al., 2001). Cohen (2003) exposed the subjects to a rhinovirus; that cause the common cold. Results showed that positive thinkers were less likely to develop a cold even after being exposed to rhinovirus. The symptoms were reported and monitored. There was a considerable evidence linking PA to reports of fewer symptoms, less pain and better health (Cohen et al., 2003). However, other research presents confusing results: Knapp and colleagues (1992) found that both positive and negative mood states have remarkably similar effects on immune system functioning, producing decreased lymphocyte production in response to mitogens. Similarly, pleasant and unpleasant moods were found to produce the same effect on natural killer cell activity (Futterman, Kemeny, Shapiro, & Fahey, 1994).

Folkman & Moskowitz, (2000) described three strategies that predicted higher level of positive well being in their longitudinal study of care givers of partners with AIDS. First positive reappraisal, second problem focused coping, and third the creation of positive events. Similarly women who focused on the positives despite hazardous child delivery and prolonged hospitalization post delivery, showed greater well being and this also extended to the developmental wellbeing of their children (Affleck & Tennen, 1996).

In addition to promoting physical health, cultivating positive thinking and

emotions is associated with psychological health (Fredrickson, 2000). Emmons & McCullough (2003) assigned participants to one of three groups: (1) count your blessing (2) List daily hassles or (3) control. People who counted their blessings, claimed to have better health, by having fewer physical complaints, frequently exercising and more hours of better quality sleep.

Positive thinking and resilience. Resilient people are characterized by positive emotionality: they have zestful and energetic approaches to life, are curious and open to new experiences (Block & Block 1980). They use optimistic thinking (Masten & Read, 2002) and humor (Masten, 2001) as ways of coping. Moreover, resilient people not only cultivate positive emotions in themselves, but they elicit positive emotions in others close to them, which creates a supportive social network to aid in the coping process (Demos, 1989). Tugate, Fredrickson, & Barret (2004) observed that high resilient subjects showed faster cardiac recovery as compared to low resilient participants.

Indigenous Research

To the best of our knowledge a little research on positive thinking and related topics such as positive affect, well being, and life satisfaction have been reported. Suhail and Chaudry (2004) determined and compared the prevalence and predictors of happiness and personal well-being in Pakistani sample with other countries. A sample of 1000 Pakistani people; age range 16-80, from various areas of Lahore was collected. Although random sampling was not used, every 10th house in a street was included to reduce personal bias. Demographic variables such as work satisfaction, social support and marital satisfaction were measured using different scales to find out its relation to well being and happiness. Personality traits such as introversion and extraversion were obtained by administering an Extraversion/ Introversion Scale (EIS) of Eysenck Personality Inventory (1953). The scale was adapted and made short and culturally fair. Religiosity was measured by on 18 item scale (Suhail, & Akram, 2002) designed to find out religious affiliation in Muslims. Rosenberg' self esteem scale (1965) was administered to measure self perception and well-being. General well-being was measured by two indicators: personal happiness and life satisfaction. Personal happiness was measured by Faces scale (Andrews and Withey, 1976). Life satisfaction was measured by Ladder scale of General Well-being (LSWB).

The findings of the study were consistent with previous world wide reports, that there is a majority of happy people. In Pakistan, 7 out of 10 rated themselves as being happy; in spite of economic hard ships, social and political turmoil and unrest. The predictors of psychological well-being such as social support, work satisfaction, income level, religious affiliation and marital satisfaction accounted for 19% and 23% of variance in happiness and life satisfaction. Positive affect was correlated with wealth. Income was positively correlated with well being and life satisfaction.

Amjad & Misbah (1998) studied the effect of religious meditation on anxiety level and well-being. Spiritual attitude measure questionnaire was developed by the researcher using Quranic translations, sufi texts and commentaries. Eighteen volunteer females were assigned for meditation for 40 days. Pre and post tests were taken for each variable. A significant mean difference was found between the pre and post measures of well-being and anxiety after the mediation. No significant mean difference was found on life satisfaction scale. Results signified that happiness and well being can be increased and anxiety can be decreased through religious interventions.

Malik & Rehman (2003) studied the effect of occupational stress on psychological well-being and work motivation. Findings showed a negative correlation between occupational stress and psychological well-being. Some researches identified the stressors of Pakistani people and their coping strategies.

Conclusion

The review of experimental studies has shown that positive thinking effects the appraisal of stress, which determines our coping strategies. Thus the evidence supports the researcher's conceptual model that positive thinking increases the ability to deal with stressors effectively and causes many successful health outcomes. The results of this review can be replicated in Pakistan where negativity due to illiteracy and poverty is prevailing every where. Geopolitical situations in the country are alarming and people are under constant strains of bomb blasts. In these circumstances there should be measures to protect them from negativity. There are implications for educationists who wish to reduce the stressors of their students by preparing them to face the challenges of teaching-learning situations and professional life. Educationists can initiate programs to cultivate

positive thinking in their students. Positive thinking interventions should focus on how learners can identify their strengths, adopt new practices and habits, and restructure their lives in ways that allow for a stream of positive emotions and experiences. Further more, many of the characteristics observed in positive thinkers can help them improve their conditions as well as others. These findings can also be used by the counselors to reduce their clients' negativity by inducing positive thinking in them. Community members can change negative perceptions of the people into positive ones to make them healthy and productive citizens of Pakistan.

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