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The Effect of Resilience Intervention on Levels of Optimism

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Abstract

This study explores the impact of 3-weeks intervention based on resilience as a psychosocial skill to enhance the levels of optimism, self-esteem, and resilience as well as the correlation between these variables. Participants were selected randomly from the Law College studying in Undergraduate Program. The intact group received 3 two-hours weekly sessions. Measures of Life Orientation Test (Revised), resilience scale and self-esteem scale were administered to gauge pre-post intervention. Data analysis indicated a significantly higher resilience score, moderately high score on the self-esteem score and significant high-rise on levels of optimism providing a reasonable positive impact. The findings of the study clearly show that resilience intervention is effective to boost self-esteem, resilience and positive life orientation.

Keywords: Effect, Resilience, Optimism, Intervention, Level

Introduction Optimism

Role of positive thinking, positive emotions and positive behavior is essential for the educational arena to shape lives of young adults. Stress and depression are alarmingly increasing among teenagers and adolescents and children. Stress and depression cause psychological disorders including attention deficit and hyperactivity disorders (ADHD) along with, behavioral problems. To equip young minds with better psychological and emotional resources, optimism carries immense potential to make a difference. Anthropologist Lionel Tiger (1979) explains optimism as "a mood or attitude associated with an expectation of social and material future-one which the evaluator finds socially desirable to his advantage or for his pleasure." (p.18). Seligman (1990) proposed optimism as a subjective act of attributing life crisis marked as changeable, specific and external attributions for the causes of positive and negative events. Furthermore, optimism is also understood as a positive future expectation as compared to bad. Scheier and Carver (1990), on the other hand, have added that tendency to experience good is stable both in time and situation in individuals. Earlier research in the field of optimism (Carver & Scheier, 1985) developed an optimism measure with the name of life orientation test (LOT).

Peterson (2000) has fairly categorized these two definitions and provide a synthesis of the all-inclusive terms proposed by Scheier and Carver (1990) as a "Big optimism and Seligman's more specific definition as a "Little optimism". On the subject of how optimism can be inculcated in individuals, the understanding of optimism is multifaceted that require due attention. They might have different routes, but it leads to the same destination. Moreover, Peterson (2000) highlights the value of future research on these two levels in order to enhance more understanding of the concept.

Optimism has two main forms that draw a clear distinction in understanding the concept of optimism. The first type is the dispositional optimism which means that optimism does involve individual's expectation of good events and requires individuals to be the causal agents of good events. Also, it does recognize the other person or fate as a causative agent under the positive light and hope.

The second type is attributional/explanatory. Optimism is considered as an overall personality trait. A lot of empirical evidence on attributional style optimism supports (Peterson & Seligman 1984). Seligman (1990) found that people employ specific attributional styles, which is described in

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three types of explanatory ways as having stability, internality, and global dimension. Individuals, who attach causes to the negative events as personal (because of me) and extend one failure onto the other domains of their lives, tend to hold pessimistic life orientation. On the contrary, optimistic individuals consider negative events as temporary, specific with external factors (Peterson & Seligman 1984). Measurement of this type of optimism requires individual's causal explanation of twelve negative and positive events of life (Seligman, 1984).

Resilience is a recovery process from the source of a stressor to the same level of effective functioning before the stressor (Dolbier, et al., 2010; Steinhardt, 2008). Hodges (2010) explains resilience as "the capacity of people to deal successfully in the face of change, catastrophe, and risk" (Mangham, 1997).

Furthermore, (Loprinzi, et al., 2011) explains resilience as an 'ability to flourish regardless of the presence of adversity (Connor & Davidson, 2003). It is also termed as immunity and hardiness (Kobasa, 1979). Resilience is an individual's internal strength that propels positive change during and after the stress and actively seeks meaning and purpose of life.

Stoiber and Gettinger (2011) considered resilience as an 'a capacity to be flexible enough to change positively when adversity hits without losing hope to overcome the bad situation (Luthar, 2000; Gueldner, 2010). Varker and Devilly (2012) describe resilience 'as a measurement scale to gauge the level of distress considering resilience intervention as effective or not' (p. 697).

Lazarus and Folkman proposed a theory of stress and coping which indicates that stress is a negotiation between individuals and their environment and the moment environmental demands appear uncontrollable or beyond individual's ability to handle with, they tend to be stressed. Resilience is a competence to recuperate from the dysfunctional state of difficult situation and maintain the levels of active functioning. In general, it is evident that resilience demands bigger optimism when encountered with adversities (Rutter, 2006).

Statement of the Problem

The study measured the effects of resilience intervention on the levels of optimism through the use of life-orientation scales revised, brief resilience scale and Rosenberg self-esteem scale in a mediating role.

Objectives of the Study

The study followed the following objectives:

- To estimate the effect of resilience intervention on the levels of optimism 1.
- 2. To examine the correlation present among resilience, self-esteem and optimism.

Significance of the Study

The study can be meaningful in the following ways;

- Resilience intervention, used to gauge the impact on the levels of optimism, can also be used 1. to reduce academic stress and depression on students to develop more psychological wellbeing.
- 2. Resilience intervention can also be helpful to develop self-esteem and resilience skills besides positive life orientation.
- 3. Resilience intervention can also be tailored for various other segments of the society as per the needs of the respective target audience.
- 4. Resilience intervention sets a new learning path in the field of non-cognitive skills imperative for children, youth and adults.

Hypotheses

H0: There is no significant difference in the levels of optimism before and after resilience intervention.

H1: There is no significant difference in the levels of self-esteem before and after resilience intervention.

H2: There is no significant difference in the levels of resilience before and after resilience intervention.

Delimitation of the Study

This intervention was limited to LL.B Year 1 in the context of private sector Law College in the city of Lahore of the province of Punjab (Pakistan). The sample represents middle class demographics

predominantly Muslims Pakistani and with averaged grades of boys with (n= 50) and girls with (n= 6).

Literature Review

Resilience and Future Expectations

Future expectations as a relevant construct for resilience studies have been paid very little attention (Sulimani, 2015). Future expectations are crucially essential in setting goals and motivation to achieve the valued goals. It is found that positive correlation exists between positive future expectations and resilience among youth (Kirk, 2011). It also acts as an active source of motivation to strive for better future outcomes in various arenas of adult life (Dubow, et al., 2001). Moreover, the literature highlights that thinking related to future expectations have an anticipatory role in youth and promises more accomplishment in later life stages of an adult (Armstrong, 2000).

What is Resilience Intervention?

Psychological resilience as a term means despite serious psychological and physical load only few people become psychologically ill or unfit (Sapienza & Masten, 2011). This definition leads to the various resilience training programs designed under different formats, structures and timeframes (Harms & Lester, 2015). In all these studies, concepts, designs and methods of these interventions with serious consideration on the area of resilience meaning and instruments used to estimate resilience (Chimitroz et al., 2018). There are two major approaches which have been shaped during the decade's long research in the field of resilience. First approach is termed as a trait-oriented in particular focus on personality type (hardy personality) that increases the adaptation skills of individuals on the face of adversity (Hu Zhang & Wang, 2015).

The second approach is more significantly considered as outcome-based referred as outcome based approach explaining mental or physical health is managed or re-acquired regardless of the stressors or adverse situations (Muller & Tuscher, 2015). In this approach, resilience requires a stressor, adversity or a substantial risk (Firtko & Edenborough, 2007). This approach explains presence of a stressor as a pre-requisites for resilience measurement.

According to Masten (2001) resilience as an outcome is enhance able and modifiable and it can be determined by various resilience factors (Bonnano, 2013). These factors related to resilience safeguard individuals from the potential damage of the stressor by modifying their responses (Fletcher &Sarkar, 2013). For instance, people living in the environments which are more stable and rich in terms of resources they tend to show more resilience than individuals in unsafe environment. Finally, there is a third type of resilience which is called as a process-oriented approach (Bonnano et al.,

Resilience as a process is associated with a track of undisputed and balanced psychological state, while handling an adversity or by occasional bouts of temporal disturbances followed by sudden and successful recovery (Kalisch et al., 2015). For intervention research, resilience definition based on outcome-oriented is more useful and more appropriate since it claims that resilience can be modified and taught (Kalisch et al., 2015).

Resilience intervention used in the study is based on the Penn resiliency program (PRP) in order to increase resilience and reduce the likelihood of depression and anxiety (Seligman & Silver, 1990). The overall findings of the intervention are that resilience intervention works to foster individual's strengths that are related to resilience and positive life-orientation, such as emotional stability, self-regulation, problem solving, social skills, self-efficacy and realistic optimism. The primary target of the intervention is to improve cognitive and coping skills in regards to daily stressors. Ellis's Adversity-Belief and Consequences (ABC) models is used to make youth learn to identify the internal "self-talk" and recognize negative and catastrophic or ineffective thinking styles. Additionally, the intervention tried to raise individual's attention to the alternative explanations of the events and issues and shared techniques to replace self-defeating habits with more flexible and realistically optimistic interpretations.

The second major focus of the intervention is on problem-solving and coping styles. Individuals are trained on how to handle difficult emotions and situations. Techniques such as assertiveness, negotiations, decision-making, social problem solving and relaxation are shared with the sample in order to enhance their coping tendencies. Moreover, the mode of instruction was less deductive and more of a group-discussion with more opportunities to express and engage in real-life scenarios. Lessons included skits, role-play, short stories, audio-video display of cartoons, and games.

The Effect of Residence meet vention on

The focus of the intervention is to harness knowledge of cognitive behavior therapy and positive psychology.

Methodology

Population of the Study

The target population of the study was selected from the city of Punjab, Lahore with age ranging from 18-23 and predominantly middle and upper middle class demographics.

Sample of the Study

The sample of the study consisted of 65 students of L L.B Year 1 from a private college Lahore, Pakistan.

Research Methodology

It was a quasi-experimental study involving an intervention. The intervention was framed on the established positive interventions in the field of positive psychology. It was further based on the works of Mininni (2006) and her book "The Emotional Toolkit". The intervention was carried out in a psycho-educational fashion with the help of direct instructions and activities used in a classroom setting with experiential learning methods. The duration of the intervention was 3 weeks.

Research Design

The current study aimed at increasing resilience and optimism among young individuals to face life more heads on with practical skills of psychological and emotional resources. In the pre-intervention phase, the participants were assessed on their general life orientation and general levels of self-esteem, depression and resilience. The resilience training was incorporated within the regular classroom schedule without holding them for extra hours. After successful completion of three weeks intervention, a positive increase in the levels of optimism and resilience, self-esteem and reduced levels of depression has been observed.

Instrument of the Study

Life Orientation Test Revised (LOT-R), Brief Resilience Scale (BRS), and Rosenberg s Self-Esteem Scale has been used to gauge the impact of resilience intervention.

Procedure of Data Collection

The data of the study were collected from a private law college, located in Lahore, Pakistan. The data was collected before the intervention as a pre-assessment, during intervention and at the end of the intervention after 3 weeks.

Data Analysis

The data was analyzed descriptively in the form of tables.

Results and Findings

The participants of the study (n=65) filled the life-orientation test revised in the pre-analysis phase to record their initial levels of optimism. The second phase of the study was execution of the resilience intervention in the course of 3 weeks duration. Each week intervention was given to the participants for two consecutive hours within 10 mins break. Resilience intervention has two major categories (a) cognitive skills and (b) coping skills or problem-solving skills. The mode of instruction was experiential learning with the help of audio-video aids along with role-play and games. The sections of the intervention can be seen in the table below:

Table 1. Resilience Intervention

Components	Content	Activities	
Cognitive Skills	ABC Model	Group Exercise	
	Detect Negative Cognition	Visual Display of info	
	Maladaptive Thinking	Video & Discussion	
	Alternative Explanations	Group-discussions	
	Replace	Group-discussion on visual display of the	
	Self-Defeating Patterns	stimulus	
Coping Skills	Managing difficult Emotions	cartoons	
	Assertiveness	Videos	
	Negotiations	Role-play	
	Decision-making	Short stories	
		Group-Discussion	
	Social Problem-Solving	Games	
	Relaxations	Deep breathing Exercises	

A positive correlation was found between the levels of optimism and resilience intervention. Students showed a reasonable increase in the levels of self-esteem, and resilience.

Table 2. Regression Model for Pre-Intervention data along with t-values, standard deviations and **Fstats**

Pre- optimism	Coef. Std.Err. t			P(t)	{95%Conf.Interval}	
Pre-	6089219	. 4594171	-1.33	0.191	-1.53315	.315306
Resilience Pre-Self-	.1222673	. 1419096	0.86	0.393	-1.632179	.4077525
Esteem _cons	30.39025	8.900927	3.41	0.001	12.4839	48.29661

The beta coefficient for Pre-Resilience is -0.060, which shows that if resilience increases by 1 unit, optimism will decrease by 60%. Also, the beta coefficient for Pre-self-esteem is 0.122 which indicates that self-esteem enhancement by 1 unit may result in increase in the levels of optimism by 12.2%. If both self-esteem and resilience have a value of zero because of Y intercept, optimism is at 30.3 by default. In the pre-intervention data, these two variables have a T-value less than 1.67 at 95% confidence interval. As a result, both self-esteem and resilience are significantly insignificant.

Table 3. Post-Resilience Intervention with T-Values, Standard Deviations and F stats

Post-	Coef.	Std.Err.	t	P(t)	{95%Conf.Interva}	
Optimism						
Post-	2910571	.2229506	-1.33	0.198	7398333	.1577192
Resilience						
Post-Self-	.1588804	.150663	1.05	0.393	1443885	.4621493
Esteem						
_cons	27.48609	6.36177	4.32	0.000	14.68051	40.29167

The beta coefficient for post-resilience intervention is 0.1588 that shows clearly that increase in resilience with the margin of 1 unit, increases optimism by 15.8%. However, self-esteem impacts on optimism in an insignificant manner.

Table 4. T-Test Applied on Two Samples with Equal variance (Self-Esteem)

Variable	Obs	Mean	Std.Err	Std.Dev	{95% Conf.	Interval}
Pre-Self-	50	21.82	.7158212	0.191	-1.53315	23.2585
Esteem						
Post-Self-	49	24.06122	.1943246	0.393	-1.632179	24.45194
Esteem						
Combined	99	22.92929	.3890515	3.871013	22.15723	23.70135
Difference		-2.241224	.7483074		-3.726408	7560414

It can be clearly seen that the p-value for the pre and post self-esteem variable is 0.0035 (written under Ha: diff! = 0) which is less 5%. Hence, we will reject the null hypothesis that there is no difference between means of optimism and resilience.

Table 5. T-Test Applied on Two Samples with Equal Variance (Resilience)

				` `		
Variable	Obs	Mean	Std.Err	Std.Dev	{95% Conf.	Interval}
Pre-	52	18.61538	.2129904	1.535895	18.18779	19.04298
Resilience						
Post-	52	17.90385	.2749738	1.982864	17.35181	18.45588
Resilience						
Combined	104	18.25962	.176576	1.800729	17.90942	18.60981
Difference		.7115385	.3478153		.0216485	1.401428

The p-value for the pre and post resilience variable is 0.0434 (written under Ha: diff! = 0) which is less 5%. Consequently, the null hypothesis is rejected that there is no difference between means of both samples.

If we look at the individual variables, the levels of resilience has significantly improved in the pre and post intervention data. Along with resilience scale, Rosenberg self-esteem scale indicates the increased score as well.

Table 6. Pre-Intervention Resilience Score

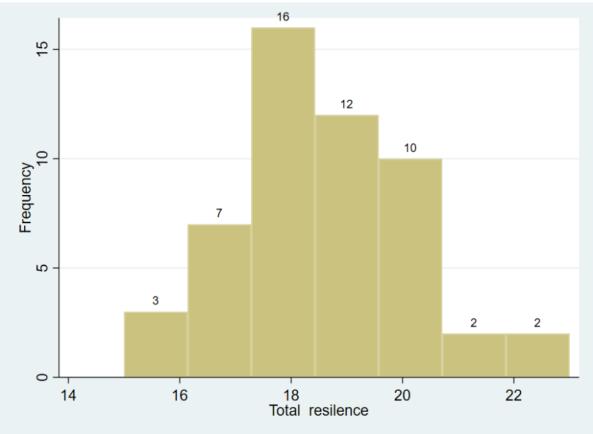


Table 7. Post-Intervention Resilience Score

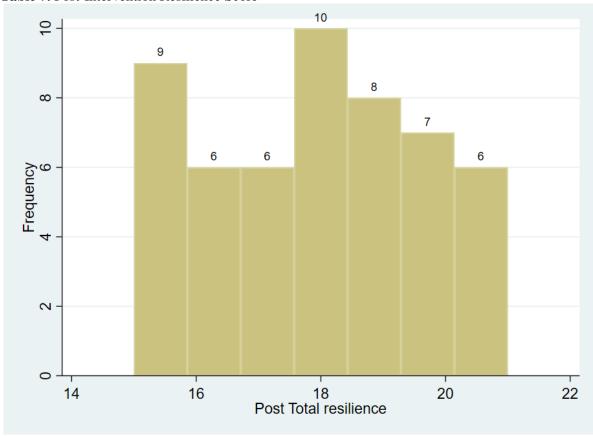


 Table 8. Pre-Intervention Self-Esteem

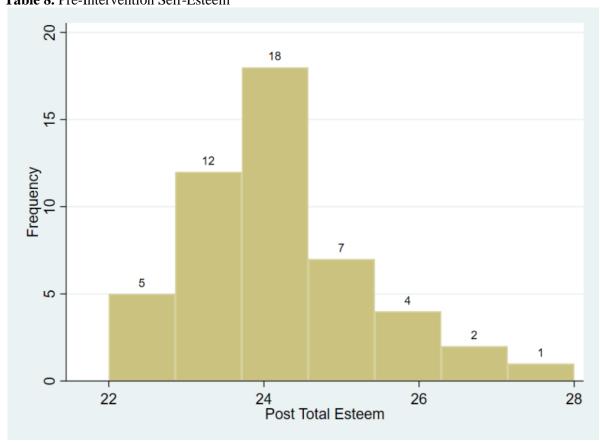
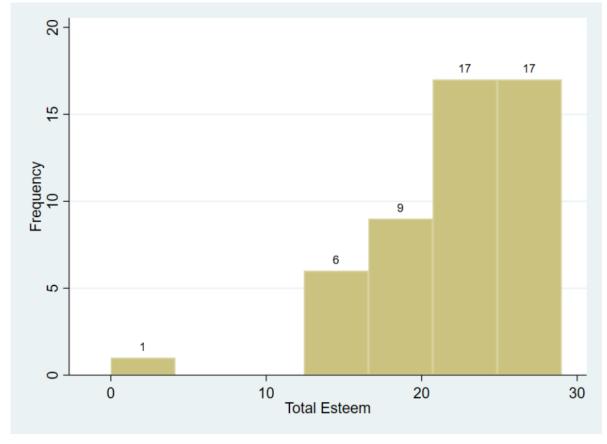


 Table 9. Post Intervention Self-Esteem



Discussion

The present study was conducted to see the impact of resilience intervention on the levels of optimism with the help of soft life skills such as problem solving, cognitive skills and coping skills. The findings of the study revealed that resilience intervention successfully enhanced the levels of optimism in their life-orientation by expanding their vision to see possibilities and alternative explanations of the challenges they encounter on day to day basis. Furthermore, participants were able to recognize the subtle difference between positive and negative emotions and how maladaptive thinking can affect our self-belief and self-image. It has further increased their understanding on the subject of how to identify pessimistic and catastrophic thinking styles that runs in the mind without any definite proof.

The study supports various theories of promoting optimism and resilience among youth with the evidence supported by Barbara Fredrickson (2004) proposed "broad and build theory" highlighting the value and powerful impact of positive emotions in our thought and action. It says that positive emotions have this "broadening effect" on the thought action ranges and it disposes of the automatic responses and replaces it with more innovative, adaptive ways of thinking and acting.

The participants showed keen interest in self-awareness, emotional competencies and social competencies in regards to learning and applying these soft life skills across all domains of their life including personal and academic relationships, goals and overall sense of self. Hence, this study shows relevance to Martin Seligman's (2000) theory of PERMA model which postulates that people's level of happiness and life satisfaction increases if they have positive relationships, positive emotions, engagement, and accomplishment.

Conclusion

This present study aimed at increasing the levels of optimism among youth and college students with the help of resilience intervention. It further aimed to gauge the correlation present between resilience, self-esteem and optimism. Resilience intervention was designed on the basis of The Penn Resiliency Program (PRP) taking full account of cognitive skills and coping skills that impacts the levels of selfesteem and resilience in order to increase psychological and emotional resources of the participants. Life skills such as emotional stability, problem-solving, decision- making, negotiations, social competencies and realistic optimism had been augmented during the 3 weeks intervention.

The study obtained data from the undergraduate law programmer (5 Years) students at a private sector college in Lahore. The data was collected through google forms before and after the intervention. The study successfully analyzed the levels of development found in the life orientation test- revised before and after the resilience intervention. The findings of the study indicates that optimism level can be improved with improved levels of resilience the ability to bounce back after crisis or adversities along with high self-esteem containing positive self-image and self-belief. The success of the intervention can be measured with Brief Resilience Scale (BRS), Rosenberg Self-Esteem Scale. The findings of the study clearly show that levels of optimism can be enhanced with resilience training targeting emotional and social competencies.

References

- Chimtorz, et el., (2018). Intervention studies to foster resilience; a systematic review and proposal for a resilience framework in future literature. Clinical Psychology Review, 60, 78-100.
- Abramson, L. Y., Seligman, M. E. P., & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. Journal of Abnormal Psychology, 87, 49-74.
- Armstrong, P. and Crombie, G. (2000). Compromises in adolescents; occupational Aspirations and expectations from grades 8 to 10'. Journal of Vocational Behavior, 26(1), 82–98.
- Arnau-Sabate, L. and Gilligan, R. (2015). What helps young care leavers to enter the world of work? Possible lessons learned from an exploratory study in Ireland and Catalonia. Children and Youth Services Review, 53, pp. 185–91.
- Bekki, J. M., Smith, M. L., Bernstein, B. L., & Harrison, C. (2013). Effects of an online personal resilience training program for women. Journal of Women and Minorities in Science and Engineering, 19, 17–35.
- Brunwasser, S. M., Gillham, J. E., & Kim, E. S. (2009). A meta-analytic review of the Penn resiliency program's effect on depressive symptoms. Journal of Consulting and Clinical Psychology, 77, 1042–1054. Doi: 10.1037/a0017671

- Cardemil, E. V., Reivich, K. J., & Seligman, M. E. P. (2002). The prevention of depressive symptoms in low-income minority middle school students. Prevention and Treatment, 5(8). doi:10.1037/1522-3736.5.1.58a
- Cavett, A. M., & Drewes, A. A. (2012). Play applications and trauma-specific components. in J. A Cohen, A. P. Mannarino, & E. Deblinger (Eds.), Trauma-focused CBT for children and adolescents. Treatment Applications (pp. 124-148). New York. Guilford Press.
- Dolbier, C. L., Jaggars, S. S., & Steinhardt, M. A. (2010). Stress-related growth: pre-intervention correlates and change following a resilience intervention. Stress and Health, 26, 135–147.
- Dubow, E. F., Arnett, M., Smith, K. and Ippolito, M. F. (2001). Predictors of future expectations of inner-city children: A 9-month prospective study. Journal of Early Adolescence, 21, pp. 528.
- Ellis, A. (1962). Reason and emotion in psychotherapy. New York: Lyle Stuart.
- Gillham, J. E., Jaycox, L. H., Reivich, K. J., Seligman, M. E. P., & Silver, T. (1990). The Penn Resiliency Program. Unpublished manual, University of Pennsylvania, Philadelphia.
- Hodges, T. D. (2010). An experimental study of the impact of psychological capital on performance, engagement, and the contagion effect (Unpublished doctoral dissertation). University of Nebraska, Lincoln.
- Kent, M., Davis, M. C., Stark, S. L., & Stewart, L. A. (2011). A resilience-oriented treatment for posttraumatic stress disorder: results of a preliminary randomized clinical trial. Journal pf Traumatic Stress, 24, 591–595.
- Kirk, C., Lewis, R. K., Lee, F., & Stowell, D. (2011). The power of aspirations and expectations: the connection between educational goals and risk behaviors among African American adolescents. Journal of Prevention and Intervention in the Community, 39(4), pp. 320-32
- Luthans, F., Avev, J. B., Avolio, B. J., & Peterson, S. J. (2010). The development and resulting performance impact of positive psychological capital. Human Resource Development Ouarterly, 21, 41–67.
- Luthar, S. S., Cicchetti, D. and Baker, B. (2000). 'The construct of resilience: A critical evaluation and guidelines for future work. Child Development, 71, pp. 54362
- Masten, A. S. and Powell, J. L. (2003). A resiliency framework for research, policy and practice, in Luther's (ed). Resiliency and Vulnerability: Adaptation in the Context of Childhood Adversity. Cambridge University Press.
- McGonagle, A. K., Beatty, J.E., & Joffe, R., (2014). Coaching for workers with chronic illness: evaluating an intervention. Journal of Occupational Health Psychology, 19, 385–398.
- Nurmi, J. E. (1991). How do adolescents see their future? A review of the development of future orientation and planning. Developmental Review, 11, pp. 159.
- Nurmi, J. E. (2005). 'Thinking about and acting upon the future: Development of future orientation across the life span, in Joireman, J., Strathman, A. and Mahwah, N. J. (eds). Understanding Behavior in the Context of Time: Theory, Research and Application. Mahwah, NJ, Lawrence Erlbaum Associates, pp. 31–57.
- Peterson, C., Seligman, M. E. P., & Vaillant, G. E. (1988). Pessimistic explanatory style is a risk factor for physical illness: A thirty-five year longitudinal study. Journal of Personality and Social Psychology, 55, 23-27.
- Peterson, C., Seligman, M. E. P., Yurko, K. H., Martin, L. R., & Friedman, H. S. (1998). Catastrophizing and untimely death. Psychological Science, 9, 49-52.
- Pidgeon, A. M., Ford, L., & Klaassen, F. (2013). Evaluating the effectiveness of enhancing resilience in human service professionals using a retreat-based Mindfulness with Metta Training Program: a randomized control trial. Psychology, Health and Medicine, 19, 355–364.
- Scheier, M. F., & Carver, C. S., (1987). Dispositional optimism and physical well-being: The influence of generalized outcome expectancies on health. Journal of Personality, 55, 169-210.
- Seginer, R., (2008). Future orientation in times of threat and challenge: How resilient adolescents construct their future. International Journal of Behavioral Medicine, 32(4), pp. 272–82.
- Seligman, M. E. P. (1991). Learned optimism. New York: Knopf.
- Songprakun, W., & McCann, T. V., (2012a). Effectiveness of a self-help manual on the promotion of resilience in individuals with depression in Thailand: a randomised controlled trial. BMC Psychiatry, 12, 12.doi:https://doi.org/10.1186/1471-244X-12-12

- Songprakun, W., & McCann, T. V., (2012b). Evaluation of a cognitive behavioural self-help manual for reducing depression: a randomized controlled trial. Journal of Psychiatric and Mental Health Nursing, 19, 647–653.
- Sulimani-Aidan, Y., (2015). Do they get what they expect? The connection between young adults' future expectations before leaving care and outcomes after leaving care'. Children and Youth Services Review, 55, pp. 193-200.
- Tiger, L., (1979). Optimism: The biology of hope. New York: Simon & Schuster.
- Varker, T., &Devilly, G. J. (2012). An analogue trial of inoculation/resilience training for emergency services personnel: proof of concept. Journal of Anxiety Disorders, 26, 696–701.