



LEARNING PROCEDURES OF SPECIAL CHILDREN (HEARING IMPAIRED PUPILS) IN SECONDARY SCHOOLS

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ABSTRACT

The present study is concerned with the Learning procedures of the Hearing impaired students studying in Special Schools. It also examines the main variables such as Gender, Residential place, Medium of learning, type of school & their influence on the learning procedures of special children. The population of present study is inclusive of only Hearing Impaired pupils of special schools for the Deaf. For the present study the investigator has taken up a stratified random sample of 200 Hearing Impaired pupils of classes IX and X from five special schools for the Deaf in Andhra Pradesh. 26 item questionnaire is attached with three point rating scale for each item Many times; Few time and Never. It includes 24 positive statements and 02 negative statements. The researcher thought that normative survey method is suitable to collect data through questionnaires on learning procedures of Hearing Impaired pupils. The statistical techniques are employed objectively. The scores were compared variable wise to find out if there is any significant variation. The sample of the Hearing impaired is found having good level of learning procedures. These findings suggest a need to take into consideration this developmental milestone in any educational and clinical evaluation of Hearing impaired children with and/or at risk to have learning.

Keywords :Hearing Impaired pupils: Hearing impaired pupils are those studying IX and X classes in special schools., **Learning Procedures:** Attempts of the Hearing Impaired pupils to understand through reading, teacher's help, and activities performed and so on to learn.

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INTRODUCTION

Education is a powerful instrument of social change, and often initiates upward movement in the social structure. Education for all is the main theme of the nations; In the Indian context, Education for All (ELL) would imply expansion of early childhood care and development activities including family and communities, especially for poor, disadvantaged and children. Providing education to Hearing Impaired children is a noble task. There is a great need to study the learning Procedures of the Hearing Impaired students. Hearing is one of the most important variable held in high esteem in all cultures, countries and times. Hence, the research related to the area of learning procedures of Hearing Impaired pupils studying in Special Schools is an ever growing concern of the researchers, educationalists and administrators.

STATEMENT OF THE PROBLEM

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Learning is an active and interactive process. The Hearing Impaired pupils with the loss of one sense organ may have to struggle to comprehend what is being taught in the class room and what is being conveyed through oral communication .It also intends to find out whether they are independent in reading and comprehending the subjects or developing dependence on the teachers and class mates .It includes their extent of participation in curricular and co –curricular programmes. Hence the investigator intense to find out the ways of learning of the hearing impaired pupils.

OBJECTIVES OF THE STUDY

1. To find out the learning procedures of the Hearing impaired pupils in Secondary Schools and classify them.
2. To find out the influence of the following variables on the learning procedures of Hearing Impaired pupils.
 - a) Gender
 - b) Residential Place
 - c) Medium of Learning
 - d) Type of School.
3. **Hypotheses of the study**
4. There would be no Significant difference between the Hearing Impaired Boys and Girls in their learning procedures
5. There would be no significant difference between Rural and Urban Hearing Impaired pupils in their learning procedures
6. There would be no significant difference between English and Telugu medium Hearing Impaired pupils in their learning procedures.
7. There would be no significant difference between the Government and Private school Hearing Impaired pupils in their learning procedures

METHODOLOGY IN BRIEF

The researcher thought on that normative survey method is suitable to collect data through questionnaires on learning procedures of Hearing Impaired pupils. The scores were compared variable wise to find out if there is any significant variation.

Tool:

The 26 item questionnaire is attached with three point rating scale for each item many times; few times and Never. It includes 24 positive statements and 02 negative statements. The subjects were to be asked to put (√) mark on the appropriate statement in one of these responses without any bias. The total marks allotted to this test are 78 (26 x 3M).

Scoring of responses is done in the following way:

Type of statement	Many times	Few times	Never
Positive	3	2	1
Negative	1	2	3

Details of the type of statements in the questionnaire for Hearing Impaired pupils

S.NO	Type of statements	Statement No's	Total No. of Statements
1	Positive	1,2,3,4,5,6,7,9,10,11,12,13,15,16,17,18,19 20,21,22,23,24,25,26.	24
2	Negative	8, 14	02

RELIABILITY AND VALIDITY:

Reliability of the test:

Correlation was found for odd and even items of the test and it was 0.989

Spearman brown proficiency formula was applied to find reliability

$$r_{11} = \frac{2 \times r \times \frac{1}{2} \times \frac{1}{2}}{1 + r \times \frac{1}{2} \times \frac{1}{2}} = \frac{2 \times 0.989}{1 + 0.989} = \frac{1.978}{1.989} = \mathbf{0.9944}$$

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The test is found highly reliable. The reliable test is said to be valid

EMPIRICAL VALIDITY:

The correlation coefficient gives the relationship between obtained scores and their theoretical true counter parts. The reliability coefficient of a test is 0.9944

$$\begin{aligned} \text{Validity value} &= \sqrt{0.9944} \\ &= 0.9971 \end{aligned}$$

Thus the test is found valid .

SAMPLE SELECTED FOR THE STUDY The population of present study is inclusive of only Hearing Impaired pupils of special schools for the Deaf. For the present study the investigator has taken up a stratified random sample of 200 Hearing Impaired pupils of classes IX and X from five special schools for the Deaf in Andhra Pradesh.

Sample size and school wise list

S.No	Name of the school	Type of school	Residential place	Medium of learning	Class	Gender		Total
						Boys	Girls	
1	Madonna special school for the Deaf, Vijayawada.	Private	Urban	English	IX	17	14	31
					X	10	10	20
2	Deaf and Dumb school, Mustafa nagar, Khammam.	Private	Rural	Telugu	IX	08	09	18
					X	09	10	19
3	S.M High school for Deaf, Dornakal.	Government	Rural	Telugu	IX	12	10	22
					X	10	10	20
4	Govt Residential school for the Deaf, Bapatala.	Government	Rural	Telugu	IX	11	10	21
					X	16	10	26
5	Govt High school for the Deaf and Dumb Malkpet, Hyderabad.	Government	Urban	Telugu	IX	06	06	12
					X	03	09	12
Total						102	98	200

Objective wise analysis:

Objective 1: To find out the learning procedures of special children (Hearing impaired pupils) in Secondary Schools and classify them

The data are analyzed to find out the Mean, Standard deviation of the total sample. Then the pupils are classified into categories pertaining to their learning procedures and tabulated

The Mean and S.D of total sample of Hearing Impaired pupils learning procedures

Sample	Mean	S.D	1/5 of Mean
200	60.025	5.1854	12.005

Observations: From the above table the following observations can be made.

The total number of sample is 200, their mean is 60.025 and S.D is 5.1854.

Interpretation: As the mean value is 60.025 and it falls in the middle category, the sample of the hearing impaired is found to have good level of learning procedures.



The sample is found homogenous in their learning procedures as this S.D value is less than one fifth of the mean value .

Hearing Impaired pupils learning procedures – comparison with Normal Distribution of total sample.

S.No	Limits of normal distribution	Frequency	Percentage	Normal Distribution
1	$\leq M - 1S.D$	31	15.5%	15.87
2	In-between $M \pm 1S.D$	129	64.5%	68.26
3	$\geq M + 1 S.D$	40	20%	15.87

Observations and interpretations:

The observed value of 15.5% is the distribution of the pupils in the range $\leq M - 1S.D$ which is more or less equal to the normal distribution value.

The observed value of 64.5% is the distribution of the pupils in-between $M \pm 1 S.D$ which is less than the normal distribution value.

The observed value of 20% is the distribution of the pupils in the range $\geq M + 1 S.D$, which is more than the normal distribution value.

5.2.1 Classification of pupils

It is done on the basis of learning procedures of Hearing Impaired pupils. The minimum possible score is 26 and the maximum possible score is 78. The Range is 78. It is divided into three classes starting with Poor, Good and ending with the Best.

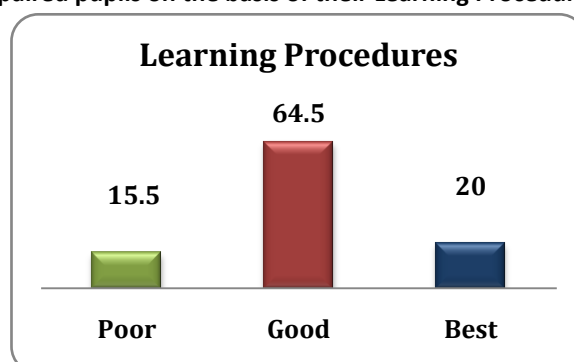
Classification of the Hearing Impaired pupils on the basis of learning procedures

Category	Scale	No. of pupils	Percentage
Poor	Below 55	31	15.5%
Good	55 – 65	129	64.5%
Best	Above 65	40	20%

Observations: From the above table the following findings are made: Nearly 15% of the pupils fall under Poor category, 64% of the pupils fall under Good category and only 20% of the Hearing Impaired pupils are the best in their learning procedures

Interpretation: Most of the Hearing Impaired pupils nearly 64.5% of them have Good level of learning procedures, 15.5% of pupils have poor level of learning procedures and 20% of the Hearing Impaired pupils have the best level of learning procedures.

Classification of Hearing Impaired pupils on the basis of their Learning Procedures



OBJECTIVE 2. To find out the influence of Gender on the learning procedures of Hearing Impaired pupils.

HYPOTHESIS 1: There would be no Significant difference between the Hearing Impaired Boys and Girls in their learning procedures



Influence of gender on the Learning Procedures of the Hearing Impaired pupils

Gender	N	Mean	S.D	Difference in Mean	t-Value
Boys	102	60.36275	4.4249	0.4953	0.6684
Girls	98	59.8673	5.9180		

Table values at 0.05 level: 1.97- Level: 2.60

Observation : From the above table the following observations could be made

The mean of 102 Hearing Impaired Boys is 60.36275 and S.D is 4.4249.

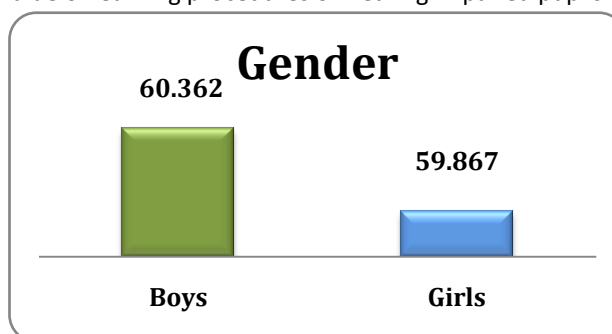
The mean of 98 Hearing Impaired Girls is 59.8673 and S.D is 5.9180.

Difference in Mean is 0.4953

t-Value is 0.6684

Interpretation of results: From the above results it can be concluded that t-value is not significant at any level. Hence gender doesn't have any influence on the learning procedures of hearing impaired pupils as there is no significant difference between the learning procedures of boys and girls.

Graph 5.2: Gender wise value of learning procedures of Hearing Impaired pupils.



Discussion : irrespective of Gender all the hearing impaired pupils had the similar learning procedures as their cognitive capabilities are to be exercised to learn the content meant for them

OBJECTIVE 3: To find out the influence of residential place on the learning procedures of the Hearing Impaired pupils.

HYPOTHESIS 2 : There would be no significant difference between rural and urban Hearing Impaired pupils in their learning procedures

Influence of residential place on the Learning Procedures of the Hearing Impaired pupils

Residential place	N	Mean	S.D	Difference in Mean	t-Value
Rural	125	60.823	4.8743	2.1307	2.7863
Urban	95	58.6933	5.4485		

Table values at 0.05 levels: 1.97 0.01 level: 2.60

Observation: From the above table the following observations could be made

The mean of 125 Hearing Impaired pupils of Rural locality is 60.823 and S.D is 4.8743.

The mean of 95 Hearing Impaired pupils of Urban locality is 58.6933 and S.D is 5.4485 .

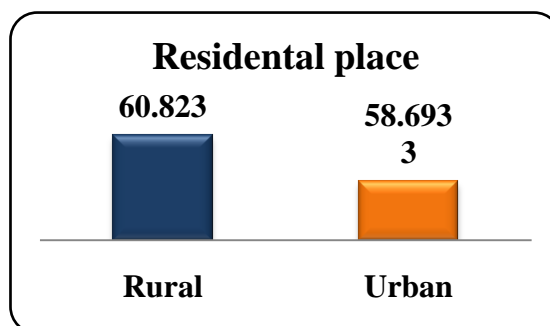
Difference in Mean is 2.1307

t-Value is 2.7863

Interpretation: t-value shows significant difference between the urban and rural hearing impaired pupils in their learning procedures. Rural hearing impaired pupils are found to have significantly better learning procedures compared to the urban pupils.



Influence of Residential place on the Learning Procedures of the Hearing Impaired pupil



Discussion: Hearing impaired rural pupils are significantly better than their counter parts, as it is a special facility for them. In the less facilitative rural conditions, they may be utilizing special school opportunity with all interest and conscious effort to achieve well.

OBJECTIVE 4. To find out the influence of medium of school on the learning procedures of the Hearing Impaired pupils.

Hypothesis 3 There would be no significant difference between Telugu and English medium Hearing Impaired pupils in their learning procedures.

Influence of Medium of school on the Learning Procedures of Hearing Impaired pupils

Medium of school	N	Mean	S.D	Difference in Mean	t-Value
Telugu	149	61.1275	4.8215	4.3236	0.4599
English	51	56.8039	4.8990		

Table values at 0.05 level: 1.97

0.01 level:2.60

Observation: From the above table the following observations could be made

The mean of 149 Hearing Impaired pupils in Telugu Medium special schools is 61.1275 and S.D is 4.8215.

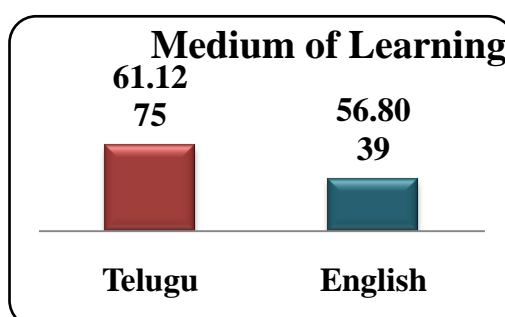
The mean of 51 Hearing Impaired pupils in English Medium special schools is 56.8039 and S.D is 4.8990.

Difference in mean is 4.3236

t-Value is 0.4599.

Interpretation: t-value is showing no significant difference between the Telugu and English medium hearing impaired pupils at any level. Hence the medium of instruction is found not having any influence on the learning procedures of hearing impaired pupils.

Influence of medium of school on the learning procedures of Hearing Impaired pupils



Discussion: Medium of instruction did not have any significant influence on Hearing Impaired pupils because the content they have to learn is not different and the learning procedures thus may not significantly differ.



Objective 2.4 To find out the influence of Type of school on the learning procedures of the Hearing Impaired pupils.

Hypothesis 4 There would be no significant difference between the Government and Private school Hearing Impaired pupils in their learning procedures

Influence of Type of school on the Learning Procedures of the Hearing Impaired pupils

Type of school	N	Mean	S.D	Difference in Mean	t-Value
Government	113	60.6902	4.9300	1.5293	2.0621
Private	87	59.1609	5.4064		

Table values at 0.05 level:1.97

0.01 level:2.60

Observation: From the above table the following observations could be made

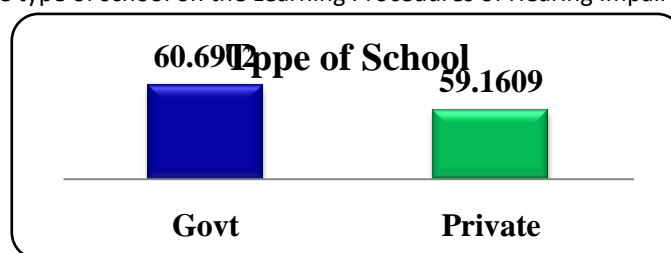
The mean of 113 Hearing Impaired pupils of Government schools is 60.6902 and S.D is 4.9300.

The mean of 87 Hearing Impaired pupils Of Private schools is 59.1609 and S.D is 5.4064 .

Difference in Mean is 1.5293

t-Value is 2.0621

Interpretation: t-value is found significant only at 0.05 but not at 0.01 level. The Hearing Impaired pupils of the Government schools are found significantly better in learning procedures compared to the private school pupils. Influence of the type of school on the Learning Procedures of Hearing Impaired pupils



Discussion: Hearing impaired pupils of government schools were significantly better than the pupils of private schools because the government schools employ well trained and selected teachers. Hence the guide lines the pupils receive in the government schools might be facilitating better learning procedures.

Table 5.6: Hypotheses testing

S.No	Hypotheses	Value obtained	Table values	Status of hypothesis
1.	There would be no Significant difference between the Hearing Impaired Boys and Girls in their learning procedures	t-value 0.6684	0.05 level 1.97 0.01 level 2.60	Hypothesis is accepted.
2.	There would be no Significant difference between Rural and Urban Hearing Impaired pupils in their learning procedures	t-value 2.7863	0.05 level 1.97 0.01 level 2.60	Hypothesis is rejected
3.	There would be no Significant difference between English and Telugu medium Hearing Impaired pupils in their learning procedures.	t-value 0.4599	0.05 level 1.97 0.01 level 2.60	Hypothesis is accepted

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4.	There would be no Significant difference between the Government and Private school Hearing Impaired pupils in their learning procedures.	t-value 2.0621	0.05 level 1.97 0.01 level 2.60	Hypothesis is rejected at 0.05 level.
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MAJOR FINDINGS OF THE STUDY:

1. The sample of the Hearing impaired is found having good level of learning procedures.
2. Most percentage of the sample is found having good level of learning procedures and least percentage is found having poor level of learning procedures.
3. Gender, Medium of learning are found not having any significant influence on the learning procedures of hearing impaired pupils.
4. Residential area is found having significant influence on the learning procedures of hearing impaired pupils .Rural pupils are found significantly better than the urban hearing impaired pupils.
5. Type of school is found having significant influence on the learning procedures of hearing impaired pupils. The Government school pupils are found having significantly better learning procedures than the private school pupils.

SUGGESTIONS TO TEACHERS:

1. Teachers have to develop empathy and patience while teaching and interacting with hearing impaired.
2. Teachers have to explain through sign language to reach the hearing impaired so that they can understand well.
3. Teachers have to direct and encourage to use dictionary to understand new words.
4. Teachers have to encourage note taking of important points while reading and also during the class. They have to allow time to take notes.
5. Teachers have to perceive the hearing impaired to answer their questions with pleasant and patient expectations from them.

SUGGESTIONS TO PARENTS

1. Ensure hearing aids are used by the child.
2. See to it that the hearing aids are functioning optimally.
3. Talk to the child most naturally preferably in a slightly slower manner ensuring that the child is looking at you.
4. Consciously label the things around him.
5. Converse on all the incidents and activities going around him.

EDUCATIONAL IMPLICATIONS & CONCLUSIONS:

Hearing Impaired can think, feel, act and use other cognitive facilities like normal children through them are defective in audition. If they are directed by concern teachers in curricular aspects they can have academic excellence.

It is noteworthy that the government institutions are appointing specially trained teachers to educate hearing impaired who are encouraging them to follow good learning procedures. Even the private institutions have to employ well trained teachers especially to meet hearing impaired education so that the hearing impaired pupils can better guided in the learning procedures. Appropriate learning procedures followed by the hearing impaired can support their comprehension and performance.

BIBLIOGRAPY

- [1]. Alejandra zuluuga candamil, Jorge Augus to Ramirez Moreno (2010). A study on the description of English Methodology received by hearing impaired learners.Licenciatura en Ensenanza de la Lengua Inglesa Universidad Technologica de Pereira .January 27,2010.

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A Peer Reviewed (Refereed) International Research Journal

Homepage:www.ijless.kypublications.com



- [2]. Anupama (2003) "Scholastic achievement of V class hearing impaired students in relation to certain personal factors".In M.sp.Ed.,(H.I)dissertation The academic performance of VII class H.I students of Telanga Region in relation to their certain personal factors by Sreedevi k 2004 Dept of Education , Sri Padmavathi Viswa Vidhyala, Tirupati P.38.
- [3]. Devi prasamishra (1993) "Self-concept and academic achievement of Hearing impaired children".Educational review 1993,Vat XCIX No3,P.13-15.
- [4]. Elizabeth mira hodes (2004). Learning styles in deafblind children; perspectives from practice . Ph.d. Thesis, university of Birmingham.
- [5]. English,K.M.(2002) "Counseling children with hearing impairment and their families". Boston:Ally and Bacon.
- [6]. Holt ,J,Hotto,S and Cole,K(1994)"Demographic aspects of hearing Impairment":Question and answers . center for Assessment and Demographic studies :Gallaudet university, 3,1-14
- [7]. Jankowski,K.A (1997)"Deaf empowerment: emergence, struggle, and rhetoric".Washington ,D.C:Gallandet University Press.
- [8]. Jayawant, Meenal and phatak pramila ,did in 1995 "An exploratory study of deaf children in integrated unit of normal schools".Vol .9(1),21-29
- [9]. Ladd, paddy (2003). "Understanding deaf culture: In search of deaf hood".Tonawanda, Ny: Multilingual Matters Ltd.
- [10]. Latkar,A.D (2001) Writing difficulties faced by hearing impaired students in higher primary IED and special schools in Mysore City.,M.Ed ; dissertation, university of Mysore, Mysore .
- [11]. Mandke. Kalyani (1991) "The effect of single modality stimulation upon speech and language development of hard of hearing children". Fifth survey of educational research 1988-92. Abstract Vol II. P.No 1554-55
- [12]. Marschark M (2007) Raising and educating a deaf child : A comprehensive guide to choices, controversies, and decision faced by parents and educators .(2nd ed.), Newyork: Oxford university press.
- [13]. Mitchell, T.V., & Quittner,A.L.(1996) "Multi method study of attention and behavior problems in hearing-impaired children". Journal of Clinical Child Psychology,25(1),83-96.
- [14]. Pathak,Shubha (1996) "Mental ability of deaf children and their educational problems" .Indian educational review .Vol 31(1), 191-199.
- [15]. Ramacharya,A. (1994) conducted the study on " Integrated Education for the children with special needs", paper presentation in S.R.C., Hyderabad ,P. 19-21 .
- [16]. Schirmer B.R (2001) " Psychological, social, and educational dimensions of deafness".Needham Heights, MA:Allyn and Bacon.
- [17]. Sharma Premalata (1990) . "Impact of adaptation of instructional material on science concept learning by deaf children from IED and special schools at RCE, Mysore, unpublished M.Ed; Dissertation June, 2002 P.21.
- [18]. Terwogt,M.M & Rieffe,C (2004)"Behavioral problems in deaf children" :Theory of mind delay or communication failure .European Journal of Developmental Psychology, 1(3),231-240.
- [19]. Vijayasree (1997) " Development of self instructional material of VIII class hearing impaired students in Natural science".PhD.,thesis, SPMVU, Tirupati, P. 161-165
- [20]. VIMALA DEVI, P. (1999). "Strategies Principles to develop reading skill in Hearing Impaired Children at High School Level."
- [21]. Yoshinaga Itano,C and Apuzzo,M (1998)"The development of Deaf and Heard of Hearing children Identified Early through the high risk registrating" American Annuals of the Deaf, Vol.143,P.416-424.