

## Role of Positive Psychological Capital in Prediction of Emotions and Subjective Wellbeing among Adolescents

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The aim of the current research was to investigate the role of positive psychological capital (PsyCap) in prediction of positive and negative emotions and subjective wellbeing (SWB) among 616 school adolescents. PsyCap scale developed for adolescents (Afzal, 2013), PANAS (Watson, Clark, & Tellegen 1988), and Well-being Inventory (Fatima, 2004) were used to measure the constructs. Correlational analysis demonstrated the significant relationships among all variables. Multiple regression demonstrated PsyCap as a positive predictor of positive emotions and inverse predictor of negative emotions. Further, multiple regression analysis portrayed that resilience, hope and optimism were positive predictors of SWB. Suggestions for further empirical research and practical implications are discussed too.

**Keywords:** PsyCap, positive emotions, negative emotions, subjective well-being

Positive psychology is the psychology of human positive strength, coping and optimal human functioning. The main focus of positive psychology is on prevention and how human beings can use their potential in coping with life stressors. Its goal is to make people happier by enhancing their positive qualities, potentials and understanding the meaning of a healthy life. Positive psychology's general stance is toward prevention. Positive psychology enhances human functioning by recognizing strengths as well as deficiencies, and environmental resources in addition to stressors.

### **Positive Psychological Capital**

The concept of psychological capital is central in positive psychology. Luthans and colleagues (Luthans, 2002; Luthans, Avolio, Avey, & Norman, 2007) conceived it as a combination of four positive psychological resources i.e. hope, optimism, efficacy, and resilience, which, when combined, have been empirically determined to be a second-order core construct (Luthans, et al., 2007; Luthans & Youssef, 2004). A second-order construct is the shared variance between the four first-order constructs (hope, optimism, efficacy, and resilience).

The comprehensive definition of PsyCap is that: it is an individual's positive psychological state of evolvment that is characterized by: (1) having confidence (efficacy) to carry on and the ability to put necessary effort to accomplish and succeed in challenging tasks; (2) making a positive attribution (optimism) of achievement in the present moment and in the future; (3) deterministic toward goals and, when needed, generating other pathways to goals (hope) in order to achieve them; and (4) when fenced by problems and adversity, coping and bouncing back and beyond all that (resilience) to attain success (Luthans, Youssef, & Avolio, 2007).

The current research was conducted with the aim to explore the impact of positive approach on affectivity and wellbeing among adolescents. Although, PsyCap is a well researched construct in organizational settings, but it attained less attention in clinical, educational and other domains of psychology. The current study is an empirical endeavor outside organizational settings and explores PsyCap in educational settings. PsyCap has been explored as a predictor of SWB and both positive and negative emotions during adolescence.

### ***PsyCap and Well-being***

Subjective well-being is considered as a multidimensional construct whereby a number of different factors interact together and regulate the well-being of individuals. Among these factors personal and environmental stressors and resources, coping styles along with demographic variables such as race, gender and socio-economic class are also included. The current study is conducted with adolescents, as previous evidences stated that adolescents having high levels of subjective well-being developed fewer externalizing problems in the situation of stressful and difficult events as compared to those who have low level of subjective well-being (Park, 2004). This indicates that subjective well-being functions as a defense against critical life circumstances. Adolescent subjective well-being should therefore be studied in order to understand the factors that may promote life satisfaction and positive affect of adolescents. These factors mitigate the negative effects of stressful life events and work against the development of psychological and behavioral problems (Rask, Astedt-Kurki, & Laippala, 2002).

PsyCap is closely associated with SWB and emotions. A growing number of research witnessed positive impact of hope on subjective well-being and psychological well-being (e.g. Davidson, Wingate, Rasmussen, & Sligh, 2009; You et al., 2008). Additionally, for improving SWB, it is essential to understand human needs. It is still not clear how the impact of hope on SWB may be affected by needs. For this purpose, a study conducted by Werner (2012) demonstrated that hope and needs act as the predictors of SWB. Furthermore, it was found from the results of the study that hope has a strong and direct effect on SWB and it was found that it is a stronger predictor of SWB.

The role of optimism as a strength became a topic of interest for researchers in the recent decades, as it is found to benefit both physical and psychological well-being. Optimism reduces the level of stress by inducing positive emotions (Scheier, Carver, & Bridge, 2001). Study related to well-being and optimism was conducted in China by Zhu (2003) on both Chinese and

western cultures; it revealed a significant, positive relationship between dispositional optimism and well-being in both samples. Another research in China by Lai (2009) predicted that optimism reduces the influence of daily troubles and stress on mental health. A relatively recent research was conducted by Xue (2010) in order to find out the mediation effect of optimism in relevance to SWB and self-construal among Chinese university students. Results of his study indicated that people who are more optimists are more satisfied and have high subjective well-being.

Self-efficacy is assumed to be positively associated with SWB and happiness. People with high self-efficacy believe in themselves and they are confident to achieve what they want and due to this they have been found to experience higher SWB than people who have low self-efficacy (Caprara & Steca, 2005; Luszczynska, Scholz, & Schwarzer, 2005). According to Diener, Oishi, and Lucas, (2003) and Lent, (2004) self-efficacy is the significant predictor of SWB.

Researches further provide evidence of predictive association between resilience and subjective well-being. Results of earlier studies depicted that resilience weakened the association between positive and negative emotions, especially during stressful conditions. (Luthar, Cicchetti, & Becker, 2000). Longitudinal research conducted in Australia on sample of young and middle adults provides evidence that SWB mediates the effect of psychological well-being in the form of increasing positive affect and decreasing negative affect on depression and anxiety (Burns, Anstey, & Windsor, 2010). This fact is also supported by research based on the broaden-and-build theory of positive emotions that gave evidence that positive emotions (in SWB) broaden people's catalogue of thoughts and actions and increase their coping skills and resilience (Fredrickson, 2001).

### ***PsyCap and Emotions***

In order to understand what positive and negative emotions actually are, Fredrickson's theory of emotions (e.g. Fredrickson, 1998; 2001; 2004) was followed. Barbara Fredrickson

is one of the renowned psychologists of positive psychology and 'the broaden-and-build theory of positive emotions' is one of the most important theories of emotions. The theory states that 'experiences of positive emotions broaden people's momentary thought-action repertoires, which in turn serves to build their enduring personal resources, ranging from physical and intellectual resources to social and psychological resources' (Fredrickson, 2001, p. 218). According to this theory, joy, love and pride are certain emotions that can be categorized as positive and they pledge "an upward spiral towards emotional well-being" (Fredrickson, 2004, p. 1373) by "broadening" the scope of cognition and actions and anxiety, sadness, anger and despair are examples of negative emotions (Fredrickson, 2001).

According to many theories of emotions, each emotion is linked with the tendency of performing a specific type of action (Oatley & Jenkins, 1996), and that action is often associated with success of survival of an evolutionarily relevant situation. Emotions also permit organisms to yield equilibrium between rapid, evolutionarily tested responses to situations and more flexible or reflective ones, by facilitating actions that have proved adaptive, without compelling them.

Positive emotions are advantageous during the process of recovery from negative experiences (Fredrickson, 2001). It can also be stated that there is a strong relationship between emotions and resilience, as resilience involves a process by which a person experiences positive emotion in the face of adverse circumstances (Tugade & Fredrickson, 2004). In addition, positive emotions have been found to aid in coping with stress (Ong, Bergeman, Bisconti, & Wallace, 2006) and with bereavement and depression (Dickerhoof, 2006). It can be concluded from the above literature that resilience is positively associated with positive emotions and negatively associated with negative emotions.

Optimism and hope, the two most important constructs of PsyCap, are also linked with emotions (positive and negative). According to Fredrickson's broaden-and-build theory (2001) of

emotions, a critical adaptive purpose of positive emotions is to help prepare the individual for future challenges. Following Fredrickson's model, Lyubomirsky, King, and Diener (2005) suggested that people experiencing positive emotions seek to attain new goals, which are part of hope. From this we can conclude that individuals having high level of hope also contain positive thinking. Moreover, positive thinkers encounter difficult circumstances with optimism and remain hopeful for solution of problems.

A meta-analysis conducted by Lyubomirsky et al. (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 outlook during negative life circumstances. Optimism (Carver & Scheier, 2001), extraversion (McCrae & Costa, 1986), sense of coherence, hope (Synder, 2000) and hardiness are correlated with positive affect and promote positive thinking during difficult circumstances and positive health outcomes (e.g., Maruta, Colligan, Malinchoc, & Offord, 2000; Snyder, 2000).

On the other hand, negative thinking refers to 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 (Naseem & Khalid, 2010). In line with the aforementioned arguments, following hypotheses have been formulated for the current study:

H1. PsyCap will positively predict positive emotions and subjective wellbeing.

H2. PsyCap will negatively predict negative emotions.

### Method

#### Sample

The sample of study comprised of adolescents (N = 640), students of 8th, 9th and 10th class, which was further categorized into males (n = 320) and females (n = 320). Age of sample ranged between 14 to 17 years (M = 15.53, SD = 1.12). Data was collected from three public and one private school of rural and four public and two private schools from urban areas of Sargodha, Jhelum, and Faisalabad districts of Punjab through convenient sampling technique.

#### Instruments

Following were the instruments used in the current study:

*Positive Psychological Capital.* Positive Psychological Capital scale developed by Afzal (2013) for adolescents was used in present study to measure PsyCap. The scale composed of four sub-scales i.e. resilience, self-efficacy, hope, and optimism. The scale is based on 4-point Likert type format. Reliabilities coefficients computed by the author for PsyCap, resilience, self-efficacy, hope and optimism were .87, .84, .74, .67 and .68 accordingly.

*Positive and Negative Affectivity Scale (PANAS).* PANAS developed by Watson, Clark, and Tellegen (1988) was used in the current study to assess positive and negative emotions. The scale consists of 20 words that describe positive and negative affectivity. The scale is anchored on a 5-point Likert type response format. The alpha reliabilities reported by authors were .89 for positive affectivity and .85 for the negative affectivity.

*Subjective Wellbeing Inventory.* Trait Wellbeing Inventory (Dalbert, 1992) was used to measure subjective wellbeing. The inventory measures cognitive and evaluative aspects of subjective well-being and consists of Life Satisfaction Scale (1 to 7) and Mood Level Scale (8 to 13). The Urdu version (Fatima, 2004) of Trait Well-being Inventory was used in the present study. Reported alpha reliability

of Life Satisfaction Scale was .89 and of Mood level scale was .74 (Fatima, 2004). Scale scores were obtained by averaging the scores across the items for each individual.

#### Procedure

For data collection convenient sampling technique was used. Sample of study was obtained from public and private schools of rural and urban areas of Sargodha, Faisalabad and Jhelum districts. Prospective participants of the study were personally contacted in their schools with the permission of school administration and principals. They were briefed about the objective of study; informed consent was taken from the students. Scales of the study were distributed along with written as well as verbal instructions. Participants were also assured about the confidentiality of the information provided by them, so that they could provide relevant information honestly and without hesitation.

#### Results

Before stepping towards main analyses the normalcy of data was ensured, where the skewness statistic ranged between -.271 to .802 with standard error .089 for all the scales. Product of skewness and standard error was less than two for each scale ensuring that data was normally distributed.

Here, the Table 1 shows Pearson correlation matrix internal consistency index (alpha coefficients) for all scales used in the study. It indicates that all scales and sub-scales achieved satisfactory alpha level ranging from .60 to .86.

The correlation matrix shows that PsyCap and its sub-scales have significant and positive correlation with each other and with other scales used in the study. NA yielded a significant and negative correlation with other variables.

Table 2 yields multiple regression analysis showing the effect of the four constructs of PsyCap i.e. resilience, self-efficacy, hope and optimism on SWB. This model is found to be significant {F (4, 612) = 45.34, p < .001} and it also indicates 23% variance in SWB. Results suggested that resilience, hope and optimism positively predict SWB.

**Table 1.** Means, Standard Deviations, Alpha Reliabilities and Correlation Matrix for all the Variables Used in the Study (N = 616)

Variables	1	2	3	4	5	6	7	8	$\alpha$	M	SD
1 PsyCap	--	.88**	.80**	.67**	.47**	-.30**	.47**	.46**	.86	103.13	13.04
2 Resilience	--	--	.63**	.45**	.21**	-.17**	.44**	.41**	.83	37.76	6.63
3 Efficacy	--	--	--	.45**	.25**	-.24**	.35**	.36**	.70	20.78	3.80
4 Hope	--	--	--	--	.15**	-.15**	.38**	.37**	.67	26.54	3.53
5 Optimism	--	--	--	--	--	-.40**	.13**	.21**	.60	20.93	3.72
6 NA	--	--	--	--	--	--	-.04	-.22**	.78	20.86	6.95
7 PA	--	--	--	--	--	--	--	.42**	.70	36.04	6.11
8 SWB	--	--	--	--	--	--	--	--	.80	40.48	6.03

Note. 6 = negative affectivity; 7 = positive affectivity; 8 = subjective well-being. \*\* $p < .01$ .

**Table 2. Multiple Regression Analysis for Resilience, Self-efficacy, Hope and Optimism Predicting SWB, Negative Emotions and Positive Emotions (N = 616)**

Variables	SWB		Negative Emotions		Positive Emotions	
	$\beta$	R2	$\beta$	R2	$\beta$	R2
Resilience	.24*		.01		.28***	
Self-efficacy	.08		-.25***		.08	
Hope	.20*	.23	-.08	.18	.38***	.24
Optimism	.11*		.68***		.03*	

\* $p < .05$ . \*\*\* $p < .001$ .

Table 2 also gives the results of multiple regression analysis showing the effect of the four independent variables, which are resilience, self-efficacy, hope and optimism. This model is found to be significant  $\{F(4, 612) = 34.86, p < .001\}$  and it also indicates 18% variance in negative emotions ( $R^2 = .18$ ).

This table further gives the results of multiple regression analysis showing the effect of the four independent variables, which are resilience, self-efficacy, hope and optimism on positive emotions. This model is found to be significant  $\{F(4, 612) = 49.58, p < .001\}$  and it also indicates 24% variance in positive emotions ( $R^2 = .24$ ).

### Discussion

Positive psychology deals with the study of the conditions and processes that enhance

and contribute to the flourishing or optimal functioning of people, groups, and institutions. It focuses on positive aspects of human nature, like joy and altruism, and creates healthy families and institutions as addressing the full spectrum of human experience. These positive topics of inquiry are important to understand in their own context, and not only as buffers against the problems, stressors, and disorders of life (Gable & Haidt, 2005).

Present study was aimed at investigating the PsyCap as predictor of emotions and SWB among adolescents. Before stepping forwarding towards the main analysis, correlation analysis was computed to have an initial insight in the relationship pattern among study variables. In current study all variables were found to be significantly correlated with each other in desired direction (see Table 1).

The results confirmed the first hypothesis and indicated that resilience predicts SWB positively (see Table 2). Prior research is a witness to the fact that resilience and well-being have co-occurring outcomes, that is, outcomes of both variables are also inter-linked with each other. Furthermore, resilience also facilitates outcomes of SWB. Resilience has been found to be a predictor of subjective well-being in a series of studies with samples in later adulthood (e.g., Ong, Bergeman, Bisconti, & Wallace, 2006).

Riddle and Romans (2012) conducted a study on resilience among urban American Indian adolescents and their research results support the current findings. They also found positive correlation between SWB and resilience.

Secondly, results confirmed that hope and SWB are positively related constructs in the way that hope can increase SWB. The fact can be explained on logical grounds that a hopeful person may be likely to have a positive outlook towards his future and this attitude of a person in turn can increase his SWB. It was consistent with the pre-existing findings on the relationship between hope and SWB. The research done by Frank and Hsu (2013), on injured athletes, found that hope and social support predict subjective well-being and rehabilitation beliefs among them. In the same vein, Billington, Simpson, Unwin, Bray, and Giles (2008) found that hope also predicts psychological adjustment and the self-worth of ill individuals along with subjective well-being.

Optimism was also identified in the current study as a significant and positive predictor of SWB (see Table 2). Optimists are confident for their future and always expect positive from life that's why they feel happy and satisfied from their life and may possess high SWB. The same fact is portrayed with the findings of the current study. As it was emphasized in the previous researches in social cognitive theory and, more recently, the positive psychology movement, the function of hope and optimism is in predicting happiness, and subjective well-being (SWB). These findings

are in accordance with pre-existing research evidences. Research in spirituality has also demonstrated similar relationships with SWB. Hope and optimism both predict SWB positively (Ciarrocchi & Deneke, 2006).

The findings of the current research did not endorse self-efficacy as a significant predictor of SWB (see Table 2); it can be explained in terms of co-linearity effect. When two variables are highly correlated they can affect the desired results. As in the current study there were four overlapping and linked variables, which were predicting SWB. This can be a reason of undesirable results related to self-efficacy and SWB. Sambandam, (2003) in his article related to this issue stated that co-linearity is a problem in key driver analysis because when two independent variables are highly correlated, it becomes difficult to accurately understand their individual impact on the dependent variable.

Furthermore, unique characteristics of a sample can also affect the results of study. Sometimes these characteristics overlap with one or more of the other situations, which results in undesirable outcomes (Goodwin & Leech, 2006). As in the current study the sample was drawn from adolescents of both rural and urban areas, which can devote a large amount of variability in characteristics of the sample and that can be a factor, which lead the results contrary to prior research.

The current results also supported the first hypothesis regarding PsyCap as a positive predictor of positive emotions. According to prior findings, in order to understand and improve the quality of life and increase happiness, psychologists study multiple factors, which are important for enhancing the well-being and positive outcomes in one's life. According to Seligman (2000) (1) positive experiences, (2) positive traits, and (3) positive institutions are three pillars of positive psychology. Positive experiences can be taken as experience of positive emotions, whereas positive traits are denoted to PsyCap.

Resilience overcomes the negative effects of risks and traumatic experiences associated with risk factors and develop coping ability against life stressors. (Luthar, Cicchetti, & Becker 2000; Masten & Powell, 2003). As evidence from previous researches demonstrate that experience of frequent positive emotions – such as feelings of joy, contentment, serenity, interest, vitality, and pride is the symbol of happiness (Urry et al., 2004). Recovering from negative experience is actually termed as resilience, now it can be stated that there is a strong relationship between emotions and resilience. As resilience involves a process by which a person experiences positive emotion in the face of adverse circumstances (Tugade & Fredrickson, 2004).

Moreover, hope and optimism also facilitates positive emotions. In 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 well-being, coping, problem solving, creativity and health. A study conducted by Afzal (2013) also demonstrated the fact that positive emotions moderate the relationship between PsyCap and SWB. It means positive emotions are important for having a healthy life with positive qualities. Only self-efficacy was found to be positive but, a non-significant predictor of positive emotions. The reason behind this can be the co-linearity factor as mentioned earlier.

Results of the current study supported our second hypothesis, which can be seen within the context of Bandura's (1998) theory of self-efficacy. Individuals having low self-efficacy are more prone to negative events and perceived daily life challenges as more threatening and impossible to handle, whereas those having high self-efficacy effectively deal with life challenges and solve problems with great competence and effort (Bandura, 2008).

People who think negatively do not expect things to go as planned therefore, they anticipate bad outcomes. Their ways of 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 (Naseem & Khalid, 2010). The fact can be derived here that people having low self-efficacy and optimism will have high negative emotions.

Present data elucidated that resilience and hope did not predict negative emotions. Saleem and Mehmood, (2012) found that there are emotional and behavioral problems present among adolescents of Pakistan, which can affect their school performance and functioning in all domains of life. It means this factor can confound the results of the study. This issue has not been discussed in this study as this was beyond the spectrum of the present research. There are certain other problems e.g. poverty and inflation, which can yield impact on the emotional life of adolescents. Afzal (2013) also found that negative emotions did not predict SWB and happiness among adolescents. It can be concluded here that in such circumstances it may be easy for adolescents to maintain a low level of negative emotions but, it is difficult to attain high level of all positive constructs.

### **Conclusion**

In conclusion, results of the present study were found to have a positive and significant relationship among all variables. Further, results of the current research also established the vision that resilience, hope and optimism significantly predicted positive emotions and SWB; only self-efficacy was found to be a non-predictor of both. Moreover, self-efficacy and optimism were found to be significant predictors and hope and resilience were found to be non-significant predictors of negative emotions.

### **Limitations and Suggestions**

The most concerning limitation of the present study was the cross-sectional research design,

because of which no cause and effect could be investigated in the present scenario. Use of self-report measures in current study was also a limitation; self-report measure can cause problems in a sense that most often people hide their true opinion and present themselves as good or bad, which they are not assumed to be actually. The present findings should also be seen with caution because the use of convenient sampling technique also restricts generalizability of results. A nationwide sample and multiple sources for data collection along with self-report measures could enhance the external validity of data.

Results of the current study can help educationalists and counselors to resolve the emotional issues and problems of adolescents in the way that they can plan strategies to increase positive emotions and minimize negative emotions. Further, school psychologists can investigate and tackle problems of adolescents and can resolve them by enhancing PsyCap.

### References

- Afzal, A. (2013). *Positive Psychological Capital and Outcomes Among Adolescents: The Moderating Role of Positive and Negative Emotions*. Unpublished M.Phil. Dissertation, University of Sargodha, Pakistan.
- Bandura, A. (1998). *Health Promotion from the Perspective of Social Cognitive Theory*. New York: Guilford
- Bandura, A. (2008). An agentic perspective on positive psychology. In S. J. Lopez (Ed.), *Positive Psychology: Exploring the Best in People* (pp. 167–196). Westport, CT: Greenwood Publishing.
- Billington, E., Simpson, J., Unwin, J., Bray, D., & Giles, D. (2008). Does hope predict adjustment to end-stage renal failure and consequent dialysis? *British Journal of Health Psychology*, 13(4), 683–699.
- Burns, R. A., Anstey, K. J., & Windsor, T. D. (2010). Subjective well-being mediates the effects of resilience and mastery on depression and anxiety in a large community sample of young and middle-aged adults. *The Australian and New Zealand Journal of Psychiatry*, 45(3), 240-248.
- Caprara, G. V., & Steca, P. (2005). Affective and social self-regulatory efficacy beliefs as determinants of positive thinking and happiness. *European Psychologist*, 10, 275-286.
- Carver, C. S., Scheier, M. F. (2001). Optimism, pessimism, and self-regulation. In E. C. Chang (Ed.), *Optimism and Pessimism: Implications for Theory, Research, and Practice* (pp.31-51), Washington, DC: American Psychological Association.
- Ciarrocchi, W. J., & Deneke, E. (2006). Hope, optimism, pessimism, and spirituality as predictors of well-being controlling for personality. *Research in the Social Scientific Study of Religion*, 16, 161-183.
- Dalbert, C. (1992). Subjektives Wohlbefinden junger Erwachsener: Theoretische und empirische Analysen der Struktur und Stabilität [Subjective well-being of young adults: Theoretical and empirical analyses of structure and stability]. *Zeitschrift für Differentielle und Diagnostische Psychologie*, 13, 207-220.
- Davidson, C., Wingate, L. R., Rasmussen, K., & Sligh, L. (2009). Hope as a Predictor of Interpersonal Suicide Risk. *Suicide and Life-Threatening Behavior*, 39(5), 499-507.
- Diener E., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. *Annual Review of Psychology*, 54, 403-425.
- Dickerhoof, R. (2007). Expressing optimism and gratitude: A longitudinal investigation of cognitive strategies to increase well-being (Doctoral dissertation, University of Riverside, 2007). *Dissertation Abstracts International*, 68, 4174.
- Fatima, I. (2004). *Beliefs in a Just World and Psychological Well-Being*. Unpublished M.Phil. Dissertation. University of Punjab, Pakistan.
- Frank J. H. Lu., Hsu, Y. (2013). Injured athletes' rehabilitation beliefs and subjective well-being: The contribution of hope and social. *Journal of Athletic Training*, 48(1), 92–98.
- Fredrickson, B.L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56, 218–226.
- Fredrickson, B.L. (2000). Cultivating positive emotions to optimize health and well-being: Prevention and treatment. *Applied Research in Quality of Life*, 2, 189-208.

- Fredrickson, B.L. (2004). The broaden-and-build theory of positive emotions. *Philosophical Transactions of the Royal Society of London Series B – Biological Sciences*, 359(1449), 1367 – 1377.
- Gable, L. S., & Haidt, J. (2005). What (and why) is positive psychology? *Review of General Psychology*, 9(2), 103-110.
- Goodwin, D. L., & Leech, L. N. (2006). Understanding correlation: factors that affect the size of r. *The Journal of Experimental Education*, 74(3), 251–266
- Lai, J. (2009). Dispositional optimism buffers the impact of daily hassles on mental health in Chinese adolescents. *Personality and Individual Differences*, 47, 247-249.
- Lent, R. W. (2004). Toward a unifying theoretical and practical perspective on well-being and psychosocial adjustment. *Journal of Counseling Psychology*, 51, 482-509.
- Luszczynska, A., Scholz, U., & Schwarzer, R. (2005). The general self-efficacy scale: Multicultural validation studies. *The Journal of Psychology*, 139, 439-457.
- Luthans, F. (2002). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, 23, 695–706.
- Luthans, F., & Youssef, C. M. (2004). Human, social, and now positive psychological capital management: Investing in people for competitive advantage. *Organizational Dynamics*, 33, 143-160.
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*, 60, 541-572.
- Luthans, F., Youssef, C., & Avolio, B. (2007). *Psychological Capital: Developing the Human Competitive Edge*. New York: Oxford University Press.
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: a critical evaluation and guidelines for future work. *Child Development*, 71, 543–62.
- Lyubomirsky, S. L., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, 14, 803–855.
- Maruta, T., Colligan, R., Malinchoc, M., Offord, K. P. (2000). Optimism vs. pessimism: Survival rate among medical patients over a 30-year period. *Mayo Clinic Proceedings*, 75, 140-143.
- Masten, A. S., & Powell, J. L. (2003). A resilience framework for research, policy and practice. In S. S. Luthar (Ed.). *Resilience and vulnerability: Adaptation in the Context of Childhood Adversities* (pp. 1-25). New York: Cambridge Press.
- McCrae, R. R., & Costa, P. T. (1991). Personality, coping and coping effectiveness in an adult sample. *Journal of Personality*, 54, 385-405.
- Naseem, Z., & Khalid, R. (2010). Positive Thinking in Coping with Stress and Health outcomes. *Journal of Research and Reflections in Education*, 4(1), 42 -61.
- Oatley, K., & Jenkins, J. M. (1996). *Understanding emotions*. Cambridge, MA: Blackwell.
- Ong, A. D., Bergeman, C. S., Bisconti, T. L., & Wallace, K. A. (2006). Psychological resilience, positive emotions, and successful adaptation to stress in later life. *Journal of Personality and Social Psychology*, 91, 730–749.
- Park, N. (2004). *Developmental Stability and Changes on the Structure and Level of Life Satisfaction Among Korean Children and Youth*. Unpublished manuscript, University of Rhode Island.
- Rask, K., Astedt-Kurki, P., & Laippala, P. (2002). Adolescent subjective wellbeing and realized values. *Journal of Advanced Nursing*, 38(3), 254-263.
- Riddle, G. S., & Romans, J. S. C. (2012). Resilience among urban American Indian adolescents: exploration into the role of culture, self-esteem, subjective well-being, and social support. *American Indian and Alaska native mental health research*, 19(2), 1-19.
- Saleem, S., & Mehmood, Z. (2012). Relationship between behavioural problems and school performance of adolescents. *FWU Journal of Social Sciences*, 6(2), 187-193.
- Sambandam, R. (2003). Co-linearity is a natural problem in clustering. Cluster Analysis Gets Complicated: So how can researchers get around it? *Marketing Research*, 15(1).
- Scheier, M.F., Carver, C.S., & Bridges, M.W. (2001). Optimism, pessimism, and psychological well-being. In E.C. Chang (Ed.), *Optimism and Pessimism: Implications for Theory, Research, and Practice* (pp. 189-216). Washington, DC: American Psychological Association.

- Seligman, M. E. P. (2000). *Learned Optimism*. New York: Knopf.
- Snyder, C. R. (2000). *Handbook of Hope: Theory, Measures, and Applications*. San Diego, Calif.: Academic.
- Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology, 86*, 320-333.
- Urry, H. L., Nitschke, J. B., Dolski, I. et al., (2004). Making a life worth living. Neural correlates of wellbeing. *Psychological Science, 15*, 367-372.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063-1070.
- Werner, E. E. (2012). The children of Kauai: resiliency and recovery in adolescence and adulthood. *Journal of Adolescent Health, 13*, 262-68
- Xue, Z. C. (2010). *Self-construal and subjective well-being among Chinese university students: The mediation effect of optimism* (In Press). Department of Applied Social Studies, City University of Hong Kong.
- You, S., Furlong, M. J., Felix, E. D., Sharkey, J. D., Tanigawa, D., & Green, J. G. (2008). School connectedness as a mediator of the relation between bullying victimization, hope and life satisfaction. *Psychology in the Schools, 45*(5), 446-460.
- Zhu, L. (2003). *Optimism and Well-being in American and Chinese College Student Sample: A Cross Cultural Short Term Longitudinal Study*. Dissertation Abstracts. International: Section B: The Sciences and Engineering, 64(2-b), 994-994.

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