

Emotional Intelligence, School Environment and Academic Achievement of Students

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Abstract

The present study investigates the relationship between emotional intelligence, school environment and academic achievement of students. Survey method is used to select a sample of 300 students at the higher secondary level. The Emotional Intelligence Scale (Hydes and others, 2002) is used to study the emotional intelligence, School Environment Inventory (Mishra, 1983) is used to assess school environment, and academic achievement marks scored by students in their quarterly examination were taken for academic achievement scores. The results of the statistical analyses show a significant correlation between emotional intelligence, school environment and academic achievement of students. A significant difference is found between students at the higher secondary level in state, matriculation and central board schools, pertaining to emotional intelligence, school environment and academic achievement.

Keywords: Emotional Intelligence, School Environment, and Academic Achievement.

1. Introduction

Educational area describes two fundamental approaches to learning: deep and surface. Deep learners are active during the learning process. They try to understand the learning materials and are able to link the knowledge with life experiences. They find that studying gives them a feeling of deep personal satisfaction. Therefore, they will often spend extra time trying to obtain more information from different sources and are not being pleased with the knowledge learnt in class. The surface approach is characterized by student's lack of interest in the subject matter. In most cases, surface learners will accept the given knowledge without thinking much about it. They accept teachers as the main single and trusted knowledge source. Their aim is to pass the course while doing as little work as possible. They learn things by rote, going over and over the materials until they know them by heart even if they do not fully understand them.

Over the past century, psychologists studying intelligence remained focused on its cognitive aspect. Though Thorndike's concept of social intelligence and Gardner's personal intelligences were important milestones in the explanation of the affective aspect of intelligence, this type of intelligence had not been directly associated with academic achievement or success in life. However, recent research has revealed that the cognitive ability is not the only predictor of performance rather affective development is an equally important predictor of success. Goleman (1998) has asserted that the old yardstick of judgment, that is training and expertise, has been substituted by the new yardstick that is judgment as to how well we handle ourselves and how well we handle others. The new rules of the world of work focus on personal qualities such as empathy, initiative, adaptability and persuasiveness, taking intellectual ability and technical expertise for granted.

Since the last two decades a new dimension of intelligence, termed as emotional intelligence, has received much attention as being more responsible for success than IQ (Goleman, 1995). The term Emotional Intelligence was coined by Peter Salovey and John D. Mayer in their academic paper in 1990 to describe qualities like understanding one's own and others emotions and to use this information for guiding thoughts and actions (Mayer and Salovey, 1990). This concept became popular after Daniel Goleman's publication Emotional Intelligence in which he has described emotional intelligence in term of abilities such as being able to motivate oneself and persist in the face of frustration; to control impulse and delay gratification; to regulate one's mood and keep distress from swamping the ability to think; to empathize and to hope (Goleman, 1995).

One acquires an education in order to ensure a smooth and flexible transition to an independent, self-sufficient life. Although some people seek their formal education outside the traditional classroom (e.g., private tutoring, home schooling), the customary educational institution is the school. According to Cash (1993), a school is a promise of the future. Schools should reflect the environment of success. It is a physical representation of a public message about the value of education. According to Winston Churchill we shape our buildings; therefore, our buildings shape us (as cited in Gardner, 1981). These comments suggest that the school environment may be just as important as the choice of methods and curriculum to ensuring a positive outcome. In order to facilitate delivering a good education to learners, schools need to be conducive to learning because a high quality education might not be as accessible in an unfavourable environment (Al-Enezi, 2002). Creating an effective school entails designing the facility specifically as an educational environment, which is a complicated issue. The school environment, which include the classrooms, libraries, technical workshops, laboratories, teachers' quality, school management, teaching methods, peers, etc are variables that affect students' academic achievement (Oluchukwu, 2000; Ajayi, 2001).

Therefore, a need is felt to investigate the variables, emotional intelligence, school environment and academic achievement of students. Hence this vital area for the present investigation has been selected.

2. Review of related Literature

For any researcher, it need not be emphasized that the review of studies related to the area of their investigation is essential, but providing information of what has already been done in the field gives direction to the present study. The purpose of the investigation is to study the emotional intelligence, school environment and academic achievement of students at the higher secondary level in different systems of education. Studies reviewed pertaining to the present study have been compiled and presented below under appropriate headings.

2.1 Studies Related to Emotional Intelligence and Academic Achievement

Yahaya and others (2011) conducted a study to investigate the relationship between the identified five dimensions of emotional intelligence, namely self-awareness, emotional management, self-motivation, empathy, interpersonal skills and academic performance. The study aimed to investigate the significant contribution of the five dimensions of emotional intelligence to academic performance. The results showed a significant relationship between self-awareness, emotional management and empathy and academic performance. Findings from multiple regression analysis showed that only three dimensions of emotional

intelligence namely, self-awareness, self motivation and empathy accounted for 8.7% of the variations in their academic performance.

The study conducted by Fayombo (2012) investigated if emotional intelligence (attending to emotion, positive expressivity and negative expressivity) and gender were predictors of academic achievement. A sample of 163 undergraduate Psychology students from the University of the West Indies, Cave Hill Campus, Barbados were selected for the studies. Results revealed a significant positive correlation among academic achievement, emotional intelligence components and gender. Additionally, using the stepwise multiple regression analysis, it was found that emotional intelligence contributed 40% to the variance in academic achievement while simple regression analysis revealed that gender also contributed to 5% of academic achievement and further, these results were significantly indicating that both emotional intelligence and gender predicted academic achievement but emotional intelligence was a better predictor of academic achievement than gender.

Mohzan and others (2013) investigated the influence of emotional intelligence on academic achievement among students of Education Faculty, Universiti Teknologi Mara. The data of this research was obtained through the use of a questionnaire which elicited information on the students' emotional intelligence level as well as their academic performance. The results of the study revealed that the respondents have a high level of emotional intelligence and the two domains (Self-Emotion Appraisal and Understanding of Emotion) of emotional intelligence investigated were found to be significantly and positively associated with the respondents' academic achievement.

2.2 Studies Related to School Environment and Academic Achievement

Thakur and others (2005) studied the relationship of school environment with development of moral values and judgment in rural pre-adolescents (9-12 years). A sample of 200 children (100 male and 100 female) was drawn randomly from primary and middle schools located in the villages of Ludhiana district. Moral values scale by Sen Gupta and Singh and moral judgment test by Sinha and Verma were used as quantitative measures for assessing moral values and judgment of pre-adolescents. Socio-economic school climate inventory by Sinha and Bhargava was used to assess school environment of children. Good socio-emotional climate of the school also played a vital in the development of positive moral values and judgment.

Chaturvedi (2009) investigated the effect of school environment and certain demographic variables on achievement motivation and academic achievement of young adolescents. The respondents of the study were 300 students of Bhopal in the age range of 12-15 years. Percentages of marks obtained by the students in the last three years were used as measures of academic achievement. The results indicated significant gender difference in academic achievement and the girls scored higher than boys significantly.

The study conducted by Arul Lawrence and Vimala (2012) on school environment and academic achievement of standard IX students probed into the relationship between school environment and academic achievement of these students. Data for the study was collected using self-made School Environment Scale. The investigator used stratified random sampling technique for selecting the sample. The sample consists of 400 standard IX students. For analyzing the data, 't' test and Pearson's product moment co-efficient were the statistical techniques

used. Findings showed no significant relationship between school environment and academic achievement of standard IX students.

2.3 Critique

The above discussed studies indicates that emotional intelligence and school environment influence academic achievement of students. Studies pertaining to emotional intelligence, school environment and academic achievement based on gender difference are not clear and it necessitates further investigation.

3. Statement of the Problem

This study has its primary objective to assess the emotional intelligence, school environment and their relationship to performance outcomes. Specifically, the study was organized around the following questions:

- (i) Are the variables, emotional intelligence, school environment, and academic achievement significantly correlated between them?
- (ii) Do the students in different systems of education, namely, state, matriculation and central board schools differ in the emotional intelligence, school environment and academic achievement?

Based on the review of related literature and the research questions, the study is undertaken keeping the following objectives in mind:

- (i) To investigate if there is any significant relationship between the selected variables of students in state, matriculation and central board schools at the higher secondary level;
- (ii) To investigate if there is any significant difference in emotional intelligence, school environment and academic achievement of students in state, matriculation and central board schools at the higher secondary level and
- (iii) To investigate if there is any significant difference in the emotional intelligence, school environment and academic achievement of boys and girls in state, matriculation and central board schools at the higher secondary level.

4. Hypothesis Formulated

The following hypotheses have been framed for the present study:

- (i) There is no significant relationship between the selected variables of students in state, matriculation and central board schools at the higher secondary level;
- (ii) There is no significant difference in emotional intelligence, school environment and academic achievement of students in state, matriculation and central board schools at the higher secondary level and
- (iii) There is no significant difference in the emotional intelligence, school environment and academic achievement of boys and girls in state, matriculation and central board schools at the higher secondary level.

5. Method of Investigation

As the method of investigation is designed on the basis of the problem, objectives and hypotheses formulated, it warrants a psychometrically sound design, procedure, tools and execution. The investigation is planned to verify hypotheses using suitable tools and appropriate statistics for data processing.

5.1 Research Design

The present study deals with the analysis of the emotional intelligence, school environment, and academic achievement of students in different systems namely, state, matriculation and central board schools at the higher secondary level.

5.2 Sample selected

From the target population a sample of 300 students, are chosen from the secondary level studying in different systems of education, namely, state, matriculation and central board schools. The chosen sample comprises of 100 students from state, 100 students from matriculation and 100 students from central board schools.

5.3 Tools used for the study

The research tools used for the present study to analyze the emotional intelligence, the school environment and academic achievement of students in different systems of education at the higher secondary level are as follows:

The research tools used for the present study to analyze the students in different systems of education at the higher secondary level are as follows:

- (i) Emotional Intelligence Scale (Hydes and others 2002)
- (ii) School Environment Inventory (Mishra 1983)

The marks scored by the students in the quarterly examination were taken as a measure of academic achievement.

6. Analyses of Data

The results of the analyses of data collected are compiled and presented in tables below.

Table-1: Analysis of Correlation between the Select Variables of Students at the Secondary Level

	Emotional Intelligence	School Environment	Academic Achievement
Emotional Intelligence	1	0.19**	0.84**
School Environment	X	1	0.18**
Academic Achievement	X	x	1

**Significant at 0.01 level

In the above table (Table-1), it is seen that there exists a significant correlation between emotional intelligence, school environment and academic achievement among students at the higher secondary level.

Table-2: Analysis of Variance of Emotional Intelligence, School Environment and Academic Achievement of Students in different Categories of Schools at the Higher Secondary Level

Variable	Source of Variation	df	Sum Square	Mean of Sum of Square	F-ratio
Emotional Intelligence	Between groups	2	94934.97	4747.48	0.73**
	Within groups	387	47161.20	194.37	
	Total	389	142096.17	-	
School Environment	Between groups	2	4470.58	2235.29	51.47**
	Within groups	387	1699.01	437.80	
	Total	389	6169.59	-	
Academic Achievement	Between groups	2	5230.74	2615.37	12.45**
	Within groups	387	8134.25	210.14	
	Total	389	13364.99	-	

**Significant at 0.01 level

In Table-2, for the analysis of variance different categories of schools are treated as different groups. The F-ratio is 0.73, 51.47, 12.45, which is significant at 0.01 level. Thus there is a significant difference in emotional intelligence, school environment and academic achievement of students in different categories of schools at the higher secondary level.

In order to establish the actual degree of difference between students belonging to different categories of schools namely, state, matriculation and central board schools, critical ratios are worked out and the actual difference between the mean scores are established. The tables (Table-2a to Table-2c) presented below thus indicate the mean difference between students in the different categories of schools at the higher secondary level.

Table-2a: Statistical Analysis of Means of Emotional Intelligence of Students in State, Matriculation and Central Board Schools at the Higher Secondary Level

Variable	Sample Size	Mean	SD	SEM	SED	CR
State Board	100	64.82	12.81	1.22	1.63	10.89**
Matriculation Board	100	82.13	13.13	1.02		
State Board	100	64.82	12.81	1.22	1.88	11.76**
Central Board	100	91.82	15.46	1.12		
Matriculation Board	100	82.13	13.13	1.02	1.59	9.59**
Central Board	100	91.82	15.46	1.12		

**Significant at 0.01 level

SD-Standard Deviation

SEM-Standard Error of Mean

SED-Standard Error of Difference

CR-Critical Ratio

In Table-2a, it is evident that students in central board schools are significantly better in their emotional intelligence when compared to students in other two categories of schools, state and matriculation board schools at the higher secondary level.

Table-2b: Statistical Analysis of Means of School Environment of Students in State, Matriculation and Central Board Schools at the Higher Secondary Level

Variable	Sample Size	Mean	SD	SEM	SED	CR
State Board	100	70.81	12.78	1.24	1.62	10.79**
Matriculation Board	100	88.60	10.03	1.00		
State Board	100	70.81	12.78	1.24	1.67	11.75**
Central Board	100	90.83	11.15	1.11		
Matriculation Board	100	88.60	10.03	1.00	1.50	8.49**
Central Board	100	90.83	11.15	1.12		

**Significant at 0.01 level

SD-Standard Deviation

SEM-Standard Error of Mean

SED-Standard Error of Difference

CR-Critical Ratio

In Table-2b, it is evident that students in central board schools are significantly better in their school environment when compared to students in other two categories of schools, state and matriculation board schools at the higher secondary level.

Table-2c: Statistical Analysis of Means of Academic Achievement of Students in State, Matriculation and Central Board Schools at the Higher Secondary Level

Variable	Sample Size	Mean	SD	SEM	SED	CR
State Board	100	54.89	15.25	1.31	1.63	10.77**
Matriculation Board	100	68.88	9.92	0.99		
State Board	100	54.89	15.25	1.31	1.64	13.57**
Central Board	100	76.78	9.37	0.94		
Matriculation Board	100	68.88	9.92	0.99	1.37	12.83**
Central Board	100	76.78	9.37	0.94		

**Significant at 0.01 level

SD-Standard Deviation

SEM-Standard Error of Mean

SED-Standard Error of Difference

CR-Critical Ratio

In Table-2c, it is evident that students in central board schools are significantly better in their academic achievement when compared to students in other two categories of schools, state and matriculation board schools at the higher secondary level.

Table-3a: Statistical Analysis of Means of Emotional Intelligence, School environment and Academic Achievement of Boys and Girls in State Board Schools at the Higher Secondary Level

Variable	Groups	Sample Size	Mean	SD	SEM	SED	CR
Emotional Intelligence	Boys	50	64.72	9.71	1.25	2.08	1.94**
	Girls	50	67.64	11.12	1.69		
School Environment	Boys	50	64.10	9.07	1.22	2.27	5.59**
	Girls	50	77.46	12.78	1.81		
Academic Achievement	Boys	50	43.62	9.33	1.32	2.29	6.27**
	Girls	50	57.86	12.00	1.82		

**Significant at 0.01 level

SD-Standard Deviation

SEM-Standard Error of Mean

SED-Standard Error of Difference

CR-Critical Ratio

In the above table (Table-3a), it is seen that the girls are significantly better than the boys in the same state board schools with respect to all variables, emotional intelligence, school environment and academic achievement.

Table-3b: Statistical Analysis of Means of Emotional Intelligence, School Environment and Academic Achievement of Boys and Girls in Matriculation Board Schools at the Higher Secondary Level

Variable	Groups	Sample Size	Mean	SD	SEM	SED	CR
Emotional Intelligence	Boys	50	67.04	9.40	1.33	1.73	0.34**
	Girls	50	67.46	7.79	1.14		
School Environment	Boys	50	86.14	10.67	1.51	1.95	2.64**
	Girls	50	91.16	8.73	1.23		
Academic Achievement	Boys	50	66.32	10.36	1.47	1.93	2.62**
	Girls	50	71.46	8.84	1.25		

**Significant at 0.01 level

SD-Standard Deviation

SEM-Standard Error of Mean

SED-Standard Error of Difference

CR-Critical Ratio

In the above table (Table-3b), it is seen that the girls are significantly better than the boys in the same matriculation board schools with respect to all variables, emotional intelligence, school environment and academic achievement.

Table-3c: Statistical Analysis of Means of Emotional Intelligence, School Environment and Academic Achievement of Boys and Girls in Central Board Schools at the Higher Secondary Level

Variable	Groups	Sample Size	Mean	SD	SEM	SED	CR
Emotional Intelligence	Boys	50	64.46	8.94	1.26	2.26	6.17**
	Girls	50	68.08	8.74	1.24		
School Environment	Boys	50	79.44	10.99	1.55	2.12	1.15**
	Girls	50	92.22	11.25	1.59		
Academic Achievement	Boys	50	69.26	10.09	1.43	1.86	1.60**
	Girls	50	74.24	8.40	1.19		

**Significant at 0.01 level

SD-Standard Deviation

SEM-Standard Error of Mean

SED-Standard Error of Difference

CR-Critical Ratio

In the above table (Table-3c), it is seen that the girls are significantly better than the boys in the same central board schools with respect to all variables, emotional intelligence, school environment and academic achievement.

7. Discussion

Researches in the past have established significant gender difference pertaining to academic achievement. The girls were found to be significantly better than the boys with regard to not only academic achievement but also with respect to their emotional intelligence and regarding their school environment.

In the present study it is found that there is a significant difference in the emotional intelligence and school environment among the students in different categories of schools following different systems of education, namely, state, matriculation and central board schools at the secondary schools. The students belonging to the matriculation board schools are found to be significantly higher in their emotional intelligence when compared to the students in the state board schools similarly the students in central board schools are found to be significantly better in their emotional intelligence. When compared to the students in the other two boards, namely the state and the matriculation board schools at the secondary level. The central board syllabus does not only focus on inculcation of knowledge, but also focuses on development of understanding comprehension and application

of knowledge. The classroom teaching techniques followed by teachers to meet with the demands of the syllabus are also very innovative updated with latest technology. With a good exposure to rich learning experiences, the students are moulded to be more creative and innovative, rather they are tuned to think radically different. Further the school environment is also found to be significantly better when compared to that of state and matriculation board schools. The central board schools run by the Central Government are fully taken care of adequate infrastructure facilities, well equipped libraries and laboratories, resource centers, adequate playgrounds and other facilities. The teachers are also selected and appointed with a good salary and as result teachers with work commitment, adequate subject and technology knowledge. These factors pave way for the students in central board schools to perform academically better than the students in state and matriculation board schools. These results are in line with the previous researches that conclude that academic achievement is very much influenced by the type of school (Considine and Zappala, 2002).

It is also been found that there is a significant difference in the academic achievement among students in the three different categories of schools following different system of education, namely the state, the matriculation and the central board schools students at the secondary level, are significantly better in their academic achievement when compared to their counter parts in state board schools. The matriculation and central board students have significantly better facilities at school and better home and school environment. Thus, these children are significantly better in their emotional intelligence leading to significantly better academic achievement when compare to the children is state board schools at the secondary level.

8. Conclusion

Focus on educational outcomes has increased in the past decade with state wide high stakes testing and nationwide school accountability programs. In an effort to improve the academic success of students, it has become necessary to examine all components of the educational process in order to maximize the performance of students.

Emotion is the basis of all interests and motivations and so is directly related to all human performances and achievements. Emotions are source of motivation, source of enjoyment source of strength and endurance to body. Constant emotional tension may cause poor health like lack of sleep, restlessness, headache, chronic fatigue, insomnia, lack of appetite. Emotional tensions affect the efficiency of the individual, shifts of moods and inconsistency in behaviour. It also affects the memory, increase in forgetting, the individual cannot reason, think and concentrate on a problem. Constant emotional pressure disturbs learning ability. Emotional intelligence is being able to monitor our own and others' feelings and emotions, to discriminate among them, and to use this to guide our thinking and actions.

Educational services are often not tangible and are difficult to measure because they result in the form of transformation of knowledge, life skills and behaviour modifications of learners (Tsinidou and others, 2010). So there is no commonly agreed upon definition of quality that is applied to education field. The definition of quality of education varies from culture to culture. The environment and the personal characteristics of learners play an important role in their academic success. The school personnel, members of the families and communities provide help and support to students for the quality of their academic performance. This

social assistance has a crucial role for the accomplishment of performance goals of students at school (Goddard, 2003).

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