

Emotional Intelligence and Stress Resiliency: A Relationship Study

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Abstract

The purpose of the paper is to study the relationship between emotional intelligence and stress resiliency among students. The study has been conducted on a sample of 140 students having technical backgrounds. The findings suggest that students being emotionally intelligent can lead them to be resilient to stress, which determine their success at personal and professional front. The paper specifies aspects for building resiliency among students from the physiological and psychological point of view. These include the implementation of various educational programmes which can enhance their levels of emotions and be more resilient to stress. Bringing together the key elements in the study is the evidence that emotional intelligence and stress resiliency when linked together develops like muscular strength and once this strength is developed intellectually; it leads to holistic development of humans.

Keywords Emotional Intelligence, Stress Resiliency.

Introduction

Academic excellence can be thought of as the reason of high intelligence quotient and this can be achieved while we have advanced technology and knowledge. In other words, we can say that the twenty-first century is an era of transformation where the youth transcend themselves into scientific minds with abundance of success stored for them. But the question that comes to mind is whether intelligence quotient (IQ) is the only measure of success or some other factors play vital role in determining the

success of students. One of the factors that have been focused is the “*emotion*” which drastically effect students’ life. This factor has been highlighted with a view that the students being more at competitive edge, experience more stress which impede their academic performance and other scholarly activities. It has also been experienced that students being engrossed in cultivating rational intelligence are stressed and a physiological arousal occurs which leads to panic and interferes with an individual’s performance (Spence and Spence, 1966).Khalsa(1997) believed that students being continually task-focused are more stressed which interfere with cognitive processing and consequently inhibit learning and memory.

As earlier stated, that students being more at competitive edge are usually preoccupied with stress, which make them emotionally weak, and when unsuccessful in achieving their targets, this deteriorates their academic performance. That is, students’ level of achievement is significantly related to their emotions as it is observed that more is the balance of emotions, greater success is experienced by the students. Or, we can say that emotional intelligence along with high IQ plays a vital role in determining the success of students, at personal and professional front.

The discussion not only terminates to EQ but further we also discuss that what are the outcomes of being emotionally intelligent and has been hypothesized that students who are emotionally intelligent are “*more resilient to stress*” and tend to develop positive attitude within themselves. Their interpretive styles of perceiving stress empower or disempower them psychologically and make them resilient to stress. Thus, coping mechanisms that utilize avoidance are associated with poorer academic performance (Carver and Sheier, 1983; Bagget and Saale, 1996), while optimistic students achieve higher academic performance compared with pessimistic students (Prola and Stern, 1984; Peterson and Barrett, 1987).

Theory and Hypotheses

Taking these factors into account, we can say that to compete in today’s scenario, it has become imperative to acquaint students with the concept of resiliency for confronting difficult events and immunizing them for future challenges. This can be attained by generating emotional intelligence within students and has become mandatory in every sense as it is being observed that bearing off setbacks in the present scenario can have detrimental influences on students and for this management of emotions is desperately required as ability to sense, understand, and effectively applying the power of emotions can be a source of human energy, information, connection, and influence. This will also enable students to get motivated and persist despite frustrations and become more resilient to stress and enhance their IQ and EQ.

Emotional Intelligence (EQ)

The term emotional intelligence was coined by Peter Salovey and John Mayer (1990) and defined EQ as “*the ability to monitor one’s own and other’s feelings, to discriminate among them, and to use this information to guide one’s thinking and actions*”. The concept was then popularized by Daniel Goleman in 1995 and defined

EQ as, “*the capacity for recognizing our own feelings and those of others, for motivating ourselves, for managing emotions well ourselves and in our relationships.*”

More specifically, Mayer and Salovey (1990) divided emotional intelligence abilities into four areas in their four-branch model as: (i) *perceiving and expressing emotions* (ii) *assimilating emotions in thought*, (iii) *understanding emotions*, (iv) *reflectively regulating emotions*. On the other hand, Goleman divided emotional intelligence into five emotional competencies as: (i) *self-awareness*, (ii) *mood management*, (iii) *self-motivation*, (iv) *empathy*, and (v) *managing relationships*.

Robert Cooper and Ayman Sawaf (1997) defined EQ as, “*the ability to sense, understand, and effectively apply the power and acumen of emotions as a source of human energy, information, connection and influence.*” He laid that EQ in business and in life can be best understood by a Four-Cornerstone Model, as the first cornerstone as:

- (i) *Emotional Literacy*, which builds a locus of self-confidence through emotional honesty, energy, emotional feedback, intuition, responsibility and connection.
- (ii) *Emotional Fitness*, which strengthens authenticity, believability, and resiliency, expanding circle of trust and capacity for listening.
- (iii) *Emotional Depth*, that explores ways to align one’s life and work with his or her unique potential and purpose, and accountability, which in turn, increases influence without authority.
- (iv) *Emotional Alchemy*, through which one can extend creative instincts and capacity to flow with problems and pressure and to compete for the future by building one’s capacity to sense more readily.

Stress Resiliency

Stress occurs when people perceive that events are placing excessive demands on them. The degree of stress experienced depends on one’s perception. Perceptions in fact, determine whether a given situation is experienced as an “*excessive demand*” or an “*opportunity*”. These perceptions depend on an individual’s “*interpretive habits*” or some specific thought patterns. Thus, interpretive habits or thought patterns cause stress and more the interpretive style is optimistic, more the individual is resilient to stress.

The term “*resiliency*” is derived from the Latin roots meaning, “*to jump*” or “*bounce back*”. It is the ability to bounce back after disappointments or setbacks, to be adaptable and flexible and to renew your sense of vitality. It is the process and outcome of successfully adapting to difficult or challenging life experiences, especially highly stressful or traumatic events and involves not only resisting failure under extreme circumstances, but also positively recovering from those experiences.

Therefore, emotional intelligence and stress resiliency enable students to find out solutions to imperfections and interpret the opportunities that promote learned optimism, high self-esteem, and self-efficacy. In fact, developing emotional intelligence and stress resiliency is very much similar to how one develops muscular

strength and once this strength is developed, it leads to holistic development of humans.

With this, the purpose of the present study is to assess the relationship between emotional intelligence and stress resiliency and to predict ways we can incorporate emotional intelligence and stress resiliency among technical students.

Methodology

Sample

The sample consists of 140 students pursuing post-graduate and research programmes from Indian Institute of Technology Roorkee. Out of which 69 students were post-graduates and 71 students were research scholars. Furthermore, the sample consists of 62 male students and 78 female students.

Measures

The data was obtained on the basis of the following two measures:

Emotional Intelligence (EQ)

This variable was measured by using *Emotional Intelligence Scale*, which is a 34-item scale developed by Hyde, Pethe, and Dhar (2002). The scale measures ten components of EQ as: *Self-awareness, Empathy, Self-motivation, Emotional Stability, Managing Relations, Integrity, Self-development, Value Orientation, Commitment, and Altruistic Behavior*. The reliability co-efficient was found to relatively high 0.88.

Stress Resiliency

This component was measured by using *Stress Resiliency Profile (SRP)* developed by Thomas and Tymon (1995). This is a self-scoring assessment tool and is used to identify three specific thought patterns or “interpretive habits” which influence stress as:

(i) *Deficiency Focusing (DF)*, which is a habit of focusing on the negatives at the expense of the positives, while shortcomings and dangers become the center of an individual’s attention, at the expense of strengths and opportunities. This results in unnecessary degree of stress, and discouragement.

(ii) *Necessitating (N)*, is the perception that the tasks are inflexible demands that must be met with no room for discretion or choice. Necessitating becomes a way of placing greater demands on oneself.

(iii) *Low Skill Recognition (LSR)*, is the tendency to underestimate one’s own competence and abilities, feeling that success depends on outside sources. The reliability of the subscales was found to be relatively high as: deficiency focusing (.87); necessitating (.74) and low skill recognition (.85).

Scoring and Analysis

The scoring of emotional intelligence and stress resiliency profile was done according to the instructions given in the manual and the analysis was done on the basis of Pearson Product-Moment method and Stepwise Regression Analysis.

Results and Discussion

The collected data was treated statistically on the basis of Pearson correlation and stepwise regression analysis. **Table 1** represents the descriptive statistics of the variables taken up in the study.

Table 1: Descriptive Statistics of the Variables taken up in the Study.

Variables	Sum	Mean	SEm	SD
Deficiency Focusing	3090.00	22.07	.52	6.23
Necessitating	4158.00	30.70	.36	4.35
Low Skill Recognition	4352.00	31.08	.46	5.45
Self-Awareness	2363.00	16.87	.23	2.76
Empathy	2602.00	18.58	.20	2.44
Self-Motivation	3181.00	22.72	.23	2.72
Emotional Stability	2113.00	15.09	.20	2.41
Managing Relations	2167.00	15.47	.17	2.04
Integrity	1599.00	11.42	.14	1.74
Self-Development	1398.00	9.98	.36	4.35
Value Orientation	1067.00	7.62	.13	1.61
Commitment	1116.00	7.97	.10	1.28
Altruistic Behavior	1072.00	7.65	.10	1.26

On analyzing table1, it can be interpreted that the mean scores obtained for the dimensions of emotional intelligence falls for high scores while the mean scores for the dimensions of stress resiliency falls for middle scores, which signify that the subjects were more close to the average in the use of their habits and can generate balancing questions pertaining to what is going well, what can be exercised as a degree of choice and what factors have contributed to their success.

H1 was tested on the basis of correlational analysis and was hypothesized that there is negative relationship between dimensions of emotional intelligence and deficiency focusing (DF). The results revealed that the relationship between EI and dimensions of deficiency focusing is significantly low with the calculated r values as: -.26,-.27,-.23, -.31,-.25, -.24, and -.28, (significant at .01 level). for self-awareness, self-motivation, emotional stability, managing relations, self-development, value orientation, commitment, and altruistic behavior Further, low relationship has been found for empathy with the calculated r values as: .05 respectively.

H2 was tested with the proposition that there is significant relationship between dimensions of emotional intelligence and necessitating and was found that there is significant relationship between self-awareness, empathy, self- motivation, and emotional stability and necessitating, with the calculated r values as: .19. .19, .20, and .26(significant at .01 level) (**Table2**). Weak correlation has been found for managing

relations, integrity, self-development, value orientation, commitment, and altruistic behavior, with the calculated r-values as: .09, .14, .05, .01, .10, and .14.

H3 was tested with the proposition that there is significant relationship between emotional intelligence and low skill recognition. The relationship has been found to be significant for dimensions of emotional intelligence and low skill recognition, except with one variable of EI as self-motivation, with the calculated r value as .16 (**Table2**).

Table 2: Table showing relationship between dimensions of Emotional Intelligence and components of Stress Resiliency.

Variables	Deficiency Focusing	Necessitating	Low Skill Recognition
Self-Awareness	-.14	.19*	.31**
Empathy	.05	.19*	.20*
Self-motivation	-.26**	.20*	.16
Emotional Stability	-.27**	.26**	.32**
Managing Relations	-.23**	.09	.40**
Integrity	-.17	.14	.22**
Self-development	-.31**	.05	.19*
Value orientation	-.25**	.01	.32**
Commitment	-.24**	.10	.36**
Altruistic Behavior	-.28**	.14	.40**

*Significant at .05 level; ** Significant at .01 level

Table 3 represents the prediction of stress resiliency on the basis of emotional intelligence, with the independent variable as components of emotional intelligence and dependent variable as components of stress resiliency.

On the basis of table 3, we can say that deficiency focusing has been predicted by self-motivation, emotional stability, self-development, and altruistic behavior and jointly accounted for 50% of variance in predicting deficiency focusing. Self-motivation predicted deficiency focusing with the calculated R as .26(F-value 10.00, $p > .01$, $R^2 = .07$, Beta= -.26). Emotional stability predicted deficiency focusing with calculated R as .35 (F-value=.10.49, $p > .10$, $R^2 = .13$ Beta= -.26). Self-development predicted deficiency focusing with the calculated R as .45(F-value = 11.00, $p > .01$, $R^2 = .20$, Beta= -.27) and altruistic behavior predicted deficiency focusing with the calculated R as: .50(F-value = 12.00, $p > .01$, $R^2 = .25$, Beta= -.31). Thus, we cans say that, altruistic behavior is the strongest predictor of deficiency focusing.

Table 3: Stepwise Multiple Regression representing the Prediction of Stress Resiliency as Dependent Variable and Emotional Intelligence as Independent Variable (N=140).

Variables	R	R ²	F-value	DF	Beta
I.V: Emotional Intelligence D.V: Deficiency Focusing					
Self-Motivation	.26	.07	10.00**	1, 138	-.26
Self-Motivation, Emotional Stability	.35	.13	11.49**	1, 137	-.25, -.26
Self-Motivation, Emotional Stability, Self-Development	.45	.20	11.00**	1,136	-.22, -.24, -.27
Self-Motivation, Emotional Stability, Self-Development, Altruistic Behavior	.50	.25	12.01**	1, 135	-.28, -.24, -.23, -.31*
I.V: Emotional Intelligence D.V: Necessitating					
Self-awareness	.18	.03	6.00*	1, 138	.18
Self- Awareness, Empathy	.26	.07	5.80*	1 , 137	.17, .17
Self- Awareness, Empathy, Self-Motivation	.31	.10	5.00*	1 ,136	.15, .16, .18
Self- Awareness, Empathy, Self-Motivation, Emotional Stability	.36	.13	5.02*	1, 135	.11, .15, .18, .19*
I.V: Emotional Intelligence D.V: Low Skill Recognition					
Managing Relations	.40	.16	25.61**	1, 138	.40*
Managing Relations, Altruistic Behavior	.50	.24	21.02**	1, 137	.30, .30
Managing Relations, Altruistic Behavior, Commitment	.52	.27	16.79**	1, 136	.23, .27, .21
Managing Relations, Altruistic Behavior, Commitment, Emotional Stability	.54	.29	13.85**	1, 135	.22, .25, .16, .16

*Significant at .05 level; ** Significant at .01 level

Necessitating has been jointly predicted by self-awareness, empathy, motivation, and emotional stability, and jointly accounted for 13% of variance in predicting

necessitating. Self-awareness predicted necessitating with the calculated R as: .18 (F-value=6.00, $p > .05$, $R^2 = .03$, Beta= .18). Empathy predicted necessitating with the calculated R as: .26 (F-value=5.80, $p > .05$, $R^2 = .07$, Beta= .17). Self-motivation predicted necessitating with the calculated R as: .31 (F-value=5.00, $p > .05$, $R^2 = .10$, Beta= .18) and emotional stability predicted necessitating with the calculated R as: .36 (F-value=5.02, $p > .05$, $R^2 = .13$, Beta= .18). On the whole, we can say that emotional stability is the strongest predictor of necessitating.

Low skill recognition has been predicted by managing relations, altruistic behavior, commitment and emotional stability and jointly accounted for 54% of variance in predicting low skill recognition. Managing relations predicted low skill recognition with calculated R as: .40 (F-value=25.61, $p > .01$, $R^2 = .16$, Beta= .40). Altruistic behavior predicted low skill recognition with the calculated R as: .50 (F-value=21.02, $p > .01$, $R^2 = .24$, Beta= .30). Commitment predicted low skill recognition with the calculated R as: .52 (F-value=16.79, $p > .01$, $R^2 = .27$, Beta= .21) and emotional stability predicted low skill recognition with the calculated R as: .54 (F-value=13.85, $p > .01$, $R^2 = .29$, Beta= .16). Thus, we can say that managing relations is the strongest predictor of low skill recognition, while retaining hypothesis 4, 5 and 6 at .05 and .01 level.

On the basis of H1, we can say that the students have high level of emotional intelligence and have significantly low relationship with deficiency focusing. It has also been interpreted that higher is self-motivation, emotional stability, managing relations, self-development, value orientation, commitment, and altruistic behavior, the lower is the perception of deficiency focusing. That is, students tend to develop a sense of understanding for academic competition with heightened optimism. In other words, to cope up with the global competition, students generally have problem-solving skills which allow them to concentrate on the opportunities to grow intellectually, while recognizing the negativism in the environment. It has also been observed that the significantly low relationship between dimensions of emotional intelligence and deficiency focusing delineates the ability to recognize and reinforce those steps which can strengthen and enhance the performance of students. Students having high intellectual standards achieve academic standards through high commitment, which are also value oriented. That is, the actions towards achieving the goals are honest and ethical. Managing relations with the faculty and peer encourages healthy interactions which leads to dissemination of knowledge, and consequently leads to self-development and self-motivation. Thus, we can say that high emotional intelligence and low deficiency focusing render opportunity to students to realize their goals and cope up with the competitive threats, while highlighting the positivity in the environment and create space for personal advancements .

In discussing H2, it has been interpreted that necessitating is significantly related to self-awareness, empathy, self-motivation and emotional stability which states that the students have the awareness to freely exercise choice over their actions as well as explore the opportunities for their over-all development. The students are self-determined to fulfill their academic aims and have true ownership of their actions. For, instance, the type of job profile they would like to have in their future career. Further having high levels of empathy within students delineates that substituting

themselves with the present global competition, students are capable enough to take wise decisions to cope with the demands of jobs that will be offered to them in future and make them feel less “bullied” and realize their priorities while remaining free to adjust their behavior to unpredictable changes in the environment. Infact, using a healthy balance of emotions and reason motivates students to establish a balance between the “absolute and obsolete demands”, and specifically job demands which enable them to negotiate with the present competitive demands, leading to right decision-making and rendering themselves an energizing experience.

In discussing H3, it can be interpreted that the students have high skill recognition and have confidence to face the existing global challenges to compete academically. Students with high awareness have the ability to recognize their skills and choose appropriate new challenges and opportunities with confidence. Students with high levels of empathy and emotional stability have astute observations for the environmental demands and can integrate their abilities and knowledge in pursuit of academic goals as per the environmental demands. This is feasible only, when students also have the ability to manage relations with peer which in turn encourages peer learning and altruism and leads to high academic success. Infact, recognition of weaknesses and strengths of students encourage them to enhance their intellectual skills.

Students with high skill recognition are also value oriented and are aware of the ethical issues related to academics and have the ability to confront the unethical actions. Thus, this not only demonstrates the value orientation of students but also demonstrates the commitment and honesty that students would hold for their profession in their future.

We can say that low deficiency focusing, necessitating and high skill recognition can reduce high stress levels, while making students resilient to stress and clean the psychological closet, where students can come forth with new ideology and support, expand and explore the intellectual infrastructure. Moreover, high stress resiliency leads to goal self-concordance, which involves the positive self-regard and the students are more likely to pursue goals for intrinsic and identified (value-congruent) reasons.

Discussing in reference to H4, components of emotional intelligence as: self-motivation, emotional stability, self-development, and altruistic behavior predicted deficiency focusing and can be stated with the stance that students having a blend of high motivation, development, altruism and emotional stability allows to seek opportunity that will help reach their academic goals and recognize the realistic goals along realistic threats and overcome them with zest and confidence. This positive outcome again reciprocates with positivity while leading to development of core personality construct called “core self-evaluations” (Rode, 2004) and meet the criteria of high self-esteem, generalized self-efficacy, locus of control and reduced neuroticism. Infact, having low deficiency focusing can be stated as a personal characteristic which is associated with healthy development, wile students having more internal resources.

Necessitating has been predicted by self-awareness, empathy, self-motivation, and emotional stability and can be stated that students being aware of their goals as well

as of the environmental demands with high empathy, motivates students to have increased necessitating and can overcome through negotiation and experience the flexibility to do what makes sense and take the career to heights with high commitment, which revolves around the desires of students and resultingly leading to high stress resiliency. This can also lead to mature and sensitive understanding of environmental demands and development of decision-making abilities and nurture one's ideals.

Hypothesis 6 has been discussed with the stance that managing relations, altruistic behavior, commitment, and emotional stability which leads to high skill recognition with a balanced view of skills to recognize the abilities of their own and appreciate how their knowledge and skills have generated confidence within them and recognize the opportunities to shape their future along high academic performance and high stress resiliency. Further, having high skill recognition also represents the potential of students to resist environmental demands and follow their opinions and actions and develop sense of initiation and contribute to personal growth and fulfillment.

We can say that emotional intelligence plays a significant role in the prediction of stress resiliency of students with the extension of the stance that these components render self-assurance of development, stability and growth. And on the other hand, being resilient to stress can be a "protective factor", which has the potential to mitigate the risk factors.

The analysis of the results are solely based on concerted efforts to address this void and propel the quest for achieving a new paradigm which represents the best of psychological state of students. Parker, et.al (1990) compared samples of highly stressed children of school with stress affected (SA) outcomes and children with stress resilient (SR) outcomes. The results revealed that SR children judged themselves as significantly better adjusted and more competent than SAs. They had higher self esteem, more empathy, and have more internal and more realistic sense of control. Also they reported more effective problem solving skills and more positive coping strategies. Another finding related to stress resiliency was evident in the study of Larrabee, Simoni, Persily, et.al (2004) which stated that the interpretive styles do influence psychological empowerment and also predict situational stress, personal stress, and job satisfaction.. The present study can be reaffirmed with the results of the study conducted by Rubin (1999) which stated that children who received high scores on EI were rated by peers as less aggressive and teachers rated them as more "prosocial", when compared to the students who scored low on EQ test. But the proposed viewpoint can be marked as an extension to the studies related to emotional intelligence and stress that if students are offered training to cope up with the stress, there must also be a scope of teaching students to become resilient to stress which involves recognition of opportunities and skills as well as the ability to negotiate with the stressful situations and enhance the decision-making abilities. As in simple fashion we come across the term "stress", and mean the term as "*what to do*" and when getting to know about stress resiliency, we mean, "*what we are*".

Low deficiency scores can also be supported with low emotional attention, which demonstrates that high emotional attention can be the real danger which involves individuals into paying constant attention to the course of their moods in an effort to

understand them, which is not always productive for the individual. This is particularly so when excessive attention to emotions is not followed by sufficient capacity to understand their causes, motives, and consequences (Thayer, Rossy, Ruiz-Padial, & Johnsen, 2003). This could result in the development of an emotional spiral that would generate a ruminative process, which is out of control and which in turn would maintain their negative mood and refrain them from recognizing the opportunities in the environment. Similarly, emotional clarity can be linked to high skill recognition which involves treating emotional problems and allow them to assess alternative actions, keep their thoughts on other tasks, and use more adaptive coping strategies (Extremera & Fernández-Berrocal &, 2005, ; Gohm & Clore, 2002; Ramos, Fernández-Berrocal & Extremera, in press) and therefore, will experience more emotional wellbeing (Palmer, Donaldson, & Stough, 2002; Extremera & Fernández-Berrocal, 2005).

Lastly, necessitating can be linked to mood repair factor which can be associated with better general results in life, and involves a higher capacity to interrupt negative moods and prolong the positive ones (Extremera & Fernández-Berrocal, 2002; Fernández-Berrocal, Salovey, Vera, Extremera, & Ramos, 2005; Goldman, Kraemer, & Salovey, 1996; Williams, Fernández-Berrocal, Extremera, Ramos, & Joiner, 2004). In other words, we can state that stress resiliency in terms of low deficiency focusing, and high skill recognition and necessitating can lead to social and emotional well-being, reduced depression and anxiety and predicts better psychological adjustment.

Future Implications of the Study

On the basis of the above study, we can interpret that developing resiliency among students has become mandatory in a number of sense, so as to reduce the disparity among the aspirations and existent opportunities for the students. For this, development of strong social networks must be initiated which assist in releasing their negative emotions while creating associations with peers, reducing anti-social behavior, alienation, and rebelliousness. Open educational approach, instead of conventional educational approach must be encouraged which promotes new ideas and unravels complexities and prompting “*why not*” mindsets as this approach would promote humility and tolerance for ambiguity and multiplex ties. Consequently, leading to problem-solving skills and intuition.

Genetics based programmes must be initiated on the basis of biofeedback, which boost the need to cope with the stress and become resilient to stress. For instance, when we experience stress, we are genetically programmed to produce adrenaline, which spurts the need to cope with the stress. Besides this, supportive relationships between student and teacher must be developed which help in developing cognitive competence as: creative expression and decision-making skills, and develop great sense of self-esteem and self-efficacy.

With the growth of interest in the emotions, *Social and Emotional Education (SEL)* programmes must be initiated, which undergo all kinds of names, such as “emotional literacy”, “emotional intelligence”, “social and emotional aspects of learning”, “coping skills”, “resiliency” and “lifeskills” and are broadly termed as SEL.

These programmes significantly reduce specific mental and emotional health problems, such as aggression, depression and also reduce commonly accepted risk factors associated with mental health problems, such as impulsiveness, and anti-social behavior. In other words, we can say that social and emotional learning can assist students in recognizing their knowledge, skills, and abilities and reinforce the psychological resources that enable students to trap the opportunities around them and become resilient to stress.

The *Emotional Learning System* (a systematic emotional skills learning process) (Nelson and Low, 1999, 2003) must be developed. This learning process or system consists of five essential, interrelated, sequential steps as: (i) *Self Assessment: Explore* (ii) *Self Awareness: Identify* (iii) *Self Knowledge: Understand*, (iv) *Self Development: Learn*, (v) *Self Improvement: Apply and Model*. The model embodies both the academic (cognitive) and emotional (affective) development of students and provide guidance to students to eliminate emotional incompetencies leading to stress and develop resiliency to face adversities that a student can face in career building and management and demonstrate behaviors that are conducive to goal attainment and overall success in life.

Leaders in student development must engage in applied institutional research to begin to develop and improve models for student retention and performance and help students to navigate the realities and challenges of their careers.

Transformative learning must be encouraged which empowers students to: (1) develop healthy and productive relationships, (2) solve problems and make good decisions, (3) manage self in achieving goals, (4) stay attuned to healthy outcomes, and (5) behave wisely and responsibly and transform the student into an effective person. In other words, transformative learning leads to dissemination of knowledge which enhances their skills and make students understand better to the environmental demands and skills with negotiating abilities to perform in accordance with the choices. This lead students to have a *protean career* (Hall and Moss, 1988), which involves a high level of self-knowledge, self-awareness, and personal responsibility and the student need to be self-correcting in response to changing demands from the environment, and transforms the student into an effective person. Thus, transformative learning train students to face the adversities which involve strategies related to emotional management and as a result moulds students to overcome stress by becoming resilient to stress along constructive thinking.

Further environmental variables as: family cohesion, absence of discord at home can serve as potential mechanisms to enable students to recognize their emotional competencies which can prove to be a strong predictor of high stress resiliency profiles of students. Such variables also help in appropriate personality development with better quality of social interactions, or to intrapersonal aspects such as mood regulation. This leads to positive associations with life satisfaction and social network size and quality, and negative associations with loneliness and reduced loneliness. This also interprets decreased *alexithymia*, where there is difficulty in identifying feelings, difficulty in describing feelings and externally-oriented thinking, increased stress levels with low resiliency profiles and are closely related to the low pole of EI .

Conclusion

With this, we can conclude that fostering stress resiliency among students will definitely help institutions in accumulation of intellectual and social capital, and counteract emotional decay. Educational leaders must give special attention to the psychological needs of the students which reduces their stress levels, makes them resilient to stress and render optimal human functioning, enmeshed with mature and sensitive understanding as well as high levels of psychological adaptations and may facilitate in sound and healthy nation building.

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References

- [1] Baggett, H.L., & Saale, P. (1996). Appraisal, Coping Task Performance, and Cardiovascular Responses during the Evaluated Speaking. *Personality and Social Psychology Bulletin*, 22 (5), 483-495.
- [2] Benard, B. (1991). *Fostering Resiliency in Kids: Protective Factors in the family, School, and Community*, Portland: Western Centre for Drug-Free Schools and Communities.
- [3] Bogenschneider, K. (1996). An Ecological Risk/Protective Theory for Building Prevention Programs, Policies, and Community Capacity to Support Youth. *Family Relations*, 15,127-138.
- [4] Carver, C.S., & Sheier, M.E. (1983). A Control-Theory Model of Normal Behavior, and Implications for Problems in Self-Management. *Advances in Cognitive-Behavioral Research and Therapy*, 2,127-194.
- [5] Cooper, R., & Sawaf, A. (1997). *Executive EQ*. New York: Orient Books.

- [6] Dubow, E.E., Tisak, J., Causey, D., & Hryshko, A. (1991). A Two Year Longitudinal Study of Stressful Life events, Social support, and Social Problem solving Skills: Contributions to Children's behavioral and Academic Achievement. *Child Development*, 62,583-599.
- [7] Edward,K-L. (2005)Resilience: When Coping Is Emotionally Intelligent. *Journal of the American Psychiatric Nurses Association*, 11(2), 101-102 (2005).
- [8] Extremera, N., & Fernández-Berrocal, P. (2005). Perceived emotional intelligence and life satisfaction: Predictive and incremental validity using the Trait Meta-Mood Scale. *Personality and Individual Differences*, 39, 937-948.
- [9] Extremera, N., & Fernández-Berrocal, P. (2002). Relation of perceived emotional intelligence and health-related quality of life in middle-aged women. *Psychological Reports*, 91, 47-59.
- [10] Fernández-Berrocal, P., Salovey, P., Vera, A., Extremera, N., & Ramos, N. (2005). Cultural influences on the relation between perceived emotional intelligence and depression. *International Review of Social Psychology*, 18, 91-107.
- [11] Garmezy, N. (1985). Stress-resistant children: The search for protective factors. In J. E.
- [12] Stevenson (Ed.). *Recent research in developmental psychopathology. Journal of Child Psychology and Psychiatry Book* (4,213-233). Oxford: Pergamon Press.
- [13] Garmezy, N. (1982). Foreword. In E. E. Wemer & R. S. Smith, *Vulnerable but invincible: A study of resilient children* (xiii-xix). New York: McGraw-Hill.
- [14] Gayle R. Parker, Emory L. Cowen, William C. Work and Peter A. (1990). Wyman. Test correlates of stress resilience among urban school children. *The Journal of Primary Prevention*, 11(1).
- [15] Gohm, C.L., & Clore, G.L. (2002). Four latent traits of emotional experience and their involvement in attributional style, coping and well-being. *Cognition and Emotion*, 16, 495-518.
- [16] Goldman, S.L., Kraemer, D.T., & Salovey, P. (1996). Beliefs about mood moderate the relationship of stress to illness and symptom reporting. *Journal of Psychosomatic Research*, 41, 155-128.
- [17] Goleman, D. (1995). *Emotional Intelligence-Why It Can Matter More Than IQ?* New York: Bantam Books
- [18] Hall, D.T. (2004).The protean career: a quarter-century journey. *Journal of Vocational Behavior*, 65(1), 1-13.
- [19] Hyde, A., Pethe, S., & Dhar, U. (2002). Manual for Emotional Intelligence Scale. Vedanta Publications, Lucknow, India.
- [20] Khalsa, D.S. (1997). *The Ageless Mind: New Developments in the Prevention and Reversal of Memory Loss*. Hilton: Head Island.
- [21] Luthar, S. S. (1991). Vulnerability and resilience: A study of high-risk adolescents. *Child Development*, 62, 600-616.
- [22] Matthews, G., Zeidner, M. & Roberts, R. D. (2002). *Emotional intelligence. Science and Myth*. Cambridge, MA: Bradford.

- [23] Nelson, D. and Low, G. (2003). *Emotional Intelligence: Achieving Academic and Career Excellence*. Upper Saddle River, NJ, Prentice-Hall.
- [24] Nelson, Darwin and Low, Gary (1999) .*Achieving Excellence through Emotional Intelligence*. Corpus Christi, TX and Kingsville, TX: Professional development workshops for educators, human resource professionals, counselors, and managers at Texas A&M University-Corpus Christi and Texas A&M University-Kingsville.
- [25] Parker, J. D. A., Taylor, G. J. & Bagby, R. M. (2001). The relationship between emotional intelligence and alexithymia. *Personality and Individual Differences*, 30, 107-115.
- [26] Palmer, B., Donaldson, C., & Stough, C. (2002). Emotional intelligence and life satisfaction. *Personality and Individual Differences*, 33, 1091-1100
- [27] Peterson, c., & Barrett, L.C. (1987). Explanatory Style and Academic Performance. *Journal of Personality and Social Psychology*, 53,603-607.
- [28] Prola,M.,& Stern,D. (1984),Optimism bout College Life and Academic Performance in College. *Psychological Reports*, 55,347-350.
- [29] Ramos, N., Fernández-Berrocal, P., & Extremera, N. (in press). Perceived emotional intelligence facilitates cognitive-emotional processes of adaptation to an acute stressor. *Cognition and Emotion*.
- [30] Rode, J, C. (2004). Job-satisfaction and life satisfaction revisited: A Longitudinal test of an integrated model. *Human Relations*, 57(9), 1205-1230.
- [31] Rubin, M.M. (1999). Emotional Intelligence and its role in mitigating aggression: a correlational study of the relationship between emotional intelligence and aggression in Urban adolescents. Unpublished manuscript, Immaculata College, Immaculata, P.A.
- [32] Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatric Association*, 57, 316-329.
- [33] Salovey, P. & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9, 185-211.
- [34] Sheppard, T.A. (1976) Social Interaction and Academic Performance, *Education Research and Perspectives*, 5, 3-15.
- [35] Shumaker, S.A.; Brownell, A. (1984) Toward a Theory of Social Support: Closing Conceptual Gaps, *Journal of Social Issues*, 40, 11-36.
- [36] Shumaker, S.A., & Brownell, A. (1984). Toward a Theory of Social Support: Closing Conceptual Gaps. *Journal of Social Issues*, 40, 11-36.
- [37] Simoni, P.S., Larrabee, J.H., Birkhimer, T.L., Mott, C.L., & Glassen, S.D. (2004). Influence of Interpretive Styles of stress resiliency on registered nurse empowerment. *Nursing Administration Quarterly*, 28(3), 221-4.
- [38] Spence, J.T., & Spence, K.W. (1996). *The Motivational Components of Manifest Anxiety: Drive and Drive Stimuli*. New York: Academic Press.
- [39] Thelen, A.S. (1954) .*Dynamics of Groups at Work*. Chicago: University of Chicago Press.
- [40] Thomas, K.W., Tymon, W.G. Jr (1993).*Empowerment Inventory*. XICOM, Tuxedo, NY.

- [41] Thomas, K.W., Tymon, W.G. Jr. (1994). Does empowerment always work: understanding the role of intrinsic motivation and personal interpretation. *Journal of Management Systems*, 26(2), 1-13.
- [42] Thomas, K.W., Tymon, W.G. Jr (1995). Interpretive styles that contribute to job-related stress: two studies of managerial and professional employees. *Anxiety, Stress, and Coping*, 8 (3), 235-50.
- [43] Thomas, K.W., Tymon, W.G. Jr (1997). Bridging the motivation gap in total quality. *Quality Management Journal*, 4 (2), 80-96.
- [44] Thomas, K.W. (2000). *Intrinsic Motivation at Work: Building Energy and Commitment*, Berrett-Koehler, San Francisco, CA.
- [45] Thomas, K.W., Velthouse, B.A. (1990), Cognitive elements of empowerment: an interpretive model of intrinsic task motivation, *Academy of Management Review*, 15(4), pp.666-81.
- [46] Thayer, J.F., Rossy, L.A., Ruiz-Padial, E., & Johnsen, B.H. (2003). Gender differences in the relationship between emotional regulation and depressive symptoms. *Cognitive Therapy and Research*, 27, 349-364.
- [47] Weare, K. Delivering health education: the contribution of social and emotional learning. (2007). *Health Education*, 107(2), 109-113.
- [48] Werner, E. E., & Smith, R. S. (1982). *Vulnerable but invincible: A longitudinal study of resilient children and youth*. New York: McGraw-Hill.
- [49] Williams, F., Fernández-Berrocal, P., Extremera, N., Ramos, N., & Joiner, T.E. (2004). Mood regulation skill and the symptoms of endogenous and hopelessness depression in Spanish high school students. *Journal of Psychopathology and Behavioral Assessment*, 26, 233-240.