Volume 14, Issue III, June 2025, ISSN: 2277-1255
BHARTIYAM INTERNATIONAL JOURNAL OF EDUCATION & RESEARCH
A quarterly peer reviewed International Journal of Research & Education

A Comparative Study about the Self Concept and Anxiety Level among Hearing Children and Children with Hearing Disability

Sonu Pandey

Abstract

This study aimed to explore the relationship between self-concept and anxiety levels among hearing and hearing-impaired children. A sample of 60 students from10th-grade Delhi Government schools, divided into two groups 30 hearing children and 30 children with hearing impairment, was selected for the study. The researcher employed both quantitative and qualitative methods to collect data. Quantitative data were gathered using Saraswat's Self-Concept Inventory and the State-Trait Anxiety Inventory (STAI), while qualitative data were collected through in-depth interviews and observations. The study's findings revealed that hearing children had significantly higher self-concept scores than hearing-impaired children. Additionally, hearing-impaired children exhibited higher levels of anxiety compared to their hearing peers. A significant negative relationship between self-concept and anxiety levels was observed in both groups. The study underscores the importance of psychological interventions to reduce anxiety and improve the self-image of children with hearing impairments. These findings highlight the need for tailored support strategies within educational settings to foster better mental well-being for children with disabilities.

Introduction

In the landscape of child development, **self-concept** and **anxiety** are critical psychological variables that significantly shape a child's emotional, social and academic life. Self-concept refers to an individual's perception of self in various domains such as physical, social, academic, and emotional aspects, while anxiety reflects emotional responses to perceived threats, challenges or unfamiliar

*Research Scholar, IGNOU

situations. These psychological constructs become even more complex in the context of children with disabilities particularly those with **hearing impairments**.

Children with hearing disability often encounter communication barriers, social exclusion, and academic challenges that may influence their self-concept and increase anxiety levels compared to their hearing peers. While hearing children typically develop language, social interactions, and environmental awareness through auditory channels, children with hearing disabilities rely on alternative modes such as sign language, lip reading or technological aids which can impact their psychological development.

The current study aims to **comparatively explore the self-concept and anxiety levels** among two distinct groups: children with normal hearing and those with hearing disabilities. By examining these dimensions side by side, the research intends to identify significant differences if any, and understand how hearing ability impacts a child's self-perception and emotional well-being. This study is crucial in informing **inclusive educational strategies, counseling interventions, and supportive practices** for children with hearing impairments, ensuring equitable development opportunities for all learners.

Significance of this study

This study holds significant value in the fields of **educational psychology, special education and inclusive development** as it provides a deeper understanding of how hearing ability influences a child's psychological makeup—particularly in terms of **self-concept and anxiety**.

1. **Understanding Psychological Differences:**
   By comparing hearing children and children with hearing disabilities, this study will highlight **variations in emotional development** enabling educators, parents and counsellors to address specific psychological needs more effectively.
2. **To understand Inclusive Education:**
   The findings can inform inclusive teaching strategies, classroom interventions and teacher

training programs to support children with hearing disabilities more empathetically and effectively.

3. **Guidance for Mental Health Interventions:**
   Insights into anxiety levels can help in developing **targeted counselling and mental health programs** for students with hearing impairments, enhancing their emotional well-being.
4. **Policy-Level Impact:**
   The study provide data-based evidence to shape **educational and psychological support policies** for children with disabilities promoting equity in learning environments.
5. **Empowering Families and Communities:**
   Parents and caregivers can better understand the emotional world of their children and adopt more supportive roles helping improve children's **self-esteem and mental resilience**.

This study not only fills a gap in comparative psychological research but also supports **NEP 2020**'s broader societal goals of **equity, inclusion, and well-being** in child development.

Review of Literature

Sharmishtha (2014) conducted a study titled "A Comparative Study of Anxiety and Frustration Between Deaf and Normal Children" on deaf and hearing high school students. The findings revealed that anxiety levels were significantly higher among deaf children compared to hearing children. This difference was attributed to a higher achievement satisfaction rate among hearing students.

Lersilp (2005) conducted a pilot study in Thailand focusing on deaf high school students. The study found that anxiety levels were elevated among deaf children due to concerns regarding their future education and career.

Ghaderi, Venkatesh Kumar, and Sampath Kumar (2009) compared the experiences of stress, anxiety, and depression among Indian and Iranian university students enrolled in postgraduate and Ph.D. programs at the University of Mysore. The study used the Depression Anxiety Stress Scale (DASS) to assess these variables. The sample included 80 Indian and 80 Iranian students, both male and

female. A 2 x 2 x 3 ANOVA revealed that Indian students exhibited significantly higher levels of depression, anxiety, and stress than their Iranian counterparts. Gender differences were not statistically significant.

Garton and Pratt (1995) explored the relationship between stress and self-concept in children aged 10 to 15 years in their study titled "Stress and Self-Concept in 10- to 15-Year-Old School Students." The results showed an inverse relationship between stress and self-concept, with females experiencing higher levels of stress compared to males. Stress had a more significant impact on females, and self-concept played a critical role in managing stress.

Appleton et al. (1994) examined self-concept among individuals with spina bifida. The study revealed that disabled participants felt less competent in academic, athletic, and social domains than their able-bodied peers. While they reported equal support from parents and friends, they felt more supported by teachers but less supported by classmates. Disabled girls placed higher importance on outer bodily appearance, which was closely associated with self-esteem.

Slifer et al. (2003) investigated the relationship between dissatisfaction with facial features, self-concept, and social competence in children aged 8 to 15 years, comparing children with and without oral clefts. The study included 34 children with clefts and 34 without. Both groups reported moderate dissatisfaction with facial appearance but demonstrated normative psychosocial adjustment. Parents of children with clefts reported greater dissatisfaction with their child's appearance, yet these children reported a better quality of life.

Aldwin and Greenberger (1987) and Salami (2001) studied the relationship between stress and academic performance in students. Both studies concluded that academic challenges are a common source of stress for students, which can adversely affect their academic performance.

Kaplan, Liu, and Kaplan (2005) explored the impact of school-related stress during early adolescence on academic performance. The study tracked 1,034 middle school students through home interviews and follow-ups three years later during high school. The findings indicated that

both early adolescent stress and school-related stress independently and negatively influenced academic performance over time.

Van and Alison (1979) examined the relationship between school settings and self-concept in 20 handicapped children. The study found no significant correlation between self-concept and school type (special or mainstream). However, socioeconomic status was observed to influence self-concept.

Harvey and Greenway (1984) conducted a comparative study on the self-concept of physically handicapped children and their siblings. The sample consisted of 20 pre-adolescent physically handicapped children attending mainstream schools and their siblings, 13 handicapped children from special schools and their siblings, and 18 non-handicapped children and their siblings. The results showed lower self-concept scores for handicapped children compared to their siblings, with minimal significant differences across the groups.

Objective

The objectives of the study are as follows:

- To compare the level of anxiety between normal hearing children and children with hearing disabilities.
- To compare the self-concept between normal hearing children and children with hearing disabilities.
- To examine the relationship between self-concept and anxiety levels in normal hearing children and children with hearing disabilities.

Methodology

The researcher employed the following methods for the study:

Procedure

Two paper-and-pen tests were administered to both groups (normal hearing children and children with hearing disabilities) with no time limit provided for the hearing-disabled group.

1. **Saraswat Self-Concept Questionnaire**:
   The first test was conducted individually for both groups of students.
2. **State-Trait Anxiety Inventory (STAI)**:
   The second test was administered similarly to both groups.

After completing the tests, individual interviews were conducted with both groups in a language comfortable and understandable to them. The researcher utilized Hindi, English and sign language as needed to facilitate communication.

Interview and Observation

The researcher conducted structured interviews with questions focusing on self-image and anxiety. Questions included rating confidence, happiness, family perception, and interest in social interaction. Responses were recorded in both descriptive and single-word formats, with some questions allowing free-form answers (e.g., recent moments of happiness or sadness and their reasons).

Data Collection and Communication

The responses from both groups were collected, tabulated, and analysed. The researcher employed sign language and total communication methods to ensure clarity and comprehension for the hearing-disabled participants.

Research Design

Quantitative and Qualitative Methods

The researcher employed a mixed-methods approach, combining quantitative and qualitative methods.

- **Quantitative Approach**:
  Two groups of 30 students each were selected for the study. The first group consisted of 30 hearing students from 10th standard with normal hearing, while the second group consisted of 30 deaf students from the 10th standard with hearing impairments. The second group communicated using sign language. Both groups participated in paper-and-pencil tests administered through questionnaires, and their responses were recorded.
- **Qualitative Approach**:
  The researcher collected information through one-on-one in-depth interviews, group discussions, and behavioural observations of both groups. Open-ended questions starting with "what," "how," and "when" were used to gather detailed information. The individual interviews focused on topics related to self-satisfaction, stress, and anxiety. Observation methods were utilized to analyse underlying reasons, opinions, and motivations.

Sample for Data Collection

The sample consisted of two groups of 10th-standard students:

1. **Deaf Students**: A group of 30 students (15 boys and 15 girls) with 100% hearing disability using sign language for communication.
2. **Hearing Students**: A group of 30 students (15 boys and 15 girls) with normal hearing.

Both groups were from the same economic and social backgrounds ensuring comparable conditions for analysis.

Inclusion and Exclusion Criteria

Inclusion Criteria:

- Boys and girls from 10th standards of Delhi Government schools.
- Students present in the classroom at the time of the study.
- Children with 100% hearing disability in both ears.

- Only pre-lingual hearing-disabled children.
- Only one disability (hearing disability) was considered.

Exclusion Criteria:

- Boys and girls from classes other than 10th.
- Students unwilling to participate in the study.
- Students absent during the time of the study.
- Children with less than 100% hearing disability.
- Children with any disability other than hearing disability.

Variables

- **Independent Variable**: Self-Concept
- **Dependent Variable**: Anxiety

Research Hypotheses

First Hypothesis:
It is expected that the self-concept of normal hearing children will be higher than that of hearing-disabled children.

Second Hypothesis:
It is expected that the anxiety levels of hearing-disabled children will be higher than those of normal hearing children.

Third Hypothesis:
It is expected that there will be a significant negative relationship between self-concept and anxiety levels in both normal hearing children and hearing-disabled children.

Tools

Self-Concept Inventory (Saraswat Test)

The self-concept inventory developed by Dr. Rajkumar Saraswat (1984) was used for data collection. This inventory assesses six separate dimensions of self-concept: physical, social, intellectual, moral, educational, and temperamental self-concept, along with a total self-concept score. The inventory consists of 48 items, with eight items for each dimension. Each item is provided with five alternatives.

State-Trait Anxiety Inventory (STAI)

State anxiety refers to a transitory emotional state characterized by subjective feelings of tension and apprehension, alongside heightened autonomic nervous system activity. The State-Trait Anxiety Inventory, developed by Charles D. Spielberger, Richard L. Gorsuch, and Robert E. Lushene in 1964, is a self-report tool that differentiates between state anxiety (temporary emotional states) and trait anxiety (long-term tendencies) to assist in developing suitable interventions.

One-on-One In-Depth Interview Method

The one-on-one in-depth interview method was used for qualitative data collection. A set of 12 interview questions was prepared to explore personal experiences and perceptions. Individual interviews are useful for building rapport with participants and gathering detailed information about their views and experiences.

Data Analysis

Data analysis followed a systematic approach, where numerical data was collected and transformed into standard scores before applying statistical techniques. The following statistical techniques were employed:

- **t-Test**:
  A t-test was used to determine the significance of the difference between the means of the two groups (hearing children and hearing-impaired children) across all relevant dimensions.
- **Pearson's Correlation**:
  Karl Pearson's coefficient of correlation was used to compute the linear relationship between the two groups. The correlation was applied to observe the relationship between the mode of communication (language) and stress levels.

In this research, mean, standard deviation (S.D.), and standard error of difference (S.E.D.) were used to analyze the data.

Mean Self-Concept Scores (1st tool)

- **Deaf Students**:
  Mean=80 (Below average self-concept)
- **Hearing Students**:
  Mean=173.9 (Above average self-concept)

Mean Scores for STAI Test (2nd tool)

- **Deaf Students**:
  Mean=80
- **Hearing Students**:
  Mean=173.9

Research findings and Result Discussion

As anticipated, the researcher observed that the anxiety levels of hearing-disabled children were higher than those of normal hearing children. This finding confirms the expectation that deaf students experience more anxiety compared to their hearing counterparts.

Furthermore, the study revealed a significant negative relationship between self-concept and anxiety levels in both normal hearing and hearing-disabled children. This indicates that students with a higher self-concept experience lower levels of anxiety, whereas those with a lower self-concept tend to have higher anxiety levels.

Humans possess a remarkable capacity for adaptability and adjustment to their environment. This positive trait can be leveraged to foster meaningful changes within special communities. Numerous initiatives in India have been implemented to empower individuals with disabilities. Psychological interventions aimed at reducing anxiety and enhancing the self-concept of differently-abled individuals can further support these efforts.

Policy measures should focus on collaborative efforts involving families, schools, and workplaces to create a supportive ecosystem for individuals with disabilities. These strategies can help build their self-confidence and reduce anxiety, contributing to a more inclusive and empowering environment.

Limitations of the Study

The limitations of the study are as follows:

1. The comparison was limited to hearing children and children with hearing disabilities only.
2. The subjects had a specific parental profile: one parent (father) was employed, and the other parent (mother) was a homemaker.
3. Both parents of the subjects were graduates.
4. The study focused solely on the relationship between self-concept and anxiety.
5. The study was confined to 9th and 10th standard students attending Delhi Government schools.
6. Only hearing disability was considered; other types of disabilities were excluded.
7. Additional variables such as personality, motivation, and achievement were not explored but could have been included for a more comprehensive analysis.

Ethical Clearance

Ethical considerations are essential in research, as they provide norms and standards for conduct, helping to distinguish between right and wrong behaviours. These principles guide researchers in ensuring the integrity and credibility of their work. For this study, the following ethical principles were adhered to:

- **Informed Consent**: Participants were provided with detailed information about the study's purpose, procedures, and potential risks before agreeing to participate.
- **Voluntary Participation**: Participation in the study was entirely voluntary, with no coercion or undue influence applied to potential participants.
- **Do No Harm**: Every effort was made to ensure that no physical, psychological, or emotional harm would occur to participants during or after the study.
- **Confidentiality**: All data collected were treated with the utmost confidentiality and stored securely to protect participants' privacy.
- **Anonymity**: Participants' identities were anonymized to prevent any association between individuals and the data collected.
- **Relevance**: Only data relevant to the study's objectives were collected and analyzed to maintain ethical integrity.

Ethical considerations were addressed both at the individual and societal levels to ensure respect for participants' rights and the broader impact of the research.

ACKNOWLEDGEMENT:

The author acknowledges the invaluable support received from Delhi Association of Deaf and Delhi Education Department for providing support for data collection of this study.

References

Adler, A. (1956). *The individual psychology of Alfred Adler*. New York, NY: Basic Books.

Alferi, T. J. (1995). The relationship between young adolescents' gender stereotypes and self-esteem (Publication No. 56-92) [Doctoral dissertation, University of XYZ]. *Dissertation Abstracts International*.

Allport, G. W., & Vernon, P. E. (1931). *The study of values*. Boston, MA: Houghton Mifflin.
Allport, G. W. (1961). *Pattern and growth in personality*. New York, NY: Holt, Rinehart and Winston.

Backman, C. W., Secord, P. F., & Pierce, J. R. (1963). Resistance to change in the self-concept as a function of consensus among significant others. *Sociometry, 26*(2), 102–111.

Barlett, D. (1993). The influence of maltreatment and family social climate on children's self-esteem and behavioral adjustment (Publication No. 54-2186-B) [Doctoral dissertation, University of XYZ]. *Dissertation Abstracts International*.

Barrish, B. M. (1996). The relationship of remembered parental physical punishment to adolescent self-concept (Publication No. 57-2171-B) [Doctoral dissertation, University of XYZ]. *Dissertation Abstracts International*.

Crosby, R. (1982). Self-concept development. *Journal of School Health, 52*(7), 432–436.

Goffman, E. (1951). Symbols of class status. *British Journal of Sociology, 2*(4), 294–304. Goffman, E. (1956). *The presentation of self in everyday life*. Edinburgh, Scotland: University of Edinburgh Press.