A study of emotional intelligence and perceived parenting styles among adolescents in a rural area in Karnataka

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ABSTRACT

Context: Adolescence is the time which is crucial for the overall development of a person both mentally and physically. In this period, along with academic intelligence, emotional intelligence (EI) also plays an equal or strong role in student life. Aims: This study was to assess EI, parental bonding, and their association among adolescents in high schools under Sarjapur PHC area. Subjects and Methods: This was a cross-sectional study conducted among high school students under Sarjapur PHC area. The EI was assessed using EI scale which measured self-awareness, self-regulation, motivation, empathy, and social skills. The parental bonding instrument was utilized to determine the parental styles of both the parents and was interpreted in terms of care and protection as neglectful parenting, affectionless control, optimal parenting, and affectionate control. Results: A total of 300 adolescents were interviewed. It was seen that most of them had low EI in self-awareness, i.e., 92 (30.7%), motivation 99 (33%), and social skills 101 (33.7%). It was also observed that most of them had high EI in self-regulation, i.e., 98 (32.7%) and moderately high EI in empathy 117 (39%). The study group perceived that 147 (49%) of the fathers and 109 (36.3%) of the mothers had affectionless control. Conclusion: Along with poor parenting, most of the respondents also have low EI in self-awareness, motivation, and social skills which has to be addressed for the future of the country.

Keywords: Adolescents, emotional intelligence, parenting styles, scholastic performance

Introduction

Adolescence is defined as the period from the onset of puberty to the termination of physical growth and attainment of final adult height and characteristics. It is the time crucial for the overall development of a person both mentally and physically. Both boys and girls are transferred from the childhood stage of life to more complex stage of adolescence. Piaget described adolescence as the stage of life in which the individual's thoughts start taking more of an abstract form and the egocentric thoughts decrease. This allows the individual to think and reason in a wider perspective. Their changing mind, body, and relationships often present themselves as stressful and that change, they assume, is something to be feared.[1]

In Adolescence, children have to undergo many difficulties and have to deal with problems of being in a school and under the scrutiny of their family. Coping resources during adolescence include those aspects of the self, for example, problem-solving skills, interpersonal skills, and the social environment like availability of supportive social network...
that facilitate or make possible successful adaptation to life stress.\[3\]

One in five persons of the world today is an adolescent. Eighty-seven percent of these adolescents live in developing countries. Adolescent population in India is 253 million, accounting for about 21% of total population. Karnataka has a current population of 6,11,30,704, with adolescents about 18.9% of the population[3]

The term “emotional intelligence (EI)” was coined by Peter Salovey from University of Yale and John Mayer from University of New Hampshire in 1990. EI, often measured as an Quotient EI, describes ability, capacity, skill, or a self-perceived ability to identify, assess, and manage the emotions of one’s self, of others, and of groups. Components of EI are (a) self-awareness, (b) managing emotions, (c) motivating self, (d) empathy, and (e) interpersonal skills.[4]

“EI” is the ability to perceive emotion, integrate emotion to facilitate thought, understand emotions and to regulate emotions to promote personal growth. Researches say that emotionally literate students have mastered the emotional abilities that inoculate them against the turmoil and pressure they are about to face during life transitions. If we are to understand the schooling of young adolescents, then we must understand how they respond to their learning environment and we must be aware that there are reasons why students respond differently.[5]

Earlier, it was thought that intelligence quotient (IQ) is the most important factor determining the academic achievement of a student, but many studies are there which shows that EI also plays an equal or strong role in the student life process. Students who are emotionally competent will manage their own feelings well, recognize, and respond effectively to the feelings of others, tolerate frustration better, and be less impulsive and more focused during adolescent transition period.

Perceived parenting styles are defined as an opinion of adolescences or children about styles of parental behaviors during their childhood. According to the definition, assessment of children about parental behaviors is important. There are two types of perceived parenting styles: care and overprotection. Several studies have revealed that rejecting and overprotective parenting styles significantly associated with EI in their children.[6]

Student lives are said to be the best period for any person as the foundations for EI, self-esteem, happiness, and success in life are laid in childhood and adolescence. Educational scholars have given importance for the EI in the scholastic performance of the student.[7] This period is a phase in the life than a fixed period where a person is no longer a child but not yet an adult. It is important that we give enough support and guidance for them to encounter the period, which give them a fruitful future. IQ and EI both play a major role in these children in their academic and social performance. There were no Indian studies which dealt the EI, parental bonding, and scholastic performance together in this modern period of generation gap.

**Aims and Objectives**

1. To assess EI of early adolescents in selected schools in a Sarjapur PHC area, Anekal Taluk, Bangalore Urban district
2. To assess parental bonding of early adolescents in selected schools
3. To assess scholastic performance of early adolescents in selected schools
4. To find the association between EI and parental bonding.

**Subjects and Methods**

This was a cross-sectional study done during the period of 2 months. Institutional Ethical Review Board consented for the study. The study population includes all adolescents in the age group of 13–16 years studying in schools under Sarjapur PHC area. List of schools under Sarjapur PHC area was obtained. We approached the concerned authority of each school to seek permission to do the study. The sample size was calculated using an estimated 0.214 correlation coefficient from a previous study done in Philippines.[8] After applying the correlation formula to calculate sample size \( N = \frac{(Z_{\alpha} + Z_{\beta})}{C^2 + 3} \); the standard normal deviate for \( \alpha = Z_{\alpha} = 1.960 \) the standard normal deviate for \( \beta = Z_{\beta} = 1.282 \); \( C = 0.5^* \ln(1 + r)/ (1-r) \), we got 178. Anticipating a nonresponse rate of 20%, the total sample size was 214. There were 7 high schools in Sarjapur PHC area out of which 4 gave consent for the study. Informed consent from parent or guardian was obtained beforehand, and assent from students was taken during the study. Inclusion criteria included adolescents in the age of 13–16 years of age, studying in the selected schools under Sarjapur PHC area (high school students) and exclusion criteria were students whose parents do not give consent to participate in the study and who are absent on the day of the interview. Even though the sample size was 214, we took 369 individuals. As 69 students provided incomplete questionnaire, final sample size came to 300.

The interview schedule was divided into four parts. The first part consisted of the sociodemographic detail of the individuals including name, age, father’s occupation and mother’s occupation, number of siblings and position among them. The second part consisted of 33-item questionnaire of EI scale[9] which is divided into five domains; self-awareness, self-regulation, motivation, empathy, and social skills in Likert’s scale. The final score for each domain is divided into categories based on percentiles (low – <25th, moderately high – 25–50th, high – 50–75th, very high – >75th). The third part consisted of 25-item parenting style questionnaire[10] separate for both father and mother. There were questions for both care and protection with score specifying high and low. According to the score for care and protection, we obtained four parenting styles: affectionate – high care and high protection,
affectionless – low care and high protection, optimal – high care and low protection, and neglectful – low care and low protection. Fourth part consisted of questions to assess the scholastic performance taken from the teenage screening questionnaire and also marks of their previous examinations for a language, mathematics, and science. According to the marks, students are divided into low (<49%), moderate (50%–75%), and high (>76%) achievers, respectively.\(^{10}\) This schedule was explained by interviewer to the point of each question in the local language to avoid confusion.

The data were entered into Microsoft Excel and analyzed using statistical package for SPSS Version 16.0 (SPSS Inc., Chicago). Sociodemographic details and frequencies of each were done by descriptive analysis. Association between sociodemographic details, the EI, perceived parenting style, and scholastic performance was done by Independent \(t\)-test and ANOVA test.

### Results

Out of 300 students, we interviewed 149 (49.7%) males and 151 (50.3%) females. The mean age of the study population was 14.29 ± 0.984, with a minimum age of 12 and maximum of 16. Majority, i.e., 198 (66%) belong to nuclear family and 248 (82.7%) had two or less siblings. A total of 151 (50.3%) had at least one younger sibling. Majority of the mothers, i.e., 221 (73.7%) were homemakers and fathers 133 (44.3%) were doing agriculture.

Table 1 shows that in the domain of self-awareness, motivation, and social skills, most of the students showed low EI (<25\(^{\text{th}}\) percentile). In the domain of empathy, most of the students showed moderately high EI (25–50\(^{\text{th}}\) percentile) and high (50–75\(^{\text{th}}\) percentile) in the domain of self-regulation.

Table 2 shows most of the mothers and fathers showed affectionless control style of parenting, high protection, and low care.

In the scholastic performance, the students were categorized into three. In that, low achievers were 52 (17.4%), moderate 143 (47.6%), and high achievers 105 (35%), respectively.

The association between EI and parental care [Table 3 and Table 4] was done by independent \(t\)-test, but we found no significant association. Table 5 shows association between EI and position among siblings using Independent \(t\)-test, which showed that students who were middle or younger had more EI in the domain of self-awareness, motivation, and empathy. Furthermore, association of gender, type of family, and number of siblings with EI was done, but we found no significant association.

Table 6 shows association between EI and scholastic performance of the students using ANOVA test. It showed that student's with EI more in the self-awareness domain performed well in their academic activities. We did find that students who had tuition (\(P = 0.008\)) and group study (\(P = 0.002\)) were having improved scholastic performance using Chi-square test.

| Table 1: Frequencies of domain in emotional intelligence |
|---------------------------------------------------------|
| **Domains** | **Low (%)** | **Moderately high (%)** | **High (%)** | **Very high (%)** |
| Self-awareness | 92 (30.7) | 78 (26) | 55 (18.3) | 75 (25) |
| Self-regulation | 78 (26) | 75 (25) | 98 (32.7) | 49 (16.3) |
| Motivation | 99 (33) | 76 (25.3) | 77 (25.7) | 48 (16) |
| Empathy | 84 (28) | 117 (39) | 44 (14.7) | 55 (18.3) |
| Social skills | 101 (33.7) | 55 (18.3) | 71 (23.7) | 73 (24.3) |

| Table 2: Frequencies of parenting style |
|----------------------------------------|
| **Parenting styles** | **Mother (%)** | **Father (%)** |
| Neglectful | 85 (28.3) | 10 (3.3) |
| Affectionless | 109 (36.3) | 147 (49) |
| Affectionate | 67 (22.4) | 106 (35.4) |
| Optimal | 39 (13) | 37 (12.3) |

| Table 3: Association between maternal care and emotional intelligence |
|-------------------------------------------------------------|
| **Table 4: Association of paternal care and emotional intelligence** |
| **Table 5: Association of emotional intelligence and demographic variable** |

\(^{10}\) \(P<0.05\), statistically significant, independent \(t\)-test. SD: Standard deviation

\(^{1}\) value calculated by independent \(t\)-test. SD: Standard deviation

\(^{2}\) value calculated by independent \(t\)-test. SD: Standard deviation

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In our study, most of the both fathers and mothers were having affectionless control (high protection and low care) of parenting style which is different from a study done in Philippines where fathers showed affectionless control and mothers showed neglectful parenting. The difference compared to our study may be due to the fact that the study was done in a rural area, where the students considered restriction as high protection. Low care can be attributed to the fact that of the occupation of the parent and multiple children aspect in the family.

Our study showed most of the students were moderate achievers in their academic performance and the performance were more in students who had tuition and group study which is consistent with study done in Karnataka, India. The study found that there was no association between EI and parenting style. However, a study done in Delhi showed that paternal parenting style had a positive impact on the EI of adolescents and also a study done in Karnataka showed the same result. In a study done in Philippines, the maternal parenting style had significant association in the child's EI. The difference in results can be due to the fact that the parent's education level might be influencing the children and their EI.

In our study, we found that student’s with more self-awareness performed well in their activities. They had awareness about their own capacities and knew the importance of the study in their life and future. These findings are consistent with studies done in Tamil Nadu. Similar results were also found in other studies. In a study done in Bhavnagar, India, EI had inverse relationship with academic success.

Our study was based on self-reporting tests. However, performance-based tests may be a better measure of EI as there may be a bias in reporting in self-rated questionnaires. Noninclusion of personality-related factors was one more limitation of the study. A follow-up study can be conducted to further strengthen the findings of the present study. Efforts must be made to include the concept of EI in the school curriculum. Two-month study period due to which individual survey of the student was not possible can be a limitation of this study. There is a possibility of misinterpretation of the questionnaire by the participants and also group answering for each response. Our tool may not be apt for Indian settings, but comprehensiveness of this tool made us to use this which may have decreased the accuracy of the study. In considering the importance of the topic EI, a tool which is compliant in all settings needs to be developed.

**Conclusion**

The study showed that among students, the EI in the domain of self-awareness, motivation, and social skills was low, in empathy moderately high, and in self-regulation high, respectively. Both father and mother of students had affectionless control (high protection and low care) of parenting style. Most students were found to be moderate achievers. There was no association between parental style and EI. Students who had
higher self-awareness were found to be academically better. Middle and younger individuals among siblings were found to have higher self-awareness, motivation, and empathy. Hence, training of students with regard to EI either in the form of inclusion in the routine curriculum or through workshops can be considered. Further research should be conducted in this area to increase our understanding regarding the role of EI on the students’ performance. As intelligence is the global capacity of the individual to think rationally, to act purposefully, and to deal effectively with his/her environment, EI has a significant role. Health is a state of complete well-being which implies the importance of these factors in health as well.

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**Conflicts of interest**
There are no conflicts of interest.

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