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# Impact of Cognitive and Emotional Intelligence on Quality Education

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Abstract— At present school and colleges are expanding very much quantitatively but less attention is being paid at the quality of education. In order to improve the quality of any course, the present study will be conducted, and this study is related to the improvement of the selection criterion of candidates by introducing the significance of testing emotional intelligence also. Till now the gold standard of selection the candidates for any course, has been cognitive intelligence tests. Previous researches had proved that emotional intelligence is much more important than cognitive intelligence. Then it should also be measured or tested. In other words if a student is cognitively intelligent, will he/she also be emotionally intelligent relatively or not. Is it different according to sex, locality etc. so in order to find out the difference between cognitive and emotional intelligence of students we have performed this study.

*Index Terms*— Emotional Intelligence, Cognitive Intelligence, Quality Education

### I. INTRODUCTION

In the past, the gold standard of intelligence has been the I.O. (Intelligence Quotient) Score. I.O. tests are the measures of cognitive aspects of intelligence. But Howard Gardner from the Harvard School of Education proposed that a single entity called intelligence does not exist. He put forward an idea of 'multiple intelligence'. It means that there are many X-intelligence. Among them, one is Emotional Intelligence (EI). Previous researches have proved that EI is as important as Cognitive Intelligence (CI) because it is fundamental for better adjustment [1]. CI is required to qualify an exam and to get a job but afterwards (during job) it is EI which is more important [2]. It is seen that many people with very high IQs (CI) do poorly in work and in relationship because they have low EQs (EI). They sabotage themselves because they cannot manage their own emotions or those of peoples and they sabotage projects because they may have all the logical, rational, analytical "answers", but they do not have "soft" skills to move a project forward. Keeping in view the relative importance of both it becomes necessary to see that, what are the components which these intelligences (EI & CI) contain?

Emotional intelligence is understanding own emotions and those of others, and ability to use this information to achieve best outcome for all consent [3][4]. Knowing their emotions come from and being able to manage your own and those of others, being able to work well with others as well as alone. As a result it is fundamental for better adjustment and better adjustment is fundamental to improve a person's efficiency in work. That is why one cannot neglect the importance of EI. Essentially it is the competence to identify and express, understand, assimilate emotions into thought and regulate both positive and negative emotions in the self and others. As a concept, emotional intelligence has been discussed by various researchers in the literature as a consequence of the work of Goleman [5]. They have used the concept in terms of its role in more effective leadership in the workplace. Goleman has claimed that emotional intelligence "can be as powerful and at times more powerful than IQ".

Cognitive Intelligence contains intellectuals' ability such as logic, reasoning, reading-writing, analyzing and prioritizing. They go on simply utilizing only the neocortex, not the emotional centers of the brain which also provide crucial information. These abilities do not requires any social skills i.e., a mathematic equation can be solved itself or write an essay or balance a business book by yourself. The classical behavioral biologist definition of intelligence is, "Intelligence is the ability to adapt new condition and to successfully cope with life situations", and seems to be the best. Intelligence, here depends on available physical tools and specific life experience (individuals hidden knowledge, preference and excess to information) therefore it's not enough selective to be measured, compared or designed.

The recognition of the role of emotions in learning and teaching in higher education is long overdue. The role of educators in educational institutions is not confined to imparting knowledge and skills, but also encouraging students to express and manage their emotions well as part of their character and personality development [6].

Teaching skills, like self-awareness, managing distressing emotions and empathy to the students makes them better learners. To use emotional intelligence in teaching means that to be able to recognize and respond to one's own feelings and those of the learners studying in the classroom so as to make both more effective in their respective roles and encourage an emotional state in the learners on the course, which is conducive to learning. EI should be recognized as an essential component of what all teachers offer rather than being an extra quality that a

minority of teachers offers to learners. A comparison between EI and CI is shown in Table I.

The rest of the paper is organized as:- Section II gives an overview of role of emotional intelligence I teaching and learning. Section III provides the objectives and related hypothesis of the work. A brief of related work is discussed in Section IV. The research methodology of the work is shown in Section V. The results and discussions pertaining to the work are depicted in Section VI. Finally Section VII concludes the paper.

TABLE I. EMOTIONAL INTELLIGENCE VS COGNITIVE INTELLIGENCE

<b>Emotional Intelligence</b>	Cognitive Intelligence
Being effective both alone and as a team player	Only effective when working alone
Being able to manage your own emotions	Having temper tantrums, sulking or with drawings
<ul> <li>Being able to empathize with others knowing that they are coming from</li> <li>Using an emotional appeal to convince someone to something</li> <li>Knowing that motivation is a feeling word</li> </ul>	<ul> <li>Not being able to grasp the feelings of others and understanding how the emotions are effecting the situation</li> <li>Using an Intellectual appeal to convince someone of something</li> <li>Thinking that motivation is thinking work</li> </ul>

# II. ROLE OF EMOTIONAL INTELLIGENCE IN TEACHING AND LEARNING

The role of educators in educational institutions is not confined to imparting knowledge and skills, but also encouraging students to express and manage their emotions well as part of their character and personality development [6]. A major part of student's life is spent in educational institution. EI skills can be better nurtured and developed during this phase of life. In the day-to-day interaction with the students, teachers will be in a better position to notice students' various feelings as well as they can encourage them to express their emotions in accordance to different situations. An anxious or worried student should be given attention before he/she becomes psychologically depressed. Once aware of students' negative state of emotions, teachers should encourage students to communicate their problems with others so that they can be helped or referred to other sources of support. In addition, educators need to manage their own emotions positively. Not only can they function as role models and show students by example which feeling (and how much of) is appropriate to express depending on the situation, but they also need to be sensitive to colleagues in order to maintain effective working relationships. If teachers are responsible for assisting others to learn, then they need to recognize this emotional component of the teaching-learning exchange, and to be able to work with it; in short, teachers need to use emotional intelligence. To use emotional intelligence in teaching means that to be able to recognize and respond to one's own feelings and those of the learners in the classroom in order to make both more effective in their respective roles and encourage an emotional state in the learners on the course, which is conducive to learning [7].

#### III. OBJECTIVE AND HYPOTHESIS OF STUDY

In this paper, we have studied and proved that, when the cognitive intelligence is measured, in any way, emotional intelligence is also being measured automatically. In other words if a student is cognitively intelligent, will he/she also be emotionally intelligent relatively or not. Is it different according to sex, locality etc. so in order to find out the difference between cognitive and emotional intelligence of students we performed some observations and analyzed the data. Following are the objectives of the study:

- To find out the difference between cognitive intelligence and emotional intelligence of *graduate students*.
- To find out the difference between cognitive intelligence and emotional intelligence of graduate *male* students.
- To find out the difference between cognitive intelligence and emotional intelligence of graduate *female* students.
- To find out the difference between cognitive intelligence and emotional intelligence of students belonging to *Urban Locale*.
- To find out the difference between cognitive intelligence and emotional intelligence of students belonging to *Rural locale*.

Following are the hypothesis of the study:

• There is no difference between cognitive intelligence and emotional intelligence of graduate students.

- There is no difference between cognitive intelligence and emotional intelligence of Graduate male students.
- There is no difference between cognitive intelligence and emotional intelligence of Graduate female students.
- There is no difference between cognitive intelligence and emotional intelligence of Graduate students belonging to Urban locale.
- There is no difference between cognitive intelligence and emotional intelligence of Graduate students belonging to Rural locale.

### IV. RELATED WORK

Goleman, reported that the single most important factor distinguishing star performers in every field is not only IQ, advanced degrees, or technical expertise, but also the quality known as emotional intelligence [5]. Provides guidelines for cultivation these capabilities and explains why corporate training must change if it is to be effective. Mayer referred that there is a good reason to expect that both EI and IQ makes separate and discrete contributions to performance [8]. For one thing, early studies of the correlations between IQ and EI show a range from 0 to 0.36, depending on the measure used. He used his own EI measure and reports a zero correlation between with fluid intelligence and a 0.36 correlation between verbal IQ. Cherniss & Goleman conducted studies to examine the predictive relationship between IQ and the ability to adjust to new environments, to fill recruitment quotas and to predict job success [9] [10].

Derksen et al. specifically explore the relationship between general intelligence and emotional intelligence among a Dutch community sample (N=873) [11]. Among the entire sample, the correlation between general intelligence (General adult mental ability scale) and emotional intelligence (Barton's EQ-I), while statistically significant at .05, is nonetheless very small (r=.081). Among men (n=489), the correlation is r=.066, among women (n=384), it is r=.095. Neither of these correlations is statistically significant. On the basis of their data, Derksen et al. conclude that general intelligence and emotional intelligence are "psychometrically independent" [11].

Okech, studied to examine the relationships among emotional intelligence, teacher self-efficacy, length of teaching experience, and study examined difference in emotional intelligence between male teachers and female teachers [12]. Differences are found significant. Lorna L, carried out a research and findings revealed that multiple factors are involved and that a combination of attributes, including knowing how to instruct, motivate, manage and asses diverse students, along with strong verbal ability, sound subject matter knowledge and knowledge of effective teaching methodology, shows the greatest promise for producing teacher quality [12].

Romanelli, Cain, and Smith reviewed a study conducted by Pau et al. in which the EI of dental students and the effect of stress were examined [13]. Students with high EI scores were found to have more adaptive coping strategies and better time management skills; whereas students who had low EI scores also reported engaging in unhealthy behaviors such as smoking, procrastinating, and withdrawing socially. Meyer and Fletcher reviewed studies that reported similar findings among college student athletes [14]. Unfortunately, each of these studies was limited by a number of factors, including sample size and make-up, use of self report measures or qualitative analysis.

Suresh, K.J. and Joshith. V.P., found that a significant negative relationship between variables, emotional intelligence and stress for the total sample and subsamples [15]. So it can be stated that the two variables are inversely related and that individuals having high emotional intelligence may have low stress and this will directly contribute to the positive development of the individual and society. H. Indu, found that majority of **Emotional** Coimbatore district posses average Intelligence [16]. It was seen from the results that male and female teacher trainees did not differ in their emotional intelligence. The results also showed that there is no significant difference between the emotional intelligence of teacher trainees based on the sub-samples; type of family and type of institution.

# V. RESEARCH METHODOLOGY

#### A. Method of the Study

In order to achieve the objectives of the study ex-post facto method was used. The choice of this method was mainly governed by its intrinsic value in comparing study group with regard to their characteristics and in ascertaining the relationship between the various sets of variables involved in the study.

# B. Population and Sample

The population for the present study has been defined as the students studying in degree colleges of Meerut city. Hence, the findings of our study will apply to the population only.

The list of all degree colleges:-

- 1. Dr. Ambedkar Degree College, Meerut
- 2. Kishan Mahila Degree College, Kankarkhera, Meerut
- 3. Laxmi Devi Arya Kanya Degree College, Meerut
- 4. D.N. College, Meerut
- 5. Meerut College, Meerut
- 6. N.A.S. College, Meerut
- 7. R.G. College, Meerut
- 8. Kanohar Lal Mahila Mahavidylaya, Meerut

- 9. Navjeevan Kishan degree College, Mawana, Meerut
- College of Professional Education, Sisauli, Garh Road, Meerut
- 11. Adharshila College of Education, Partapur Byepass, Meerut

List of selected colleges are Meerut College Meerut, D.N. College, N.A.S. College, R.G. College, Meerut. Having selected the institution, the next important step was to establish rapport with the principals/directors of each of these above institutions, they were first contacted through a personal letter then the investigator personally went to each of the above institutions to have a contact with their principals/directors. They were explained the significance and the purpose of the study and their cooperation for a successful conduct of the study. Each one of the principals was highly cooperative and extended his cooperation willingly. Since the size of the sample should be large enough to serve an adequate representation of the population about which the researcher wished to generalize his findings and small enough to be selected economically in terms of availability, in terms of both time and money and complexity of the data analysis. So far in the present study 100 students studying in degree colleges were selected for the study. The data collection fact sheets along with the computation are shown in Fig. 17, 18, 19 and 20.

# C. Statistical Technique Used

The present investigation aimed at to find out the relationship between emotional intelligence and cognitive

intelligence of graduate students. To measure each one of these variables the following tools have been employed.

- Emotional intelligence scale by Anukool Hyde, Sanjyot Pethe and Upinder Dhar. Scales are shown in Table II, III and IV.
- 2. Cognitive intelligence by Jalota general mental ability test.

TABLE II. FACTORIAL VALIDITY OF SUB-SCALES OF EI

S.No	Sub-scales	Factorial Validity
1.	Self-awareness	0.69
2.	Empathy	0.62
3.	Self-motivation	0.54
4.	Emotional stability	0.62
5.	Managing relations	0.59
6.	Integrity	0.62
7.	Self-development	0.68
8.	Value-orientation	0.64
9.	Commitment	0.69
10.	Altruistic behavior	0.65

TABLE III . NORMS FOR RAW SCORES INTERPRETATIONS  $(N=150) \label{eq:normalized}$ 

(N=200)				
Mean(M)	68			
Standard Deviation	16			
Normal	52-84			
High	85 and above			
Low	51 and below			

TABLE IV. NORMS FOR FACTOR-WISE INTERPRETATION OF RAW SCORES (N=150)

	A	В	С	D	Е	F	G	Н	I	J
Factors	Self-Awareness	Empathy	Self-Motivation	Emotional Stability	Managing Relations	Integrity	Self-Development	Value Orientation	Commitment	Altruistic Behavior
Mean(M)	7.10	10.5	12.87	7.85	8.39	5.37	3.78	3.74	3.79	3.87
S.D.	2.85	3.43	3.94	2.66	2.83	1.83	1.46	1.77	1.31	1.51
Normal Range	4-10	7-14	9-17	4-10	5-11	4-7	2-5	2-5	2-5	2-5
High	11 & above	15 & above	15 & above	12 & above	12 & above	8 & above	6 & above	6 & above	6 & above	6 & above
Low	8 & below	6 & below	8 & below	3 & below	4 & below	3 & below	1 & below	1 & below	1 & below	1 & below

#### VI. RESULTS AND DISCUSSION

The objective of study is to find out difference between Cognitive Intelligence and Emotional Intelligence of graduate students. To achieve this objective the data is collected from different colleges and summarized as shown in Fig. 17 to Fig. 20 (*Annexure 1*). The 't' factor for the table is computed using formula:

 $t = (M1-M2)/sqrt[(sd_1^2)/n + (sd_2^2)/n]$ 

where M1 and M2 are the mean for different values of CI and EI in a table,  $sd_1$  and  $sd_2$  are the standard deviation for different values of CI and EI in the table.

TABLE V. MEAN, SD AND 'T' OF CI AND EI OF MALE

	Mean (M1	S.D. (sd <sub>1</sub>	
Group	& M2)	& $sd_{2}$	t
Male CI	114.33673	11.14805	40.67682
Male EI	40.40206	6.649084	40.07082

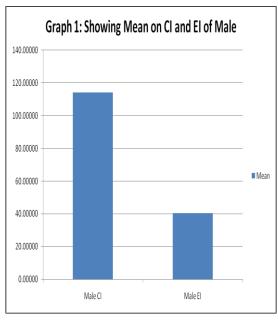


Figure 1: Difference in CI and EI of Males

Data presents in Table V and Fig. 1 reveals that the mean of male students on cognitive intelligence and emotional intelligence is 114.33 and 40.15 with their corresponding S.D.s 11.14 and 6.64 and 't' value is 40.67. This shows that there is significant difference between the levels of cognitive intelligence and emotional intelligence of male students at both the level of significance. Hence formulated null hypothesis is rejected.

TABLE VI. MEAN, SD AND'T' OF CI AND EI OF FEMALE

Group	Mean	S.D.	t
Female CI	114.48000	11.49914	38.47857
Female EI	40.56000	6.971702	30. <del>4</del> 7037

Data presents in Table VI and Fig. 2 reveals that the mean of female students on cognitive intelligence and emotional intelligence is 114.48 and 40.56 with their corresponding S.D.s 11.49 and 6.97 and t' value is 38.47. This shows that there is significant difference between the levels of cognitive intelligence and emotional intelligence of female students at both the level of significance. Hence formulated null hypothesis is rejected.

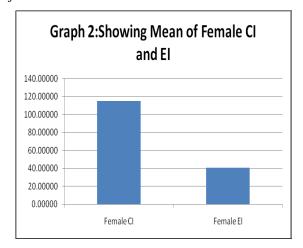


Figure 2: Difference of CI and EI of Females

TABLE VII. MEAN, SD AND 'T' OF CI AND EI OF URBAN

Group	Mean	S.D.	t
Urban CI	114.48000	9.838214	15.39857
Urban EI	40.56000	38.04177	13.39637

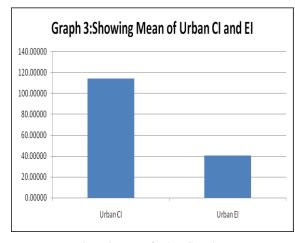


Figure 3: Mean of Urban CI and EI

Data presents in Table VII and Fig. 3 reveals that the mean of urban students on cognitive intelligence and emotional intelligence is 114.48 and 40.56 with their corresponding S.D.s 9.83 and 38.04 and 't' value is 15.39. This shows that there is significant difference between the levels of cognitive intelligence and emotional intelligence of urban students at both the level of significance. Hence formulated null hypothesis is rejected.

TABLE VIII. MEAN, SD AND 'T' OF CI AND EI OF RURAL

Group	Mean	S.D.	t
Rural CI	114.32292	13.03567	8.645422
Rural EI	40.29167	47.43235	0.043422

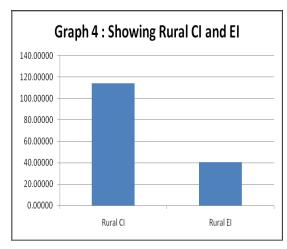


Figure 4: Rural CI and EI

Data presents in Table VIII and Fig. 4 reveals that the mean of rural students on cognitive intelligence and emotional intelligence is 114.32 and 40.29 with their corresponding S.D.s 13.03 and 47.43 and 't' value is 8.64. This shows that there is significant difference between the levels of cognitive intelligence and emotional intelligence of rural students at both the level of significance. Hence formulated null hypothesis is rejected.

TABLE IX. MEAN, SD AND 'T' OF CI AND EI OF URBAN MALE

Group	Mean	S.D.	t
Urban Male CI	114.51042	13.54552	26 60057
Urban Male EI	40.42708	8.860002	26.68857

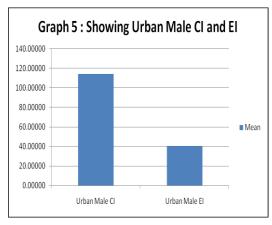


Figure 5: Urban Male CI and EI

Data presents in Table IX and Fig. 5 reveals that the mean of urban male students on cognitive intelligence and emotional intelligence is 114.51 and 40.42 with their

corresponding S.D.s 13.54 and 8.86 and 't' value is 26.68. This shows that there is significant difference between the levels of cognitive intelligence and emotional intelligence of urban male students at both the level of significance. Hence formulated null hypothesis is rejected.

TABLE X. MEAN, SD AND 'T' OF CI AND EI OF RURAL MALE

Group	Mean	S.D.	t
Rural Male CI	114.32292	19.23359	14.04875
Rural Male EI	40.29167	10.10625	14.04873

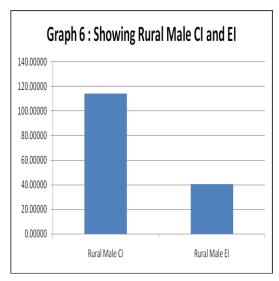


Figure 6: Rural Male CI and EI

Data presents in Table X and Fig. 6 reveals that the mean of rural male students on cognitive intelligence and emotional intelligence is 114.32 and 40.29 with their corresponding S.D.s 19.23 and 10.10 and 't' value is 14.04. This shows that there is significant difference between the levels of cognitive intelligence and emotional intelligence of rural male students at both the level of significance. Hence formulated null hypothesis is rejected.

TABLE XI. MEAN, SD AND 'T' VALUE OF CI AND EI OF RURAL FEMALE

Group	Mean	S.D.	T
Rural Female CI	113.95506	18.59168	13.73309
Rural Female EI	40.18072	10.7743	13.73309

Data presents in Table XI and Fig. 7 reveals that the mean of rural female students on cognitive intelligence and emotional intelligence is 113.95 and 40.18 with their corresponding S.D.s 18.59 and 10.77 and 't' value is 8.64. This shows that there is significant difference between the levels of cognitive intelligence and emotional intelligence of rural female students at both the level of significance. Hence formulated null hypothesis is rejected.

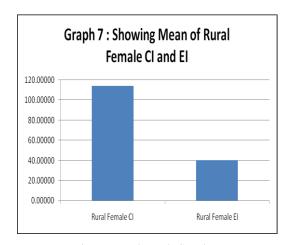


Figure 7: Rural Female CI and EI

TABLE XII. MEAN, SD AND 'T' VALUE OF CI AND EI OF URBAN FEMALE

Group	Mean	S.D.	t
Urban Female			
CI	114.48000	14.01944	25.90155
Urban Female			23.90133
EI	40.56000	8.498752	

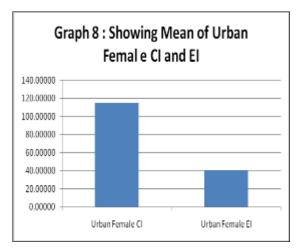


Figure 8: Urban Female CI Vs EI

Data presents in Table XII and Fig. 8 reveals that the mean of urban female students on cognitive intelligence and emotional intelligence is 114.48 and 40.56 with their corresponding S.D.s 14.01 and 8.49 and 't' value is 25.90. This shows that there is significant difference between the levels of cognitive intelligence and emotional intelligence of urban female students at both the level of significance. Hence formulated null hypothesis is rejected.

Data presents in Table XIII and Fig. 9 reveals that the mean of male and female students on cognitive intelligence is 114.33 and 114.48 with their corresponding S.D.s 11.14 and 11.49 and 't' value is 0.06. This shows that there is no significant difference between male and female students at both the level of significance. Hence formulated null hypothesis is accepted.

TABLE XIII. MEAN, SD AND 'T' VALUE OF CI OF MALE AND FEMALE

Group	Mean	S.D.	t
Male CI	114.33673	11.14805	0.06322
Female CI	114.48000	11.49914	0.00322

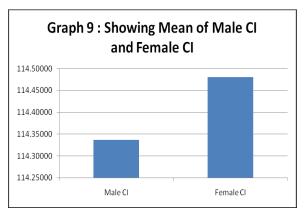


Figure 9: Mean of Male CI and Female CI

TABLE XIV. MEAN, SD AND 'T' VALUE OF MALE AND FEMALE

Group	Mean	S.D.	t
Male EI	40.40206	6.649084	0.115843
Female EI	40.56000	6.971702	0.113043

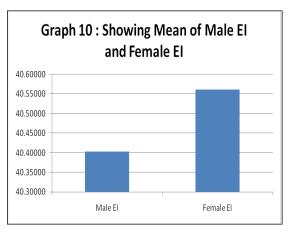


Figure 10: Mean of Male EI and Female EI

Data presents in Table XIV and Fig. 10 reveals that the mean of male and female students on emotional intelligence is 40.40 and 40.56 with their corresponding S.D.s 6.64 and 6.97 and 't' value is 0.11. This shows that there is no significant difference between male and female students at both the level of significance. Hence formulated null hypothesis is accepted.

TABLE XV. MEAN, SD AND 'T' VALUE OF CI OF URBAN AND RURAL

Group	Mean	S.D.	t
Urban CI	114.48000	9.838214	0.061171
Rural CI	114.32292	13.03567	0.001171

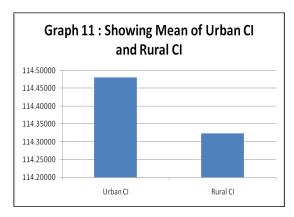


Figure 11: Mean of Urban CI and Rural CI

Data presents in Table XV and Fig. 11 reveals that the mean of urban and rural students on cognitive intelligence is 114.48 and 114.32 with their corresponding S.D.s 9.83 and 13.03 and 't' value is 0.06. This shows that there is significant difference between urban and rural students at both the level of significance. Hence formulated null hypothesis is rejected.

TABLE XVI. MEAN, SD AND 'T' VALUE OF EI OF URBAN AND RURAL

Group	Mean	S.D.	t
Urban E.I.	40.56000	38.04177	0.02832
Rural E.I.	40.29167	47.43235	0.02632

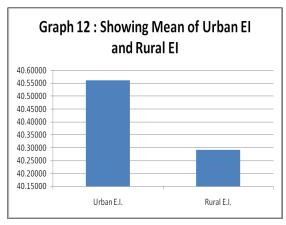


Figure 12: Mean of Urban EI and Rural EI

Data presents in Table XVI and Fig. 12 reveals that the mean of urban and rural students on emotional intelligence is 40.56 and 40.29 with their corresponding S.D.s 38.04 and 47.43 and 't' value is 0.02. This shows

that there is significant difference between urban and rural students at both the level of significance. Hence formulated null hypothesis is rejected.

TABLE XVII. MEAN, SD AND 'T' VALUE OF EI OF URBAN MALE AND URBAN FEMALE

Group	Mean	S.D.	T
Urban Male EI	40.42708	8.860002	0.06385
Urban Female EI	40.29167	8.498752	0.00303

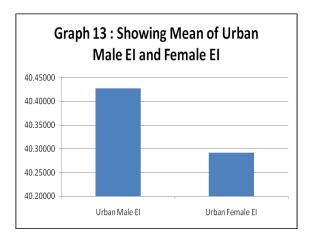


Figure 13: Mean of Urban Male EI and Female EI

Data presents in Table XVII and Fig. 13 reveals that the mean of urban male and urban female students on emotional intelligence is 40.42 and 40.29 with their corresponding S.D.s 8.86 and 8.49 and 't' value is 0.06. This shows that there is no significant difference between urban male and urban female students at both the level of significance. Hence formulated null hypothesis is accepted.

TABLE XVIII. MEAN, SD AND 'T' VALUE OF EI OF RURAL MALE AND RURAL FEMALE

Group	Mean	S.D.	t
Rural Male EI	40.29167	10.10625	0.030465
Rural Female EI	40.18072	10.7743	

Data presents in Table XVIII and Fig. 14 reveals that the mean of rural male and rural female students on emotional intelligence is 40.29 and 40.18 with their corresponding S.D.s 10.10 and 10.77 and 't' value is 0.03. This shows that there is no significant difference between rural male and rural female students at both the level of significance. Hence formulated null hypothesis is accepted.

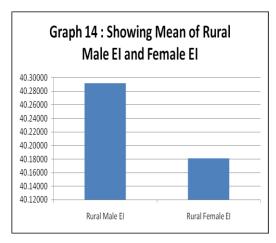


Figure 14: Mean of Rural Male EI and Female EI

TABLE XIX. MEAN, SD AND 'T' VALUE OF EI URBAN MALE AND RURAL MALE

Group	Mean	S.D.	T
Urban Male EI	40.42708	6.358229	0.091832
Rural Male EI	40.18072	10.10625	0.091832

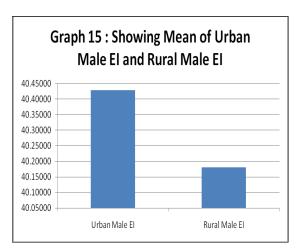


Figure 15: Mean of Urban Male EI and Rural Male EI

Data presents in Table XIX and Fig. 15 reveals that the mean of urban male and rural male students on emotional intelligence is 40.42 and 40.18 with their corresponding S.D.s 6.35 and 10.10 and 't' value is 0.09. This shows that there is no significant difference between urban male and rural male students at both the level of significance. Hence formulated null hypothesis is accepted.

TABLE XX. MEAN, SD AND 'T' VALUE OF EI URBAN FEMALE AND RURAL FEMALE

Group	Mean	S.D.	t
Urban Female EI	40.56000	8.498752	0.123418
Rural Female EI	40.18072	10.7743	0.123418

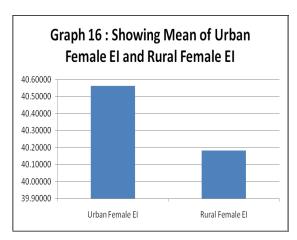


Figure 16: Mean Female Urban EI and Rural EI

Data presents in Table XX and Fig. 16 reveals that the mean of urban female and rural female students on emotional intelligence is 40.56 and 40.18 with their corresponding S.D.s 8.49 and 10.77 and 't' value is 0.12. This shows that there is no significant difference between urban female and rural female students at both the level of significance. Hence formulated null hypothesis is accepted. The major findings of the research are as follows:

# 1. There is significant difference between

- The levels of cognitive intelligence and emotional intelligence of male students.
- The levels of cognitive intelligence and emotional intelligence of Female students.
- The levels of cognitive intelligence and emotional intelligence of Urban students.
- The levels of cognitive intelligence and emotional intelligence of Rural students.
- The levels of cognitive intelligence and emotional intelligence of Urban male students.
- The levels of cognitive intelligence and emotional intelligence of Rural male students.
- The levels of cognitive intelligence and emotional intelligence of Urban female students.
- The levels of cognitive intelligence and emotional intelligence of Rural female students.

# 2. There is no significant difference between

- Male and female students on cognitive intelligence.
- Male and female students on emotional intelligence.
- Urban and rural students on cognitive intelligence.
- Urban and rural students on emotional intelligence.
- Urban male and urban female students.
- Rural male and rural female students on cognitive intelligence.

- Urban male and rural male students.
- Urban female and rural female students.

### VII. CONCLUSION

Emotionally healthy children are more cooperative, happier and grasp things more effectively. Educational organizations have the potential to help all learners develop into well-rounded individuals who can express themselves, form enduring relationships, contribute usefully in the world and achieve their learning potential. Emotional literacy inspires learners by enabling them to sustain their curiosity and creativity in seeking solutions to problems. It also strengthens their ability to respond to the challenges which they will face at work and in their lives. For developing a good relationship with a group of learners, emotional intelligence is a prerequisite, which can be the basis for producing learners who have: greater motivation, more engagement, a greater readiness to take risks in their learning, a more positive approach, a readiness to collaborate, and more creativity and more tenacity. There are other benefits of applying emotional intelligence like: avoiding the costs of anxiety and depression, promoting academic success, laying down patterns for future life, making the whole experience more rewarding and enjoyable in developing skills that are in demand by employers.

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# Annexure 1

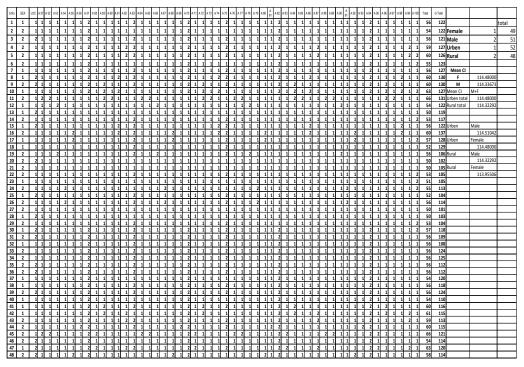


Figure 17: CI Computation Chart

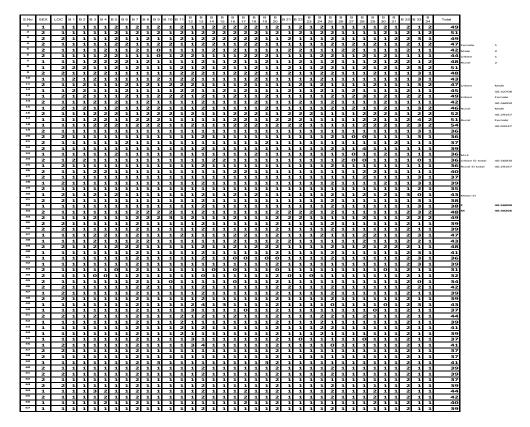


Figure 18: EI Computation Chart

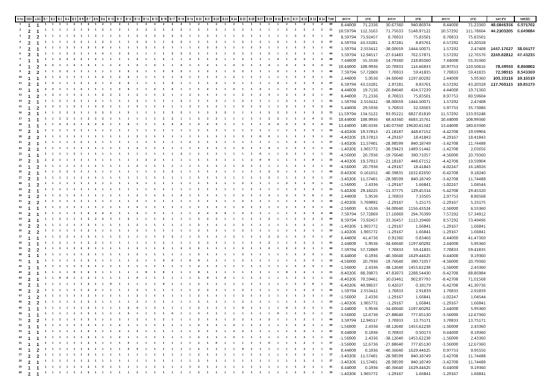


Figure 19: Data collection and analysis (SD for EI) Fact Sheet 1

S.No	SEX	LOC	G Total	d=X-m	(d*d)	d=X-m	(al*al)	d=X-m	(d*d)	sum d*d	sqrt(SD)
1	1	1	122	7.52	56.5504	7.52	56,5504	7.52	56.5504		11.49913828 for F
2	2	1	122	7.66327	58.72571	7.52	56.5504	7.48958	56.09381	124.27897	11.148048 for M
3	2	2	121	6.66327	44.39917	6.52	42.5104	6.67708	44.58340		
4	2	1	127	12.66327	160.35841	12.52	156.75	12.48958	155.98961		
5	2	1	126	11.66327	136.03187	11.52	132.71	11.48958	132.01045		9.838213647 Urben
6	2	1	123	8.66327	75.05225	8.52	72.5904	8.48958	72.07297	169.92861	13.03566667 Rural a
7	1	1	127	12.52	156.7504	12.52	156.75	12.52	156.7504		
8	1	2	130	15.52	240.8704	15.52	240.87	16.04494	257.44010		13.54552242 Urban
9	2	2	130	15.66327	245.33803	15.52	240.87	15.67708	245.77084	196.54466	14.0194388 Urban
10	2	1	127 131	12.52 16.66327	156.7504 277.66457	12.52 16.52	156.75 272.91	12.52 16.48958	156.7504 271.90625		19.23359333 Rural f 18.59168383 Rural f
12	1	1	122	7.52	56.5504	7.52	56.5504	7.52	56.5504	345.65071	18.59168383 Rurai i
13	1	2	119	4.52	20.4304	4.52	20,4304	5.04494	25.45142		
14	2	1		2.66327	7.09301	2.52	6.3504	2.48958	6.19801		
15	1	2		7.52	56.5504	7.52	56.5504	8.04494	64.72106		
16	2	1		22.66327	513.62381	22.52	507.15	22.48958	505.78121		
17	1	1		13.52	182.7904	13.52	182.79	13.52	182.7904		
18	1	1	129	14.52	210.8304	14.52	210.83	14.52	210.8304		
19	2	1		-8.33673	69.50107	-8.48	71.9104	-8.51042	72.42725		
20	2	2	102	-12.3367	152.19491	-12.48	155.75	-12.3229	151.85436		
21	2	1	105	-9.33673	87.17453	-9.48	89.8704	-9.51042	90.44809		
22	2	1	105	-9.33673	87.17453	-9.48	89.8704	-9.51042	90.44809		
23	1	1	105	-9.48	89.8704	-9.48	89.8704	-9.48	89.8704		
24	2	1	113	-1.33673	1.78685	-1.48	2.1904	-1.51042	2.28137		
25	1	2	104	-10.48	109.8304	-10.48	109.83	-9.95506	99.10322		
26 27	2	1	114 101	-0.33673 -13.3367	0.11339 177.86837	-0.48 -13.48	0.2304 181.71	-0.51042 -13.5104	0.26053 182.53145		
28	1	2		-13.3367	131.7904	-13.48	131.79	-10.9551	120.01334		
29	2	1	103	-10.3367	106.84799	-10.48	109.83	-10.5331	110.46893		
30	1	2		3.52	12.3904	3.52	12.3904	4.04494	16.36154		
31	2	2	109	-5.33673	28.48069	-5.48	30.0304	-5.32292	28.33348		
32	1	1	108	-6.48	41.9904	-6.48	41.9904	-6.48	41.9904		
33	2	1	124	9.66327	93.37879	9.52	90.6304	9.48958	90.05213		
34	2	1	125	10.66327	113.70533	10.52	110.67	10.48958	110.03129		
35	2	2	112	-2.33673	5.46031	-2.48	6.1504	-2.32292	5.39596		
36	2	2		-2.33673	5.46031	-2.48	6.1504	-2.32292	5.39596		
37	1	1	120	5.52	30.4704	5.52	30.4704	5.52	30.4704		
38	1	1	118	3.52	12.3904	3.52	12.3904	3.52	12.3904		
39	2	2	124	9.66327	93.37879	9.52	90.6304	9.67708	93.64588		
40	1	1	110 116	-4.48 1.52	20.0704	-4.48 1.52	20.0704	-4.48 1.52	20.0704		
41	1	1	115	0.52	0.2704	0.52	0.2704	0.52	0.2704		
43	2	1	113	-1.33673	1.78685	-1.48	2.1904	-1.51042	2.28137		
44	2	1	115	0.66327	0.43993	0.52	0.2704	0.48958	0.23969		
45	2	1	121	6.66327	44.39917	6.52	42.5104	6.48958	42.11465		
46	2	2	114	-0.33673	0.11339	-0.48	0.2304	-0.32292	0.10428		
47	1	2	120	5.52	30.4704	5.52	30.4704	6.04494	36.54130		
48	2	2	114	-0.33673	0.11339	-0.48	0.2304	-0.32292	0.10428		
49	1	1	121	6.52	42.5104	6.52	42.5104	6.52	42.5104		
50	1	1	104	-10.48	109.8304	-10.48	109.83	-10.48	109.8304		
51	2	2		0.66327	0.43993	0.52	0.2704	0.67708	0.45844		
52	1	1		-6.48	41.9904	-6.48	41.9904	-6.48	41.9904		
53 54	1	1	114 109	-0.48 -5.48	0.2304 30.0304	-0.48 -5.48	0.2304	-0.48 -5.48	0.2304 30.0304		
54 55	1	1		-5.48 -6.48	30.0304 41.9904	-5.48 -6.48	41,9904	-5.48 -6.48	30.0304 41.9904		
56	1	2	108	-10.48	109.8304	-10.48	109.83	-9.95506	99.10322		
57	2	2	104	-6.33673	40.15415	-6.48	41.9904	-6.32292	39.97932		
58	2	1	106	-8.33673	69.50107	-8.48	71.9104	-8.51042	72.42725		
59	1	1	118	3.52	12.3904	3.52	12.3904	3.52	12.3904		
60	2	1	110	-4.33673	18.80723	-4.48	20.0704	-4.51042	20.34389		
61	2	2	117	2.66327	7.09301	2.52	6.3504	2.67708	7.16676		
62	2	1	114	-0.33673	0.11339	-0.48	0.2304	-0.51042	0.26053		
63	2	2	114	-0.33673	0.11339	-0.48	0.2304	-0.32292	0.10428		
64	1	1	125	10.52	110.6704	10.52	110.67	10.52	110.6704		
65	2	1	120	5.66327	32.07263	5.52	30.4704	5.48958	30.13549		
66	1	1	116	1.52	2.3104	1.52	2.3104	1.52	2.3104		
67 68	1	1	112	-2.48 -2.48	6.1504	-2.48 -2.48	6.1504	-2.48	6.1504		
00		2	112	-2.48	6.1504	-2.48	6.1504	-1.95506	3.82226		

Figure 20: Data collection and analysis (SD for CI) Fact Sheet 2