

Study on Emotional Intelligence and Academic Achievement of High School Students

D. Sathyalakshmi¹, Dr. G. Rajadurai²

¹ Ph.D. Research Scholar, V.O.C. College of Education, Thoothukudi—628 008. (Affiliated to Tamil Nadu Teachers Education University, Chennai).

Email ID: sathyadlakshmi@gmail.com

² Assistant Professor of History, V.O.C. College of Education, Thoothukudi – 628008.

(Affiliated to Tamil Nadu Teachers Education University, Chennai).

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ABSTRACT

Academic achievement is often viewed as the primary indicator of student success, encompassing grades, test scores, and overall performance in school. To improve academic outcomes through personalized learning and interactive tools, its relationship with emotional intelligence is equally significant. This article examined the emotional intelligence and academic achievement of high school students studying in high schools and higher secondary schools based on the selected background variables. A sample of 1000 high school students was surveyed using the Emotional Intelligence Scale developed and validated by the investigators and academic achievement marks were collected from the students. The collected data were analysed using t-test, ANOVA, Chi-square test and Percentage Analysis using SPSS software. The study found that the level of emotional intelligence and its dimensions and academic achievement of high school students with respect to gender, nature of school and parental educational level is moderate. The study found that there is significant difference between high school students in self-awareness, self-regulation, motivation social skills and emotional intelligence and academic achievement with respect to gender. There is no significant difference between high school students in empathy and emotional resilience with respect to gender. There is significant difference among high school students in motivation, and emotional intelligence with respect to nature of school. There is no significant difference among high school students in self-awareness, self-regulation, empathy, social skills and emotional resilience and academic achievement with respect to nature of school. There is no significant association between in the emotional intelligence of high school students and in the dimensions namely self-awareness, self-regulation, motivation, empathy, social skills and emotional resilience with respect to occupation of parents. There is significant relationship between emotional intelligence and academic achievement of high school students The findings were interpreted, discussed and appropriate recommendations were made.

Keywords: Emotional intelligence, academic achievement, high school students, student well-being and adolescent psychology.

1. INTRODUCTION

Academic achievement is often viewed as the primary indicator of student success, encompassing grades, test scores, and overall performance in school. To improve academic outcomes through personalized learning and interactive tools, its relationship with emotional intelligence is equally significant. Emotional intelligence (EI), which includes skills like self-awareness, empathy, emotional regulation, and interpersonal communication, is critical for managing stress, building relationships, and achieving personal and professional goals. The interrelationship between academic achievement, and emotional intelligence is complex. It can also indirectly influence academic performance through its effect on emotional intelligence. For example, students who are adept at using technology for collaboration and problem-solving are likely to exhibit higher levels of self-confidence and social skills, which are essential components of emotional intelligence. Grounded in the Theory of Multiple Intelligences and the Technology Acceptance Model (TAM), this research aims to unravel the multifaceted effects on students' academic and emotional growth. The findings of this study have the potential to inform educational practices, contributing to the development of a more inclusive and effective learning environment.

2. NEED FOR THE STUDY

High school students are at a formative stage where their cognitive, emotional, and social skills are developing rapidly. Emotional intelligence (EI), which encompasses self-awareness, empathy, emotional regulation, and interpersonal skills, is an essential determinant of their academic and personal success. In today's competitive and emotionally demanding academic

environment, the role of emotional intelligence (EI) has become increasingly significant in determining students' overall success. Emotional intelligence — the ability to understand, manage, and regulate one's own emotions and those of others — directly influences students' learning behavior, interpersonal relationships, stress management, and academic motivation. With adolescence being a critical developmental stage, high school students often face emotional fluctuations that may impact their academic performance. Therefore, identifying and nurturing emotional intelligence can be a key strategy to promote better academic achievement and psychological well-being.

While academic intelligence has traditionally been the focus of educational systems, recent research suggests that emotional competence is equally vital in helping students cope with academic pressure, maintain focus, and build resilience. However, despite growing global attention, there is limited research in the Indian context, particularly at the high school level, that explores the correlation between emotional intelligence and scholastic success. Hence, this study is essential to fill this gap and provide insights for educators, counselors, and policymakers to design emotional learning programs that support students' academic and personal development.

3. OBJECTIVES OF THE STUDY

1. To find out the level of emotional intelligence of high school students with respect to gender, nature of school and occupation of parents.
1. To find out the level of the emotional intelligence of high school students in different dimensions namely self-awareness, self-regulation, motivation, empathy, social skills and emotional resilience.
2. To find out if there exists any significant difference between in the emotional intelligence and academic achievement of high school students with respect to gender.
3. To find out if there exists any significant difference among in the emotional intelligence and academic achievement of high school students with respect to nature of school.
4. To find out if there exists any significant association between in the emotional intelligence and academic achievement of high school students with respect to the occupation of parents.
5. To find out the significant relationship, if any, between emotional intelligence and academic achievement of high school students.

4. NULL HYPOTHESIS OF THE STUDY

1. The level of emotional intelligence of high school students with respect to gender, type of family, nature of school and occupation of parents is moderate.
2. The level of the emotional intelligence of high school students in different dimensions namely self-awareness, self-regulation, motivation, empathy, social skills and emotional resilience is moderate.
3. There is no significant difference between in the emotional intelligence and academic achievement of high school students with respect to gender and type of family.
4. There is no significant difference among in the emotional intelligence and academic achievement of high school students with respect to nature of school.
5. There is no significant association between in the emotional intelligence and academic achievement of high school students with respect to the occupation of parents.
6. There is no significant relationship between emotional intelligence and academic achievement of high school students.

5. METHODOLOGY

The investigator used a descriptive survey to study the chosen variables. emotional intelligence scale was developed and validated by the investigators and academic achievement scores were collected from the students. A sample of 1000 high school students in Thoothukudi city was chosen using a stratified random sampling technique. The collected data were scored and normalized. Data analysis was performed using statistics such as t-test, ANOVA, Chi square test and Percentage Analysis using SPSS software.

6. RESULTS

Table No. 1 The level of emotional intelligence of high school students with respect to the background variables

Background Variables		No.	Low		Moderate		High	
			No.	%	No.	%	No.	%
Gender	Boys	377	72	19.1	250	66.3	55	14.6
	Girls	623	103	16.5	414	66.5	106	17
Nature of School	Girls	155	23	14.8	107	69	25	16.1
	Boys	325	50	15.4	212	65.2	63	19.4
	Co-education	520	102	19.6	345	66.3	73	14
Occupation of Parents	Government	278	50	18	176	63.3	52	18.7
	Private	228	33	14.5	154	67.5	41	18
	Business	494	92	18.6	334	67.6	68	13.8

Table No. 2 The level of emotional intelligence and its dimensions of high school students

Dimensions	Low		Medium		High	
	No.	%	No.	%	No.	%
Self-Awareness	286	28.6	552	55.2	162	16.2
Self-Regulation	70	7	769	76.9	161	16.1
Motivation	285	28.5	555	55.5	160	16
Empathy	286	28.6	552	55.2	162	16.2
Social Skills	283	28.3	554	55.4	163	16.3
Emotional Resilience	288	28.8	555	55.5	157	15.7

Table No. 3 Difference between emotional intelligence of high school students with respect to gender

Dimensions	Gender	Number	Mean	SD	CR Value	Table Value	Remarks 5% level
Self-Awareness	Boys	377	19.22	1.293	2.570	1.96	Significant
	Girls	623	19.95	1.307			
Self-Regulation	Boys	377	19.25	1.367	2.692		Significant
	Girls	623	19.91	1.293			
Motivation	Boys	377	19.21	1.354	2.753		Significant
	Girls	623	19.86	1.253			
Empathy	Boys	377	19.31	1.307	0.025		Not

Dimensions	Gender	Number	Mean	SD	CR Value	Table Value	Remarks 5% level
	Girls	623	19.31	1.285			Significant
Social Skills	Boys	377	19.98	1.342	2.694		Significant
	Girls	623	19.34	1.275			
Emotional Resilience	Boys	377	19.32	1.333	0.435		Not Significant
	Girls	623	19.28	1.240			
Emotional Intelligence	Boys	377	115.59	3.808	2.522		Significant
	Girls	623	116.96	3.555			

Table No. 4 Difference between academic achievement of high school students with respect to gender

Variable		N	Mean	S.D	Calculated t Value	Table Value	Remarks at 5% level
Gender	Boys	377	85.03	6.162	2.430	1.96	S
	Girls	623	86.48	5.553			

Table No. 5 Difference among emotional intelligence of high school students with respect to the nature of school

Dimensions	Source	Sum squares	df	Mean square variance	Calculated 'F' value	Table Value	Remarks 5% level
Self-Awareness	Between	5.930	2	2.965	1.750	3.00	Not Significant
	Within	1689.261	997	1.694			
Self-Regulation	Between	2.917	2	1.459	0.836		Not Significant
	Within	1739.714	997	1.745			
Motivation	Between	11.350	2	5.675	3.410		Significant
	Within	1659.014	997	1.664			
Empathy	Between	4.136	2	2.068	1.238		Not Significant
	Within	1665.383	997	1.670			
Social Skills	Between	0.346	2	0.173	0.102		Not Significant
	Within	1688.685	997	1.694			
Emotional Resilience	Between	2.662	2	1.331	0.818		Not Significant
	Within	1622.534	997	1.627			
Emotional Intelligence	Between	86.992	2	43.496	3.272		Significant
	Within	13255.152	997	13.295			

Table No. 6 Difference among academic achievement of high school students with respect to the nature of school

Source	Sum of Squares	Df	Mean Square Value	Calculated F value	Table Value	Remarks at 5% level
Between	96.600	2	48.300	1.440	3.000	NS
Within	33429.544	997	33.530			

Table 7 Association between emotional intelligence of high school students with respect to the occupation of parents

Dimensions	df	Calculated χ^2 value	Table value	Remarks 5% level
Self-Awareness	4	1.578	9.488	Not Significant
Self-Regulation		1.358		Not Significant
Motivation		1.919		Not Significant
Empathy		1.363		Not Significant
Social Skills		0.269		Not Significant
Emotional Resilience		0.965		Not Significant
Emotional Intelligence		5.487		Not Significant

Table 8 Association between academic achievement of high school students with respect to the occupation of parents

Variable	df	Calculated Value χ^2	Table Value	Remarks 5% level
Academic Achievement	4	11.473	9.488	S

Table 9 Relationship between emotional intelligence and academic achievement of high school students

Variables	Number	'r' Value	Table Value	Remarks 5% level
Emotional Intelligence and Academic Achievement	1000	0.655	0.061	Significant

7. FINDINGS AND DISCUSSIONS

The level of emotional intelligence of high school students is moderate (66.4%). This may be while many high school students have a basic understanding of emotions and interpersonal skills, there is room for growth. Structured programs in emotional literacy, mindfulness, and social-emotional learning (SEL) could help improve their emotional maturity and coping abilities. The level of the emotional intelligence of high school students in different dimensions namely self-awareness (55.2%), self-regulation (76.9%), motivation (55.5%), empathy (55.2%), social skills (55.4%) and emotional resilience (55.5%) are moderate. This may be high school students are in a transitional stage of emotional development, with strengths in self-regulation but emerging or underdeveloped skills in self-awareness, empathy, motivation, social interaction, and

resilience. This pattern highlights the need for targeted emotional intelligence training programs in schools to support holistic student development.

There is significant difference between high school students in self-awareness, self-regulation, motivation social skills and emotional intelligence with respect to gender. This may be due to gender-based emotional expression, socialization patterns, and coping strategies developed through societal and cultural expectations. Boys and girls may differ in how they perceive, express, and manage emotions, affecting their scores across emotional intelligence dimensions. There is no significant difference between high school students in empathy and emotional resilience with respect to gender. This may be because both boys and girls equally experience and respond to emotional challenges during adolescence. Empathy and emotional resilience are likely influenced more by individual personality and environment than by gender.

There is significant difference among high school students in motivation, and emotional intelligence with respect to nature of school. This may be because the nature of the school influences student engagement, competition, and emotional support systems. Co-educational and single-gender schools may differ in how they nurture motivation and overall emotional development. There is no significant difference among high school students in self-awareness, self-regulation, empathy, social skills and emotional resilience with respect to nature of school. This may be because these emotional competencies develop through individual experiences and relationships, regardless of school type. Students in all school settings likely encounter similar social and emotional challenges, leading to comparable development.

There is no significant association between in the emotional intelligence of high school students and in the dimensions namely self-awareness, self-regulation, motivation, empathy, social skills and emotional resilience with respect to occupation of parents. This may be because emotional intelligence is shaped more by personal experiences, peer interactions, and school environment than by family socioeconomic background. Parental occupation may have limited direct influence on students' emotional skill development.

The level of academic achievement of high school students is moderate (80.6%). This may be due to adequate but not optimal support, engagement, and learning strategies. Improving achievement may require personalized learning, stronger academic guidance, and emotional support.

There is significant difference between in the academic achievement of high school students with respect to gender. This may be external factors such as access, exposure, and environment play a critical role in shaping student performance.

There is no significant difference among in the academic achievement of high school students with respect to nature of school. This may be a positive trend toward academic equity, where student performance is more influenced by personal and instructional factors than by school type.

There is significant association between in the academic achievement of high school students with respect to occupation of parents. This may be families with better financial means and digital exposure can facilitate access, usage, and encouragement, leading to greater student awareness and competence.

There is significant relationship between emotional intelligence and academic achievement of high school students. This may be because emotionally intelligent students can manage stress, stay motivated, and build positive relationships, which support better academic performance. Skills like self-regulation, resilience, and empathy enhance focus, collaboration, and effective learning, leading to higher achievement.

8. RECOMMENDATIONS

- Include Social-Emotional Learning (SEL) programs in the regular timetable.
- Provide regular opportunities for self-reflection, journaling, and group discussions.
- Organize role plays, storytelling, and empathy-building activities to improve emotional and social skills.
- Train teachers in emotional literacy and psychological first-aid techniques.
- Encourage a school culture that supports open communication, respect, and emotional safety.

9. EDUCATIONAL IMPLICATIONS

1. Schools should incorporate emotional learning modules into the curriculum to help students understand and manage their emotions, improving focus and academic performance.
2. Teachers should be trained to recognize and respond to students' emotional needs effectively. Educators with high emotional intelligence can create supportive classroom environments that foster learning.
3. Structured life skills or value education programs that emphasize self-awareness, empathy, and relationship management can enhance students' emotional competence and academic outcomes.
4. Strengthening the role of school counselors and psychological support services can help students develop healthy coping mechanisms and reduce the negative impact of stress on academic performance.

5. Schools should conduct workshops to sensitize parents about the role of emotional intelligence in learning, encouraging them to support their children's emotional and academic growth at home.

10. SUGGESTIONS FOR FURTHER RESEARCH

1. Future research can track students over time to understand how emotional intelligence evolves during adolescence and its long-term impact on academic success.
2. Comparative studies can be conducted to examine differences in emotional intelligence and academic achievement based on geographical location, socio-economic background, and cultural factors.
3. Further research can explore how teachers' emotional intelligence influences students' classroom behavior, emotional regulation, and academic performance.
4. Experimental or interventional studies may be carried out to assess the impact of EI-focused programs or workshops on students' emotional and academic outcomes.
5. Future studies can explore the connection between emotional intelligence and other psychological constructs such as stress, self-esteem, resilience, and motivation, and how they collectively influence academic achievement.

11. CONCLUSION

The present study highlights the significant relationship between emotional intelligence and academic achievement among high school students. It emphasizes that students with higher emotional intelligence tend to perform better academically, as they are better equipped to manage stress, stay motivated, and interact effectively with peers and teachers. Emotional intelligence acts as a bridge between personal well-being and academic success, especially during adolescence, a period marked by emotional and psychological changes. The findings also underline the importance of integrating emotional development into the educational process. While cognitive abilities are essential, emotional skills such as self-awareness, empathy, emotional regulation, and social competence are equally important in shaping a student's academic journey. This study brings attention to the need for a holistic educational approach, where emotional learning complements intellectual growth. It opens up pathways for educational stakeholders to design programs and policies that foster emotional intelligence, ultimately contributing to improved academic performance and overall student development.

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