

## Research Article

## Depression among Visually Impaired and Non – Visually Impaired Secondary School Students: A Study With Reference To Mithila Region, India

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**Abstract:** In the present day world visually impaired children has become matter of discussion in the society. It is because of the fact that visually impaired children nowadays feel insecure in the present social system and consequently they feel stress due to lack of social and emotional support from their family and society as well which leads to depression among visually impaired children. Therefore, the present enquiry was aimed at studying the depression among Visually Impaired (experimental group) and Non – Visually Impaired (control group) secondary school students. Total sample one hundred twenty (N=120) were selected using purposive sampling technique from different secondary schools of Mithila region of North Bihar, covering the districts, viz., Darbhanga, Madhubani and Samastipur. Sample comprises visually impaired students (n=60) as experimental group and non – visually impaired students (n=60) as control group. Experimental group was further divided into male (n=38) and female (n=22). Total subjects' age were ranged between 11 – 14 years. Data were collected through Hindi Version Beck Depression Inventory along with biographical information blank. After collecting the data, individual scores were summed up as per norms of the inventory for giving statistical treatment. Obtained results clearly revealed the fact that there has been a highly significant difference between male visually impaired and female visually impaired students, although, both the group of students had shown moderate level of depression as per the norms of inventory. When total sample of visually impaired students were compared statistically with the control group, significant difference had also been found, although, experimental group were found to have moderate level of depression as compared with the control group for which they have indicated mild mood disturbances only as per the inventory of the norms. Finally, discrepancies of the obtained results have been discussed in detail by giving probable reasons.

**Keywords:** Depression, Visually Impaired, Non – Visually Impaired, Students, Secondary School, Mithila Region, North Bihar, India.

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### INTRODUCTION:

In this transitory phase of world of work every one experience stress that causes depression. Basically, it is a form of psychosis characterized by overwhelming feelings of sadness and futility. Depression is a mood disorder that also causes a persistent feeling of sadness and loss of interest and it affects how we feel, think and behave and can lead to a variety of emotional and physical problems.

In the present day changing environment, depression is a common mental disorder which is almost found in every individual which may create trouble doing normal day to day activities, and sometimes individual may feel as if life is not worth

living. It is important to mention here that depression is not a weakness and individual can't simply "snap out" of it. It is because of the fact that most people with depression feel better with medication, psychotherapy or both.

Apart from the above context, it is generally observed that depression may occur only once during our life, even people typically have multiple episodes. During these episodes, symptoms occur most of the day, nearly every day and may include that follows: feeling of sadness, tearfulness, emptiness, angry outburst, irritability or frustration, even at small matters. Moreover, it is often observed that loss of interest, sleep disturbances, including insomnia, tiredness, slowed thinking, feelings of worthlessness or guilt, fixating on

past failures or self – blame and trouble thinking create some extent of depression among people. On the other hand, it is important to point out that Blindness is defined as “absence or loss of visual ability or perception of visual stimulus” (Andrews & Shirley 2005, World Health Organization 2004). Today, there is substantial data on the causes, prevalence and distribution of blindness and visual impairment (Gilbert *et al.*, 1998). The prevalence of visual impairment among children under 16 was found to be 10-22/10000 in developed countries while the rate is 30-40/10000 in developing countries (Gilbert *et al.*, 1998, Nyong’o & Del Monte 2008). Adolescents are in the situation of learning to use newly acquired cognitive abilities in order to make the transition from the dependency of childhood to the autonomy of adulthood. An adolescent develops new relationship patterns with his/her family and the surrounding culture in this period (Hendren 1990). Difficulties experienced in this critical period have a significant impact on the psychology of the adolescent. The prevalence of depressive disorder increases significantly compared to that occurring during previous developmental phases. Point prevalence rates of depressive disorder are reported to be 1-2% in children; 3-8% in adolescents and 20% in follow-up studies conducted throughout adolescence. The prevalence of depressive disorder is reported to be three times higher in adolescent girls than adolescent boys (Costello *et al.*, 2003, Lewinsohn *et al.*, 1998, Reinherz *et al.*, 1993). An adolescent with visual impairment has to deal with the difficulties of his/her physical impairment as well as the specific difficulties of adolescence. Many studies report that individuals with visual impairment experience severe psychological and behavioral problems specifically during adolescence. Wong *et al.*, (2009) investigated the impact of visual impairment on quality of life in a study of 1249 adolescents aged between 11 and 18 and showed that levels of psychosocial and school functionality are significantly lower in adolescents with visual impairment than those without visual impairment, whereas the level of general quality of life is similar in both groups. In a study conducted on 86 children and adolescents with complete or partial visual impairment, Jan *et al.*, (1977) reported that 57% of children and adolescents with visual impairment have psychiatric disorders including diagnoses of adjustment disorder, conduct disorder and personality disorder.

Thus, the present study was aimed at studying the depression among visually impaired and non – impaired secondary school students with particular reference to Mithila region of North Bihar. It is also important to mention here that each child his / her own unique traits which present him / her as a separate individual from others. Exceptional children too can not be excluded from this. Exceptional children have been classified in to four main categories, for practical purposes, in the field of education. They are; a) physically handicapped, b) mentally handicapped, c)

educationally handicapped, and d) socially handicapped (Bhargava, 1994). Further visually impaired children fall into the category of sensorial – disabled children who are physically handicapped. Though, it is generally defined that the visually impaired children are those whose visual loss indicates that he/she should be educated chiefly through the use of Braille, tactile and auditory materials. The partially seeing child is defined as one who has some remaining useful vision and can use print and other visual materials as part of the educational program. Visually impaired children are educated either in special or integrated schools. The education as a system revolves around parents, teachers and the visually impaired child and his/her peer group. Education in the present day is a powerful force in bringing about developmental changes in the society. Likewise, the role of education in physical, mental, social and emotional development of an individual is of paramount importance. Pathak (1984) found that the disabled children in normal schools had good emotional and social adjustment and their socio – metric status was satisfactory, although, Brown and Hammill (1978) viewed that when visually impaired students work in groups; the teachers most often provide instruction and guidance in important interpersonal skills. It is often seen that students need to learn to share work materials. Various studies have been found on different aspects of behavioral sciences in relation to visually impaired children.

In addition to the above psychological factors, the basic social factors that are associated with depression are socioeconomic status, marriage, children, gender, age, and undesirable life events. Socio-economic status and education: The socio-economic status signifies a person’s status within society relative to others regarding the distribution of resources such as education, employment, occupation, income, or wealth. Education is the key determinant for a person’s socio-economic status and their placement in the social stratification system. Higher education increases the chances to get a job; it is associated with higher job quality and higher income, and studies have shown that education has a very strong association with many health outcomes, physical as well as mental health (Ross & Mirowsky, 2002). Higher education is associated with lower levels of depressive symptoms, even when controlling for a wide array of other variables (Kok *et al.*, 2016; Ladin, 2008). Ross and Mirowsky argue that education is particularly beneficial for the (mental) health of otherwise (socio economically) disadvantaged groups (Ross & Mirowsky, 2002).

A number of studies have shown that psychological illness is associated with increased emotional and behavioral problems. Physical disabilities e.g. orthopedic handicap, hearing and visual impairment caused by emotional and social stress (Reddy *et al.*, 1991; Thomas and Sudhakar, 1994).

Although, academic stress in adolescents is caused by personal inadequacy, fear of failure, interpersonal difficulties, and lack of study facilities. It is often seen that depression caused by stress is being experienced everywhere but its perception and manifestations vary across different groups and settings (Latha and Kaliappan, 1991; Misra, 1996b; Tuli, 1997). Moreover, a number of studies have reported about the correlates negative emotions including age, gender, residential background, health status, and various psychological dispositions.

Research on orthopaedically handicapped boys showed that they perceived the emotional climate of school to be significantly more favorable as compared to girls (Sinha *et al.*, 1996) and in one of the important studies Kumar, *et al.*, (1994) had advocated that physically challenged individuals displayed more neurotic and psychotic symptoms than normal people. Moreover, a number of researchers viz., Rajendran and Kaliappan, 1991; Sanghavi, 1995; Singh and Broota, 1992; Sidhu, 2000; Suneetha, 1995 have observed that the behavioral package program of relaxation, study skill, assertiveness training, and systematic desensitization leads to a reduction in stress levels and better academic performance in high school children. Relaxation and meditation also alleviate the symptoms of depression (Singh and Kaushik, 2000). Research has also shown that test anxiety is related to study habits, academic performance, procrastination (Sud, *et al.*, 2001; Sud and Prabha, 1995). Singh, D' souza and Singh (1996) have also shown that whereas test anxiety and failure stress lead to impaired verbal learning and achievement, the same variables facilitate performance on motor perceptual tasks in more intelligent students. Examining the prevalence and pattern of psychological disturbance in school going children, Sarkar *et al.*, (1995) discovered that one – third of the children showed academic backwardness and about 10 percent were disturbed and had significantly higher scores on the dimensions of nervousness, over activity, self – destruction, inattention, and unpopularity. Various studies on depressions in relation to psychological aspects have been conducted but have not been studied in relation to visually impaired students of Mithila region of North Bihar. Thus, the present study is of immense value so far as sample area is concerned.

#### **AIMS AND OBJECTIVES OF THE PRESENT STUDY**

Having scanned the review of literature on the problem, various researches have been found on different aspects of children and adolescence but very meager number of studies especially in Indian context has been found on visually impaired school going children in term of depression. These days, every one experience stress and it causes little amount of depression. Therefore, the present study was aimed at studying depression among visually impaired and non –

impaired secondary school students. The present investigation was planned to study on the sample area of Mithila region of North Bihar, India. It is very important to mention here that the area taken for the present piece of research work is still unexplored and need special attention. The problem chosen by the present investigators is of immense value and will fill the void of knowledge in the area concerned.

#### **HYPOTHESES:**

On the basis of the broad aims and objectives of the present study, the following hypotheses were formulated:

- There will be no significant difference between the group of visually impaired school going students (Experimental group) and control group (Non – visually impaired students) in terms of their degree of Depression.
- There will be no significant difference between male and female visually impaired school going students on the degree of depression.
- Female visually impaired school going students will not be differing with male visually impaired secondary school students on the degree of depression.
- Female visually impaired students will not have higher degree of depression than male visually impaired students.

#### **RESEARCH METHODOLOGY:**

To carry out the present piece of research work the following sound methodology was used:

##### **Sample:**

Total sample consisted of one hundred twenty (N=120) secondary school students which comprises visually impaired students (n=60) and Non – visually impaired students (n=60) were identified by using purposive sampling technique, sample drawn from Mithila region of North Bihar. Mithila region covers three districts viz., Darbhanga, Madhubani and Samastipur from where the present sample has been drawn. Total subjects' age were ranged between 11 – 14 years.

##### **Tools Used:**

For measuring the levels of depression among visually impaired and non – visually impaired students the following tools were used for the present piece of research work.

##### **1. Beck Depression Inventory:**

For measuring depression among students – a Hindi Version of Beck Depression Inventory developed by Arora *et al.*, (1988) was used. This is an objective questionnaire containing 20 items with 4 alternatives (0 – 3) measures severity and degree of depression that follows:

<u>Total Score</u>	<u>Levels of Depression</u>
0 – 0	No depression
1 – 10	these ups and downs are considered normal
11 – 16	mild mood disturbance
17 – 20	border line clinical depression
21 – 30	moderate depression
31 – 40	severe depression
Over 40	extreme depression

**2. Biographical Information Blank (BIB):**

Biographical blank was also prepared for interpreting the results. It includes: sex, qualification, religion, area of locality, family income, father’s qualification, mother’s qualification, family structure, etc.

**Procedure:**

Before giving the above schedules, respondents were deliberated about the instructions of questionnaire schedules then thereafter measures were given to each visually impaired secondary school students (Experimental group) individually to complete in all respect. They were also assured that the information provided by them would be kept strictly confidential and will be used research purposes only. Likewise, questionnaire schedule were also give to non – visually impaired secondary school students (Control group). Having collected the data using Hindi version of Beck Depression Inventory, the individual scores were summed up as per norms for giving statistical treatment. Finally, the obtained results of both the group presented in tables and discussed in detail.

**RESULTS AND DISCUSSION:**

In quest of obtaining the results, descriptive analysis was done by computing mean, SD, and t-test to see the significant difference in obtained scores of the two groups i.e. visually impaired and non – visually

impaired secondary school students. From the table-1, it can be observed that in the present sample there is a highly significant difference in the mean values of total depression inventory as visually impaired (experimental group) students had shown moderate degree of depression mean score with an SD (22.68 and 5.67) than non – visually students (control group) (Mean – 12.6 and SD – 3.5). Hence, the significant difference between visually impaired and non – visually impaired secondary school students has been found significant as t – value i.e. 11.59 is found to be significant statistically at .01 level of confidence. Thus, the null hypothesis that there will be no significant difference between the group of visually impaired school going children (Experimental group) and Non – visually impaired students (control group) in terms of their degree of Depression, stands rejected. The results seem to be logical that visually impaired students and Non-visually impaired normal students do differ in their degree of depression. It is due to the psycho – social make up of their personality. It is important to mention here that one of the possible reasons for the present study is likely to be lack of awareness about the importance of education especially from the side of school settings and from family too. Thus, the visually impaired group of students is found to have more depression than non – visually impaired students (control group).

**Table-1:** Showing Mean, SD and t-value between the groups of Visually Impaired and non – Visually Impaired Students of Mithila Region In terms of Their Degree of Depression

<u>Variable</u>	<u>Groups</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>	<u>t-value</u>
Beck Depression Inventory	Visually Impaired Students	60	22.68	5.67	11.59*
	Non – Visually Impaired Students	60	12.6	3.5	

\* Significant at 0.01 Levels

Table – 2 is the extension of table – 1 regarding the comparative levels of degree of depression between visually impaired and non –

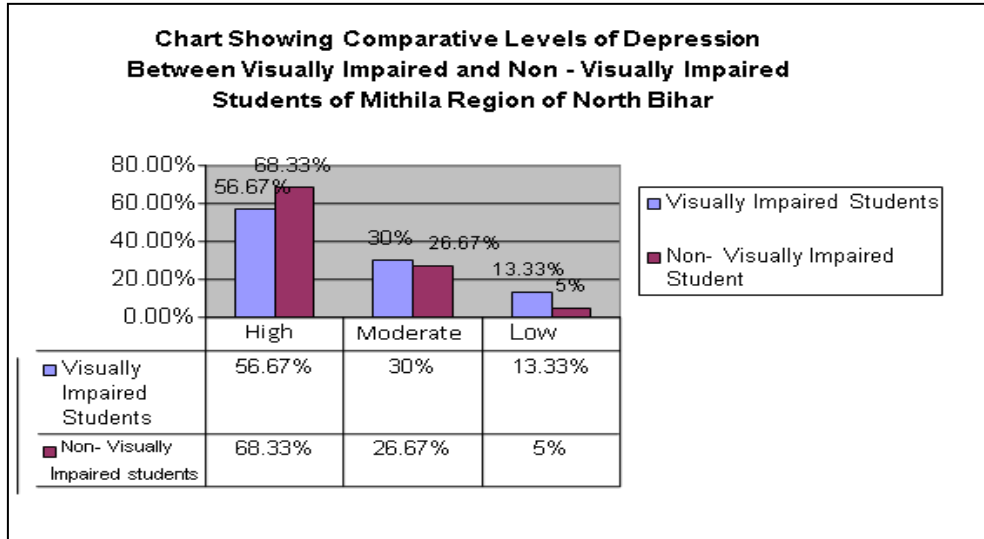
visually impaired secondary school students of Mithila region of North Bihar, India.

**Table-2:** Showing Comparative Levels of Depression between Visually Impaired and Non – Visually Impaired Students of Mithila Region of North Bihar

Levels	Visually Impaired students (Experimental Group)		Non – Visually Impaired Students (Control Group)	
	n=60	Percentage	n=60	Percentage
High	34	56.67	41	68.33
Moderate	18	30.00	16	26.67
Low	08	13.33	03	05.00
	<b>Mean = 22.68</b> (Moderate Depression as per norms)		<b>Mean = 12.6</b> (Mild mood disturbance as per norms)	

Table - 2 highlights the percentages of perceived reaction of the degree of depression between the group visually impaired and Non – visually impaired students of secondary school from where the present piece of research work has been carried out. It is evident from the table that 56.67 percent of visually impaired students have shown higher degree of depression (moderate level of depression as per norm) as compared to non – visually impaired students who reported 68.33 percent to have mild mood disturbance only as per the norms of the inventory. While 30 percent of visually impaired students have shown moderate level of perceived reactions on depression, 26.67 percent of non – visually impaired students group have shown moderate level of mild moderate level of depression which is comparatively low when compared to visually impaired secondary school students. Moreover, 13.33 percent of visually

impaired students reported to have low level of moderate depression in comparison to non – visually impaired student group i.e. 05 percent which is low degree of mild mood disturbance comparatively. Therefore, the proposed hypothesis i.e. visually impaired school going children will not be differing with non – visually impaired secondary school children on the degree of depression, stands also rejected. The obtained results seem to be logical in the sense that visually impaired students have been found to have moderate depression as per norms of the inventory, it is due to the feeling of sadness, tearfulness, emptiness or hopelessness as compared to non- visually impaired students (control group). The above mentioned results regarding the levels of the degree of depression between visually impaired and non – visually impaired students can also be observed by the following diagram.



**Table-3** Showing Mean, SD and t-value between the groups of Female Visually Impaired and Male Visually Impaired Students of Mithila Region In terms of Their Degree of Depression

Variable	Groups	n	Mean	SD	t-value
Beck Depression Inventory	Female Visually Impaired Students	22	27.56	6.88	5.11
	Male Non – Visually Impaired Students	38	22.76	5.69	

\* Significant at 0.01 Levels

In addition to the above aforementioned results of table – 1 & 2, table – 3 of the results clearly reveals

the picture pertaining to the significance of difference between the groups of female and male visually

impaired secondary school students in terms of their degree of depression. It could be observed from the table – 3 that both the group (male and female) of visually impaired secondary school students have reported to have moderate level of depression as per the norms of Beck Depression Inventory as the mean values with an SDs are 27.56, 6.88 and 22.76, 5.69 respectively. Therefore, significant difference have been found ( $t = 5.11$ ) statistically at 0.01 level of confidence. Hence, the proposed hypothesis i.e. there will be no significant difference between the group of male and female visually impaired secondary school

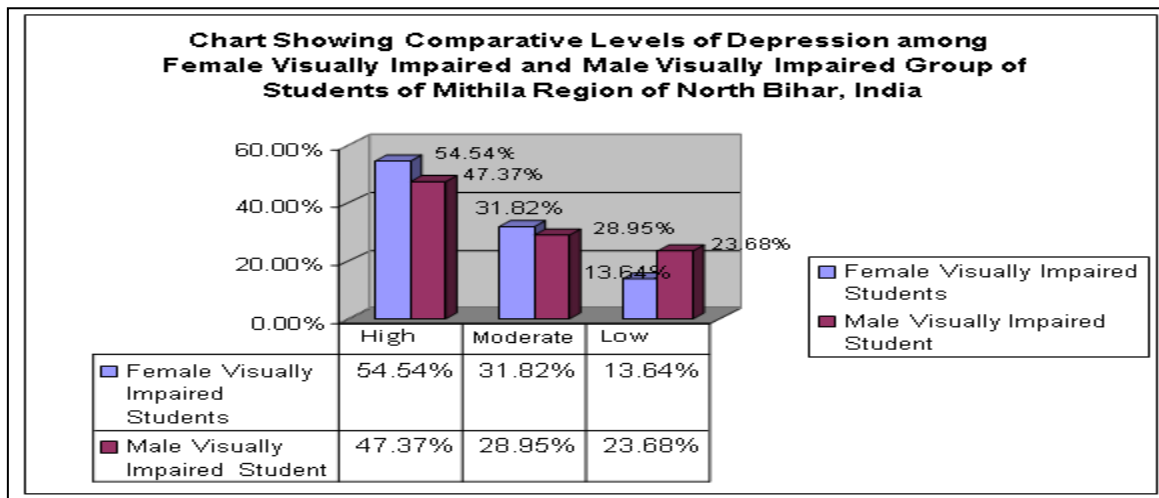
students in their degree of depression, stands rejected. Extending the table – 3 of the results, table – 3 of the results have clearly indicated that female group of visually impaired secondary school students suffer more from the evils of depression, as the obtained mean score have been found as high in comparison to male visually impaired students which can be observed from the table – 3. That’s why the proposed hypothesis i.e. female visually impaired students will not have higher degree of depression than male visually impaired students also stands rejected.

**Table-4:** Showing Comparative Levels of Depression among Female Visually Impaired and Male Visually Impaired Students of Mithila Region of North Bihar, India

Levels	Female Visually Impaired Students n=22		Male Visually Impaired Students n=38	
	n	Percentage	n	Percentage
High	12	54.54	18	47.37
Moderate	07	31.82	11	28.95
Low	03	13.64	09	23.68
	<b>Mean = 27.56</b> Moderate Depression as per norms		<b>Mean = 22.76</b> Moderate Depression as per norms	

Extending the table – 3 of the results, table – 4 is showing comparative levels of depression among female visually impaired and male visually impaired student studying in different secondary schools located in and around Mithila region. From the table – 4, it could be understood that 54.54 percent of female visually impaired students have shown high level of the degree of depression as compared to male visually impaired students i.e. 47.37 percent. 31.82 percent of female visually impaired students have shown moderate level of depression in comparison to their male

counterparts. Similarly, 23.68 percent of male visually impaired secondary school students have shown low levels of the degree of depression as compared to their female counterparts. It is important to mention here that both the group of male and female visually impaired secondary school students have reported moderate levels of depression as per the norms prepared by Beck on Beck’s Depression Inventory. Obtained results as mentioned above can also be observed by the following chart.



Discussing the obtained results presented in tables – 1 to 4 it is important to point out some of the observations pertaining to male and female visually impaired students of secondary schools located at Mithila region of North Bihar from where the present sample has been taken for the present researcher endeavor i.e. there is a need to pay much attention towards evils of depression from visually impaired

students especially from the Mithila region of North Bihar. Union and State Government must take care of. It is a challenge not only to encourage but also to improve the personality development of the visually impaired students.

A number of studies on visual impairment in the psychiatric literature do not study specific samples.

An advantage of the present study is the specific sample composed of secondary school students with congenital complete visual impairment. For this reason, the sample size is relatively low. The cross-sectional quality of the present study is a limitation. It might be useful to study longitudinally with visually impaired children and adolescents, and comparatively with different groups such as congenital and acquired visual impairment.

Therefore, it is important that every visually impaired students must be taken care by the teachers, parents, society, NGOs, Government Officials, etc especially in Mithila region in particular and nation at large.

## CONCLUSIONS:

The conclusions have been drawn on the basis of obtained results and its interpretations that follow:

1. Significant difference has been found between the group of visually impaired school going children (Experimental group) and Non – visually impaired students (control group) in terms of their degree of Depression in Mithila region of North Bihar, India.
2. Significant difference has also been found between male and female visually impaired school going students on the degree of depression in the Mithila region
3. Female visually impaired school going students have been found differing with male visually impaired secondary school students on the degree of depression.
4. Female visually impaired students have been found to have higher degree of depression than male visually impaired students especially in Mithila region from where the present piece of research work has been carried out.
5. Observations have revealed the fact that there is a need to pay much more attention for the upliftment of visually impaired students especially in the Mithila region of North Bihar. It is because of the fact that they are the part of our family and society and they have the right to participate in each event of our nation, that's why it is strongly suggested that our union / state government, researchers, family, society and NGOs must take action to create confidence among the visually impaired students by providing special needs especially in Mithila region from where the present piece of research work has been completed.
6. Finally, it is to mention here that these visually impaired school going students either male or female from birth onwards have not indicated severe problems contrary to expectations. Hence, visual impairment may not have a negative effect on depression level. Additionally, it is to point out here that teachers and counseling services specializing in the field of visual impairment may detect the potential problems of students with visual impairment early and contribute to the

mental wellbeing of adolescents through required interventions. The findings of the present study may provide some light for further investigations into a topic that, to our knowledge, had never been previously studied in Mithila region of North Bihar, India

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