

# Adjustment and Academic Achievement of Visually Handicapped School Children in Assam

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**Abstract:** *The present study was conducted on Adjustment and Academic Achievement of Visually Handicapped School Children of Assam. The data were collected from a sample of 400 visually handicapped children 200 boys and 200 girls who were studying in the classes VI to X (age 12 to 16 years) in six visually handicapped schools of lower and upper Assam selected by using simple random technique. The descriptive survey method was used for data collection using (i) Adjustment Inventory standardized by A.K.P Sinha and R.P.Singh; (ii) Academic Achievement from School Record. The study reported that the adjustment of visually handicapped boys and girls was found similar on overall adjustment. It also revealed that there existed no relationship between adjustment and academic achievement among visually handicapped children.*

**Keywords:** Adjustment, Academic Achievement, School Children, Upper Assam and Visually Handicapped.

## 1. Introduction

In ancient time, the visually handicapped children were treated with hostility and were neglected. They were considered as 'Curse of God'. They were viewed as the victims of punishment by supernatural power. They were considered useless, incapable of doing anything. It was regarded as a punishment for his past sins. Negative attitudes towards blindness were widely prevalent. Thus, no attempt was made for their education, training, habilitation and rehabilitation. They were at a distance (aloof) from the physical and social world due to lack of sight. This sensory deprivation creates adjustment problems and other personality problems among visually handicapped children. After the world war II, special education made a comeback with wealthy and powerful people like US president Kennedy and president Johnson taking interest in the education of all handicapped.

The eye is very important sensory organ which accounts for a very large fraction of total information available to a person through his senses. It has been estimated that more than three-fourth of all learning comes through the use of the eyes. The visually handicapped children have to do all their learning using their other senses which are not impaired i.e. hearing, taste, and smell, sensation or touch. Research Studies show that about one child in every five has a correctible vision defect and vision defects left undetected or uncorrected for too long may bring about failure, retardation, or other maladjustments.

With the development of democracy and socialism in different countries of the world, education was started considered to be basic right of the child. This realization paved the way for mainstreaming disabled children. However, a discernible change has taken place for attitude of visually handicapped children after the International Year of Disabled Persons (IYDP, 1981). Visually handicapped is considered as a low prevalence handicapping condition existing in approximately one in every 1000 school children population. But as per the

National Sample Survey Organization (NSSO, 1991), the visually handicapped in India are nearly 4.005 million in chronological age of 0-14 which constitutes 0.3 percent of school children.

In India, not more than 5 percent visually handicapped children receive education. A much smaller fraction of our blind adults achieve economic independence. Most of the institutions for visually handicapped are largely urban based. It is found that more than 80 percent of our blind people live in rural areas, where practically no rural services exist for them. There is urgent need to devote large resources for the development of services to the blinds in the rural areas (Encyclopedia of social-world in India, volume1).

A Visually handicapped child is defined in terms of visual acuity, field of vision, and visual efficiency. 'Visual ability' of the eye to see distant objects clearly is assessed using the Snellen's chart, developed by Herbert Snellen, a Dutch doctor. The chart starts with a big 'E' which a normal eye can see at a distance of 200 ft. When vision of a person is so handicapped or impaired that to see the 'E' clearly he has to come within 20ft. of it or nearer, he is then considered legally blind. His vision is assessed as 20/200 in the better eye. It simply means a legally blind person sees something at 20 ft. distance which can be seen by a normal at 200 ft. easily. The children are partially sighted whose visual acuity does not exceed 20/70. Visual impairment is a condition in which a student's vision is deficient to such a degree that it significantly affects his school functioning. Another description may also be used to classify an individual as blind. If the visual field is severely limited, that person may be considered blind even if visual acuity is better than 20/200. This visual field limitation is often called tunnel vision. If the visual field is no greater than 20 degrees in width, the individual can still be classified as being blind even though visual acuity is not within typical range of blindness.

Visually efficiency means how well one can use one's vision. This means how the visual information is processed, analyzed and interpreted in the brain. Educationally speaking, blind children are those visually handicapped children who use Braille, and partially seeing are those who use large print. That is why a partially sighted child is known as print handicapped. Low vision and partial sightedness are not synonymous. Low vision is defined in terms of clarity reduction whereas partial sightedness is defined in terms of distance from the Snellen Chart.

Accordingly to Encyclopedia of Britannica, visually handicapped include two categories, as partially sighted and blind. A person is defined as being 'partially sighted' if the vision in his better eye (after correction) is less than 20/70 but better than 20/200. Such children need special equipment's and are often taught in special classes or resource rooms that provide special methods and materials. In many cases they can be educated in a regular class if special material and equipment's are provided. A person is defined as 'Blind' if his vision or visual acuity (after correction) is 20/200 in his better eye. This visual acuity is in general inadequate for education through the eyes, and special techniques have been devised to make possible education through tactual and auditory channels.

As per the Encyclopedia of Educational Research (1960), visually handicapped person are those whose sight is limited to such a degree that they need special consideration in their education and other life activities. The report on blindness in India submitted in 1944 suggests that a person who cannot count the fingers of an outstretched hand at a yard's distance should be considered blind.

Visual impairment occurs when any part of the optical system is defective, diseased, or malfunctions. If the visual impairment is the result of a defective part (or parts), and is usually present at birth is called congenital. These include missing parts (e.g. absence of iris; absence of the eyes themselves), defective systems (e.g., dislocation of the lens; holes in the retina; drainage systems that are stopped up), and hereditary conditions (e.g., refractive errors due to eyeballs that are too short or too long; improperly shaped corneas; albinism). Diseases can be pre-natal, at birth or post-natal (e.g., damage shortly thereafter birth), or adventitious (acquired later in life) e.g., diseases that develop gradually such as diabetic retinopathy and some types of retinal diseases). Malfunctions can be due to defective parts or, secondarily, to body diseases such as rubella. There are hundreds of eye problems (and combinations of problems) located in the optical system itself.

Visual impairment can also occur when the central nervous system is damaged, since the brain not only governs and coordinates the optical system but also interprets (i.e., 'processes') the visual stimuli sent to it by the eyes. Sometimes this brain-based disability is mild (e.g., poor visual perception) and sometimes it is severe e.g., Cortical Visual Impairment (CVI).

Chauhan (1989) says, hereditary and developmental disorders in children are the major causes of visual impairment. Among the various causative factors responsible for visual impairment, infections, injuries, malnutrition particularly vitamin A deficiency and refractive anomalies including muscle imbalance are important. Accidents, carelessness and neglect are also responsible for such impairment.

## 2. Review of Related Studies

Dhangare (1969) conducted a study entitled "The problem of visually Handicapped and their Rehabilitation" In his study, he found that blind boys develop skills in crafts faster than in liberal education and boys from rural area and low socio economic background pose no problem of adjustment with institutional training .

Patel and Joshi (1979) have examined the relationship of family, personal and social adjustment to achievement in high school students. Results indicate that high achievers score much more than low achievers, in all the three areas of adjustment. Girls score better on family adjustment than boys, but boys score higher on personal adjustment.

Darsana (1980) studied the adjustment of IXth class students of Kurukshetra district at various levels of security, insecurity, and academic achievement. Her study revealed that the emotional and social adjustment of high insecure, middle insecure, and low insecure were significantly different. It further found that academic achievement had a significant role to play in emotional and social adjustment. She also found that sex had a significant role to play in emotional and social adjustment. It was also revealed that there existed a significant interaction among sex, security, insecurity and academic achievement.

Das (1980) studied some existing problems some of physically handicapped with reference to two important places of Assam, namely Guwahati and Nagaon. In this regard she visited some of the institutions herself and has drawn solutions on the basis of her investigation. She observed that there was less number of institutions for visually handicapped children. She also identified the existing problems like adjustment, proper schooling, educational facilities etc of visually handicapped students.

Sarita, et.al (1987) conducted a study on the adjustment pattern of visually handicapped and sighted students. The objectives of the study were :(1) To find out the significance of difference between the mean scores of different dimensions of adjustment of the visually handicapped and sighted students.(2) To examine the effect of socio-economic status on adjustment. The sample consist of 40 visually handicapped and 40 sighted students of age group of 14-18 years of both sexes reading in middle school for the blind and a local school for sighted students. The findings were (1) visually handicapped students were poorly adjusted in emotional, social and educational adjustment than sighted students. (2) The same condition prevails as regards their total adjustment.

Sarma(1990) conducted a study to find out the anxiety level of visually handicapped and normal children. The study was conducted on a sample of 50 visually handicapped and 40 sighted students of class IV to IX standards of Aligarh district. The results revealed that visually handicapped children were significantly more anxious than the sighted children. They were found more anxious for their examination than their seeing counterpart.

Haider(1990)investigated the adjustment, social competency, aspiration and academic achievement of visually handicapped children in special schools and in integrated settings. Further, it was also examined that how personal and psychological characteristics influence the educational achievement of the visually handicapped children in special and integrated schools. The 106 visually impaired children from residential and 52 from integrated school had been taken. The results showed that visually impaired children from integrated school were better in all respects. A close relationship was noticed between their several psychological characteristics, such as adjustment, social competency, aspiration and academic performance.

Bhuyan (1991) conducted a research on development of education among the physically handicapped students of Assam since independence. The finding were: (1) Most of the educational institutions for the blind were managed by voluntary organizations and the funds of the voluntary organizations were not adequate and govt.grant were also not sufficient as a result of which the institutions had been suffering from various problems arising out of the paucity of funds . (2)There was lack of adequate number of qualified and specially trained teachers in all the educational institutions for the blind and the deaf and dumb (3) There is dearth of teaching aids and equipments in all the educational institutions of the blind. (4)The pay scales and service conditions of the teachers of the schools managed by voluntary organizations were very deplorable and there was the problem of irregular emoluments of the teachers in these institutions. (5)There are no proper hostel facilities in all the schools of the blind and food supplied to the boarders of the hostels of most of the blind school was of a very low standard. (6)There were no proper facilities for vocational training in all in educational institutions of the blind. (7)There were no provisions of making proper assessment of visual acuity of the blind students. (8)There was no medical unit attached to the institutions for regular check-up and assessment of health standard of the physically handicapped students (9) There were no awareness among the parents regarding the existing educational and vocational facilities for the physically handicapped.

Pradhan(1994) studied “Factor Affecting Academic Achievement of Visually Handicapped Children” and found (1) Study habit affected the academic achievement of visually handicapped children. (2)There was no correlation between sensory knowledge and academic achievement of visually handicapped children. (3) There was low correlation between age and sensory knowledge of visually handicapped children. (4) There is no sex difference of visually handicapped children in study habit

and sensory knowledge. (5) The teaching methods adopted specially for visually handicapped children were Braille, Abacus and Reader class.

Aminabhavi(1996) in his study entitled “A study of adjustmental ability of physically disabled and able students from the colleges of Dharwad and Belgaum,” found that physically disabled were mal-adjusted with respect to family, emotion, mode and leadership aspects

Agarwal (2002) conducted a study entitled “A comparative study of academic skills of visually impaired students studying in various educational settings” and reported that visually impaired students going to mainstream schools both in integrated as well as semi- integrated setting were good at problem solving and reasoning skills due to greater exposure to the subjects like Mathematics and science. The investigator concluded that visually impaired children should be admitted to mainstream schools in large numbers. Integrated setting should be promoted and strengthened. Special schools should be utilized to provide resource services as a supplement to integrated setting. Last but not the least important finding from the analysis of hypotheses was remarkable uniformity between visually impaired boys and visually impaired girls in academic skills. Both were equal in their performance. The investigator concluded that uniform education policy and procedures shall hold good for both.

Pradhan (2011) studied on adjustment and anxiety in visually handicapped male and female adolescents .The study was based on a sample of 400 visually handicapped adolescents, 200 male and 200 female. The tools he used for adjustment was adjustment inventory by S.P.Kulshrestha and anxiety scale by D.N Sinha. Objectives of the study were (a) To find out the adjustment level of visually handicapped male and female adolescents in Bhim Bhoi School for Blind, Bhubaneswar. (b) To study the interaction effect of visually handicapped male and female adolescents on adjustment in Bhim Bhoi school for Blind, Bhubaneswar. (c) To find the anxiety level of visually handicapped male and female adolescents in BBSB, Bhubaneswar. (d) To see the interaction effect of visually handicapped male and female adolescents on anxiety in BBSB, Bhubaneswar. Findings are (a) The result of the study indicated that there is no significant difference in the adjustment of visually handicapped male and female adolescents studying in Bhim Bhoi School for Blind, Bhubaneswar. (b) The study confirmed that there is no significant interaction effect of visually handicapped adolescents and sex on adjustment in Bhim Bhoi School for Blind, Bhubaneswar.

Dutta et al., (2014) “A Study of Adjustment, Level of Aspiration, Self-Concept and Academic Achievement of Visually Handicapped School Children of Assam”The study was based on a sample of 400 visually handicapped children 200 boys and 200 girls who were studying in the classes VI to X (age 12 to 16 years) in six visually handicapped schools of lower and upper Assam selected by using simple random technique. The descriptive survey method was used for data collection using (i) Adjustment Inventory standardized by A.K.P Sinha and R.P.Singh; (ii)



Self -Concept Inventory standardized by Raj Kumar Saraswat; (iii) Level of Educational Aspiration constructed by J.C.Soni and (iv) Academic Achievement from School Record. The study reported that the adjustment of visually handicapped boys and girls was found similar on overall adjustment. It also revealed that there existed no relationship between (a) adjustment and level of educational aspirations; (b) adjustment and self-concept and (c) adjustment and academic achievement of visually handicapped children

### 3. Significance of the Study

There is a positive effect or correlation between the favorable environment and harmonious development of personality of the organism. The eye sight plays an important role in forming of the personality of an individual. We can acquire a large fraction of total information and knowledge through this important sensory organ. Those who do not have proper eye sight are deprived of outer world due to their visual impairment. This sensory deprivation has direct influence in their adjustment of academic achievement. Many studies have established positive correlation between adjustment and academic achievement of visually handicapped children which help further in understanding the characteristics and problems of visually handicapped children.

The visual impairment affects the academic achievement. As a result they become an isolated group or specially neglected group of people in society. They are helpless and they need special opportunity. Visually handicapped persons are also like other members of the society. They are valuable human resources for the country therefore; an environment seeks to be created that provides them with equal opportunities, protection of their rights and full participation in society.

The research study of visually handicapped children has to be organized not merely on humanitarian grounds, but also on the grounds of utility. The scientific study and research outcome on their capabilities generally enable them to overcome their handicappers, and make them useful citizen in society. Social justice also demands it. It has to be remembered that the constitution of India ensures equality, freedom, justice for them. The primary task of research for a handicap child is to prepare him for adjustment to a socio-cultural environment designed to meet the needs of the normal. At the same time it is found that very little research work has been conducted in the area of visually handicapped children in India and particularly in the state of Assam. Although there is a large number of visually handicapped children in Assam, but very little attention has been paid to their well-being either by the government or by social and other private agencies. Against the above backdrop, the researcher was motivated to study adjustment pattern and academic achievement of visually handicapped children in Assam.

### 4. Statement of the Problem

The present study is entitled as “**Adjustment and Academic Achievement of Visually Handicapped School Children of Assam**”

### 5. Objectives of the Study

1. To study the adjustment pattern of visually handicapped school children.
2. To find the relationship between adjustment and academic performance of visually handicapped school children.
3. To study the distribution of academic achievement of visually handicapped school children
4. To find whether significant interaction exists between adjustment and visually handicapped school children with academic achievement as the dependent variable.

### 6. Hypotheses of the Study

1. There is no significant relationship between adjustment and Academic achievement of visually handicapped School Children
2. There is no significant interaction between adjustments among visually handicapped school children with academic achievement as dependent variable.
3. The scores of adjustment and academic achievement are normally distributed.
4. There is no significant difference in academic achievement of boys and girls visually handicapped children.

### 7. Methodology of the Study

#### Method

The descriptive survey method is used in the present study.

#### Population

The population of the present study comprised of all the students of classes V1 to X studying in visually handicapped schools existing in Assam.

#### Sample

For the present study, the sample is comprised of 400 visually handicapped children 200 boys and 200 girls who are studying in the classes VI to X (age 12 to 16 years) in different visually handicapped schools of Assam. The sample is selected by simple random technique out of all the six visually handicapped schools of lower and upper Assam.

#### Tools Used

The following tools are used for the present study:

- (i) Adjustment Inventory standardized by A.K.P Sinha and R.P.Singh
- (ii) School Record for Academic Achievement.

### Statistical Techniques Used

In the present study the investigator has used median, standard deviation and Spearman correlation, Kolmogorov-Smirnov test, Q-Q plot, Mann-Whitney U-test, and Multiple Regression. The calculation are done by using SPSS package

### 8. Findings and Conclusions

After testing hypotheses and analysis of data, the following conclusions were drawn:

- a. The adjustment of visually handicapped boys and girls are found similar on overall adjustment.
- b. The results of the study further show that visually handicapped boys and girls do not differ significantly in respect of academic achievement.
- c. The study revealed that there exist no relationship between adjustment and academic achievement of visually handicapped children.
- d. The interaction between adjustment no impact on academic achievement.

### 9. Educational Recommendations

On the bases of the finding of the present study, the following educational recommendations are proposed by the researchers so that it may help teachers, policy makers, parents and researchers.

1. Adjustment is the most important factor for visually handicapped children. For developing different dimension of adjustment, various types of co-curricular activities like dancing, singing, dramatic, scouting should be provided in their schools.
2. Teachers should create good environment and provide opportunities for better interaction of visually handicapped children with their sighted peers in order to improve adjustment. They should be made to understand that they are not different from sighted but they are just like or even can be more efficient in some activities than any other normal individual.
3. It has been found that boys visually handicapped show better self-concept than that of their girl counterparts. So, teachers and parent should try to develop positive self-concept among visually handicapped children by proper counselling and guidance, so that girls feel themselves at par with boys.
4. Parents should not have guilt feeling and tension towards visually handicapped. They should consider them as sighted, helping them in their cognitive, affective and psychomotor development. This will help them to understand the handicappedness and accept the children as normal children. National Institute for visually handicapped and other major organizations should be encouraged to convene parent's conference for care of blind children at home.
5. The school campus should be reshaped scientifically for the visually handicapped so that they are not deprive of experiences, activities, social acceptance, and social co-operation.

6. There is no need to open new schools for blind children but integrate them with the sighted schools.
7. Various types of seminar, educational programmes and other academic and vocational activities should be included in the school curriculum for visually impaired children.
8. More auditory and tactile aids adaptations should be made to compensate visual defects.
9. To develop the hidden potentiality of visually handicapped children, Government and non-government organizations should implement integrated educational programmes or other programmes for their improvement.
10. Teachers of the blind school should be trained on how to prepare lesson plan in the broader prospect of teaching plan and related aspects.
11. Adequate arrangement should be made to give vocational training to disabled children for making them economically independent.
12. Special schools with hostels should be provided, as far as possible at district headquarters, for handicapped children. But inclusive approach is better for their adjustment in society.
13. Teachers' training programmes should be reoriented according to the requirement of the visually handicapped children.
14. Early detection, diagnosis and intervention are very essential to identify visually handicapped children.
15. The role of the schools is most significant for helping blind students. This should encourage the blind students to take part in various activities and should ensure more facilities for them with the help of social welfare ministry.
16. Social welfare department should play active role for implementation of all government schemes of disabled persons to assist them to secure education which would enable them to earn living and to become useful members of the society.
17. Parental counselling and needed professional and other support would reduce the burden on the parents and family. This would develop effective coping, provide needed services for the betterment of the visually impaired children.

### 10. Suggestions for Further Research

The findings of the present study made the investigators suggest to do further research on the following problems:

1. The present study confirms itself to drawing the sample of the visually handicapped pupils from various residential schools of Assam. A similar study should be conducted by drawing the samples from integrated and inclusive settings of these areas.
2. Similar study may be conducted on students with other disabilities like hearing impaired, learning disabled, locomotors disabled etc.
3. Comparison can be made between visually handicapped students and students suffering from other disabilities i.e. orthopedically handicapped by taking same variables.

4. A study on inter-institutional differences as affecting the psychological make-up of the visually handicapped children may also be attempted.
5. Further research may be conducted on visually handicapped by taking into account other variables like intelligence, interest, attention and motivation, attitude of parents and teachers etc.
6. A comparison can also be made between those visually handicapped children who study in special school and those who study in other schools with normal children.

## Reference

- [1] Advani, K. R. (1965) *Problems-Educational and Psychological of the Blind Children in the Age Group 7 to 21 years*. Ph.D. Dissertation, Bombay University, Bombay.
- [2] Aggarwal, Y. P. (1988) *Research in Emerging Field of Education: Concepts, Trends and Prospects*. Sterling Publishers Private Limited, New Delhi.
- [3] Advani, L. (1992) *Expanding horizons in the education of the visually impaired*, Naseoh News, 20, 5, 15-16
- [4] Agarwal, A. K. (2002) *A Comparative Study of Academic Skills of Visually Impaired Students Studying in Various Educational Settings*. Ph. D Dissertation, Jamia Millia Islamia University, Delhi.
- [5] Aminabhavi, V. L. (1996) A study of adjustment ability of physically disabled and able students, *Journal of Community Guidance and Research*, 13, 1, 13-17.
- [6] Bala, M. (1985) *A Comparative Study of the Mental Make-up and Educational Facilities for Physically Handicapped and Normal Children*. Ph. D. Dissertation. Kurshatra University, Haryana.
- [7] Banerjee, N. (1988) *An Investigation in to the Problems of Adjustment of Blind Students Reading in Secondary Schools West Bengal*. Ph.D. Dissertation, Vishwa Bharti, West Bengal.
- [8] Baker, N.I & Rutherford, A. (1995) Understanding cortical visual impairment in children. *American Journal of Occupational Therapy*, 49, 9, 899-903.
- [9] Bateman, B. (1962) Sighted children's perceptions of blind children's ability. *Journal of Exceptional children*, 29, 42-46.
- [10] Best, John W. (1978) *Research in Education*. Prentice-Hall of India Privat-Limited.
- [11] Bhuyan, P. C. (1991) *Development of Education among the Physically Handicapped Students of Assam since Independence*. Ph. D. Dissertation, Guwahati University. Guwahati.
- [12] Bhargava, A. and B. lavania, (1981) A Comparative study of Personality Characteristics of Sensory Disabled and Normal Children. *Journal of Institute of Educational Research*, 5, 3, 1-5
- [13] Bishop, V. E. (1991) *Preschool children with Visual Impairment*. Springfield'EL: Charles C Thomas.
- [14] Buch, M.B. (Eds.) (1987) *Third Survey of Research in Education* (1978-83). NCERT. New Delhi.
- [15] Buch, M. B. (Ed.) (1991) *Fourth Survey of Research in Education*. NCERT. New Delhi.
- [16] Buch, M. B. (Ed.) *Sixth Survey of Research in Education* (1993-2000) NCERT. New Delhi.
- [17] Baruah, S. K.(Ed)(2012) *Assam Year Book* 2012
- [18] Census Report (2001) *Govt. of India*, Census Commission.
- [19] Chaturvedi, S. (2002) *Psychological Makeup of Visually Impaired Children*. Rajat Publications, New Delhi.p. 2747.
- [20] Cook-clampert, (1981) The development of self-concept in blind children", *Journal of visually impairment and blindness*, vol. 75, 6, pp. 233-238
- [21] Cowen E. L. (1961) *Adjustment to visual disability in adolescence*. American Foundation for the blind, New York.
- [22] Dawn, R. (2005) A comparative study of self-esteem of blind students in integrated and non-integrated school setting. *Journal of Disabilities and impairments*. Vol.19 (2), 129-139
- [23] Devi, K. (1984) *Education for Physically Handicapped Children in Assam*. Ph. D. Dissertation, Guwahati University, Guwahati.
- [24] Deveen, K. (2003) *A Study of Self-Concept and Adjustment Problems of Visually Handicapped Students in Guwahati and Nagaon district of Assam*. Ph. D. Dissertation, Guwahati University, Guwahati.
- [25] Duraiswamy, N. (1984) *A Study of the Attitudes of Resource and Regular Teachers of Integrated Education Programmes in Teaching of Mathematics to Visually Handicapped Children*. M.Ed. Dissertation, Sri Ramakrishna vidyalaya college of education, Coimbatore, Tamilnadu .
- [26] Ebel Obert. L. (1960) *Encyclopedia of Educational Research*, The Macmillan Company. London. p.15, 22.
- [27] *Education and National Development, Report of the Education Commission 1964-66*, New Delhi: NCERT, Encyclopedia of Social Sciences, Vol.1, XI-XII, P376
- [28] Fox, David. (1969) *The Research Process in Education*. Rinehart and Winston Inc, New York, p758.
- [29] Garrett, H. E. (1962) *Statistics in Psychology and Education*. Allied Pacific Private Limited, Bombay.
- [30] Ghai, S. and R. Sen. (1985) Work adjustment and job anxiety of the handicapped in open employment -An Empirical Study. *Indian Journal of Industrial Relation* 32, 56
- [31] Gogoi, A. (1999) *Educational problems of blind children as faced by the teachers of Blind school*. Ph.D. Dissertation, Guwahati University.
- [32] Gupta, H. & Singh, A. (1994) *Status of science teaching in indian schools for the visually impaired children*. School science, vol. 32, 2, pp. 21-23.
- [33] Gupta, P. (1990) *Achievement of Visually Handicapped Children in Special Schools and in Integrated Settings*. Ph. D. Dissertation, Jamia Millai Islami, New Delhi.
- [34] Haider, S. I. (1996) *A Comparative Study of Some Related Psychological Characteristics and Academic Achievement of Blind Children*. Ph. D Dissertation, Guwahati University, Guwahati
- [35] Jaysree, M. (1982) *A comparative study of the mannerist behavior of blind and sighted children*: Manuscript published by National Institute for visually Handicapped, Dehradun.
- [36] Kajjari, J.N. & Khadi, P. B. (1994) Factors influencing study habit and study involvement and blind school



- age children. *Indian Psychological Review* 42, 5, pp. 1-3
- [37] Kar, C. (2003) *Exceptional Children*. Sterling Publishers Private limited, New Delhi.
- [38] Katwal, P. (2008) *Special Education*. Publishers of Scholarly Books, New Delhi.
- [39] Kenmore, J. R. (1965) *Associative Learning by Blind Versus Sighted Children with Words and Objects Differing in Meaningfulness and Identifiably Without Vision*. Ph. D. Dissertation, University of Minnesotan, Arbor.
- [40] Khan, A.H. (1988) *A Study of the Personality, Mutual Perception, Attitude and Vocational Preference of the Blind and the Sighted*. Ph.D. Disseration, Utkal University.
- [41] Koul, L. (2006) *Methodology of Educational Research*, Vikas Publishing House pvt ltd, New Delhi.
- [42] Kundu, C. L. (2000) *Status of Disability in India*. Ministry of Human Resource Development, Govt. of India, New Delhi.
- [43] Lal, A. (1998) *A Study of the Personality, Mutual Perception, Attitude and Vocational Preference of the Blind and the Sighted*. Ph. D. Dissertation. Allahabad University.
- [44] Lata, K. (1985) *Impact of Parental Attitude on Social, Emotional and Educational Adjustment of Normal and Handicapped Students*. Ph. D. Disseration, Agra University.
- [45] Lifshitz, K. (2007) Self-concept, adjustment to blindness, and quality of friendship among adolescents with visual impairments. *Journal of visual impairment and blindness*, 10, 2, 96-107
- [46] Lili, S. (2002) *A Comparative Study of the Scholastic Performance of the Visually Handicapped Pupils Studying under the Integrated System with that of the Normal Pupils in Secondary Schools of Kerala*. Ph. D. Dissertation, University of Calicut.
- [47] Long, R.G. (1995) Housing design and persons with visual impairment. *Journal of Visual Impairment and Blindness*, 89, 1, pp 90-91.
- [48] Mani, M.N.G. (2000) *Inclusive education in Indian context* Coimbatore, International Human Resource Development Centre for the Disabled, Ramakrishna Mission Vidyalaya.
- [49] Mathur, A. (1985) *A Comparative Study of the Adjustment Problems, Level of Aspiration, Self-Concept and Academic Achievement of Crippled Children and Normal Children*. D.Phil. Allahabad University.
- [50] Mathur, M.L. (1985) Meeting the training needs of teachers of the visually handicapped. *International Journal of Education Science*, 21, 11, pp. 65-75.
- [51] Mandaravalli, M.R. (1991) *Cognitive Development of Visually Handicapped children*. Ph. D, Dissertation Mysore University.
- [52] National Policy on Education (1986) *Ministry of Human Resource Development, government of India (Department of Education)*, New Delhi.
- [53] Nair, G. (2006) Welfare of Handicapped. The role of voluntary organization. *The Indian Journal of Public Administration*, 27, No.3 pp.672-678.
- [54] Nutheti.R. (2003) *Relationship between visual impairment and eye diseases and visual function in Andhra Pradesh*. International centre for Advancement of Rural Eye Care (L.V. Prasad Eye institute) Hyderabad.
- [55] Pathak, K. C. (1984) *A Personality Study of Visually Handicapped Persons*. LBMRC Research Newsletter, 9, 1, pp10-19
- [56] Pathak, M. (2004) *A Study on the Problems of blind children in Bihpuria, Assam*. Project Report, Guwahati University, Guwahati.
- [57] Pandey, R. N. (1985) *A Study of Affection Deprivation, Ego-strength and Adjustment Pattern Among Visually Handicapped Children and their Rehabilitation*. Ph. D. Disseration, Bapu Degree College, Pappaganj, Gorakhpur.
- [58] Pathak, A. B. (1984) *A Study of Disabled Children in Normal Schools*. Ph. D. Dissertation, V.B.G.S. Teachers College, Udaipur.
- [59] Prabhakar, S. (1983) *An Experimental Study of Compensatory Effects among the Blind, Deaf and Normal Children*. Ph.D. Dissertation, Department of Psychology, Madras University.
- [60] Prabha, S. (1983) *Education and Adjustment Problems of the Physically Handicapped and a Plan for their Rehabilitation*. Ph. D. Dissertation, Department of Education, Patna University, Patna.
- [61] Pradhan, G. (1994) *Factor Affecting Academic Achievement of Visually Handicapped Children*. Ph. D. Disseration, Jorhat Agriculture University, Assam.
- [62] Pradhan, K.C. (2011) *A Study of Adjustment and Anxiety in Visually Handicapped Male and Female Adolescents in Odisha*. Ph. D Disseration, Rajiv Gandhi University, Arunachal Pradesh
- [63] Rane, A. J. (1983) *Integrated Education of Disabled Children: An Evaluation of the scheme of integrated Education for Handicapped Children Based on a Study of the working of the scheme in Maharashtra*. TISS, Bombay
- [64] Raja, R. (1983) *A Study of the Adequacy of the Orientation and Mobility Programme for the Visually Handicapped Children*. Ph. D. Dissertation, Bharathiyar University, Coimbatore.
- [65] Rastogi, M. O. (1988) *Assessment of Residual Vision and Visual Functions in Literate Visually Handicapped: A psycho-social study*, PGI Chandigarh.
- [66] Rangaswamy, R. & Bhavani, K. (2008) Impact of Disability on the Family and needs of Families of Disabled Children. *Journal of community Guidance Research*, 25, 1 pp. 121-130
- [67] Rajkhowa, P. (2003) *A Study on the Blind Institution of Jorhat*. Ph. D. Dissertation, Dibrugarh University, Assam.
- [68] Saha, G.B. (1984) *An Experimental study of the Facial Expressions of Emotion of the Blind person*, Ph.D. Dissertation, Department of Education, Kurukshetra University.
- [69] Sankar, U. (1976) *Exceptional Children*. Sterling Publishers Pvt Ltd. New Delhi.
- [70] Sarma, M. G. (2004) *An Analytical study on the Growth and Development of Special Education in Assam*, Ph. D. Disseration, Department of Education, Dibrugarh University, Assam.

- [71] Saikia, J. (2004) *A Study on the Problems in Educating the Physically Challenged Children in the Special School*. Project Report, Department of Education, Guwahati University, Guwahati.
- [72] Singh, A. K. P. & Singh. R. P. (1971) *Manual for Adjustment Inventory*, National Psychological Corporation, Agra.
- [73] Singh, C. (1998) *Behaviorally Disordered Students in Primary Schools of Great Guwahati*. Ph. D. Dissertation. Guwahati University, Guwahati.
- [74] Singh, R. P. (1987) *Evaluation of Integrated Educational Facilities for Physically Handicapped in the Schools of Bihar*. Ph. D. Dissertation. Department of Education, Patna University.
- [75] Soni, R. (2002) *A Study of Influence of Parental Attitude on the Self-concept of Visually Impaired Children*. Ph. D Dissertation, Jamia Millia Islamia University, Delhi.
- [76] Rajkhowar Suresh, (2012) "A Study of Adjustment, Level of Aspiration, Self-Concept and Academic Achievement of Visually Handicapped School Children of Assam" An Unpublished Doctoral Thesis, Deptt. of Education, Rajiv Gandhi University, Arunachal Pradesh.
- [77] Rajkhowar Suresh, Soni, J.C & Dutta Jadab, "A Study of Adjustment, Level of Aspiration, Self-Concept and Academic Achievement of Visually Handicapped School Children of Assam" *International Journal of Development Research*, ISSN: 2230-9926, vol. 4, Issue. 4, pp. 902-907.
- [78] Talukdar, D. (2003) *Problems of visually impaired children and existing educational facilities in Assam with special reference to Guwahati blind school*. Abstract of North East India Education Society, Twelfth Annual Conference 6th-7th march. 2003. Deptt. of Education Arunachal University, Arunachal.
- [79] Vaidya, S. (1955) *The Study of the Daily Living Skills of the Visually Handicapped and sighted children*. Ph. D Dissertation, Ramakrishna mission Vidyalaya College of Education, Coimbatore, and Tamilnadu.
- [80] Venkat, H. L. and Krishnamurthy, N. (2007) Behavior and adjustment of visually impaired children. *Journal of community Guidance & Research* 24, 3 pp. 308-315
- [81] Williams, K. E. *A Study of Adjustment of the Blind and Deaf students in Standard V, VI, & VII of Special Schools in Karnataka*, Horizen college of Education, Bangalore, Third survey of Research in Education MB Buch, NCERT. New Delhi.
- [82] Wilson, J.F. (1948) Adjustment to blindness. *British Journal of Psychology*. 60, 10, 307-331.
- [83] Zaidi, D. M. (1990) General anxiety of visually handicapped children in relation to their genders. *Journal of Disability and Impairment* 4, 1, 78-82