



A Study on Emotional Intelligence among School Going Adolescents in Kolkata

Bikash Chandra Ghorai^{1*}, Samayita Kundu² and Sunil Santra³

¹*Department of Education, Jadavpur University, India.*

²*School of Education, IGNOU, India.*

³*Department of Education, University of Calcutta, India.*

Authors' contributions

This work was carried out in collaboration among all authors. Author BCG designed the study, performed the statistical analysis, interpreted results, wrote the protocol and wrote the first draft of the manuscript. Authors SK and SS managed the analyses of the study and managed the literature searches. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJESS/2021/v14i430363

Editor(s):

(1) Dr. Bashar H. Malkawi, University of Sharjah, United Arab Emirates.

Reviewers:

(1) Fikret Er, Anadolu University, Turkey.

(2) Rokiah Kadir, University of Malaysia Terengganu (UMT), Malaysia.

Complete Peer review History: <http://www.sdiarticle4.com/review-history/65582>

Original Research Article

Received 25 November 2020

Accepted 01 February 2021

Published 08 February 2021

ABSTRACT

The aim of the present study is to determine the level of emotional intelligence of school going adolescents; and to compare the emotional intelligence and its four dimensions/sub-factors i.e., understanding emotions, understanding motivation, empathy and handling relation of school going adolescents with respect to their gender, grade and board pattern of education. The present study was carried out on 288 higher secondary school students selected as sample from six schools of three different boards of education (viz. two WBCHSE, two CBSE and two ICSE) of Kolkata district in West Bengal using convenient sampling technique. This research is cross-sectional survey type study. The measuring tool in this research originally was of two-point emotional intelligence scale entitled as 'Emotional Intelligence Scale (ESI – SANS) of Dr. A. K. Singh and Dr. S. Narain [1] which was translated in Bengali version by B. C. Ghorai and L. L. Mohakud [2]. After the initial exploratory analysis of the data, different statistical (descriptive and inferential) techniques are used to analyze the data set via SPSS 20. Results of the study revealed that there is no statistically significant difference in emotional intelligence and its sub-factors of school going adolescent with respect to their gender grade and board pattern of education. The findings provide

*Corresponding author: Email: bikashchandraghorai@gmail.com;

a further need on how to more improve upon the emotional intelligence of school going adolescent. Implications and recommendations for developing emotional intelligence school going adolescent are discussed.

Keywords: Emotional Intelligence; understanding emotions; understanding motivation; empathy; handling relations; school going adolescent.

1. INTRODUCTION

Adolescent is the most important period in the human development. It is a period of transition and a turning point in the life of the individual. Adolescence is a bridge between the childhood and adulthood. It is a period of rapid changes in almost all developmental dimensions. Adolescence is an age of emotional upheavals. Period of adolescence has been marked by emotional storm and stress. Their emotions are very intense. But all round development of individual is not possible without the control over emotions. Mayer, et al. [3] observed emotions direct our attention and motivate us to engage in certain behaviors. Adolescence is a time of increased independence during which adolescents begin to interact less with their parents and more with peers [4,5]. Emotional intelligence refers in part to an ability to recognize the meanings of such emotional patterns and to reason and problem solve on the basis of them [6, jhbnnn7]. Emotional Intelligence is more crucial today than ever before the students are academically prepared to complete for knowledge and technology-based jobs. Emotional intelligence (EI) is a relatively new construct compared with intelligence or personality, with the first academic article appearing in [7]. The concept was relatively unknown until it was popularized by science journalist Daniel Goleman [8] book Emotional Intelligence: Why It Can Matter More Than IQ. MacCann, et al. [9] Emotional Intelligence takes the terms 'Emotion' and 'Intelligence'. Emotional Intelligence is something specific to do with the intelligent inter-section of Emotions and thoughts. Emotional Intelligence represents an ability to valid reason with emotions and to use emotions to enhance thought. Emotional Intelligence is involved in the capacity to perceive emotions and manage them [10]. The value of emotional intelligence incorporates intra-personal & inter-personal intelligence or abilities [11]. Emotional Intelligence is an ability to control our emotions in abnormal situations. Emotional intelligence also a key determinant for higher education student's success and also in development in personality. Goleman [8] has defined "Emotional Intelligence as "the capacity of recognizing our own feelings

and those of others for motivating ourselves for managing emotions well in us and in our relationships". Various investigators in MacCann, et al. [9], Preeti [12] examined emotional intelligence constructs within academic settings for the purpose of measuring academic success. Fernandez, Salamonson and Griffiths [13] found that acquiring emotional intelligence skills were key factors in the academic achievement and test performance of the high school and college students. Roy, Sinha, and Suman [14] also reported emotional intelligence as a significant predictor of academic success. Subramanyam & Rao [15] revealed that there is no significant difference with regard to the impact of gender on emotional intelligence and academic achievement, besides there is no relationship between academic achievement and emotional intelligence. Tariq, Majoka and Hussain [16], researched female and male university students regarding emotional intelligence and found that although there was a great difference between perceptions of female and male students, male students believe that they were more superior in factors of emotional intelligence, compared to their female counterparts. Brackett & Mayer [17] revealed that women scored significantly higher in emotional intelligence than men. Katyal & Awasthi [18] revealed that the majority of boys, girls and the total sample had well followed by low emotional intelligence. Girls were found to have higher emotional intelligence than that of boys. According to Goleman, Boyatzis and Mckee [19] Emotional Intelligence, playing an important role in determining the individual success in work, family and social life and individual's ability to manage his/her relations efficiently with his/her environment includes the awareness of emotions, judgment of the knowledge related to the emotion and operating on the emotional knowledge as a part of problem-solving. Briefly, emotional intelligence is using emotions wisely. Pradhan et al. [20] revealed that there exists a positive relationship between Emotional Intelligence and Personal Effectiveness. Olatoye et al. [21] revealed that there was no significant difference between male and female student's academic achievement, creativity and emotional intelligence. Reddy & Venu [22] revealed that girls were found to be 34

higher in their Emotional Intelligence than boys. Further, it was found that students belonging to urban areas have higher emotional intelligence than students in rural areas. Katoch [23] found that government and private secondary school students differ significantly on emotional intelligence; rural and urban secondary school students do not differ significantly on emotional intelligence and secondary school boys and girls do not differ significantly on emotional intelligence. Chamundeswari [24] revealed Matriculation and Central board schools' students better than State board schools' students in emotional intelligence and academic achievement. Senad [25] revealed that the CBSE students are higher level of Emotional Intelligence, Understanding Motivation and Empathy than ICSE students. Females (girls) student are higher level of emotional intelligence, understanding motivation and empathy but in the understanding emotion and handling relation it was concluded that no significant difference in CBSE (male and female) and ICSE (male and female) students. Lawrence Arul and Deepa [26] concluded that the level of emotional intelligence of the high school students is average and the levels of academic achievement are also found to be average. Kanade [27] concluded that negative correlation found between emotional intelligence and academic achievement of higher secondary school boy students and Positive correlation found between emotional intelligence and academic achievement of higher secondary school girl's students. Carvalho and Colvin [28] showed significant direct or indirect effects of income level on emotional intelligence and academic success. Suresh & Vedhan [29] examined that emotional intelligence of the teacher educators was high, the academic achievement of B. ED trainees was in first class and the correlation between emotional intelligence and academic achievement was high. Tehlan and Dalal [30] found that emotion regulation ability enables students to maintain excitement and enthusiasm and emotion facilitation ability enable students to enhance their academic skill. Silamboli and Sujathamalini [31] revealed that the need for intervention training programmes for children with visual impairment to develop their emotional intelligence which helps them to improve their academic achievement. Khatwani & Rathi [32] found that assess the impact of emotional intelligence on the academic achievement of the sample and also to explore the sex difference concerning the same. Verma & Kumar [33] revealed that there was no significant difference

in the academic achievement of higher secondary school students with their low and high emotional intelligence. Makwana & Kaji [34] revealed that there was no significant difference in Home, School and Emotional adjustment of boys and girls secondary school student. Badawy and Magdy [35] also reported that Emotional Intelligence did not affect Job Satisfaction, Gender did not effect on Emotional Intelligence or Job Satisfaction and age had no effect on Job Satisfaction. Srivastava & Pant [36] revealed that there was no significant difference between Hindi and English medium students regarding Emotional Quotient whereas academic achievement was high among English medium students and gender differences were found significant in both variables. Acharya & Patel [37] found that the female's emotional intelligence score was slightly higher than the males. Parveen & Aziz [38] showed that there was no significant difference between male and female adolescent students on emotional intelligence. Chamundeswari [24] found that there is a significant difference in emotional intelligence and academic achievement among students in different categories of schools at the higher secondary level. Raj & Chandramohan [39] examined that relationship between EQ and Academic Achievement among Psychology girl's college students. Kahtani, A. Al. [40] found that the high degree of knowledge, experience, education and skill work of employee was closely related to emotional intelligence person. Srinivasan [41] examined that the emotional intelligence of teachers was influential than intelligence in enhancing the achievement of students. Sharma [42]. Conclude that the General Intelligence and Emotional Intelligence were effective in predicting academic success. Shenoy and Thingujam [43] revealed that emotional intelligence was correlated with neuroticism, extraversion, openness and conscientiousness. Bibi et al. [44] found that females were most emotionally intelligent from males but do not exist any statistically significant gender difference in self-esteem among university students. Suresh kumar [45] concluded that there was a positive relationship between EI and achievement. Ngondi et al. [46] revealed that there was a positive correlation between emotional intelligence and academic performance. Ali and Ali [47] revealed that there was no significant difference between males and females in emotional intelligence in the total score of the EI scale and its subscales. Only two dimensions (regulation of emotions & self-emotions appraisal) predicted academic achieve

ment. Maraichelvi and Rajan [48] conclude that Interpersonal Awareness Score on the academic performance, Interpersonal Management Score on the academic performance and Total Emotional Intelligence Score on academic performance. Parrish [49] examined that emotional intelligence was recognized as highly relevant and important requirements for academic leadership in higher education. The investigation was ascertained that the emotional intelligence related to empathy, inspiring, guiding others and responsibly managing oneself. Sharma et al. [50] concluded that there was a positive and significant correlation between Emotional Intelligence and Academic Achievement of teacher trainees. It is evident that though many research studies have been conducted in these fields, still these fields need special attention of researchers. This study is an attempt to determine the level of emotional intelligence of school going adolescents; and to compare the emotional intelligence and its four dimensions/sub-factors i.e. understanding emotions, understanding motivation, empathy and handling relation of school going adolescents with respect to their gender, grade and board pattern of education. It is hypothesized that there is no significant difference in emotional intelligence and its four dimensions i.e. understanding emotions, understanding motivation, empathy and handling relation of school going adolescents with respect to their gender, grade and board pattern of education.

2. METHODS

This research is cross-sectional survey study. The population of the study is the students of higher secondary school of Kolkata district in West Bengal from Grade XI and Grade XII and their age is between 15 to 18 years. This is the main restriction of the study for generalization of the results. The total number of the students in the sample is 288, these students are selected from six schools of three different boards of education (viz. two WBCHSE, two CBSE and two ICSE) of Kolkata district in West Bengal using convenient sampling technique.

The main measuring tool in this research originally was of two-point emotional intelligence scale entitled as 'Emotional Intelligence Scale (ESI – SANS) of Dr. A. K. Singh and Dr. S. Narain [1] which was translated in to Bengali by B. C. Ghorai and L. L. Mohakud [2]. The scale had total of 31 items that consist of four negative and twenty-seven positive questions. One mark

is given for every right response and zero for wrong responses. The possible scores range from 0 to 31. After the initial exploratory analysis of the data different statistical (descriptive and inferential) techniques [51] are used to analyze the data set via SPSS 20.

3. RESULTS AND DISCUSSION

Table 1 and Fig. 1 shows that out of the total 288 school going adolescent, 56.3% student have scored up to 20, 20.1% student have scored between 21-26 and 23.6% student have scored 27 and above on the emotional intelligence score of school going adolescent. Mean of emotional intelligence of school going adolescent is 22.13 which is under average emotional intelligence category. Hence research showed that average adolescent students possessed average emotional intelligence. This result supported by Kumar and Dey [52] and contradicted by Ghorai et al. [2].

It can be seen from Table 2 that the mean score of 150 boy and 138 girls in emotional intelligence are 21.99 and 22.28 respectively. The calculated value of 't' is -0.605 which is smaller than the critical value of 't' at .05 level of significance, as $p=0.546 > 0.05$ that indicates there is no statistically significant difference between boy and girl students in emotional intelligence. This result is also corroborated [52, 32, 15, 21, 22, 41, 2, 14, 15, 17, 27] and contradicted by Srivastava & Pant [36]. Sub factor of emotional intelligence i.e., understanding emotions mean score of boy and girls are 3.13 and 2.96 respectively. The calculated t value is 1.397 which is quite smaller than the critical t value at 0.05 level of significance, as $p=0.163 > 0.05$ that indicates there is no statistically significant difference between boy and girl students in understanding emotions. Mean score of boy and girls in understanding motivation are 6.36 and 6.47 respectively. The calculated t value is -0.720 which is smaller than the critical t value at 0.05 level of significance, as $p=0.472 > 0.05$ that indicates there is no statistically significant difference between boy and girls in understanding motivation, this finding contradicted by Senad [25]. Mean score of boy and girls in empathy are 8.42 and 8.52 respectively. The calculated t value is -.728 which is smaller than the critical t value at 0.05 level of significance, as $p=0.467 > 0.05$ that indicates there is no statistically significant difference between boy and girls in empathy. In handling relations, the mean score of boy and girls are 4.09 and 4.30 respectively. The

calculated t value is -0.583 which is smaller than the critical t value at 0.05 level of significance, as $p=0.560 > 0.05$ that indicates there is no statistically significant difference between boy and girls in handling relations. Hence, in this study, it can be concluded that there is no statistically significant difference between boy and girls in emotional intelligence and its sub-factors of school going adolescent. This result of the study supported by Ghorai et al. [2] and Kumar and Dey [52].

From the Table 3, it is found that the mean score of 183 XI and 105 XII grade students in emotional intelligence are 21.98 and 22.39 respectively. The calculated value of 't' is -0.853 which is smaller than the critical value of 't' at .05 level of significance, as $p=0.395 > 0.05$ that indicates there is no statistically significant difference between XI and XII grade students in emotional intelligence. This result corroborated by Fernandez, Salamonsen and Griffiths [13]; Lawrence, Arul & Deepa [26,2] and [33]. Sub factor of emotional intelligence i.e., understanding emotions their mean score of XI and XII grade students are 3.06 and 3.03 respectively. The calculated t value is 0.260 which is smaller than the critical t value at 0.05 level of significance, as $p=0.795 > 0.05$ that indicates there is no statistically significant difference between XI and XII grade students in understanding emotions. Mean score of XI and XII grade students in understanding motivation are 6.32 and 6.58 respectively. The calculated t value is -1.656 which is smaller than the critical t value at 0.05 level of significance, as $p=0.099 > 0.05$ that indicates there is no statistically significant difference between XI and XII grade students in understanding motivation. Mean score of XI and XII grade students in empathy are 8.39 and 8.61 respectively. The calculated t value is -1.533 which is smaller than the critical t value at 0.05 level of significance, as $p=0.126 > 0.05$ that indicates there is no statistically significant difference between XI and XII grade students in empathy. In handling relations, the mean score of XI and XII grade students are 4.20 and 4.16 respectively. The calculated t value is 0.107 which smaller than the critical t value at 0.05 level of significance, as $p=0.914 > 0.05$ that indicates there is no statistically significant difference between XI and XII grade students in handling relations. Hence, it can be concluded that there is no statistically significant difference between XI and XII grade students in emotional intelligence and its sub-factors of school going adolescent.

Table 4 shows that the mean of 184 WBBHSE board, 27 CBSE board and ICSE board students are 22.09, 21.41 & 22.47 respectively. It indicates that ICSE board students have higher mean (22.47) than the other board in emotional intelligence. The calculated F is 0.740, which is statistically not significant at 0.05 level of significance ($p=0.478 > 0.05$). Hence, it can be concluded that there is no statistically significant difference on emotional intelligence among school going adolescent with regards to their board pattern of education. This result of the study contradicted by Dwivedi and Qasim [53] and Senad [25]. The sample size might be the contributor of this contradiction. A further study with a larger sample size is recommended at this stage.

In Table 5, it is shown that the mean of 184 WBBHSE board, 27 CBSE board and ICSE board students are 3.05, 2.93 and 3.08 respectively. It is found that ICSE board students have higher mean (3.08) than the other board in understanding emotions. The calculated F is 0.243, which is statistically not significant at 0.05 level of significance ($p=0.785 > 0.05$). Hence, it can be concluded that there is no statistically significant difference on understanding emotions among school going adolescent with regards to their board pattern of education. This result of the study corroborated by Senad [25].

In Table 6, it is shown that the mean of 184 WBBHSE board, 27 CBSE board and ICSE board students are 6.46, 5.93 and 6.47 respectively. It is found that ICSE board students have higher mean (6.47) than the other board in understanding motivation. The calculated F is 2.089, which is statistically not significant at 0.05 level of significance ($p=0.126 > 0.05$). Hence, it can be concluded that there is no statistically significant difference on understanding motivation among school going adolescent with regards to their board pattern of education.

In Table 7, it is shown that the mean of 184 WBBHSE board, 27 CBSE board and ICSE board students are 8.45, 8.26 and 8.60 respectively. It is found that ICSE board students have higher mean (8.60) than the other board in empathy. The calculated F is 0.913, which is statistically not significant at 0.05 level of significance ($p=0.402 > 0.05$). Hence, it can be concluded that there is no statistically significant difference on empathy among school going adolescent with regards to their board pattern of education.

Table 1. & Fig. 1. Overall trend of emotional intelligence range school going adolescents

E.I. Category	Range	N	(%)	Mean
Low E.I	Up to 20	162	56.3	
Average E.I.	21 to26	58	20.1	
High E.I.	27 and above	68	23.6	
	Total			22.13

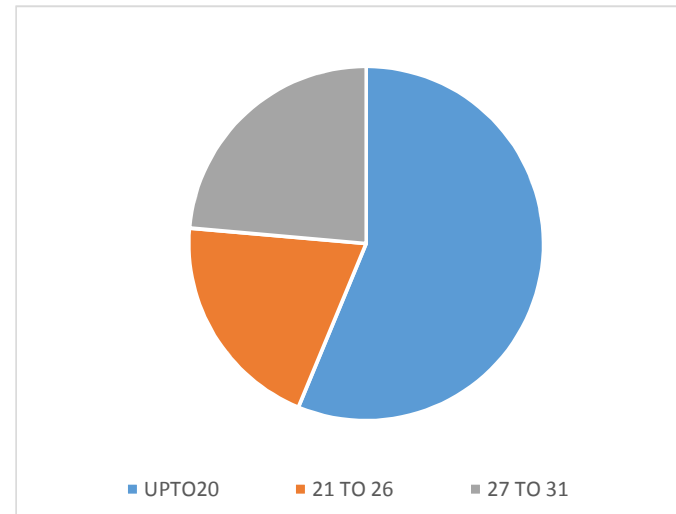


Table 2. Gender wise comparison of overall emotional intelligence and its dimensions

Variables		N	Mean	S.D.	SE_M	d.f.	t	M.D	Sig.(2-tailed)
Dependent	Independent (Gender)								
Emotional Intelligence	Boys	150	21.99	4.009	.327	286	-.605	-.282	.546
	Girls	138	22.28	3.890	.331				
Understanding emotions	Boys	150	3.13	1.012	.083	286	1.397	.163	.163
	Girls	138	2.96	.962	.082				
Understanding motivation	Boys	150	6.36	1.322	.108	286	-.720	-.111	.472
	Girls	138	6.47	1.291	.110				
Empathy	Boys	150	8.42	1.211	.099	286	-.728	-.102	.467
	Girls	138	8.52	1.154	.098				
Handling relations	Boys	150	4.09	3.001	.245	286	-.583	-.210	.560
	Girls	138	4.30	3.121	.266				

Table 3. Grade wise Comparison of Emotional Intelligence and Its Sub-factors

Variables		N	Mean	S.D	SE_M	d.f.	t	M.D	Sig.(2-tailed)
Dependent	Independent (Grade)								
Emotional Intelligence	XI	183	21.98	3.910	.289	286	-.853	-.412	.395
	XII	105	22.39	4.020	.392				
Understanding emotions	XI	183	3.06	.979	.072	286	.260	.032	.795
	XII	105	3.03	1.014	.099				
Understanding motivation	XI	183	6.32	1.338	.099	286	-1.656	-.264	.099
	XII	105	6.58	1.239	.121				
Empathy	XI	183	8.39	1.308	.097	286	-1.533	-.222	.126
	XII	105	8.61	.915	.089				
Handling relation	XI	183	4.20	3.005	.222	286	.107	.040	.914
	XII	105	4.16	3.157	.308				

Table 4. Comparison of emotional intelligence among students of different boards of education

Board of Education	N	Mean	S.D	S.E		Sum of Squares	df	Mean Square	F	Sig.(2-tailed)
WBCHSE	184	22.09	3.806	.281	Between Groups	23.130	2	11.565	.740	.478
CBSE	27	21.41	3.983	.767						
ICSE	77	22.47	4.272	.487	Within Groups	4451.117	285	11.565		
Total	288	22.13	3.948	.233	Total	4474.247	287			

Table 5. Comparison of the Sub-factor “Understanding Emotion” among Students of Different Boards of Education

Board pattern of Education	N	Mean	S.D	S.E		Sum of Squares	df	Mean Square	F	Sig.(2-tailed)
WBCHSE	184	3.05	.996	.073	Between Groups	.479	2	.239	.243	.785
CBSE	27	2.93	1.072	.206						
ICSE	77	3.08	.957	.109	Within Groups	280.841	285	.985		
Total	288	3.05	.990	.058	Total	281.319	287			

Table 6. Comparison of the sub-factor “understanding motivation” among students of different boards of education

Board pattern of Education	N	Mean	S.D	S.E		Sum of Squares	df	Mean Square	F	Sig.(2-tailed)
WBCHSE	184	6.46	1.250	.092	Between Groups	7.075	2	3.538	2.089	.126
CBSE	27	5.93	1.567	.302						
ICSE	77	6.47	1.324	.151	Within Groups	482.754	285	1.694		
Total	288	6.41	1.306	.077	Total	489.830	287			

Table 7. Comparison of the sub-factor “empathy” among students of different boards of education

Board pattern of Education	N	Mean	S.D	S.E		Sum of Squares	df	Mean Square	F	Sig.(2-tailed)
WBCHSE	184	8.45	1.163	.086	Between Groups	2.558	2	1.279	.913	.402
CBSE	27	8.26	1.483	.285						
ICSE	77	8.60	1.115	.127	Within Groups	399.161	285	1.401		
Total	288	8.47	1.183	.070					Total	401.719

Table 8. Comparison of the sub-factor “handling relations” among students of different boards of education

Board pattern of Education	N	Mean	S.D	S.E		Sum of Squares	df	Mean Square	F	Sig.(2-tailed)
WBCHSE	184	4.13	3.036	.224	Between Groups	1.662	2	.831	.088	.915
CBSE	27	4.30	3.417	.658						
ICSE	77	4.29	3.008	.343	Within Groups	2678.213	285	9.397		
Total	288	4.19	3.056	.180					Total	2679.875

In Table 8, it is shown that the mean of 184 WBBHSE board, 27 CBSE board and ICSE board students are 4.13, 4.30 and 4.29 respectively. It is found that CBSE board students have higher mean (4.30) than the other boards in handling relations. The calculated F is 0.088, which is statistically not significant at 0.05 level of significance ($p=0.915>0.05$). Hence, it can be concluded that there is no statistically significant difference on handling relations among school going adolescent with regards to their board pattern of education.

4. CONCLUSION

Emotional Intelligence plays an important role for learning. Gender and grade in emotional intelligence and its sub-factors found no significant difference among school going adolescent. Board pattern of education in emotional intelligence and its sub-factors found that ICSE higher secondary school students have higher mean than other boards in emotional intelligence, understanding emotions, understanding motivation and empathy but no significant difference among school going adolescent with regards to their board of education. These results infer that gender, grade and board pattern of education may not be influenced on emotional intelligence among students. The study was conducted in limited area with small sample size, for better generalization there is a need of an increase in sample size and the number of different areas. This study is an effort to help students to achieve their educational goals and aspirations. Therefore, there is need for all stakeholders in the educational sector to embrace the important role of Emotional intelligence in higher secondary students' academic and non-academic life.

CONSENT

The students had their full consent on participating to study.

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Singh AK, Narain S. Emotional Intelligence Scale (EIS). National Psychological Corporation, Agra, India; 2014.
2. Ghorai BC, Mohakud LL. Emotional intelligence scale (in bengali language) 2016.
3. Mayer JD, Salovey P, Caruso DR. Emotional intelligence: New ability or eclectic traits? *American Psychologist*, 2008;63(6):503–517.
4. Csikszentmihalyi M, Larson R. Being adolescent: Conflict and turmoil in the teenage years. New York, NY: Basic Books; 1984.
5. Schneiders J, Nicolson NA, Berkhof J, Feron FJ, DeVries MW, van Os J. Mood in daily contexts: Relationship with risk in early adolescence. *Journal of Research on Adolescence*, 2007;17(4):697–722.
6. Salovey P, Mayer JD, Goldman SL, Turvey C, Palfai TP. Emotional attention, clarity and repair: Exploring emotional intelligence using the Trait Meta-Mood Scale. *Emotion, Disclosure and Health*. 1995;125-154.
7. Mayer JD, Di Paolo MT, Salovey P. Perceiving affective content in ambiguous visual stimuli: A component of emotional intelligence. *Journal of Personality Assessment*. 1990;772-781.
8. Goleman D. Emotional intelligence. New York: Bantam; 1995.
9. MacCann C, Jiang Y, Brown LER, Double KS, Bucich M, Minbashian A. Emotional Intelligence Predicts Academic Performance: A Meta-Analysis. *American Psychological Association*. 2020;146(2): 150–186.
10. Mayer JD, Caruso D, Salovey P. Emotional intelligence meets traditional standards for an intelligence. *Intelligence*. 1999;27:267-298.
11. Gardner H. Multiple intelligences: The theory in practice. New York: Basic Books; 1993.
12. Preeti B. Role of emotional intelligence for academic achievement for students. *Research Journal of Educational Science*. 2013;8-12.
13. Fernandez R, Salamonson Y, Griffiths R. Emotional intelligence as a predictor of academic performance in first-year accelerated graduate entry nursing students. *Journal of Clinical Nursing*. 2012; 21:3485-3492.

14. Roy B, Sinha R, Suman S. Emotional intelligence and academic achievement motivation among adolescents: A relationship study. *Researchers World*. 2013;4(2): 126.
15. Subramanyam K, Rao KS. Academic achievement and emotional intelligence of secondary school children. *Journal of Community Guidance & Research*. 2008; 25(2):224-228.
16. Tariq S, Majoka MI, Hussain S. A study to investigate emotional intelligence of male and female students at university level in Pakistani context. *Interdisciplinary Journal of Contemporary Research in Business*. 2011;2(10):209–218.
17. Brackett MA, Mayer JD. Convergent, discriminant and incremental validity of competing measures of emotional intelligence. *Personality and Social Psychology Bulletin*. 2003;29:1147-1158.
18. Katyal S, Awasthi E. Gender differences in emotional intelligence among adolescents of Chandigarh. *Journal of Human Ecology*. 2005;17(2):153-155.
19. Goleman D, Boyatzis R, McKee A. *Primal leadership: Realizing the power of emotional intelligence*. Harvard Business School Press; 2002.
20. Pradhan RK, Jena LK, Bhattacharya P. Impact of psychological capital on organizational citizenship behaviour: Moderating role of emotional intelligence. *Cogent Business and Management*. 2016; 1-16.
21. Olatoye et al. Emotional intelligence, creativity and academic achievement of business administration students, electronic. *Journal in Educational Psychology*. 2010;8(2):763-786.
22. Reddy BS, Venu P/ Impact of gender and locality on emotional intelligence on secondary school students. *Journal of Community Guidance & Research*. 2010; 27(3):331-336.
23. Katoch A. A study of emotional intelligence of adolescent students in relation to the type of school. *International Journal of Behavioral Social and Movement Sciences*. 2013;2(3):28-36.
24. Chamundeswari S. Emotional intelligence and academic achievement among students at higher secondary level. *International Journal of Academic Research in Economics and Management Sciences*. 2013;178-187.
25. Senad R. A study of emotional intelligence on CBSE and ICSE adolescents. *International Journal of Indian Psychology*. 2017;4(2).
26. Lawrence AS, Arul. Deepa T. Emotional intelligence and academic achievement of high school students in Kanyakumari District. *International Journal of Physical and Social Sciences*. 2013;3:101-107.
27. Kanade M. Emotional intelligence and academic achievements of higher secondary students. 2014;76–82.
28. Carvalho J, Colvin AD. Emotional intelligence and academic success among low income college students. *International Journal of Education and Social Science*. 2015;2(3):35- 42.
29. Suresh K, Vedhan R. A correlation study of teacher educators' emotional intelligence and academic achievement of B.ED Trainees. *Scholarly Research Journal for Interdisciplinary Studies*. 2016;3283-3287.
30. Tehlan IB, Dalal M. A study of relationship between emotional intelligence and academic achievement of secondary school students. *International Journal of Advanced Research in Management and Social Science*. 2018;14-24.
31. Silamboli S, Sujathamalini J. A study on emotional intelligence and academic achievement of children with visual impairment. *Adalya Journal*. 2019;32-40.
32. Khatwani I, Rathi N. Academic Achievement as a function of emotional intelligence. *International Journal for Psychology and Social Sciences*. 2017;20-31.
33. Verma A, Kumar NA. Academic achievement of higher secondary school students in relation to their emotional intelligence. *Indian Journal of Applied Research*. 2019;11-12.
34. Makwana MD, Kaji SM. Adjustment of secondary school students in relation to their gender. *The International Journal of Indian Psychology*. 2014;5-12.
35. Badawy TAAL, Magdy MM. Assessing the impact of emotional intelligence on job satisfaction: An empirical study on faculty members with respect to gender and age. *International Business Research*. 2015;67-78.
36. Srivastava SK, Pant N. Emotional intelligence and academic achievement among graduate students. *International Journal of Research in Social Sciences*. 2016;14-22.

37. Acharya PB, Patel IJ. Emotional intelligence and academic achievement of higher secondary school students. RET Academy for International Journals of Multidisciplinary Research (RAIJMR). 2015;4-7.
38. Parveen A, Malik MH, Aziz R. Emotional intelligence and academic achievement of male and female adolescent students of District Budgam. Journal of Education and Practice. 2012;184-187.
39. Raj P, Chandramohan V. Emotional intelligence predicting academic achievement among college students. International Journal of Science and Research. 2013;1275-1278.
40. Kahtani AA. Employee emotional intelligence and employee performance in the higher education institutions in Saudi Arabia: A proposed theoretical framework. International Journal of Business and Social Science. 2013;80-95.
41. Srinivasan P. Exploring the influences of teacher's intelligence and emotional intelligence on students' academic achievement. American Journal of Educational Research. 2015;1159-1162.
42. Sharma AD. General intelligence and emotional intelligence as predictors of academic success. International Index & Refereed Research Journal. 2013;26-27.
43. Shenoy S, Thingujam NS. Perceived emotional intelligence and academic adjustment in transition phase: Examining the mediating role of personality. Journal of the Indian Academy of Applied Psychology. 2012;114-121.
44. Bibi S, Saqlain S, Mussawar B. Relationship between emotional intelligence and self esteem among Pakistani University Students. Journal of Psychology and Psychotherapy. 2016;1-6.
45. Suresh kumar P. Relationship between emotional intelligence and academic achievement of student teacher (B.ED) in Virudhunagar District. International Journal of Education. 2018;29-31.
46. Ngondi R, Khasakhala L, Yugi P. Relationship between emotional intelligence and academic performance among secondary school students in Athi-River Sub County, Kenya. Journal of Education in Developing Economics. 2020;13-22.
47. Ali MA. The relationship between emotional intelligence and academic achievement in males and females in egyptian context. David Publishing. 2016;567-578.
48. Maraichelvi A, Rajan S. The relationship between emotional intelligence and the academic performance among final year under graduates. Universal Journal of Psychology. 2013;41-45.
49. Parrish DR. The relevance of emotional intelligence for leadership in a higher education context. Faculty of Science, Medicine and Health; 2015.
50. Sharma P, Mangal S, Nagar P. To Study the impact of emotional intelligence on academic achievement of teacher trainees. IRA- International Journal of Education & Multidisciplinary Studies. 2016;43-54.
51. Garrett HE. Statistics in psychology and education. New York: Longmans: Green and Co; 1958.
52. Kumar R, Dey R. Emotional intelligence of adolescent school going children of Purulia. The Scholar. 2018;1-9.
53. Dwivedi A, Qasim SH. A study of emotional intelligence of secondary level students. Annals of Education. 2017;3(1): 48-52.

© 2021 Ghorai et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
<http://www.sdiarticle4.com/review-history/65582>