

## Original Research Article

# Association between leisure time activities and emotional intelligence among school students in Kollam district of South Kerala

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## ABSTRACT

**Background:** Leisure activity plays a key role in forming an individual's physical and mental development. Both leisure-time physical activity and emotional intelligence (EI) are related to health-related quality of life. Objectives were to assess the EI of school children belonging to various boards and to find out whether leisure time activity has association with EI.

**Methods:** A cross-sectional study was undertaken among 200 school students belonging to various boards of Kollam district. EI was measured using self-report EI developed by Shuttle et al for data collection.

**Results:** Among 200 subjects, 50 students studying in 9<sup>th</sup> standard belonging to different boards were taken from each school, 146 (73%) of students belonged to nuclear family, 154 (77%) shared their daily events with family. 109 (54%) choose arts as leisure time activity and 91 (45.5%) chose sports, 112 (56%) of the students spend at least one hour in social media and only 55 (27.5%) had a habit of reading newspaper daily. Significant statistical association was found between gender, type of school, sharing events with their parents, leisure time activity and EI ( $p < 0.05$ ).

**Conclusions:** The study concluded that leisure activity has significant role in the developing EI of a person. It was found that the government (State syllabus) school children have better EI comparing with other boards and also the students who are good at arts also have good EI.

**Keywords:** Leisure time, EI, School children

## INTRODUCTION

Emotions are the vital and important feature of human nature and the inspiration for behaviour. According to Goleman (1995) being able to monitor and regulate one's own feelings, understand the feelings of others, and use that "emotion" or "feeling" knowledge to guide thoughts and actions is known as EI.<sup>1</sup> EI helps one to build stronger relationships, succeed at work, and achieve career and personal goals. The concept of EI was introduced by Salovey and Mayer and is described as 'a

type of social intelligence that involves the ability to monitor one's own and other's emotions, to discriminate among them, and to use this information to guide one's thinking and actions.<sup>2</sup>

EI is described as the "person's ability to manage his feelings so that those feelings are expressed appropriately and effectively".<sup>2</sup> EI is very good predictor of success in workplace, academic achievement, leadership, coping styles, personality development. Leisure activity has been identified to positively influence self-esteem, emotional

self-control, the development of interpersonal skills; it improves psychological well-being and reduces anxiety and depression. Psychological well-being is closely related to stability and EI.

Several meta-analyses study confirm that EI has a significant relationship with better mental health and helps in relieving stress.<sup>3,4</sup> EI is thus better among individuals who spent time for leisure activities and exercise compared with the individuals who do not. Also in the last few decades, the life tasks are being reorganized by the introduction of various time-saving gadgets, home appliances, entertainment devices, and communication instruments (e.g. laptop, mobile, videogames, television, and Internet). Taken together, they tend to reorganize the pattern of time use and engagement with physical exercise. A major consequence of this has been the emergence of newer leisure opportunities for the younger people. Comparative study of well-being, thought control, academic achievement, and health related physical fitness of active and inactive adolescent school students.

With the increase in exposure to powerful technology and media representations coupling with predominance of relatively unattractive learning environments, the younger generation is becoming receptive to a wide variety of commercial products and entertainment activities, many of which are unproductive and sometimes health compromising also. Several researchers and health agencies have expressed alarming concern about the possible adverse impacts of some such leisure practices.

In view of a rampant increase in availability of and access to many health-compromising leisure choices and opportunities during the last few decades, this study also examines the pattern of leisure practices in a sample of school-going adolescents from different boards (n=200).

There are various EI scales to measure the different dimensions of EI on different respondents. The tools for assessing EI among school children are very less.

Hence, this project is a modest attempt to study EI of school children belonging to various boards in South Kerala and to find if leisure time activity has any role to play with EI.

### **Objectives**

Objectives were to assess the EI of school children belonging to various boards and to find out whether leisure time activity has association with EI.

## **METHODS**

This was a cross sectional study done among the IX standard students of various school boards studying in Kerala like ICSE, state syllabus (SSLC) and CBSE schools. Sample size was 200 (50) from each school.

sampling technique was simple random sampling. Informed consent was taken from the principals and parents teachers association of the schools before the start of the study. Study period was from June to September 2019. Institutional ethical committee clearance was taken before the conduct of the study. Students who were absent on the day of visit by the investigator and students who refused to give consent were excluded from the study. EI was measured using self-report EI developed by Shuttle et al for data collection. Socio demographic profile and leisure time activity data were collected by self-administered questionnaire which was pretested before the conduct of the study.

### **Statistical analysis**

Data was entered in MS excel. Data analysis done by computer software statistical programme for social sciences (SPSS) version 16. Descriptive statistics including frequencies and percentages were done. Association between categorical variables was found using Pearson's chi-square test.

### **Data collection method**

A self-administered, structured questionnaire was used to obtain data on socio-demographic variables like age, gender, type of family, type of accommodation, type of schooling, occupation of parents, socio-economic status, involvement in extracurricular activities, volunteering with youth organizations, and sources of stress. Schutte self-report EI test (SEIT) a 33-item validated self-report questionnaire was used to determine EI.<sup>5</sup> Questionnaire has 4 subscales: "perception of emotion," "managing own emotions," "managing others' emotions," and "utilization of emotion." Respondents rate themselves on the items using a five-point scale. Scores range from 33 to 165, higher scores indicating higher emotional intelligence. The SEIT has an internal consistency (Cronbach's alpha) of 0.90 and 2-week test-retest reliability of 0.78. Schutte self-report emotional intelligence test has been used in South Indian population, previously.

## **RESULTS**

A cross sectional study was undertaken among 200 school students from IX standard belonging to different boards (SSLC, CBSE and ICSE) from 4 different schools in Kollam district. The 50 students from each school, with a mean age of 14 years were selected for the study, 100 girls and 100 boys were taken to avoid bias. Majority of students 146 (73%) were from nuclear family and remaining 54 (27%) belonged to joint family. Although 54.5% reported arts as their favorite spare time activity, (45.5%) reported sports 70% preferring outdoor activities, 51% of the students spend 1-2 hours for leisure time activities, 33% spend >2 hours and 16% spend <1 hour for leisure time activities. It is noticed that a considerable proportion (56.5%) were not playing regularly. This is probable since they may have restrictions at home, to

spend more time on studies. Parents of 39.5% students were disinterested in sports. Nearly two-third of study population preferred playing outside (64%) over watching TV, (64.5%) chose movies over books and slept for 7-8 hours with a bedtime of 10 pm to 12 am (65%). It was revealed that majority have at least 1 daily meal with their families (81%) and 80% watch TV while eating. As many as 154 students (77%) shared their daily events with their parents, 112 students (56%) prefer to share their problems with parents, followed by friends (42%) and then teachers (2%). It has been found that 148 students (74%) were attending tuition daily. Only (27.5%) reported to read newspaper daily, 36% spend 1-2 hours day on TV/ computer/ mobile, 31.5% spend less than 1 hour and 32.5% spend more than 2 hours, with less than half (44%) scrolling over 1 hour on social media.

Out of total 200 students, girls (79.5%) tend to have a very high EI compared to boys (20.5%) shown in Table and was found to be statistically significant at the  $p=0.000$ .

Study also indicates that students of govt. schools (both Malayalam and English medium) have higher EI (34.1%) compared to CBSE (9.1%) and ICSE (22.7%) schools ( $p=0.016$ ) (Table 2). Statistically significant association was found between students sharing their daily events with parents and higher EI (41; 93.2%) shown in Table 3.

Table 4 shows that students spending leisure activities involving arts (79.5%) have higher EI than students interested in sports (20.5%). Chi-square test for statistical association also supports significant ( $p=0.002$ ) association of leisure time activities and EI. It has also been found that duration of leisure time hours is also statistically ( $p=0.02$ ) significant with their EI (Table 5). This study also showed students sleeping more than 6 hrs (63.6%) have higher EI compared to other students sleeping 6 hrs (36.4%) and sleeping 4 hrs (0%). However, this association could not be statistically substantiated ( $p=0.078$ ).

It is also observed that students spending less time on TV/ mobile/ computers (less than 1 hour) (31.5%) were found to have a higher EI with a strong statistical significance ( $p=0.014$ ) as shown in Table 6.

However, there is no significant association found between ( $p=0.087$ ) fathers' occupation and EI of study group, between students' favorite spare time activity (playing outside over watching TV and their EI ( $p=0.053$ ), between amount of time spend by students outdoor and their EI, ( $p=0.066$ ) or between students watching TV while eating ( $p=0.058$ ). Students spending less than 1hr on social media (54.5%) have higher EI, but in contrast to our expectations, this could not be statistically defined ( $p=0.550$ ). There was no association between EI and time spend in social media.

**Table 1: Sociodemographic profile of students (n=200).**

Variables	N	Percentage (%)
<b>Fathers' occupation</b>		
Professional	15	7.5
Semi professional	16	8.0
Arithmetic skilled	59	29.5
Skilled	39	19.5
Semi skilled	5	2.5
Unskilled	52	26.0
Unemployed/ late/ housewife	14	7.0
<b>Type of family</b>		
Joint	54	27.0
Nuclear	146	73.0
<b>Sharing of daily events</b>		
Yes	154	77.0
No	46	23.0
<b>Group</b>		
Parents	112	56.0
Friends	84	42.0
Teachers	4	2.0
<b>How often having food with your family</b>		
Never	2	1.0
Daily	162	81.0
Once a week	21	10.5
More than twice a week	15	7.5
<b>Watch TV while eating</b>		
Yes	160	80.0
No	40	20.0

Continued.

Variables	N	Percentage (%)
<b>Leisure time activity</b>		
Arts	109	54.5
Sports	91	45.5
<b>Time spends for leisure activities</b>		
Less than 1 hour	32	16.0
1-2 hours	102	51.0
More than 2 hours	66	33.0
<b>Sleep hours</b>		
7-8 hours	145	72.5
6 hours	49	24.5
4 hours	6	3.0
<b>Bed-time</b>		
Before 10 pm	66	33.0
10 pm to 12 am	130	65.0
After 12 am	4	2.0
<b>Interest in sports</b>		
Yes	165	82.5
No	35	17.5
<b>Disinterest of parents in their children participating in sports</b>		
Yes	79	39.5
No	121	60.5
<b>Hours spend on TV/ computer/ mobile in a day (in hour)</b>		
<1	63	31.5
1-2	72	36.0
2-3	35	17.5
> 3	30	15.0
<b>Preference in watching TV over playing outside</b>		
Watching TV	72	36.0
Playing outside	128	64.0
<b>Time spends on social media (in hour)</b>		
<1	112	56.0
1-2	56	28.0
2-3	20	10.0
> 3	12	6.0
<b>Reading newspaper</b>		
Daily	55	27.5
Sometimes	117	58.5
Never	28	14.0

Table 2: Distribution of EI among students of study group.

EI	N	Percentage (%)
<b>Low EI</b>	51	25.5
<b>Moderate EI</b>	51	25.5
<b>High EI</b>	54	27.0
<b>Very high EI</b>	44	22.0
<b>Total</b>	200	100.0

Table 3: Association between various variables and EI of the study group.

Variables	EI, n (%)				Chi square	P value
	Low EI	Moderate EI	High EI	Very high EI		
<b>Gender</b>						
Female	17 (33.3)	25 (49.0)	23 (42.6)	35 (79.5)	22.235	0.000
Male	34 (66.7)	26 (51.0)	31 (57.4)	9 (20.5)		

Continued.

Variables	EI, n (%)				Chi square	P value
	Low EI	Moderate EI	High EI	Very high EI		
School						
SSLC (Malayalam)	17 (33.3)	7 (13.7)	11 (20.4)	15 (34.1)	20.387	0.016
SSLC (English)	8 (15.7)	14 (27.5)	13 (24.1)	15 (34.1)		
CBSE	14 (27.5)	20 (39.2)	12 (22.2)	4 (9.1)		
ICSE	12 (23.5)	10 (19.6)	18 (33.3)	10 (22.7)		
Sharing of daily events						
YES	27 (52.9)	41 (80.4)	45 (83.3)	41 (93.2)	24.729	0.000
NO	24 (47.1)	10 (19.6)	9 (16.7)	3 (6.8)		
Spend leisure time						
Arts	25 (49.0)	24 (47.1)	25 (46.3)	35 (79.5)	14.352	0.002
Sports	26 (51.0)	27 (52.9)	29 (53.7)	9 (20.5)		
Leisure time hours						
Less than 1 hour	11 (21.6)	3 (5.9)	8 (14.8)	10 (22.7)	15.088	0.020
1-2 hours	20 (39.2)	37 (72.5)	26 (48.1)	19 (43.2)		
More than 2 hours	20 (39.2)	11 (21.6)	20 (37)	15 (34.1)		
TV/mobile/computer hours						
<1 hour	14 (27.5)	17 (33.3)	13 (24.1)	19 (43.2)	20.615	0.014
1-2 hours	20 (39.2)	23 (45.1)	13 (24.1)	16 (36.4)		
2-3 hours	6 (11.8)	6 (11.8)	16 (29.6)	7 (15.9)		
>3 hours	11 (21.6)	5 (9.8)	12 (22.2)	2 (4.5)		

## DISCUSSION

The study shows that the distribution of EI among the study group was found to be: low EI -25.5%, moderate EI 25.5%, high EI-27%, very high EI-22% moreover; students' EI levels differed considerably in terms of gender, school in which they study, hours of sleep etc. Moreover, the state board of Kerala had adopted a teaching style which is more based on application level and activity based. but in other study from Kanyakumari.<sup>6</sup> In a study undertaken by Bhad et al participants EI differed significantly in terms of age variable there was no significant difference with age variable in the present study.<sup>7</sup> Since our study subjects belonged to 9 STD majority belonged to almost same age group so our results did not concur with the results of this study. In a study by Bhad et al, prevalence of severe distress was lower in children who had daily time with parents and daily leisure time, and it was same with our study also.<sup>7</sup> According to the studied done by Adilogulları and Özdingç and Bilir; participants' EI did not change considerably in terms of age variable. Study results of the current study were in line with the results of these studies.

On the other hand; the studies done by from Kanyakumari by Lawrence et al, Kwok et al, Van Schie et al reported no statistically significant difference in participants' EI in terms of sex variable but in the present study females (79.5%) tend to have very high EI compared to males (20.5%) which was similar with the results of Garton et al, Jackson et al and Fitzgerald et al.<sup>6,8-12</sup> This states that females are emotionally stable than boys, reasons may be majority of girls help parents with household work which help them build more inter personal relationships, social awareness and the wider knowledge about family and society. Sex was major

predictor of participation in sports and vocational activities and of interest in sporting and gregarious activities.

The study conducted by Fiere et al results suggest that positive leisure attitudes are associated with higher levels of leisure satisfaction that, in turn, are positively associated with self-esteem, satisfaction with life and psychological well-being which was similar to our findings.<sup>13</sup> In our study it was seen that the students of state board had better EI. This may be due to the fact that majority of them belonged to low socioeconomic status and parents did not have enough money for sending them for tuitions for all subjects or buying expensive gadgets and many of them were from rural areas where they have playgrounds to play and more activities to be with nature, similar results was found in a study done in Romania by Pomohaci et al.<sup>14</sup> In a study by Bergin students reported greater intrinsic intellectual motivation with more leisure activities but were no higher in academic achievement than other students.<sup>15</sup>

The association between leisure satisfaction and self-esteem tend to be higher when adolescents make use of the cognitive reappraisal strategy in terms of emotion regulation. Similar results have been found in a study by Sigvartsen et al self-reported physical activity during leisure time had positive association with health-related quality of life.<sup>16</sup> There was not much study done about EI and its association with leisure time activities. Xie et al results showed that physical activity experience was positively associated with physical activity level and had a direct negative relationship with use of video games/movies/social media for males and a direct negative relationship with use of computer/Internet for both genders.<sup>17</sup>



In a study by Auhuber et al about the trends of leisure activities from 2011 to 2017 among adolescents results showed an alarming development with an increase in the importance of the newer media, especially the use of mobile phones, but a decline of leisure activities related to arts and music.<sup>18</sup>

### Limitations

Our study was done in a small population with a sample size of 200, hence the generalizability will be less when compared with a huge sample size.

### CONCLUSION

The present study has drawn attention to the study of EI strategies in the scope of leisure and positive functioning in adolescence. It suggests that positive leisure attitudes are associated positively with self-esteem, satisfaction with life, psychological and emotional well-being. Moreover, the association between leisure activities, time spend by the study group for leisure activities and EI is clear. The concept of leisure, including active and passive leisure activities is also reflected upon EI. The latter one, passive leisure, in current scenario, does less on cognitive functioning and emotional development of adolescents. The school, family and society altogether contribute to the development of EI among adolescents. These findings shed light on new approaches for educators or professionals that work with adolescents. For example, the need to consider the effects of positive leisure experiences (attitudes and satisfaction) on improving adolescents' positive functioning. From here, leisure education should be a main goal in the socialization process during adolescence, and in multiple life contexts (e.g., school, family, and community). According to our results, and if positive leisure experiences improve positive functioning or EI, one can think about its role in maximizing youth potentialities through leisure. Furthermore, the use of emotional regulation processes should be considered throughout leisure experiences once they can mediate the association between leisure experience and EI. Concretely, our study highlighted the association between emotional development and leisure experience, highlighting a cognitive focus in EI in relation to leisure.

### Recommendations

Incorporation of leisure activity more into the syllabus can help in the socialization process during adolescence and in multiple life contexts. Importance of EI and its relationship should be emphasized in the school curriculum and its importance should be made understood for the parents also.

All these need to be addressed properly in early adulthood which helps in influencing the future.

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