

Emotional Intelligence of Post Graduate Science and Social Science Students



Psychology

KEYWORDS : Emotional intelligence, science students, social science students.

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ABSTRACT

The present study aimed to assess the emotional intelligence of post graduate science and social science students. It was hypothesized that Post graduate social science students have higher emotional intelligence than post graduate science students. In order to verify the above hypotheses a sample of the present study consist total 160 subjects with two main groups are post graduate science and social science students from departments of Karnatak University Dharwad, Karnatak, India. Each group consist N=80 subjects with male (N=40) and female (N=40). To measure the emotional intelligence, used Emotional Quotient Inventory developed and standardized by Bar-on (2002) has 66 items and measures 10 different dimensions. It was administered individually on the subjects. The data were subjected to 't' analysis and the major findings of the study revealed that the social science post graduate students have significantly higher level emotional intelligence than science students of post graduate.

Emotional Intelligence:

Since the publication of the bestselling book Emotional Intelligence by Daniel Goleman (1995), the topic of emotional intelligence has witnessed unparalleled interest. Programs seeking to increase emotional intelligence have been implemented in numerous settings, and courses on developing one's emotional intelligence have been introduced in universities and even in elementary schools throughout the United States. But what exactly is emotional intelligence? As is the case with all constructs, several schools of thought exist which aim to most accurately describe and measure the notion of emotional intelligence. At the most general level, emotional intelligence refers to the ability to recognize and regulate emotions in ourselves and others (Goleman, 2001).

Another prominent researcher of the emotional intelligence construct is Reuven Bar-On, the originator of the term "emotion quotient". Possessing a slightly different outlook, he defines emotional intelligence as being concerned with understanding oneself and others, relating to people, and adapting to and coping with the immediate surroundings to be more successful in dealing with environmental demands (Bar-On, 1997). Regardless of the discrepancies between definitions of emotional intelligence, it is clear that what is being referred to is distinct from standard intelligence, or IQ.

According to Hein "Emotional intelligence is the innate potential to feel, use, communicate, recognize, remember, describe, identify, learn from, manage, understand and explain emotions".

Goleman (1998) defines emotional intelligence as "the capacity for recognizing our own feeling and those of others, for motivating ourselves and for managing emotions well in ourselves and in our relationships. Emotional intelligence describes abilities distinct from, but complementary to academic intelligence or the purely cognitive capacities measured by IQ".

Bar-on (1997) states that Emotional Intelligence reflects one's ability to deal with daily environmental challenges and helps predict one's success in life, including professional and personal pursuits'.

Singh (2006) defines Emotional intelligence as the "the ability of an individual to appropriately and successfully respond to a vast variety of emotional stimuli being elicited from the inner self and immediate environment".

Emotional Intelligence Models:

Early theorists such as Thorndike and Gardner paved the way for

the current experts in the field of emotional intelligence. Each theoretical paradigm conceptualizes emotional intelligence from one of two perspectives: ability or mixed model. Ability models regard emotional intelligence as a pure form of mental ability and thus as a pure intelligence. In contrast, mixed models of emotional intelligence combine mental ability with personality characteristics such as optimism and well-being (Mayer, 1999). Currently, the only ability model of emotional intelligence is that proposed by John Mayer and Peter Salovey. Two mixed models of emotional intelligence have been proposed, each within a somewhat different conception. Reuven Bar-On has put forth a model based within the context of personality theory, emphasizing the co-dependence of the ability aspects of emotional intelligence with personality traits and their application to personal well-being. In contrast, Daniel Goleman proposed a mixed model in terms of performance, integrating an individual's abilities and personality and applying their corresponding effects on performance in the workplace (Goleman, 2001).

Characteristics of Emotional Intelligence:

Self Regard:

This intrapersonal sub-factor is defined as the ability to accurately perceive, understand and accept ourselves. Self-regard is the ability to respect and accept ourselves as basically good. Respecting ourselves like the way we are; and self-acceptance is the ability to accept our perceived positive and negative aspects as well as our limitations and possibilities.

Interpersonal Relationship:

This interpersonal sub-factor is defined as the ability to establish and maintain mutually satisfying relationships and relate well with others. Mutual satisfaction describes meaningful social interactions that are potentially rewarding and enjoyable for those involved. Being adept in interpersonal relationship skills is characterized by giving and receiving warmth and affection and conveying intimacy.

Impulse Control:

This stress management sub-factor is defined as the ability to effectively and constructively control emotions. More precisely, impulse control is the ability to resist or delay an impulse drive or temptation to act. It entails a capacity for accepting our aggressive impulses, being composed and controlling aggression, hostility and irresponsible behavior.

Problem Solving:

This adaptability sub-factor governs the ability to effectively solve problems of a personal and interpersonal nature. Problem solving entails the ability to identify and define problems as well

as to generate and implement potentially effective solutions.

Emotional Self-Awareness:

This intrapersonal sub-factor is defined as the ability to be aware of and understand our emotions. Emotional self-awareness is the ability to recognize our emotions. It is not only the ability to be aware of our emotions, but also to differentiate between them, to know what we are feeling and why, and to know what caused those feelings.

Flexibility:

This adaptability sub-factor represents the ability to adapt and adjust our feelings, thinking and behavior to new situations. This entails adjusting our feelings, thoughts and behavior to changing situations and conditions. This component of emotional-social intelligence refers to our overall ability to adapt to unfamiliar, unpredictable and dynamic circumstances.

Reality Testing:

This adaptability sub-factor governs the ability to objectively validate our feelings and thinking with external reality. This includes assessing the correspondence between what is experienced and what objectively exists.

Stress Tolerance:

This stress management sub-factor is defined as the ability to effectively and constructively manage emotions. In essence, stress tolerance is the ability to withstand and deal with adverse events and stressful situations without getting overwhelmed by actively and positively coping with stress. Stress tolerance includes having a repertoire of suitable responses to stressful situations, and it is associated with the capacity to be relaxed and composed and to calmly face difficulties without getting carried away by strong emotions.

Assertiveness:

This intrapersonal sub-factor is defined as the ability to constructively express our feelings and ourselves in general. This is the ability to express feelings, beliefs and thoughts and to defend our rights in a nondestructive manner. Assertiveness is thus composed of three basic components: (i) the ability to express our feelings; (ii) the ability to express beliefs and opinions; and (iii) the ability to stand up for our rights and not to allow others to bother or take advantage of us.

Empathy:

This interpersonal sub-factor is defined as the ability to be aware of and understand how others feel. It is being sensitive to what, how and why people feel the way they do. Empathetic means being able to emotionally read other people. Empathetic people care about other people and show interest in and concern for them. Serious deficiencies in empathy are fundamental for diagnosing psychopaths.

Literature Review

Nazan Yelkikalan et al., (2011) studied the emotional intelligence levels of university students in the context of emotional intelligence extents; the difference in terms of demographic qualities of students and the majors they study and the relationship between emotional intelligence of students and their academic achievements. The results of the research revealed that there is not any significant difference in the relationship between the faculty of students and their emotional intelligence, apart from the sociability. In their studies studied the relationship between sub dimensions of emotional intelligence of Applied Technology and Management College students and sub-dimensions of communication skills and confirmed a positive, significant however weak relationship. Particularly, only one of the emotional intelligence aspects, namely emphatic sensitivity, influences the communication skills at a statistically significant level.

Ruchi Dubey (2007) found that there is no relationship between emotional Intelligence and academic achievement of undergraduate students of Arts and Science stream. The only exception is the math group where there was significant positive relationship between Emotional Intelligence score and total aggregate marks.

Adeyemo (2007) study examined the moderating influence of emotional intelligence on the link between academic self-efficacy and achievement among university students. The participants in the study were 300 undergraduate students at the University of Ibadan, Ibadan, Nigeria. The result demonstrated that emotional intelligence and academic self-efficacy significantly correlated with academic achievement. The moderating effect of emotional intelligence on the relationship between academic self-efficacy and achievement was also established. On the basis of the findings, it is suggested that emotional intelligence should be integrated into undergraduate curriculum. The study further advocated for the promulgation of educational policy on emotional intelligence and academic self-efficacy.

Saranya and Velayudhan (2008) among 30 male and 30 female, university students regarding gender differences in emotional intelligence revealed that there exists no significant difference in self awareness, self regulation, social awareness and social skills among day scholars' boys and girls. There exists a significant difference in the dimension of motivation. Girls are better motivated than boys, this is because girls have a better driving and pulling forces which result in persistent behavior directed towards certain goals.

Lopes, Salovey and Straus (2003) had explored links between emotional intelligence and interpersonal relationships; in college student and found that individuals scoring highly on the managing emotions subscale of the Mayer, Salovey and Caruso emotional Intelligence test (MSCEIT), were more likely to report positive relations with others, as well as perceived parental support and less likely to report negative interactions with close friends.

The study of Landau and Meirovich (2011) explains the role of participatory classroom environment over emotional intelligence of business management postgraduate students and whether or not emotional intelligence is related with academic achievements. The findings informed that the chance of participating has a positive relationship with emotional intelligence of male students whereas not associated with emotional intelligence of female students. Plus, regardless of a student's sex, it is concluded that a supportive environment has positive relationship with emotional intelligence. Also, the study did not determine a relationship between the emotional intelligence and grade averages of the students.

Research Methodology

Research Problem:

Problem of the present research is to study the emotional intelligence of the post graduate science and social science students.

Objectives:

The main objective of the present study is to measure the emotional intelligence of post graduate science and social science students.

Hypotheses:

Post-graduate social science students have higher emotional intelligence than post graduate science students.

Sample:

The sample of the present study consist total 160 subjects with two main groups are post graduate science students and post graduate social science students at Karnatak University Dharwad, Karnatak, India. Each group consist N=80 subjects with

male (N=40) and female (N=40). In order to verify the above hypotheses post graduate students were selected from respectively: post graduate science students from departments such as physics, mathematics, chemistry, botany, zoology, microbiology bio-chemistry and post graduate social science students from such as history, economics, political science, geography, social work departments include the male and female students.

Tool

To measuring the emotional intelligence, Emotional Quotient Inventory developed and standardized by Bar-on (1997) has 66 items and measures 10 different dimensions of emotional intelligence such as self-regard, interpersonal relationship, impulse control, problem solving, emotional self-awareness, flexibility, reality testing, stress tolerance, assertiveness and empathy. This scale has Likert five point rating with responses such as not true, seldom true, sometimes true, and often true and true. This scale has 37 positive items and 29 negative items. Scoring pattern of the scale: positive items score is 0, 1, 2, 3, 4, and negative items score is 4, 3, 2, 1 & 0. The internal consistency coefficients for the Emotional Quotient Inventory subscales were analyzed. The test-retest reliability studies indicated that there was consistency coefficient of 0.76 and this tool possesses content validity and face validity. The criterion group validity was established as 0.81.

Statistical Techniques:

Obtained samples raw scores were converted into standard scores using 16.0 versions of SPSS, subsequently the mean and SD was calculated. The data was subjected to independent sample 't' analysis to find the significant difference between the post graduate science and social science students.

Results and Discussion:

Table no 01: means, standard deviation scores and 't' value of the science and social science students on emotional intelligence.

Sl No	Variable	Sample Groups			't' value
			Social Science Students (n=80)	Science Students (n=80)	
1.	Self-regard	Mean	51.84	48.16	2.35*
		SD	9.36	10.36	
2.	Interpersonal relationship	Mean	51.07	48.97	1.33 ^{NS}
		SD	10.07	9.88	
3.	Impulse control	Mean	51.51	48.52	1.90 ^{NS}
		SD	11.06	8.63	
4.	Problem solving	Mean	51.43	48.60	1.80 ^{NS}
		SD	9.60	10.25	
5.	Emotional self-awareness	Mean	52.00	48.03	2.55*
		SD	10.24	9.40	
6.	Flexibility	Mean	52.52	47.51	3.25***
		SD	10.74	8.55	
7.	Reality testing	Mean	52.53	47.47	3.29***
		SD	10.29	9.10	
8.	Stress tolerance	Mean	52.14	47.86	2.76**
		SD	9.98	9.63	
9.	Assertiveness	Mean	51.98	48.05	2.52*
		SD	10.02	9.68	
10.	Empathy	Mean	51.35	48.67	1.70 ^{NS}
		SD	9.93	9.97	
Total SD		Mean	52.91	47.09	3.83***
			10.34	8.78	

*** Significant at 0.001 level. ** Significant at 0.01 level. * Significant at 0.05 level. NS - Not Significant

Table no 01 shows means, standard deviation scores and 't'

value of the science and social science post graduate students on emotional intelligence. On the emotional intelligence components self-regard, emotional self-awareness, flexibility, reality testing, stress tolerance and assertiveness, the social science post graduate students have higher level mean scores and significantly differ than the science post graduate students. On self regard and emotional self-awareness components obtained 't' value found are respectively 2.35 and 2.55, which is significant at 0.05 level. The dimension of flexibility and reality testing components obtained 't' value found are respectively 3.25 and 3.29 which is significant at 0.001 level. The dimension of stress tolerance and assertiveness obtained 't' value found are respectively 2.76 and 2.52 which is significant at 0.05 level.

There is no significant difference between science and social science post graduate students on the components interpersonal relationship, Impulse control, Problem solving and empathy of emotional intelligence. The total emotional intelligence of the social science post graduate students have higher mean scores (52.91) than the science post graduate students (47.09). The obtained 't' value for the mean difference is 3.83 which is significant at 0.001 level. This implies that the social science post graduate students have a higher level of emotional intelligence than the science post graduate students.

Summary

The main objective of the present study was to assess the emotional intelligence of post graduate science and social science students. The total sample size consisted of 160 subjects. Of the total samples 80 social-science and science were selected for the present study. The samples of post graduate social science students were selected from P G departments at Karnatak University. Both male and female students were selected with equal number of 40 each in social science and science discipline. Bar-on's Emotional Quotient Inventory (2002) was used to study the level of emotional intelligence. The main finding of the present research revealed that there is a significant difference between the emotional intelligence of post graduate science and social science students.

Conclusion:

The social science students have higher level of emotional intelligence than the science students.

Reference:

- Adeyemo, D.A. (2007) Moderating Influence of Emotional Intelligence on the Link Between Academic Self-efficacy and Achievement of University Students Psychology Developing Societies, 19(2) 199-213.
- Adeyemo, D.A. (2008). The measured influence of Emotional Intelligence and some Demographic Characteristics on Academic Self-efficacy of Distance Learners. *Edutracks*, 7, (22), 150-154.
- Bar-On, R. (1997). *Bar-On Emotional Quotient Inventory (EQ-I): Technical Manual*. Toronto, Canada: Multi-Health Systems.
- Goleman, D. (1995). *Emotional Intelligence*. New York: Bantam Books.
- Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam Books.
- Goleman, D. (2001). Emotional intelligence: Issues in paradigm building. *The Emotionally Intelligent Workplace*. San Francisco: Jossey-Bass.
- Heinemann, A.W. And Shontz Frankin, C. (1984). Adjustment Following Disability: Representative Case Studies, *Rehabilitation - Counselling Bulletin*, 28(1), 3-14.
- Landau J, Meirovich G. (2011). Development of Students' Emotional Intelligence: Participative Classroom Environments in Higher Education. *Academy of Educational Leadership Journal*, 15, 3.
- Mayer, J.D. & Geher, G. (1996). Emotional intelligence and the identification of emotion. *Intelligence*, 22, 89-113.
- Mayer, J.D. & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D.J. Sluyter (Eds.), *Emotional Development and Emotional Intelligence: Educational Implications*: 3-31. New York: Basic Books.
- Mayer, J.D., Caruso, D.R., & Salovey, P. (1999). Emotional intelligence meets

- standards for traditional intelligence. *Intelligence*, 27, 267-298.
12. Mayer, J.D., Perkins, D.M., Caruso, D.R., & Salovey, P. (2001). Emotional intelligence and giftedness. *roeper Review*, 23 (3), 131-137.
 13. Mayer, J.D., Salovey, P., & Caruso, D. (2000). Models of emotional intelligence. In J.R. Sternburg (Ed.), *Handbook of Intelligence* (396-420). Cambridge, UK: Cambridge University Press.
 14. Mayer, J.D., Salovey, P., & Caruso, D. (2002). *MSCEIT User's Manual*. Toronto, ON: Multi-Health Systems.
 15. Mayer, J.D., Salovey, P., & Caruso, D., & Sitarenios, G. (2003). Measuring emotional intelligence with the MSCEIT V2.0. *Emotion*, 3, 97-105.
 16. Nazan Yelkikalan, Gungor Hacioglu and at al., (2011). Emotional Intelligence Characteristics of Students Studying at Various Faculties and Colleges of Universities *European Scientific Journal* April edition vol. 8(8), 45-55.
 17. Nazan Yelkikalan, Gungor Hacioglu and at al., (2012). Emotional Intelligence Characteristics of Students Studying At Various Faculties and Colleges of Universities, 8(8) 555-566.
 18. Ruchi, Dubey (2007). Relationship between Emotional Intelligence and Academic achievement of undergraduate students. *Researches and studies- Education Department* University of Allahabad. Vol-58.
 19. Saranya, R. and Velayudharn, a (2008). Analysing prosocial behavior and emotional intelligence among university students. *Psycho-lingua*, 38(2), 126-132.