

## A comparative study of Emotional Intelligence and Academic Achievement of Science and Social Science Higher Secondary Students

Ms. Shazia Siraj Zargar, Dr. Mohammad Yousuf Ganai

PhD Scholar, Department of Education, University of Kashmir, India  
Associate Professor, Department of Education, University of Kashmir, India  
E-mail: [showkat80ahmad@gmail.com](mailto:showkat80ahmad@gmail.com)

**Abstract:** The aim of the study was to compare Emotional Intelligence and Academic Achievement of Science and Social Science in Higher Secondary Students. (1) To identify science and social science higher secondary students. (2) To study Emotional Intelligence of science and social science higher secondary students. (3) To find out academic achievement of the science and social science higher secondary students. (4) To compare emotional intelligence and academic achievements of science and social science higher secondary students. The sample for the present study was collected from higher secondary school Safa Kadal of J& K state.

[Shazia Siraj Zargar, Mohammad Yousuf Ganai. **A comparative study of Emotional Intelligence and Academic Achievement of Science and Social Science Higher Secondary Students.** *Nat Sci* 2013;11(3):71-76]. (ISSN: 1545-0740). <http://www.sciencepub.net>. 11

**Key Words:** Emotional Intelligence, Academic Achievement, Science, Social Science and Higher Secondary Students

### Introduction

The Study examined the moderating influence of emotional intelligence, age and academic motivation on academic achievements of secondary school students. The study adopted a survey research design. The participant's age group ranges between 12 yrs and 17 yrs with the mean age of 15.96 years. Two valid and reliable instruments were used to assess Emotional Intelligence and academic motivation while achievement tests on science and social science higher secondary students. The result revealed that emotional Intelligence, age and motivation were potent predictor's closely associated to academic achievement. The study has implication for the curriculum developers to integrate Emotional Intelligence into the school curriculum of secondary school that teaches counseling and educational psychologists should encourage the development of a strong achievement motivation in the students thorough the provision of appropriate counseling intervention programmes and enabling environment by doing so the academic performance of the students could be improved barring all other teaching obstacle. Education no doubt, remains the most outstanding development priority area in the world today. The core purpose of education unquestionably, is human development. Other being equal, an educated person who is well or relevantly positioned in the socio-economic, cultural and political milieu is expected to be a valuable asset to the society than another individual who is illiterate and perhaps ignorant. This simple fact explains why researchers and scholars, all over the world, continue to do research into ways of improving human knowledge and development debates on education and human development more

generally can hardly be a boring exercise. The social-political, economical and technological development which bring about a high frequency of innovations and reforms, have all combined to make discussions or debate on education and human development trendy, exciting and unending.

However, achievement can be said to be the outcome of instructions, Sequoya (1998) also started that achievement is the end product of learning experience. Attaining a high level of academic performance is what every parent or guardian as well as teacher wishes for their children wards and students. Schools and teachers are generally graded qualitatively by achievement based on the performance of their students. Emotional Intelligence (EI) refers to get the ability to perceive, control and evaluate emotions. Some researchers suggest that Emotional Intelligence can be earned and strengthened, while others claim it as an inborn characteristic. Since 1990, Peter Salovey and John D. Mayer has been the leading researchers on Emotional Intelligence. In their influential article "Emotional Intelligence", they defined Emotional Intelligence as "the subset of social intelligence that involves the ability to monitor one's own others feelings and emotions to discriminate among them and to use this information to guide one's thinking and actions" (1990).

Buck (1985) has defined emotion as the process by which motivational potential is realized or 'readout' when activated by challenging stimuli. In other words emotion is seen as 'readout' mechanism carrying information and motivational systems. Emotions have long considered to be of such depth and power that in Latin, for example, they were

described as 'motus anima' meaning literally the spirit that moves us contrary to most conventional thinking, emotions are inherently neither positive nor negative, rather they serve as the single most powerful source of human energy. In fact each feeling provides us with vital and potentially profitable information every minute of the day. This feedback ignites creative genius, improves an inner compass for one's life and career, guides to unexpected possibilities and even saves organization from disaster. To exhibit emotions is very easy but doing it at the right time at the right place with right person and to the right degree is difficult. The management of emotions has given rise to the most talked about term educational intelligence. The term EI was coined by two psychologists, P. Salovey and J. Mayer I 1990.

Emotional intelligence enables one of learn to acknowledge and understand feelings in ourselves and in others and that we appropriately respond to them, effectively applying the information an energy of emotions in our daily life and work Cooper and Swaf (1997) define Emotional Intelligence 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. Mayer and Salovey (1993) define Emotional Intelligence as the ability to monitor one's own and others feelings and emotions to discriminate among them, and to use this information. To guide one's own thinking and action, Emotional Intelligence involves the ability to perceive accurately, appraise, and express emotions, the ability to access or generate feelings when they facilitate thoughts, the ability to understand emotions and emotional knowledge and intellectual growth.

During the last 20 years, Emotional Intelligence has become an increasingly popular topic with the fields of psychology and management (Grandy 2000; Law Wong and Song, 2004 Mayer, Roberts and Barsad 2008). The last decade of 20<sup>th</sup> century is in fact considered to be the best gift to the international community of psychological sciences, as it is known for the best discovery related to Emotional Intelligence. The impressive growth of Emotional Intelligence in scholarly work has been partially fueled by Emotional Intelligence is as strong predictor of job performance as is IQ (Goleman 1995). This purported relationship between Emotional Intelligence and work performance has also stimulated interest among human resource practitioners, who have made Emotional Intelligence a widely used tool used for personal hiring and training (Fineman, 2004).

Learning becomes more effective if the child is relaxed, happy and in peace of oneself, Feeling good is an important prerequisite for learning. Managing and understanding emotions is like a preventive tools, which if properly understood will benefit the

individual and the society at large. The Emotional maturity comes with the correct ecological development which takes place when the child is given the right ambiance to grow up in, especially in the initial stage of life. The impact of parenting starts in the cradle itself, the children who receive approval and encouragement from the adults are better equipped to deal with challenges and stress inducing situations. It has been proven with the span of time that children are more relaxed and less prone to pick up fights or display aggressive behavior. It would be difficult to over estimate the effects of parental behavior on children's psychological growth and behavior.

Following are the factors of "Emotional Intelligence"

1. The perception of emotions.
  2. The ability reason using emotions
  3. The ability to understand emotions and
  4. The ability to manage emotions.
1. **Perception of emotions:** The first step in understanding emotion is to accurately perceive them, in many cases, this might involve understanding nonverbal signals such as body language and facial expressions.
  2. Reasoning with Emotions: The next step involves using emotions to promote thinking and cognitive activity. Emotions help prioritize what we pay attention and react to; we respond emotionally to things.
  3. Understanding Emotions: The emotions that we perceive can carry a wide variety of meaning. If someone is expressing angry emotions, the observer must interpret the cause of their anger and what it might mean. For example, if your boss is angry and what it might mean that he is dissatisfied with your work or it could be because he got a speeding ticket on his way to work that morning or that he's been fighting with his wife.
  4. Managing Emotions: The ability to manage emotions effectively is a key of emotionally intelligence. Regulating emotions, responding appropriately and responding to the emotions of others are all important aspects of emotional management.

#### **Selection of sample:**

The sample for the present study was collected from higher secondary school Safa Kadal of J& K state.

#### **Description of tool:**

Emotional Intelligence scale (EIS) by Hyde *etal*: It is one of the most widely used Emotional Intelligence Scale. The final form of the scale constituted items. The scale comprises of ten factors these are: Self-awareness, empathy, self motivation, Emotional stability, Managing relations, integrity, self

development value orientation, commitment and Altruistic behavior.

### Analysis And Interpretation

#### Significance of mean difference between students of Science and Social Science (Higher Secondary Students) on self Awareness of Emotional Intelligence and academic achievement N=50 in each group

Group	N	Mean	S.D.	t-value	Level of significance
Science students	50	14.06	2.64	0.34	Insignificant
Social science students	50	14.22	2.14		

The above table shows the mean difference between science and social science higher secondary students on “Self Awareness” of emotional intelligence. The table indicates the two groups do

not differ significantly. It further indicates that the science and social science higher secondary students are similar, So far as their awareness is concerned.

#### Significance of mean difference between students of Science and Social Science (Higher Secondary Students) on factor B, Empathy of Emotional Intelligence

Group	N	Mean	S.D.	t-value	Level of significance
Science students	50	16.03	2.13	1.46	Insignificant
Social science students	50	16.84	2.97		

The above table shows the mean difference between science and social science higher secondary students on “Empathy” of emotional intelligence. The table indicates the two groups do not differ

significantly. It further indicates that the science and social science higher secondary students are similar, So far as their Empathy is concerned.

#### Significance of mean difference between students of Science and Social Science (Higher Secondary Students) on factor C, Self Motivation of Emotional Intelligence N=50 in each group.

Group	N	Mean	S.D.	t-value	Level of significance
Science students	50	22.16	3.14	0.50	Insignificant
Social science students	50	21.82	3.65		

The above table shows the mean difference between science and social science higher secondary students on “Self Motivation” of emotional intelligence. The table indicates the two groups do

not differ significantly. It further indicates that the science and social science higher secondary students are similar, So far as their Self Motivation is concerned.

#### Significance of mean difference between students of Science and Social Science (Higher Secondary Students) on factor D, Emotional Stability of Emotional Intelligence N=50 in each group.

Group	N	Mean	S.D.	t-value	Level of significance
Science students	50	10.06	2.22	8.23	Significant at 0.01 level
Social science students	50	13.52	2.16		

The above table shows the mean difference between science and social science higher secondary students on “Emotional Stability” of emotional intelligence. The table indicates the two groups differ

significantly at 0.01level. The table further indicates that social science higher secondary students are emotionally stable than Science Higher secondary students

**Significance of mean difference between students of Science and Social Science (Higher Secondary Students) on factor E, Managing Relations of Emotional Intelligence N=50 in each group.**

Group	N	Mean	S.D.	t-value	Level of significance
Science students	50	13.56	2.27	1.65	Insignificant
Social science students	50	14.32	2.48		

The above table shows the mean difference between science and social science higher secondary students on “Managing Relations” of emotional intelligence. The table indicates the two groups do not differ

significantly. It further indicates that Science and social science higher secondary students are similar, So far as their “Managing relations” is concerned.

**Significance of mean difference between students of Science and Social Science (Higher Secondary Students) on factor F, Integrity of Emotional Intelligence N=50 in each group.**

Group	N	Mean	S.D.	t-value	Level of significance
Science students	50	10.26	1.96	1.8	Insignificant
Social science students	50	10.8	1.17		

The above table shows the mean difference between science and social science higher secondary students on “Integrity” of emotional intelligence. The table indicates the two groups do not differ

significantly. It further indicates that Science and social science higher secondary students are similar, So far as their “Integrity” is concerned.

**Significance of mean difference between students of Science and Social Science (Higher Secondary Students) on factor G, Self Development of Emotional Intelligence N=50 in each group.**

Group	N	Mean	S.D.	t-value	Level of significance
Science students	50	6.8	1.20	1.90	Insignificant
Social science students	50	7.22	1.23		

The above table shows the mean difference between science and social science higher secondary students on “Self Development” of emotional intelligence. The table indicates the two groups do

not differ significantly. It further indicates that Science and social science higher secondary students are similar, So far as their “Self Development” is concerned.

**Significance of mean difference between students of Science and Social Science (Higher Secondary Students) on factor H, Empathy of Emotional Intelligence N=50 in each group.**

Group	N	Mean	S.D.	t-value	Level of significance
Science students	50	7	1.33	1	Insignificant
Social science students	50	7.26	1.45		

The above table shows the mean difference between science and social science higher secondary students on “Empathy” of emotional intelligence. The table indicates the two groups do not differ

significantly. It further indicates that Science and social science higher secondary students are similar, So far as their “Empathy” is concerned.

**Significance of mean difference between students of Science and Social Science (Higher Secondary Students) on factor I, Commitment of Emotional Intelligence N=50 in each group.**

Group	N	Mean	S.D.	t-value	Level of significance
Science students	50	7.04	1.45	0.53	Insignificant
Social science students	50	7.18	1.26		

The above table shows the mean difference between science and social science higher secondary students on “Commitment” of emotional intelligence. The table indicates the two groups do not differ

significantly. It further indicates that Science and social science higher secondary students are similar, So far as their “Commitment” is concerned.

**Significance of mean difference between students of Science and Social Science (Higher Secondary Students) on factor J, Altruistic of Emotional Intelligence N=50 in each group.**

Group	N	Mean	S.D	t-value	Level of significance
Science students	50	7.04	1.45	1.74	Insignificant
Social science students	50	7.18	1.26		

The above table shows the mean difference between science and social science higher secondary students on "Altruistic" of emotional intelligence. The table indicates the two groups do not differ

significantly. It further indicates that Science and social science higher secondary students are similar, So far as their "Altruistic behavior" is concerned.

**Conclusion**

In the light of the objectives set forth for the present investigation, the data was collected with the help of a suitable tool. This data was later analyzed and on the basis of the discussions of results, certain facts have been revealed. These broader conclusions are discussed as under:

1. It has been found that science and social science higher secondary students are significantly different on composite score of their emotional intelligence.
2. The study has revealed that science and social science students do not differ significantly so far as their self awareness is concerned.
3. It has been found that science and social science secondary students do not differ significantly on Empathy.
4. The study has revealed that science and social science higher secondary students do not differ significantly as far as their motivation is concerned.
5. It has been found that science and social science higher secondary students differ significantly as far as their emotional stability is concerned. Science and social science students are more comfortable to novel ideas and new information. They face boldly good and bad situations.
6. The students have revealed that science and social science higher secondary students do not differ significantly as far as their managing relations are concerned.
7. It has found that science and social science higher secondary students do not differ significantly on integrity.
8. The study has revealed that science and social science higher secondary students do not differ significantly as far as their self development is concerned.
9. It has been found that science and social science higher secondary students do not differ significantly on commitment.

10. The study has revealed that science and social science higher secondary students do not differ significantly as far as their altruistic behavior is concerned.

**References**

1. Afsar B (2003) Indian women the changing face kilaso Books, New Delhi.
2. Aizer A. (2004) Home Alone: Supervision after school and child behavior. Journal of public economic 88, pp. 1835-1848
3. Alvarez, W. F. (1986) The meaning of maternal employment for mothers and their perceptions of their three years old children, Development Psychology 56, pp 350-360.
4. American Academy of Pediatrics (2004) Periodic survey of Fellows: caring for your baby and young child; birth to age 5. Bantan.
5. Andrabi, G.A. (1997) A comparative study of the children of working and non-working women in respect of their adjustment, academic achievement and socio-economic status, Unpublished M. Phil Dissertation, University of Kashmir.
6. Arputhamurthy S. (1990) Women work and discrimination Ashish Publishing House, Punjabi Bagh New Delhi.
7. Ary, Donald, *et al.* (1972) Introduction to Research in Education New York, Holt Rinehart and Winston Inc.
8. Associated Press (1999) Mothers work outside home does not hurt child Washington Times March 1, 1999.
9. Belsky, J. (1992) Non maternal care in the first year of life and the security of instant-parent attachment. Child development, 59, 157-167
10. Benli, U. K. (1981) Child Psychology NCERT New Delhi.
11. Best J.W. (1983) Research in education, New Delhi prentice Hall of India Pvt. Ltd.
12. Bhattacharya S. (1985) Psychology of child Development Sterling Publishers Private Limited New Delhi pp. 431-437

13. Bhatti, Z. & Bhatti I. (1971) Demographic portraits of professional women employed in India, Bombay Tata Mc Graw Hill
14. Blua, F Grossberg, A. (1992) Maternal labour supply and children's cognitive development. Review of economics and statistics 74 (3), 474-481
15. Bracfcett, M.A. Mayer, J. D. & Warner, R. M. (2004) Emotional Intelligence and the prediction of behavior. Personality and Individual differences 36, 1387-1402.
16. Brofenbrenner, U. & Henderson, C.R; J. R. (1985) Working and watching: maternal employment status and parents perceptions of their three years old children. Child development, 55 pp 1362-1378.
17. Brooks-Gunn, J; Han W.J & Waldfogel, J (2002) maternal employment and child cognitive outcomes in the first three years of life. Child Development, 73 pp. 1052-1072
18. Tivers, J. (1985) Women attached the daily lives of women with young children. Groom Helen London & Sydney pp. 200-213.
19. Tuckraan, B. W. (1972) Conducting Educational Research New York Hear Court Bruce. Jovanovich In charge.
20. Van Dalen, Deobold B. (1973) Understanding Educational Research New York: Mc Graw-Hill Company.
21. Vandell, D. L; Ramanan J (1991) Children of the national longitudinal survey of youth: choices in after school care and child development. Development Psychology 27 (4), 637-643.
22. Vijay (1990) A study of personality, educational achievement and level of aspiration among the children of working and non-working mothers, Ph.D; Edu, Agra university 5th survey of research in education, 1988-92, Vol. 1 11 page 941 NCERT, New Delhi.
23. Vijayarani, D. (1992) A study of child rearing practices: A naturalistic approach, M. Phil, Education Madurai Karnaraj University.
24. Vohra R & Sen A. K. (1986) Status Education and problems of Indian Women Akshat Publications Delhi. pp. 50-60, 71-106.
25. Walzer, S. (1996) "Thinking about the baby: Gender and divisions of infant care" Social problems 43 (May): 219-243.
26. Zadoo, S. A. (1994) Adjustment of working and non-working women, Unpublished M. Phil dissertation, University of Kashmir.

1/15/2013