

A Study on Adjustment Pattern and Emotional Intelligence of Visual Impaired Adolescents

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Abstract:

India has a large number of blind population.. The **National Sample Survey** carried out in **2011** estimated that, there are about **4 million blind populations** in the country. It is necessary to explore their adjustment patterns and emotional intelligence. Research in this area is scanty and inconclusive, therefore the children having sensory deprivation have been chosen as the subject of study. It is necessary to find out, how they manage their own emotions and those of others.

The objective of the present study is to find out the nature of adjustment pattern and emotional intelligence of boys and girls with visual impairment. The sample of the present study was drawn from five schools and the samples were students of VII – X, both boys and girls. **General Assessment Functioning (GAF)**, as described in **DSM IV** and **Emotional Intelligence Scale** were administered to the students. In the present study, category wise analyses of data were done by calculating the **Mean, Standard Deviation and ANOVA** for adjustment and all the factors of emotional intelligence. It is observed that, in the case of adjustment and emotional intelligence, there is noticeable difference due to the status of visual impairment, both boys and girls. Therefore the disadvantaged section of the society should learn to behave responsively towards environment and gradually improve the quality of life.

Key Words: – Visual Impairment, Adjustment Pattern, Emotional Intelligence, Adolescent.

I. INTRODUCTION

There is no accurate estimation regarding the magnitude of the blind population in India. The Ministry of Health and Family Welfare projected that there are about 12 million blind populations in India. Visual Impairment is a condition in which a person's vision is deficient to such a degree that it significantly affects his schools functioning. The key concepts involved in the present study are – **Visual Impairment, Adjustment Pattern, Emotional Intelligence and Adolescence**. In simple words, Visual Impairment has been defined as the diminishment of the ability to see (**Nilesen, 2002**). The terms partially sighted, legally blind, low vision and totally blind are commonly used to describe visual impairments.

Adjustment is a quality of human behavior to which we direct our attention. When we are interested in how well or how poorly mental activity and behavior are suited to the demands and problems that people encounter, actually we speak of the level of adjustment. On the other hand, **Emotional intelligence (EI)** is the ability to monitor one's own, other people's emotions, to discriminate between different emotions and label them appropriately, and to use emotional information to guide thinking and behavior.

II. SIGNIFICANCE OF THE STUDY

As India has a large number of blind populations mostly belonging to the rural areas, a two way social and

psychological integration of visually impaired and other people has a major obstacle that lies within the gap of mutual understanding. So, it is necessary to explore their adjustment patterns and emotional intelligence. Research in this area is scanty and inconclusive and therefore, the children having sensory deprivation has been chosen as the subject of study, who constitute a major part within the domain of challenged children. Also, realizing the importance of developing conclusive adjustment pattern and positive emotional intelligence among adolescents with visual impairment, the researcher undertook the present study.

III. OBJECTIVES OF THE STUDY

The main objectives of the present study are as follows:

To investigate the **nature** of pattern of adjustment and emotional intelligence of the blind and low-vision adolescents.

To find out the **relationship** among adjustment pattern and emotional intelligence of blind and low-vision adolescents.

To find out whether there is any **difference** between blind and low-vision adolescents in adjustment pattern and emotional intelligence.

To test **gender** difference with respect to adjustment pattern and emotional intelligence in the blind and low-vision.

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IV. METHODOLOGY OF THE STUDY

The methodology of study comprises of **analysis method ,hypothesis, population, sample, tool, procedure of data collection and procedure of data analysis.**

4.1 Method of Analysis:

It is a ex-post facto research.

4.2 Hypotheses

The following are the brief statement of hypotheses:

- H01.** There is no significant difference in adjustment pattern of boys and girls with visual impairment.
- H02.** There is no significant difference in emotional intelligence of boys and girls with visual impairment.
- H03.** There is no significant difference in adjustment pattern between blind and low-vision adolescents.
- H04.** There is no significant difference in emotional intelligence between blind and low-vision adolescents.
- H05.** There is no interaction effect of gender and visual status.

4.3 Population of The Study:

Population of the present study consisted of the students of class VII – X in the age group 14-16.

4.4 Sample of The Study:

The sample of this study consisted of students of both visually impaired and low-vision adolescents of five separate schools.

The target size was proposed to be as follows:

SAMPLE	MALE	FEMALE	TOTAL
LOW-VISION	21	20	41
BLIND	51	50	101
TOTAL	72	70	142

4.5 Tool

Tools for the present study consisted of **General Assessment Functioning Scale (GAF)**, as described in DSM IV , **standardised for the blind and low-vision people and Emotional Intelligence Scale (Bengali)** by **Molina Saha,2009, derived from Ability Model, developed by Peter Salovey and John Mayer.**

4.6 Procedure of Data Collection

Data was collected from 142 students of class VII – X between the period November 2014 - March 2015. Adjustment pattern and Emotional Intelligence Scale were administered to the students of the age group 14-16 of both blind and low-vision boys and girls. They touched the questionnaires of the respective scale and the researcher started questioning them in accordance to the item numbers.

4.7 Procedure of Data Analysis:

In the present study, Category wise Analysis of Data were done by calculating the Mean and Standard Deviation. The results of ANOVA with graphical representation for adjustment and all the factors of emotional intelligence and total score of the emotional intelligence are reported separately.

V. ADJUSTMENT

Mean, SD and the results of ANOVA with graphical representation are reported below:

Table No. 1: Mean & SD of Adjustment

Gender Group	VI-Cat	Mean	SD	N
1 (Boys)	0 (Blind)	74.20	.05970	51
	1 (Low-Vision)	63.67	.06673	21
	Total	71.13	.07802	72
2 (Girls)	0 (Blind)	54.05	.08061	50
	1 (Low-Vision)	58.95	.05790	20
	Total	55.44	.07770	70
Total	0 (Blind)	64.22	.12338	101
	1 (Low-Vision)	61.37	.06625	41
	Total	63.39	.11050	142

Table No. 2: Two way ANOVA of Total Adjustment

Source of variance	Type III Sum of Squares	df	Mean Square	F	Significance
Main effect Gender gr.	.451	1	.451	95.808	.000
VI-cat	.023	1	.023	4.890	.029
Interaction between Gender gr. & VI-Cat	.174	1	.174	36.916	.000
Error	.849	138	.005		
Total	58.789	142			

Figure 1: Graphical representation of Mean scores



Interpretation : It appears from **Table 2** that the effect of degree of visual impairment and gender on Total Adjustment is significant (P<.01). Also the interaction effect of visual category and gender is highly significant (P<.01). When the mean scores of the respective sample subgroup are graphically compared (**Figure 1**) it is evident that, adjustment is much more seen in **blind boys (74.20) than blind girls (54.05)**. On the other hand, total adjustment is more seen in **low vision boys (63.67) than in low vision girls(58.95)**. Therefore, in matters of total adjustment, there lies a significant difference in adjustment of both boys and girls with blindness and low-vision. And significant difference can be seen in blind and low-vision adolescents in adjustment too. Also interaction effect of gender and visual status can be seen. Thus, **H01, H03, H05 are rejected and Alternative Hypotheses are accepted.**

VI. EMOTIONAL INTELLIGENCE

Mean, SD and the results of ANOVA with graphical representation are reported below:

Table No. 3: Mean & SD of Ability to Perceive Emotion factor of Emotional Intelligence

Gender Group	VI-Cat	Mean	SD	N
1 (Boys)	0 (Blind)	52.96	8.067	51
	1 (Low-Vision)	36.10	7.595	21
	Total	48.04	11.031	72
2 (Girls)	0 (Blind)	39.42	8.219	50
	1 (Low-Vision)	38.60	6.492	20
	Total	39.19	7.728	70
Total	0 (Blind)	46.26	10.580	101
	1 (Low-Vision)	37.32	7.104	41
	Total	43.68	10.499	142

Table No. 4: Two way ANOVA of Ability to Perceive Emotion factor of Emotional Intelligence

Source of variance	Type III Sum of Squares	df	Mean Square	F	Significance
Main effect Gender gr.	887.536	1	887.536	14.378	.000 S
VI-cat	2279.280	1	2279.280	36.924	.000 S
Interaction between Gender gr. & VI-Cat	1876.160	1	1876.160	30.393	.000 S
Error	8518.711	138	61.730		
Total	286422.000	142			

Figure 2: Graphical representation of Mean Scores



Interpretation : It appears from **Table 4** that the effect of degree of visual impairment and gender on Ability to Perceive Emotion is significant ($P<.01$). Also the interaction effect of visual category and gender is highly significant ($P<.01$). When the mean scores of the respective sample subgroup are graphically compared (**Figure 2**) it is evident that, this factor is much more seen in **blind boys (52.96) than blind girls (39.42)**. **On the other hand, it is more seen in low vision girls (38.60) than in low vision boys (36.10)**.

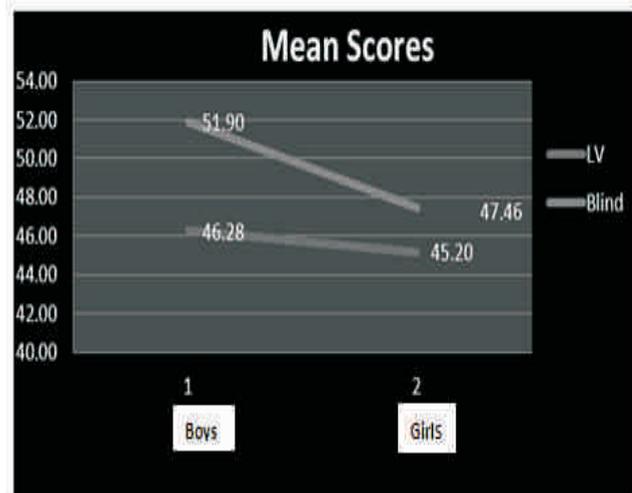
Table No. 5: Mean & SD of Ability to Use Emotion to Facilitate Thought factor of Emotional Intelligence

Gender Group	VI-Cat	Mean	SD	N
1 (Boys)	0 (Blind)	51.90	5.900	51
	1 (Low-Vision)	46.28	5.436	21
	Total	50.29	6.263	72
2 (Girls)	0 (Blind)	47.46	4.782	50
	1 (Low-Vision)	45.20	4.663	20
	Total	46.81	4.825	70
Total	0 (Blind)	49.70	5.796	101
	1 (Low-Vision)	45.80	5.046	41
	Total	48.58	5.847	142

Table No. 6: ANOVA of Ability to Use Emotion to Facilitate Thought factor of Emotional Intelligence

Source of variance	Type III Sum of Squares	df	Mean Square	F	Significance
Main effect Gender gr.	230.401	1	230.401	8.226	.005 S
VI-cat	441.197	1	441.197	15.753	.000 S
Interaction between Gender gr. & VI-Cat	77.493	1	77.493	2.767	.099 NS
Error	3865.082	138	28.008		
Total	339908.000	142			

Figure 3: Graphical representation of Mean scores



Interpretation : It appears from **Table 6** that the effect of degree of visual impairment and gender on Ability to use Emotion to Facilitate Thought is significant ($P<.01$). **The interaction effect of visual category and gender is not significant.** When the mean scores of the respective sample subgroup are graphically compared (**Figure 3**) it is evident that, **ability to use emotion to facilitate thought is much more seen in blind boys (51.90) than blind girls (47.46)**. **On the other hand, ability to use emotion to facilitate thought is more seen in low vision boys (46.28) than in low vision girls (45.20)**.

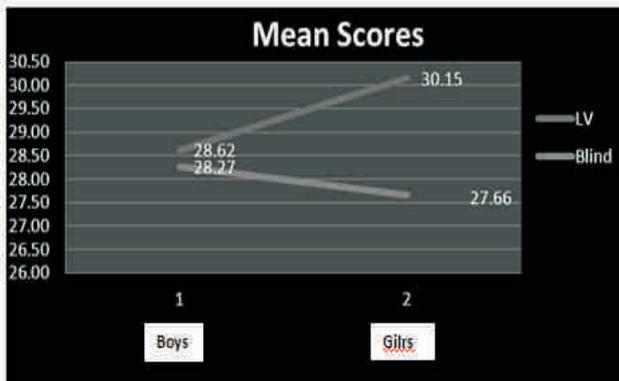
Table No. 7: Mean & SD of Ability to Understand the Meaning of Emotion factor of Emotional Intelligence:

Gender Group	VI-Cat	Mean	SD	N
1 (Boys)	0 (Blind)	28.27	6.245	51
	1 (Low-Vision) Total	28.62	5.801	21
		28.37	6.080	72
2 (Girls)	0 (Blind)	27.66	4.350	50
	1 (Low-Vision) Total	30.15	4.499	20
		28.37	4.505	70
Total	0 (Blind)	29.97	6.373	101
	1 (Low-Vision)	29.37	5.200	41
	Total	28.37	5.343	142

Table No. 8: ANOVA of Ability to Understand the Meaning of Emotion factor of Emotional Intelligence:

Source of variance	Type III Sum of Squares	df	Mean Square	F	Significance
Main effect Gender gr.	6.120	1	6.120	.215	.644 NS
VI-cat	58.550	1	58.550	2.053	.154 NS
Interaction between Gender gr. & VI-Cat	33.543	1	33.543	1.176	.280 NS
Error	3934.879	138	28.514		
Total	118341.000	142			

Figure 4: Graphical representation of Mean scores



Interpretation : It appears from **Table 8** that the effect of degree of visual impairment and gender on Ability to Understand the Meaning of Emotion is **not significant**. Also **the interaction effect of visual category and gender is not significant**. When the mean scores of the respective sample subgroup are graphically compared (**Figure 4**) it is evident that, this is more seen in **low vision girls (30.15)** than **low vision boys (28.62)**. Again on the other hand, this factor is more seen in **blind boys (28.27)** than in **blind girls (27.66)**

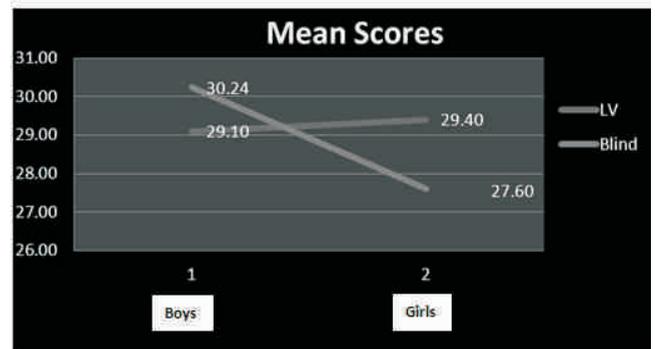
Table No. 9: Mean & SD of Ability to Manage Emotion factor of Emotional Intelligence

Gender Group	VI-Cat	Mean	SD	N
1 (Boys)	0 (Blind)	30.24	4.389	51
	1 (Low-Vision) Total	29.10	7.049	21
		29.90	5.276	72
2 (Girls)	0 (Blind)	27.60	3.753	50
	1 (Low-Vision) Total	29.40	3.267	20
		28.11	3.689	70
Total	0 (Blind)	28.93	4.267	101
	1 (Low-Vision)	29.24	5.472	41
	Total	29.02	4.635	142

Table No. 10: ANOVA of Ability to Manage Emotion factor of Emotional Intelligence:

Source of variance	Type III Sum of Squares	df	Mean Square	F	Significance
Main effect Gender gr.	39.580	1	39.580	1.917	.168 NS
VI-cat	3.174	1	3.174	.154	.696 NS
Interaction between Gender gr. & VI-Cat	62.990	1	62.990	3.050	.083 NS
Error	2849.786	138	20.651		
Total	122625.000	142			

Figure 5: Graphical representation of Mean scores



Interpretation : It appears from **Table 10** that the effect of degree of visual impairment and gender on Ability to Manage Emotion is **not significant**. Also **the interaction effect of visual category and gender is not significant**. When the mean scores of the respective sample subgroup are graphically compared (**Figure 5**) it is evident that, this is more seen in **blind boys (30.24)** than in **blind girls (27.60)**. Again on the other hand, this factor is more seen in **low vision girls (29.40)** than in **low vision boys (29.10)**.

Table No. 11: Mean & SD of Total Emotional Intelligence:

Gender Group	VI-Cat	Mean	SD	N
1 (Boys)	0 (Blind)	164.16	12.176	51
	1 (Low-Vision) Total	151.00	10.752	21
		160.32	13.162	72
2 (Girls)	0 (Blind)	149.64	7.634	50
	1 (Low-Vision) Total	151.05	10.206	20
		150.04	8.395	70
Total	0 (Blind)	156.97	12.486	101
	1 (Low-Vision)	151.02	10.357	41
	Total	155.25	12.178	142

Table No. 12: ANOVA of Total Emotional Intelligence:

Source of variance	Type III Sum of Squares	df	Mean Square	F	Significance
Main effect Gender gr.	1525.139	1	1525.139	14.456	.000 S
VI-cat	1005.552	1	1005.552	9.531	.002 S
Interaction between Gender gr. & VI-Cat	1546.297	1	1546.297	14.667	.000 S
Error	14559.215	138	105.502		
Total	3443630.000	142			

Figure 6: Graphical representation of Total Emotional Intelligence



Interpretation : It appears from **Table 12** that the effect of degree of visual impairment and gender on Total Emotional Intelligence is significant ($P < .01$). Also the **interaction effect of visual category and gender is highly significant** ($P < .01$). When the mean scores of the respective sample subgroup are graphically compared (Figure 6) it is evident that, total emotional intelligence aspect is much more seen in **blind boys (164.16) than in blind girls (149.64)**. Again on the other hand, **total emotional intelligence is more seen in low vision girls (151.05) than in low vision boys (151.00)**. Therefore, in matters of Total Emotional Intelligence, there lies a significant difference in Emotional Intelligence of both boys and girls with blindness and low-vision. And significant difference can be seen in blind and low-vision adolescents in Emotional Intelligence too. Also interaction effect of gender and visual status can be seen. Thus, **H02, H04, H05 are rejected and Alternative Hypotheses are accepted.**

VII. CONCLUSION

Adjustment:

For adjustment, there is difference between blind and low-vision adolescents, both boys and girls. For boys, adjustment is better in blind than low-vision boys whereas for girls, it is more in low-vision than blind girls. Therefore, it can only be concluded that, there is likely impact of the level of vision upon adjustment. But no conclusive pattern emerges out of the results obtained. Again, from the respective table (**Table 1**) and graphical representation (**Fig. 1**), it can be noted that, significant difference is seen in adjustment in case of blind and low-vision boys, whereas very low difference is seen in adjustment in case of blind and low-vision girls.

Emotional Intelligence

In the case of Emotional Intelligence and its various factors (**Ability to Perceive Emotion, Ability to Use Emotion to Facilitate Thought, Ability to Understand the Meaning of Emotion, Ability to Manage Emotion**), there is also noticeable difference, due to the status of visual impairment, that is between blind and low-vision adolescents, both boys and girls. Boys with blindness are noted to have higher emotional intelligence including its factors than low-vision boys, but they are not very able to understand the meaning of emotion. Whereas girls with low-vision are noted to have higher emotional intelligence than blind girls and they are

well capable enough in managing and understanding the meaning of emotion. Besides, blind girls are more capable to perceive others emotions and in using emotion to facilitate their thought process. Therefore, it can be concluded that, boys with blindness and girls with low-vision are noted to have higher emotional intelligence. Again, from the respective table (**Table 11**) and graphical representation (**Fig. 6**), it can be noted that, highly significant difference is noticed in total emotional intelligence in case of blind and low-vision boys, whereas very low difference is noticed in total emotional intelligence in case of blind and low-vision girls.

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