# Variables Influencing Emotional Intelligence of Visually Impaired Students in Higher Education

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## *ABSTRACT*

***Purpose:*** *Emotional Intelligence is a set of abilities which enables people to understand emotions more accurately and solve problems in their emotional lives. The present study attempted to identify variables influencing emotional intelligence (EI) of visually impaired students studying in higher educational institutions.*

***Method:*** *A survey method of descriptive research design was adopted. 60 visually impaired students pursuing higher education were selected through purposive sampling. Their emotional intelligence (EI) was measured using 'Mangal Emotional Intelligence Inventory' (MEII). The collected data was analysed using differential and descriptive statistics to identify the influence of selected demographic variables on EI.*

***Results:*** *The study results revealed that demographic variables did not have significant impact on the EI of students with visual impairment studying in higher educational institutions, except at the onset of visual impairment. Those who had lost their vision later in life seemed to have more EI than those who were congenitally blind.*

***Conclusion:*** *Suitable training programmes should be planned to promote the emotional intelligence of those who are visually impaired since birth, because most behaviour is learnt through visual clues.*

***Limitations:*** *The study constituted only 60 students with visual impairment.*


***Key words:*** *Emotional Intelligence, visual impairment.*

## INTRODUCTION

Emotional Intelligence (EI) refers to the capacity for recognising our own feelings and those of others, for motivating ourselves and for managing emotions well,

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in us and in our relationships (Goleman, 1998). Emotionally intelligent students are skilled in interpersonal communication, self management, goal achievement, and demonstrate personal responsibility in completing assignments and working effectively (Nelson and Low, 2003).

According to Census of India 2011, the visually impaired population of 5,032,463 people constitutes 18.8% of the total population with disability. In India, only 2% of persons with visual impairment are pursuing higher education (Disability Census 2001), though an increasing number of them have enrolled in the last two decades as a result of awareness programmes and other support services.

In this era of inclusion, although individuals with visual impairment get enrolled in higher education institutions, they are not trained adequately to meet the challenges they are likely to face. Soon after their education, they enter mainstream society and join the workforce, where problems of inner and outer conflicts, poor interpersonal skills, inability to network and stress, can arise.

Meighan (1971) and Beaty (1992) found that visual impairment could be responsible for feelings of incapacity and inferiority, which may be reflected in lack of social acceptance, low academic results, physical incapacity and poor social adjustment. Avenues for recreation are limited and adolescents, in particular, feel this loss. This may result in psychological problems and unwarranted aggressiveness. There is a need to explore the mechanisms of reducing, if not totally eliminating, this behaviour in visually impaired adolescents (Eniola, 2007).

Understanding one's own emotions and the feelings of others is vital to forming friendships and developing healthy workplace relationships. While sighted individuals receive the necessary clues by looking at others, people with vision problems are in a difficult position as they have no opportunity to learn about sighted perspectives. Their own reactive tendencies and the reactions of others affect their emotions. As a result, they feel more comfortable mixing with other visually impaired people rather than with their sighted peers.

It has been established that emotional intelligence is vital to make healthy choices in every aspect of life. The ability to know oneself (self-consciousness), self-management, motivation, empathy, social skills and communication skills are determinative for emotional intelligence.

Research on emotional intelligence with regard to certain demographic factors such as gender, age, socio-economic status and locality has been reported

widely. However, there is very little research on the factors affecting emotional intelligence of the visually impaired population.

A study conducted by Kumar and Singh (2013) on 300 students (150 visually impaired and 150 sighted) studying in Senior Secondary Schools in India showed that the relationship between emotional intelligence and adjustment was significant. The researchers reported that visually impaired and sighted school students differed significantly in their emotional intelligence, and concluded that sighted students were emotionally more intelligent and better adjusted than visually impaired students.

Rani's (2011) study on emotional intelligence among visually impaired students in integrated and special school settings in Delhi, India revealed that visually impaired students in integrated schools were more emotionally intelligent than their counterparts in special schools. Similar results were obtained for academic achievement. Correlation between emotional intelligence and academic achievement was found significant in both the settings. The study concluded that the type of school setting has a significant impact on the emotional intelligence and academic achievement of visually impaired students.

A review of international and national literature reveals lack of research that attempts to connect the demographic variables and Emotional Intelligence among the visually impaired population, especially at higher educational levels. After a critical analysis of the above-mentioned studies, the author of the current study attempted a survey research to fill the gap.

### Objective

This study attempts to investigate the demographic variables that can potentially impact the Emotional Intelligence of students with visual impairment in higher educational institutions.

## METHOD

### Research Design

A descriptive research design was adopted for the current study. Data was collected using the survey method.

## Sample

A total of 60 students with visual impairment (including total blindness and low vision) from higher educational institutions in Coimbatore District of Tamil Nadu state, India, were selected through the purposive sampling method.

As per the register of the Association for the Rights of Visually Impaired at Coimbatore District (ARVI) during the year 2012-2013, only 72 visually impaired students were enrolled at higher educational institutions. A sampling frame of 60, which constituted 83 % of the population, was selected through purposive sampling method using non-probability sampling technique. Since the population with disability constitutes approximately 2% of the total population in India, research studies carried out in the field of Special Education have a limitation of small sample size which justifies the purposive sampling.

Inclusion criteria were:

- Age group -16 to 19 years.
- Gender - male and female.
- Nature of visual impairment - total blindness and low vision.
- Visual impairment without additional disabilities.

## Research Tools

The standardised research tool 'Mangal Emotional Intelligence Inventory' (MEII) developed by Mangal and Mangal (2004), was employed to measure the emotional intelligence of the study sample. This inventory has been designed for use with school, college and university students, 16 + years of age, who speak Hindi and English, for the measurement of their emotional intelligence (total as well as separately) in respect of four areas of emotional intelligence, namely, Intrapersonal Awareness (Knowing about one's own emotions), Interpersonal Awareness (Knowing about others' emotions), Intra- personal Management (Managing one's own emotions) and Interpersonal Management (Managing others' emotions) respectively. MEII has 100 items, 25 each from the four areas, to be answered as 'yes' or 'no'.

The tool was translated into Tamil, the regional language, and duplicated into Braille format and large print in order to suit the needs of the totally blind and low vision students.

A general profile was used to obtain the required data from the selected sample, such as age, gender, nature and onset of visual impairment, type of school attended, course pursued, living condition, locality, parental education and family income level.

### Procedure

The Heads of the institutions offering higher education were asked for permission to collect data from their visually impaired students. The researcher also obtained informed consent from the selected sample of students. The need for this study was explained to them before the MEII tool was administered.

Participants were seated comfortably in a well-lit spacious hall. After collecting the demographic information, participants were asked to read the items in the inventory carefully, and instructed to answer them all. Sighted volunteers helped the totally blind who did not know how to read Braille. Collected data was then subjected to statistical analysis for further interpretation of the results.

Statistical analysis, such as T-test and one-way ANOVA, was done with the SPSS package.

## RESULTS

**Table 1: Analysis of Emotional Intelligence scores with reference to Gender, Age group, Nature and Onset of Visual Impairment (VI), Living Condition, Course Pursued and Locality**

| S. No | Variable | Comparison | N | Mean | S.D | t-value | df | Sig |
|---|---|---|---|---|---|---|---|---|
| 1 | Gender | Male | 30 | 69.33 | 10.6 | 1.452 | 58 | Ns |
| | | Female | 30 | 72.6 | 6.23 | | | |
| 2 | Age Group | 18-22 years | 32 | 68.91 | 10.7 | 1.987 | 58 | Ns |
| | | 23-26 years | 28 | 73.32 | 5.25 | | | |
| 3 | Nature of VI | Total Blindness | 25 | 73.4 | 5.63 | 1.847 | 58 | Ns |
| | | Low Vision | 35 | 69.23 | 10.2 | | | |
| 4 | Onset of VI | Congenital | 35 | 68.37 | 8.29 | 2.864 | 58 | ** |
| | | Acquired | 25 | 74.6 | 8.32 | | | |
| 5 | Living Condition | Residential | 28 | 72.54 | 9.91 | 1.3 | 58 | Ns |
| | | Non- residential | 32 | 69.59 | 7.59 | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 6 | Course Pursued | UG | 46 | 70.41 | 9.75 | 0.882 | 58 | Ns |
| | | PG | 14 | 72.79 | 4.17 | | | |
| 7 | Locality | Rural | 21 | 68.95 | 10.9 | 1.309 | 58 | Ns |
| | | Urban | 39 | 72.05 | 7.38 | | | |

Ns: not significant at 0.05 level
** Significant at 0.01 level

**Gender**

The mean and SD of male and female were 69.33, 10.64 and 72.60, 6.23 respectively. The t-test was applied to find whether mean scores differ significantly between males and females. The calculated t-test value is 1.452 which is less than the Table value of 2.002 at 5% level of significance, showing that there is no significant difference between male and female students with visual impairment.

**Age**

The mean and SD of the two age groups (18-22 years and 23-26 years) were 68.91, 10.67and 73.32, 5.25 respectively. When the t-test was applied, it was found that the calculated t-test value is 1.987 which is less than the Table value of 2.002 at 5% level of significance. Hence, it is inferred that the emotional intelligence scores do not differ significantly between age groups of students with visual impairment.

**Nature of impairment**

The mean and SD of total blindness and low vision groups were found to be 73.40, 5.63 and 69.23, 10.22 respectively. The t-test results showed that since the calculated value (1.847) is less than the Table value of 2.002 at 5% level of significance, hence it could be inferred that the mean scores do not differ significantly between students with total blindness and low vision.

**Onset of impairment**

However, during the analysis of onset of visual impairment, a significant difference was found between two groups, i.e., those with congenital and acquired/adventitious blindness. The calculated t-test value is 2.864, which is greater than the Table value of 2.663 at 1% level of significance. This means that the mean scores differ significantly between the two groups. The mean scores of congenital blindness (68.37) and acquired blindness (74.60) showed that the

visually impaired students who have acquired blindness had more emotional intelligence than those who were born blind.

**Living condition**

With regard to living conditions, i.e., residential and non-residential groups, the results revealed that the calculated t-test value (1.300) is less than the Table value (2.002) at 5% level of significance, indicating that the mean scores do not differ significantly between residential and non- residential groups, which in turn reveals that living conditions did not have an influence on the emotional intelligence of the selected sample.

**Course pursued**

Table 1 indicates that the calculated t-test value (0.882) is less than the Table value (2.002) at 5% level of significance; therefore no significant difference was found between the mean scores of undergraduate and postgraduate groups. This indicates that the courses being studied did not influence the EI scores of the sample, though the mean score of the PG group (72.79) was more than the UG group (70.41).

**Locality**

The analysis of mean scores of overall EI showed that the calculated t-test value is 1.309, which is less than the Table value of 2.002 at 5% level of significance. Hence, it could be inferred that the mean scores do not differ significantly between rural and urban groups.

**Table 2a: Analysis of scores with reference to Type of School attended**

| Type of School attended | N | Mean | S.D |
|---|---|---|---|
| Integrated | 33 | 70.18 | 9.56 |
| Special | 11 | 72.91 | 7.02 |
| Inclusive | 16 | 71.25 | 8.5 |

**Table 2b: Summary of ANOVA**

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 63.115 | 2 | 31.558 | 0.399 | Ns |
| Within Groups | 4502.82 | 57 | 78.997 | | |
| Total | 4565.93 | 59 | | | |

Ns: not significant at 0.05 level

For the three different groups, i.e., integrated, special and inclusive schools, the mean scores were 70.18, 72.91 and 71.25, and SD were 9.56, 7.02 and 8.50 respectively. One-way ANOVA analysis shows that the calculated F-ratio value is .399 which is less than the Table value of 3.159 at 5% level of significance. This indicates that the EI scores do not differ significantly among the three groups.

**Table 3a: Analysis of scores with reference to Parental Education**

| Parental Education | N | Mean | S.D |
|---|---|---|---|
| Illiterate | 11 | 71.36 | 6.27 |
| High School | 17 | 70.18 | 12.3 |
| Higher Secondary School | 22 | 69.73 | 7.11 |
| Higher education | 10 | 74.6 | 7.69 |

**Table 3b: Summary of ANOVA**

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 178.154 | 3 | 59.39 | 0.76 | Ns |
| Within Groups | 4387.78 | 56 | 78.35 | | |
| Total | 4565.933 | 59 | | | |

Ns: not significant at 0.05 level

When one-way ANOVA was applied to find out whether the mean scores of EI differ significantly with respect to parental education, the result shows that the calculated F-ratio value is .758 which is less than the Table value of 2.769 at 5% level of significance. This indicates that EI scores do not differ significantly among the four groups.

**Table 4a: Analysis of scores with reference to Family Income**

| Family Income* | N | Mean | S.D |
|---|---|---|---|
| Low Income | 36 | 69.89 | 9.6 |
| Middle Income | 18 | 71.61 | 7.7 |
| High Income | 6 | 75.5 | 5.68 |

* According to HUDCO (2010) Income Classification

**Table 4b: Summary of ANOVA**

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 172.6 | 2 | 86.3 | 1.12 | Ns |
| Within Groups | 4393.333 | 57 | 77.076 | | |
| Total | 4565.933 | 59 | | | |

Ns: not significant at 0.05 level

The ANOVA result shows that the calculated F-ratio value is 1.120, which is less than the Table value of 3.159 at 5% level of significance, indicating that the EI scores do not differ significantly among the three groups.

## DISCUSSION

The results obtained from the analysis of EI scores with respect to gender revealed that there was no significant difference between male and female students. But the mean scores of female students were found to be higher than their counterparts. Similar results were found in a study conducted by Charbonneau and Nicol (2002) which investigated the relationship between emotional intelligence and gender differences among 134 adolescents involved in a 6-week training camp run by the military. The results revealed that girls scored marginally though not significantly higher than the boys on emotional intelligence.

The results of the present study concur with the results of the following studies which indicate no relationship between EI and age factor. Tyagi's (2004) study found that the level of emotional intelligence is independent of age and Jacques (2009) reported that age did not predict emotional intelligence among a sample of 221 college students. Gowdhaman and Murugan (2009) reported in their study that there is no significant impact of locality on the emotional intelligence of sample which coincides with the results of present study.

Also, with respect to the variable family income, results of the current study is in accordance with the results of the study by Gowdhaman and Murugan (2009) which found that socio- economic status or monthly income does not have any significant effect on emotional intelligence. Similarly, Jacques (2009) reported that socio economic status did not predict emotional intelligence.

In the light of above studies which have similar results, it could be inferred that there is no significant difference in the total EI scores of students with visual impairment pursuing higher education with reference to gender, age group, nature of VI, living condition, course being studied and locality. The current study has made it clear that EI is independent of the above-mentioned variables.

However, a significant difference was noticed from the t-test results when the mean scores were analysed with regard to onset of VI. Students with acquired visual impairment pursuing higher education were found to have better EI than those with congenital visual impairment. This may be due to the fact that those who suffer vision loss after birth, as a result of illness or accident, would have had an opportunity to see the world around them and would have learnt the intricacies of emotional behaviour. The age and level of development before the onset of visual impairment influences the individual's ability to acquire skills and concepts. Students with congenital blindness may have difficulty in acquiring concepts, while students with adventitious blindness may retain sufficient visual memory to benefit from visual descriptions.

ANOVA results revealed that there was no significant difference in the sample's EI scores with reference to type of school attended, parental education and family income. This indicates that these factors did not influence the EI of visually impaired students pursuing higher education. This result is contrary to the results of the study done by Rani (2011), which revealed that integrated students with visual disability are emotionally more intelligent than their counterparts in segregated schools. With regard to family income, the result of the current study is supported by the empirical studies conducted by Gowdhaman and Murugan (2009) and Jacques (2009), which showed that socio-economic status or monthly income does not have any significant effect on emotional intelligence among college students. In contrast to this, the study by Mohanty and Devi (2010) revealed that good education and occupation of parents positively and significantly affects the interpersonal relationship (a component of EI) of the adolescents.

## CONCLUSION

Emotional intelligence has become a matter of concern and a subject of research today, since it has been proved that emotional health is fundamental to effective learning. Students need to be taught the essential skills of Emotional Intelligence alongside improving traditional measures like Intelligent Quotient (IQ) and Grade Point Average (GPA). Research findings indicate that personal factors and emotional intelligence skills are important to student achievement and success in higher education. Though there are a number of factors that influence emotional intelligence, the current study concluded that the emotional intelligence of visually impaired students pursuing higher education is not affected by the demographic variables, except for the onset of visual impairment. The study findings revealed that adventitiously blind persons scored higher than congenitally blind persons on the emotional intelligence scale. Hence it is suggested that appropriate measures are to be initiated very early in life, to promote emotional intelligence among those with congenital visual impairment. This would help to enhance their psychological and social development and improve their overall personalities. A comprehensive curriculum, with adapted pedagogical approaches including training in emotional intelligence skills, should be designed and incorporated to meet the diverse needs of students with special needs. By strengthening inclusion on a broader level, and by providing and creating opportunities for them, the underprivileged can live their lives with dignity.

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