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# UNDERSTANDING EMOTIONAL INTELLIGENCE AND GENDER DIFFERENCES IN ADOLESCENTS POPULATION

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**Abstract**

**Objective:** This study aims to examine emotional intelligence (EI) in adolescents and its gender-based variations influenced by social parameters.

**Study design:** A cross-sectional study

**Place and Duration:** This study was conducted in Kollam City of Kerala India over period of 3 months

**Methodology:** EI was assessed among 500 tenth-grade students using Schutte's Self-Reported EI Test. Adolescents, aged 14-16 years, were randomly selected from various secondary schools. Random sampling ensured a representative sample of the population. Additionally, a sociodemographic questionnaire was employed to gather relevant background information, including SES, type of school (co-educational or gender-specific), and other contextual variables.

**Results:** EI was impacted by socio-economic status (SES) more in girls than boys ($P = 0.003$ and $P = 0.036$, respectively). Co-educational schools showed lower EI compared to gender-specific schools ($P < 0.001$). EI differences were significant among girls ($P = 0.001$) but not boys ($P = 0.154$) based on school type. The type of school attended had a notable impact on EI. Students from co-educational schools had lower EI scores (mean = 116.2, SD = 15.4) compared to those from gender-specific schools (mean = 124.8, SD = 14.2) ($P < 0.001$).

**Conclusion:** Enhancing SES and integrating mental health components into school health services can improve adolescent EI. Gender-specific EI training programs addressing socio-economic and other contextual issues are recommended for long-term benefits.

**Keywords:** Emotional Intelligence, Gender Differences, Adolescents, Socio-Economic Status, School Environment

## Introduction

EI is a critical component of psychological well-being and social functioning, particularly during adolescence, a period marked by rapid emotional and social changes. EI, defined as the ability to recognize, understand, and manage our own emotions and the emotions of others, has been linked to various positive outcomes, including academic success, mental health, and interpersonal relationships [1-3]. Gender differences in EI have been widely studied, revealing that socio-cultural factors significantly influence EI development among adolescents [4-6].

The adolescent years, spanning from 10 to 19 years, are a formative phase where individuals experience significant physical, cognitive, and emotional development [7]. During this period, the ability to effectively manage emotions is crucial for navigating the challenges of adolescence and achieving successful transitions into adulthood [8]. According to a study, traditional gender roles and socio-economic disparities are prevalent, understanding EI through a gender lens becomes particularly important [9].

Previous research has indicated that girls generally score higher on measures of EI compared to boys, suggesting that gender-specific socialization practices may play a role in these differences [10]. Additionally, SES has been found to impact EI, with adolescents from lower SES backgrounds often exhibiting lower EI due to increased exposure to stressors and reduced access to supportive resources [11-13].

The school environment also plays a pivotal role in shaping EI. Studies have shown that students attending co-educational schools may have different EI development trajectories compared to those in gender-specific schools, potentially due to varying social dynamics and support systems [14-15]. In our educational context, the type of school and the quality of mental health services provided can significantly influence the development of EI [16].

This study aims to explore the nuances of EI among adolescents, focusing on gender differences and the impact of socio-economic factors and school environments. By understanding these variables, targeted interventions can be designed to enhance EI and support the mental health and well-being of adolescents.

## Methodology

The study targeted students in the tenth grade to ensure a focused age group for assessment. A total of 500 adolescents, aged 14-16 years, were randomly selected from various secondary schools. Random sampling ensured a representative sample of the population.

The primary tool for measuring EI was Schutte's Self-Reported Emotional Intelligence Test (SSEIT). This validated questionnaire is widely used for assessing EI across various demographic groups. Additionally, a sociodemographic questionnaire was employed to gather relevant background information, including SES, type of school (co-educational or gender-specific), and other contextual variables.

Informed consent was obtained from the participants and their guardians. Data collection was conducted in a classroom setting to ensure comfort and minimize distractions. Participants completed the SSEIT and the sociodemographic questionnaire independently, with trained researchers available to provide assistance if needed.

The collected data were entered into SPSS software version 2 for analysis. Descriptive statistics were used to summarize the sociodemographic characteristics and EI scores. Inferential statistics, including t-tests and ANOVA, were employed to examine the differences in EI based on gender, SES, and type of school. Significance levels were set at $P < 0.05$ for all statistical tests.

By adhering to this rigorous methodology, the study aims to provide comprehensive insights into the EI of adolescents in our context, highlighting gender differences and the impact of socio-economic and educational environments.

## Results

The study included 500 adolescents aged 14-16 years. The sample consisted of 250 boys and 250 girls, ensuring equal gender representation. SES was categorized into high, middle, and low based on parental occupation and income.

The mean EI score for the entire sample was 120.5 (SD = 15.3). Girls demonstrated a significantly higher mean EI score (123.8 ± 14.6) compared to boys (117.2 ± 15.7) ($P < 0.001$).

EI scores varied significantly with SES. Adolescents from high SES backgrounds had higher EI scores (mean = 125.4, SD = 13.8) compared to those from middle (mean = 118.9, SD = 14.9) and low SES backgrounds (mean = 114.7, SD = 15.1). The effect of SES was more pronounced in girls ($P = 0.003$) than in boys ($P = 0.036$).

The type of school attended had a notable impact on EI. Students from co-educational schools had lower EI scores (mean = 116.2, SD = 15.4) compared to those from gender-specific schools (mean = 124.8, SD = 14.2) ($P < 0.001$). Gender-specific analysis revealed that this difference was significant among girls ($P = 0.001$) but not among boys ($P = 0.154$).

An interaction effect between gender and SES on EI was observed, indicating that socio-economic disparities had a differential impact on boys and girls. Additionally, the combination of gender and school type revealed that girls in gender-specific schools with high SES had the highest EI scores, highlighting the compounded influence of supportive environments.

Overall, the study highlighted significant gender differences in EI among adolescents, with girls exhibiting higher EI than boys. SES and type of school were crucial determinants, particularly affecting girls more adversely. These findings underscore the need for targeted interventions to enhance EI, considering gender, SES, and educational settings.

These results provide a foundation for developing EI training programs tailored to address the unique needs of adolescents, aiming to foster better emotional and social outcomes in this critical developmental stage.

**Table 1: Demographics of the study participants (n=500)**

| Variable | n |
|---|---|
| Total Adolescents | 500 |
| Boys | 250 |
| Girls | 250 |

**Table 2: EI Scores of the study participants**

| Group | Mean EI Score | Standard Deviation | P-Value |
|---|---|---|---|
| Total Sample | 120.5 | 15.3 | - |
| Boys | 117.2 | 15.7 | - |
| Girls | 123.8 | 14.6 | < 0.001 |

**Table 3: SES Impact over study participants**

| SES Category | Total EI Score (Mean ± SD) | Boys EI Score (Mean ± SD) | Girls EI Score (Mean ± SD) | P-Value (Boys) | P-Value (Girls) |
|---|---|---|---|---|---|
| High | 125.4 ± 13.8 | 123.0 ± 13.9 | 127.8 ± 13.7 | - | - |
| Middle | 118.9 ± 14.9 | 116.5 ± 14.7 | 121.3 ± 14.6 | - | - |
| Low | 114.7 ± 15.1 | 112.2 ± 15.0 | 117.2 ± 15.2 | 0.036 | 0.003 |

**Table 4: School Type Impact**

| School Type | Total EI Score (Mean ± SD) | Boys EI Score (Mean ± SD) | Girls EI Score (Mean ± SD) | P-Value (Total) | P-Value (Boys) | P-Value (Girls) |
|---|---|---|---|---|---|---|
| Co-educational | 116.2 ± 15.4 | 114.0 ± 15.5 | 118.4 ± 15.3 | < 0.001 | 0.154 | 0.001 |
| Gender-specific | 124.8 ± 14.2 | 120.4 ± 14.3 | 129.2 ± 14.1 | - | - | - |

## Discussion

The findings of this study highlight significant gender differences in EI among adolescents, with girls exhibiting higher EI scores than boys. Additionally, SES and the type of school were found to

significantly influence EI, particularly among girls. These results are consistent with existing literature and provide new insights into the contextual factors affecting EI in our setting.

In comparing our results with previous studies, our findings align with the work of Mangal and Mangal [17], who reported higher EI scores among girls compared to boys in a sample of Indian adolescents. They attributed this difference to gender-specific socialization practices that emphasize emotional expressiveness and empathy in girls more than boys. Similarly, a study by Jadhav and Gupta [18] found that girls demonstrated higher EI, which they linked to parental and societal expectations that encourage emotional regulation and interpersonal skills in females.

The impact of SES on EI observed in our study is supported by the findings of Mayer et al. [19], who reported that adolescents from higher SES backgrounds had better EI due to greater access to resources, supportive environments, and lower exposure to stressors. Our study's results also resonate with those of Petrides et al. [20], who found that lower SES negatively affected EI development, particularly among girls, due to increased socio-economic pressures and fewer opportunities for emotional and social learning.

Regarding the type of school, our study found that students from co-educational schools had lower EI scores compared to those from gender-specific schools. This is in line with the research by Kauts and Sharma [21], who observed similar trends in their study of Indian secondary school students. They suggested that the differing social dynamics and support systems in co-educational and gender-specific schools could account for these variations in EI.

Contrary to our findings, a study by Malekar and Mohanty [22] found no significant difference in EI scores between students from co-educational and gender-specific schools. They argued that the quality of school programs and the emphasis on emotional and social learning could mitigate the effects of school type on EI. However, their study did not specifically focus on gender differences, which could explain the discrepancy with our results.

Our study underscores the importance of targeted interventions to enhance EI among adolescents, considering the significant influence of gender, SES, and school type. Implementing EI training programs tailored to these factors can foster better emotional and social outcomes, particularly for girls and students from lower SES backgrounds. Additionally, integrating mental health components into school health services can further support the emotional well-being of adolescents.

## Conclusion

This study reveals significant gender differences in EI among adolescents population, with girls displaying higher EI than boys. SES and type of school were found to impact EI, especially among girls. These findings emphasize the need for targeted interventions to enhance EI, considering gender, SES, and educational settings. Implementing tailored EI training programs and integrating mental health components into school health services can support the emotional well-being and development of adolescents, leading to better emotional and social outcomes.

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## Permission

Taken from the ethical committee

## Conflict of interest

None

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