

Psychological Problems among Hearing Impaired Adolescent Studying in Selected Special Schools: A Descriptive Study

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Abstract: *Objectives:* 1) To assess Psychological Problems among Hearing impaired adolescent studying in selected special schools of the city. 2) To find out the association between Psychological problems among hearing impaired adolescent with selected demographic variables. *Methodology:* Non experimental descriptive design used for the study. It was conducted over 100 Hearing impaired adolescent by using Non probability Purposive sampling technique. *Results:* Assessment was done by using Rating Scale to assess Psychological problems. Analysis showed that 40% of the adolescent had mild level of psychological problems, 59% of them had moderate level of psychological problems and only 1% of the adolescent had severe level of psychological problems. Mean psychological problem score was 107.53 ± 22.22 and mean percentage of psychological problems score was 59.73 ± 12.34 . Mean psychological problem score for the area wise distribution was, for anxiety it was 35.06 ± 8.68 , for aggression it was 35.67 ± 7.91 for frustration it was 36.80 ± 7.53 . *Conclusion:* Analysis reveals that in overall association there is association of psychological problem score with age, religion, area of residence, monthly family income (Rs), education of students. In anxiety there is association of psychological problem score with age, religion, area of residence, education of students. In aggression there is association of psychological problem score with age, religion, education of students. In Frustration there is association there is association of psychological problem score with age, religion, area of residence, Education of students. While none of the other variables were associated with psychological problem score.

Keywords: "Psychological problems", "Hearing impaired", "Adolescent", "Special Schools"

1. Introduction

Adolescent are young people. It is transitional stage of physical, physiological and psychological development of adolescent. It starts from puberty to legal adulthood.¹ World health organization defines an adolescent whose age is between 12 to 19.² Adolescent faces many health care issues like Injuries, federal problems, Infections, deep rooted affection, Skin disorder and many more. With these health issues they also face Psychological problem. In the stage of puberty there are many changes occur in adolescent it may be physical and psychological, and due to this change child get disturbed emotionally. The adolescents usually feel insecure because they are internally disorganized. He covers his inadequacy by loud behavior and aggression. He has strong sexual and aggressive desire, but he cannot control his impulses abundantly due to this inadequacy he may develop Anxiety disorder, Depression, Aggression etc³

Hearing impairment stated that complete or partial loss of hearing in one or both ears. Adolescents with hearing impairment have communication problem and lack of vocabulary. And leads to become socially isolated and aggressive because they cannot express their feelings. In development of behavioral control and Psychological problem, the main cause is problem in language and communication as said by developmental theory.⁴

Researcher conducted a research in this he mainly focus to show prevalence of psychological difficulties among hearing impaired children. He found that 20% to 50% children are suffering from hearing loss. After tested this tool he found

that the prevalence of psychological problem was 3.7 times greater than normal children. It concluded that there is a relation between language and psychological difficulties if there is a good oral language then there is no higher level of psychological problem.⁵

2. Background

A person who is not able to hear as well as someone with normal hearing with hearing thresholds of 25 db or better in both ears is said to have hearing loss. It may be mild, moderate, severe, or profound. It can affect to one ear or both ears, and it leads to difficulty in hearing conversational speech or loud sounds.⁶ In all over population of world there are 5% or 466 million people has disabled by hearing loss in that 432 million are adults and 34 million are children's. In 2050 there will be chances of hearing disability over 900 million people or one in every ten people. Due to noise pollution mainly in recreational setting about 1.1 billion young people are at risk of hearing loss. In India, The "hearing handicapped as per defined by the Rehabilitation Council of India Act., 1992, A person with hearing levels of 61–70 dB, is although suffering from severe hearing impairment.⁷ In India there are various studies are conducted on hearing impairment but done so far and today we have need to be done in future are the highlights of this paper.⁸

3. Need of the study

Hearing impairment is a disability that can latency lead to the development of psychopathology. Hearing - impaired

adolescents suffered from different psychopathology in various forms but its causes are not clear, because of this unclear causes we are not able to give proper intervention and for this knowledge is essential to reorganization of cause and its treatment. Hearing Impairment is chronic disability or condition involving many people all - around the world. India is one of the country to have many patients with this disability. Hearing impairment can cause many psychological problems. Many studies have conducted and stated that there are many psychological problems present in hearing impaired individual. For gaining the knowledge and its treatment, we have to assess the psychological problem. On the basis of previous studies Investigator would like to do further assessment of psychological problem in hearing impaired adolescent especially who is studied in special school for their disability.

a) Title:

Psychological problems among hearing impaired adolescent studying in selected special schools: A Descriptive Study

b) Objectives:

Primary Objective:

To asses Psychological Problems among Hearing impaired adolescent studying in selected special schools of the city.

Secondary Objective:

- To asses Psychological Problems among Hearing impaired adolescent studying in selected special schools of the city.
- To find out the association between Psychological problems among hearing impaired adolescent with selected demographic variables.

c) Operational Definition:

Psychological Problem:

In this study Psychological problem means Anxiety, Aggression, and Frustration.

Hearing impaired:

In this study Hearing impaired means The adolescent who do not able to hear properly without hearing aid.

Adolescent:

In this study Adolescent means the children whose age group is in between 12 to 18 year.

School:

In this study it means a special school for hearing impairment.

d) Assumptions:

- Hearing impairment may cause psychological problem.
- There may be psychological problems present in hearing impaired adolescent.
- There may be association in between psychological problem with their demographic variables.

e) Limitations:

The study is limited to:

- The study was not interventional study only to assess the Psychological problems among hearing impaired adolescents.
- The study was conducted only on Hearing impaired adolescent.
- Only special school were selected for the study.
- Adolescent who using hearing aid only.

f) Ethical Aspect

The study was approved by the institution ethical committee and the study will be conducted in accordance with the ethical guidelines prescribed by central ethical committee on human research. The ethical consideration for the study was to check that the study applicable in the old age home and assessed the subjects is protected from any physical, psychological and emotional harm.

g) Review of Literature

In the present study, the review of literature is organized under following headings:

- Literature related to Hearing Impairment in adolescents.
- Literature related to Psychological problem in adolescents.
- Literature related to Psychological problem in Hearing Impaired adolescents.

h) Conceptual Framework:

The conceptual framework used for the present study is developed from the health belief model.

4. Methodology

- 1) **Research approach** - Quantitative research approach
- 2) **Research design** - Non - experimental descriptive research design
- 3) **Setting of the study** - The study is conducted in Selected special schools of the city.
- 4) **Research variable** - Assess the psychological problems among hearing impaired adolescent.
- 5) **Demographic variables** - Age, gender, religion, type of family, area of residence, monthly Income, education of parents, education of students.
- 6) **Population** -
 - Target population:* It includes Hearing Impaired Adolescents
 - Accessible population:* In this study accessible population is consists of Hearing impaired adolescents studying in special schools and is available at the time of data collection.
- 7) **Sampling** -
 - *Sample size:* 100 Hearing impaired adolescent.
 - *Sampling technique:* Non probability Purposivesampling technique
- 8) **Sampling criteria** -
 - a) Inclusion criteria:*

In this study, inclusion criteria was adolescent who are,

 - Having Hearing Impairment.
 - Attaining special school for hearing impairment.
 - Age group is 12 to 18
 - Available at the time of data collection.

b) *Exclusive criteria:*

Students who are,

- Not using hearing aids.
- Not willing to participate.

9) *Description of Tools -*

- Section I - Semi structured questionnaire of demographic variables
- Section II - Rating Scale to assess Psychological problems.

10) *Validity -*

To obtain content validity of the tool, the prepared tool with synopsis, Evaluator’s response sheet and content validity certificate was submitted to 25 experts in the field. The experts include 13 from psychiatric (mental health) nursing specialty, 1 Psychiatrist from psychiatry departments, 1 expert from Clinical Psychology, 1 expert from Social work, and 1 expert from English literature. 17 validated content of the tools were received from the above listed experts with their valuable suggestions and comments.

11) *Reliability -*

In this study, by using Guttman Split Half method of reliability, it was found to be 0.8770 and hence tool is reliable and valid.

12) *Pilot study -*

It was conducted on 10 Hearing impaired adolescent and collected data was coded, tabulated and descriptive and inferential statistics used to analyze. The pilot study was feasible in term of time, money and resources.

13) *Data collection -*

The main study data was gathered from 28/12/2020 to 16/01/2021 Permission from the principal was taken before conducting the study. The investigator introduced her and explained the purpose of the study and consent was obtained. The questionnaires were distributed to the samples with the help of Google form and collected back after 1 hour. The questionnaires were completed in the presence of the investigator to avoid contamination and bias in the collection of data.

5. Results

Section I: Distribution of subject with regards to demographic variables in terms of frequency and percentage.

Table 1: Percentage wise distribution of adolescents according to their demographic characteristics, n=100

Demographic Variables	Frequency (f)	Percentage (%)
1. Age (yrs)		
12 - 14 yrs	33	33
14 - 16 yrs	31	31
16 - 18 yrs	36	36

Table 3: Item wise assessment with level of Psychological problems, n=100

Item	N	Minimum	Maximum	Mean	Std. Deviation	Mean %
Anxiety	20	20	52	35.06	8.68	58.43
Aggression	20	20	53	35.67	7.91	59.45
Frustration	20	21	49	36.80	7.53	61.33

2. Gender		
Male	52	52
Female	48	48
3. Religion		
Hindu	65	65
Muslim	3	3
Christian	3	3
Buddhist	15	15
Other	14	14
4. Type of family		
Nuclear	26	26
Joint	62	62
Extended	12	12
5. Area of residence		
Urban	45	45
Urban Slum	35	35
Rural	20	20
Monthly family income (Rs)		
<10000 Rs	12	12
10001 - 15000 Rs	50	50
15001 - 20000 Rs	37	37
≥ 21000 Rs	1	1
Education of parents		
Primary	3	3
Secondary	27	27
Higher Secondary	44	44
Graduation	18	18
Post Graduation	8	8
Other	0	0
Education of students		
Primary	36	36
Secondary	39	39
Higher Secondary	25	25

Section II: Description of subject with regards to assessment of level of psychological problems among hearing impaired adolescent studying in selected schools of the city

Table 2: Assessment with level of psychological problems, n=100

Level of psychological problems	Score Range	Level of Psychological Problems	
		Frequency (f)	Percentage (%)
Mild	60 - 100	40	40
Moderate	101 - 140	59	59
Severe	141 - 180	1	1
Minimum score		69	
Maximum score		144	
Mean score		107.53 ± 22.22	
Mean % Score		59.73 ± 12.34	

Section III: Description of subject with regards to area wise distribution with level of psychological problem

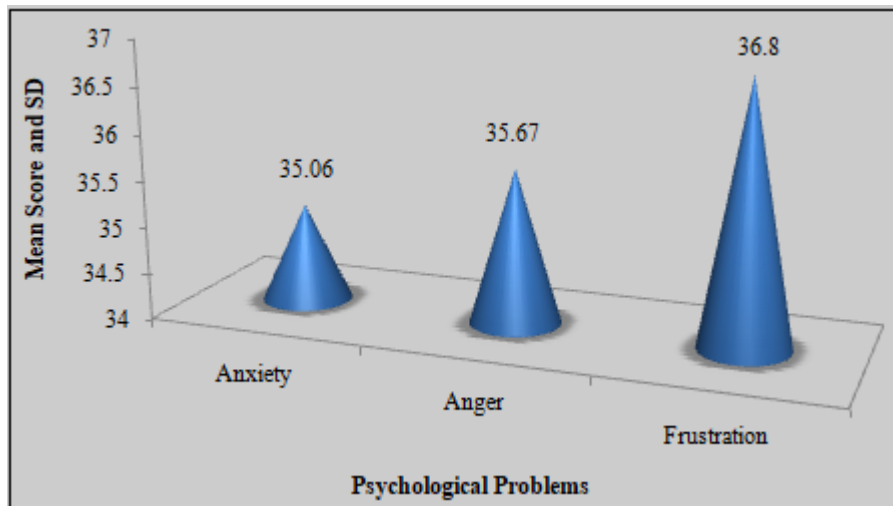


Figure 1: Conical bar diagram representing area wise assessment with level of psychological problems

Section IV.1: Description of subject with regards to association of level of psychological problems among hearing impaired adolescent studying in select schools of the city in relation to demographic variables (overall)

Table 4: Association of Psychological problems among adolescent with demographic variables (overall), n=100

SR. NO	Demographic Variables	Calculated value			DF	Table value	Level of significance	Significance
		t- value	F-value	P- value				
1.	Age (yrs)	-	36.91	0.0001	2, 97	3.07	p<0.05	S
2.	Gender	0.70	-	0.48	98	1.98	p>0.05	NS
3.	Religion	-	7.53	0.0001	4, 95	2.45	p<0.05	S
4.	Type of family	-	1.47	0.23	2, 97	3.07	p>0.05	NS
5.	Area of residence	-	3.88	0.024	2, 97	3.07	p<0.05	S
6.	Monthly family income (Rs)	-	3.63	0.016	3, 96	2.68	p<0.05	S
7.	Education of parents	-	1.15	0.33	4, 95	2.45	p>0.05	NS
8.	Education of Students	-	17.35	0.0001	2, 97	3.07	p<0.05	S

S - Significant NS - Non Significant

Section IV.2: Description of subject with regards to association of level of psychological problems among hearing impaired adolescent studying in select schools of the city in relation to demographic variables (Anxiety)

Table 5: Association of Psychological problems among adolescent with demographic variables (Anxiety), n=100

S. No	Demographic Variables	Calculated value			Df	Table value	Level of Significance	Significance
		t- value	F- value	P- value				
1.	Age (yrs)	-	41.14	0.0001	2, 97	3.07	p<0.05	S
2.	Gender	0.45	-	0.64	98	1.98	p>0.05	NS
3.	Religion	-	5.22	0.001	4, 95	2.45	p<0.05	S
4.	Type of family	-	1.03	0.36	2, 97	3.07	p>0.05	NS
5.	Area of residence	-	3.19	0.015	2, 97	3.07	p<0.05	S
6.	Monthly family income (Rs)	-	2.34	0.078	3, 96	2.68	p>0.05	NS
7.	Education of parents	-	0.99	0.41	4, 95	2.45	p>0.05	NS
8.	Education of Students	-	22.44	0.0001	2, 97	3.07	p<0.05	S

S - Significant NS - Non Significant

Section IV.3: Description of subject with regards to association of level of psychological problems among hearing impaired adolescent studying in select schools of the city in relation to demographic variables (Aggression)

Table IV.6: Association of Psychological problems among adolescent with demographic variables (Aggression), n=100

S. No	Demographic Variables	Calculated value			Df	Table value	Level of Significance	Significance
		t- value	F- value	P- value				
1.	Age (yrs)	-	29.71	0.0001	2, 97	3.07	p<0.05	S
2.	Gender	0.96	-	0.33	98	1.98	p>0.05	NS
3.	Religion	-	6.64	0.0001	4, 95	2.45	p<0.05	S
4.	Type of family	-	1.04	0.33	2, 97	3.07	p>0.05	NS
5.	Area of residence	-	2.77	0.067	2, 97	3.07	p>0.05	NS
6.	Monthly family income (Rs)	-	3.46	0.019	3, 96	2.68	p>0.05	NS
7.	Education of parents	-	1.40	0.23	4, 95	2.45	p>0.05	NS
8.	Education of Students	-	12.70	0.0001	2, 97	3.07	p<0.05	S

S - Significant NS - Non Significant

Section IV.4: Description of subject with regards to association of level of psychological problems among hearing impaired adolescent studying in select schools of the city in relation to demographic variables (Frustration)

Table IV.7: Association of Psychological problems among adolescent with demographic variables (Frustration), n=100

S. N	Demographic Variables	Calculated value			Df	Table Value	Level of significance	Significance
		t- value	F- Value	P- value				
1.	Age (yrs)		18.90	0.0001	2, 97	3.07	p<0.05	S
2.	Gender	0.54		0.59	98	1.98	p>0.05	NS
3.	Religion		7.16	0.0001	4, 95	2.45	p<0.05	S
4.	Type of family		2.08	0.13	2, 97	3.07	p>0.05	NS
5.	Area of residence		4.10	0.019	2, 97	3.07	p<0.05	S
6.	Monthly family income (Rs)		3.78	0.013	3, 96	2.68	p>0.05	NS
7.	Education of parents		0.80	0.52	4, 95	2.45	p>0.05	NS
8.	Education of Students		9.70	0.0001	2, 97	3.07	p<0.05	S

S - Significant NS - Non Significant

6. Discussion

A researcher conducted study to investigate the psychological problems of hearing impaired adolescent students. Sample size is 150 hearing impaired adolescent students in that 78 males and 72 females are there study setting is around Coimbatore city, Tamil Nadu state, India. In this study researcher use Taylor's scale of manifest anxiety, frustration test, aggression scale and Adolescent Adjustment Inventory was employed. The results showed that adolescent students with hearing impairment do not differ in anxiety, frustration and aggression levels. There was a positive correlation between the levels of anxiety, aggression and adjustment excluding frustration among hearing impaired adolescents. Some of the demographic variables showed significant influence on the psychological variables studied. Anxiety, frustration, aggression and adjustment measures are positively correlated.¹⁰

In the present study the level of psychological problem was found, 40% of the adolescent had mild level of psychological problems, 59% of them had moderate level of psychological problems and only 1% of the adolescent had severe level of psychological problems. Minimum psychological problem score was 69 and maximum psychological problems score was 144. Mean psychological problem score was 107.53 ± 22.22 and mean percentage of psychological problems score was 59.73 ± 12.34 . Majority Mean psychological problem score for frustration it was 36.80 ± 7.53 , for aggression it was 35.67 ± 7.91 for the anxiety it was 35.06 ± 8.68 . In this present study there is association of psychological problem score with Age, Religion, Area of residence, Monthly family income (Rs), and Education of students.

7. Conclusion

After the detailed analysis, this study leads to the following conclusion, The present study shows that majority 59% of hearing impaired adolescent had moderate level of psychological problems, 40% of the them had mild level of psychological problems, and only 1% of the adolescent had severe level of psychological problems. Analysis also reveals that in overall association there is significant association of Psychological problem score with age,

religion, area of residence, monthly family income (Rs), Education of students. In Anxiety there is significant association of Psychological problem score with age, religion, area of residence, Education of students. In Aggression there is significant association of Psychological problem score with age, religion, Education of students. In Frustration there is significant association of Psychological problem score with age, religion, area of residence, Education of students. While none of the other variables were associated with Psychological problem score.

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