Psychological Distress and Resilience among Hearing Impaired Students

Dissertation submitted to Kerala University

In partial fulfilment of the requirements for the award of the Degree of

M. Sc. Counselling Psychology

By

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CERTIFICATE

This is to certify that the Dissertation entitled "**Psychological Distress and Resilience among Hearing Impaired Students"** is an authentic work carried out by Greena John, Reg. No. 60421115011 under the guidance of Ms. Jesline Maria Mamen during the fourth semester of M.Sc. Counselling Psychology program in the academic year 2021- 2023.

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DECLARATION

I, Greena John, do hereby declare that the dissertation titled **"Psychological Distress and Resilience among Hearing Impaired Students",** submitted to the Department of Counselling Psychology, Loyola College of Social Sciences, Sreekariyam, under the supervision of Ms. Jesline Maria M. Mamen, Assistant professor and Head of the Department of Counselling Psychology, for the award of the degree of Master's in Science of Counselling Psychology, is a bonafide work carried out by me and no part thereof has been submitted for the award of any other degree in any University.

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Greena John

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Abstract

Every human being in this world faces difficulties and obstacles in their own way. However, it's about how an individual bounces back into normal life after a stressful event. In the case of hearing-impaired students, they generally come to face many challenges and stressors in their academics, socialization, communication barriers, lack of opportunities, fear of making mistakes and failures, and being unable to get proper educational resources. Sometimes these challenges may result in psychological distress like depression, anxiety, and social isolation. Resilience refers to the ability to cope mentally or emotionally with a crisis and "bounce back" or return to pre-crisis status quickly. This quantitative study examined psychological distress and resilience among hearing-impaired students. For the study, 120 hearing-impaired students (60 males and 60 females) were selected from the Thiruvananthapuram, Kollam, Pathanamthitta, and Kottayam districts of Kerala. The age of the sample ranged from 13 to 20 years. The participants completed the Kessler Psychological Distress Scale (K10) by R C Kessler (2003) and the 14-Item Resilience Scale (RS-14) by Wagnild and Young (2009). Major findings concluded that although psychological distress and resilience varied among participants individually, as a whole, they had a mild level of psychological distress and high level of resilience. Also found a significant difference in psychological distress and resilience among hearing-impaired students based on their gender and educational category and results shows that there is significant relationship between psychological distress and resilience among hearing impaired students.

Keywords: psychological distress, resilience, hearing impaired students

CHAPTER I

INTRODUCTION

'Blindness cuts us off from things, deafness cut us off from people'- Helen Keller

India is an ethnically and linguistically diverse nation, making educating the hearing impaired a constant challenge. After independence, there were many legal initiatives to safeguard the rights of the disabled people, but the rapidly growing population made it difficult to meet the demand. More research is being done in this area, and several previously taboo communication and instruction strategies have been brought to light, such as sign language and bilingualism. Currently, new breakthroughs are being made in this field.

In 2018, the WHO estimates that 466 million (6.12% of the world's population) were affected by Disabling Hearing Loss (DHL). By 2030, 630 million people are predicted to be DHL patients. The National Program for Prevention and Control of Deafness (NPPCD), a national program launched in 2008, aims to eliminate preventable deafness, reduce the burden of deafness to <1% and empower the hearing-impaired individuals to lead an economically and socially productive life by 2030. The reported prevalence of hearing loss among children was between 6.62% and 16.47% (Verma et al., 2022).

Adolescence is a critical period of transition as young students pursue personal growth, independence and identity formation. However, the challenges of navigating this transition are compounded for hearing impaired adolescents with chronic illness and disabilities who must manage their conditions while confronting biological, psychological and social role changes associated with transitioning through salient developmental periods. Hearing-impaired children

participating in hearing societies may experience significant psychological, social, and emotional challenges (Antia et al., 2012; Kouwenberg et. al., 2012).

Hearing impairment is described as the partial or total loss of hearing ability and its' severity can be classified as mild, moderate, severe, or profound. Hearing loss can happen anytime during life, from birth to adulthood. According to the study conducted by Verma et al. (2022) Conductive Hearing Loss (CHL) was responsible for most (81.6%– 98.6%) of the hearing impairment.

Adolescent students who are hearing impaired have special difficulties in their everyday lives, especially when it comes to their mental health. The inability to converse with peers due to hearing loss affects one's capacity to engage in social and professional activities (Snoddon & Underwood, 2014). As such, the confluence of developmental factors in the context of adjustment to and management of chronic illness and disability among hearing impaired adolescent students may exacerbate distress and psychological maladjustment, potentially leading to more severe and persistent pain into adulthood. These obstacles may include a lack of understanding and support from their hearing peers, problems with social contact, and communication impediments. Adolescent pupils who are hearing impaired experience higher levels of psychological discomfort as a result of these issues. But it's crucial to understand that not all hearing-impaired adolescent pupils go through psychological anguish in the same manner. In spite of these difficulties, some hearing-impaired teenagers show resiliency and are able to go about their everyday lives with confidence and self-assurance. The importance of studying the resilience and psychological distress of hearing-impaired adolescent students cannot be understated in this context. Understanding the challenges that hearing impaired adolescent students face, as well as their

resilience in facing these challenges, can aid educators and healthcare professionals in developing effective interventions to support the needs of these students.

According to the study of Blom et al. (2014), hearing impaired adolescent students' psychological discomfort as well as their capacity for resiliency are significantly influenced by their level of social and community participation. Adolescent hearing-impaired students who participate in their community and have social contact chances typically suffer reduced levels of psychological discomfort. Additionally, community involvement gives those teenage pupils a feeling of support and belonging, which can enhance their general wellbeing. Moreover, it has been discovered that elements including communication mode, educational setting, and identity have a substantial influence on psychological well-being in this population. For instance, studies have shown that hearing impaired teenagers in mainstream schools who often communicate orally might have greater levels of social anxiety than their hearing peers (AlShammari et al., 2014).

When compared to their hearing peers, hearing impaired adolescents face different difficulties and pressures, which can lead to more severe psychological discomfort. These difficulties could include poor language skills, social exclusion, prejudice, and restricted access to mental health care. Adolescents who are hearing impaired may therefore be more vulnerable to psychological trauma, including bullying, neglect, and abuse. An individual's general well-being can be greatly impacted by psychological suffering, such as anxiety, depression, and traumatic stress. In order to lessen the impacts of psychological discomfort and aid people in recovering from negative events, resilience is essential. Individuals who are more resilient may handle stressesbetter, experience fewer additional negative occurrences, and develop healthy resources, connections, and assets.

Resilience is the system of fixing nicely inside the face of trouble, distress, tragedy, fears, or perhaps considerable stress sources—including educational or academic problems, family and relationship issues, financial stressors, etc. In order to foster resilience in hearing impaired children and adolescents, it is crucial that they develop a strong sense of identity and self-worth. Hearing impaired young people can develop self-confidence and improve their capacity to deal with hardship by embracing their deaf identity and cultivating a positive self-image. Further enhancing resilience in this demographic includes strengthening personal assets including coping mechanisms, emotional control, and problem-solving abilities.

Resilience is crucial in addressing psychological distress, especially for hearing impaired adolescents who face unique challenges. Understanding protective factors and barriers can support their mental health and overall well-being. Resilience involves the ability to bounce back and adapt to adversity or stress. Studying psychological distress can help identify risk factors, protective factors, and effective interventions for mental health problems, such as anxiety, depression, and Post Traumatic Stress Disorder (PTSD).

Resilient people no longer let hardship define them. They discover resilience by transferring towards a purpose beyond themselves, exceeding aches and grief by seeing bad times as temporary situations. They discover resilience by means of transferring towards a purpose past themselves, exceeding ache and grief by means of seeing bad times as a temporary situation. Hearing-impaired young people can develop self-confidence and improve their capacity to deal with hardship by embracing their deaf identity and cultivating a positive self-image. Further enhancing resilience in this demographic includes strengthening personal assets, including coping mechanisms, emotional control, and problem-solving abilities.

Adolescents who are hearing impaired may encounter obstacles while trying to receive mental health care, such as a dearth of culturally and linguistically suitable programs and practitioners. Delay in assistance and intervention may occur as a result, worsening the psychological anguish. For the purpose of fostering resilience, it is essential to make sure that mental health treatments are available and catered to the special requirements of hearing-impaired teenagers. Communication issues are one of the biggest obstacles to resilience for hearing impaired teenagers. Lack of communication and language skills can result in social exclusion, low self-esteem, and restricted access to help and resources. Promoting resilience in this group depends on removing these communication impediments.

Due to stigma and prejudice, hearing impaired adolescents may experience, which can have a severe effect on their resilience and mental health. This comprises linguicism (favoring one language over another) and audism (the idea that being deaf is a defect). Adolescents who are hearing impaired can develop resilience by addressing various types of prejudice and fostering a positive deaf identity. Social connections and supportive networks are crucial for fostering resilience in hearing impaired adolescents. Family support, positive parent-child relationships, peer connections, and community involvement contribute to improved mental health and resilience development. This promotes essential skills development, self-esteem building, and increased resilience in the face of adversity.

Need and Significance of the study

Hearing loss can prevent individuals from being exposed to socially challenging circumstances resulting in isolation which significantly impinges upon their quality of life and mental health. Humans encounter challenges and setbacks, but their capacity to resume normal life has a bearing on how well they recover from them. In that instance, hearing-impaired adolescent

students face numerous challenges and stressors in their academic and social lives, including academic environment, peer group socialization, communication barriers, financial constraints, lack of opportunities, fear of mistakes and failures and inadequate educational resources. These conditions may contribute to high levels of distress, depression, anxiety and social isolation. Sometimes these challenges may end up in negative responses like severe mental health issues or distresses. People may experience psychological distress while coping with the stressful, disturbing or harmful circumstances in their daily life. Especially for hearing impaired children socializing with other peer groups and communication with others become more difficult and it may increase their anxiety and frustration and affect their mental health.

According to Brown & Cornes (2014) students who have hearing impairment may endure more psychological anguish than their hearing classmates. Communication issues, a lack of social support, and an increased likelihood of negative events are all potential causes of this difference. An individual's general well-being can be greatly impacted by psychological suffering such as anxiety, depression, and traumatic stress. In order to lessen the impacts of psychological discomfort and aid people in recovering from negative events, resilience is essential. Individuals who are more resilient may handle stress better, experience fewer additional negative occurrences, and develop healthy resources, connections, and assets.

A study by Bizuneh (2022) which conducted on 160 adolescents (80 hearing impaired and 80 hearing) students, the results revealed that hearing adolescent students' average resilience score was significantly greater than that of hearing-impaired students. It was also shown that female adolescent students' average resilience score was found to be significantly lower than their counterparts. Results also revealed a significant difference in resilience scores among hearing-

impaired females, hearing-impaired males, hearing females, and hearing male adolescent students. Hearing-impaired female adolescent students' resilience score was the lowest.

Schools play a vital role in fostering resilience by providing an inclusive learning environment, high teacher expectations, and resources tailored to hearing impaired students' unique needs. This promotes essential skill development, self-esteem building, and increased resilience in the face of adversity. The present study examines the psychological distress and resilience of hearing-impaired students. From reviewing existing literature, it was found that, at present, research that has explicitly examined psychological distress and resilience among hearing-impaired students, especially in Kerala, is limited. Hence this study ‘Psychological Distress and Resilience among Hearing Impaired Students’ is relevant in this context.

Statement of the problem

The problem of the present study has been stated as "Psychological Distress and Resilience among Hearing Impaired Students".

Operational definitions of the variables

Psychological Distress

In this study, psychological distress refers to unpleasant emotions a person may experience due to chronic stress, resulting in negative symptoms.

Resilience

In this study, resilience refers to the ability to cope mentally or emotionally with a crisis and to “bounce- back” or return to pre-crisis status quickly.

Hearing Impaired Students

In this study, hearing impaired students refer to the students with partial or total hearing impairment studying in high school and higher secondary classes from various deaf schools of Thiruvananthapuram, Kollam, Pathanamthitta and Kottayam districts in Kerala.

Objectives of the study

- To assess the psychological distress among hearing impaired students.
- To examine the gender difference in psychological distress among hearing impaired students.
- To examine the educational category difference in psychological distress among hearing impaired students.
- To assess the resilience among hearing impaired students.
- To examine the gender difference in resilience among hearing impaired students.
- To examine the educational category difference in resilience among hearing impaired students.
- To examine the relationship between resilience and psychological distress among hearing impaired students.

Hypotheses of the study

- There is no significant difference in psychological distress among hearing impaired students based on gender.
- There is no significant difference in psychological distress among hearing impaired students based on educational category.

- There is no significant difference in resilience among hearing impaired students based on gender.
- There is no significant difference in resilience among hearing impaired students based on educational category.
- There is no significant relationship between resilience and psychological distress among hearing impaired students.

CHAPTER II

REVIEW OF LITERATURE

The literature review is an integral element in the development and execution of a research project, playing a crucial role in the entire process. They provide access to the academic conversation surrounding the topic of the proposed study. It is this literature review that serves as the springboard for future research, providing an organized and well-argued case that is supported by a thorough understanding of the current state of knowledge in the field of interest. According to Hart (1998) the literature review is seen as producing two products: the presentation of information, ideas, data, and evidence to express viewpoints on the nature of the topic, as well as how it is to be investigated. Lambert (2012) defines a literature review as a critical analysis of what is known about the study topic, the themes related to it, and the various perspectives expressed regarding the topic.

A theoretical review investigates theoretical perspectives, models and concepts that elaborate on the subject being studied, which aids in a better comprehension of the research in question whilst also establishing out a hypothetical scenario for the present study.

Empirical review searches studies that have been undertaken in a similar area of study with a view to establish gaps, convergence and disagreements that help to clearly identify, define and justify the researcher's study in question. It can be quantitatively or qualitatively assessed and involves direct or indirect observation of the event. That is, it discusses the relationships between a study's independent and dependent variables. Here the empirical review of both the variables psychological distress and resilience includes studies from the years 2010 to 2022 and resources like Google Scholar, PubMed, etc. are referred.

Theoretical review

To comprehend the concepts of psychological distress and resilience, it is necessary to investigate the theoretical perspectives associated with these elements. The conceptual framework and various ideas provided by researchers within the field of research relevant to the current variables are discussed in this part.

Psychological distress

In contemporary times, particularly among adolescents, psychological distress stands as a significant concern. The presence of such distress has been acknowledged throughout history. Kovacs and Beck (1978) highlight that evidence of this can be traced back even to a 3,900-year-old Egyptian manuscript, which vividly portrays a distressed individual as someone with pessimistic tendencies, a diminishing trust in others, an inability to engage in daily activities, and contemplation of suicide. These historical depictions align with current understandings of the concept of psychological distress. For several years, there has been disagreement on how to understand psychological distress. The major dispute among students of psychological distress has been over the meaning of the concept, and about what actually is meant by the assertion that a person is psychologically distressed (Torkington, 1991).

The following are some conceptual perspectives on psychological distress:

Medical Model

The medical model stands as a prominent perspective on pathology worldwide (Novello, 1999; Kaplan & Sadock, 1998). Within this framework, psychological distress is perceived akin to an ailment within the same classification as physical illnesses. This model employs a comparable approach to that utilized by medical professionals to define psychological distress. In essence, psychological distress is considered to arise from neurological abnormalities that

contribute to disrupted cognition and behavior, necessitating medical intervention and care (Carson, Butcher, & Mineka, 1996).

Interpersonal Theory

Interpersonal theories attribute psychological challenges to dysfunctional interaction patterns (Carson et al., 1996). These ideas emphasize how social we are by emphasizing how much of who we are is molded by how we interact with others. Maladaptive conduct that appears in relationships and results from unpleasant previous or present interactions is referred to as psychological discomfort. Analyzing the various interpersonal connection patterns of the troubled person is necessary to detect psychological discomfort. According to this viewpoint, interpersonal therapy, which focuses on dealing with relational problems and helping people develop new interpersonal skills to build more rewarding relationships, can help people feel less depressed.

Psychodynamic Theory

The classical psychoanalytic approach investigates psychological discomfort from an internal viewpoint. This standpoint emphasizes how unconscious processes and defense mechanisms mold usual and unusual actions. Childhood encounters are seen as crucial in forming subsequent personality adaptation. Essentially, this theory views present symptoms as extensions of past struggles. Therefore, psychological distress in a person's life might be seen as an effort to handle current obstacles by employing defense mechanisms established during childhood—a tactic that could seem inappropriate and out of sync with current situations.

Cognitive Theory

The cognitive model posits that negatively skewed cognition plays a central role in psychological distress (Barlow & Durand, 1999). This cognitive process becomes evident as

distressed individuals often hold pessimistic views about themselves, their surroundings, and the future (Weinrach, 1988). These individuals perceive themselves as lacking worth, competency, desirability, and adequacy. As per cognitive theorists, people's heightened emotional responses and dysfunctional behaviors arise from their tendency to interpret their experiences in inappropriate ways. At the heart of this model is the notion that emotional struggles initiate when our interpretation of events becomes overly exaggerated beyond the available evidence, fostering a negative impact on emotions and behaviors in a cyclical pattern.

Resilience

Resilience is defined as the ability to bounce back from adversity, frustration, and misfortune and is essential for the effective leader. Resilience originates from the Latin word resilience, which refers to the pliant or elastic quality of a substance (Greene, et al., 2002). Resiliency was defined in the area of psychology as the ability to bounce back and to withstand hardship by repairing oneself (Higgins, 1994; Wolin & Wolin, 1993). Masten (2005) defines resilience as a class of phenomena characterized by good outcomes in spite of serious threats to adaptation of development.

Michael Rutter Theory of Resilience

In 2006, Michael Rutter defined resilience as, “An interactive concept that is concerned with the combination of serious risk experiences and a relatively positive psychological outcome despite those experiences”. His definition has remained stable over time, with his 2013 definition stating that resilience is when, “Some individuals have a relatively good outcome despite having experienced serious stresses or adversities – their outcome being better than that of other individuals who suffered the same experiences” (Rutter, 2013).

Rutter has established several principles for resilience theory based on his extensive research (Rutter, 2006; Rutter, 2007; Rutter, 2012; Rutter, 2013). One of the principles Rutter adheres to is that resilience is not related to individual psychological traits or superior functioning, but rather it is an ordinary adaptation given the right resources. He openly criticizes the ideas of 'superkids' or 'invulnerable' and suggests that individual differences in resilience may be due to genetic effects that make some children more or less susceptible to environmental change or physiological responses to environmental hazards. He emphasis that it is the environment, not the child, that is the catalyst for these differences. Rutter asserts that individual differences (e.g., genetics, personality, temperament) create differences in how each person responds to risk and protective factors. He states "resistance to infections does not come from avoiding all contact with the pathogens; such avoidance is likely to increase vulnerability rather than promote resilience" (Rutter, 2013). However, it is important to note that these experiences should be controllable experiences of stress, as it is uncontrollable experiences that lead to adverse outcomes.

Norman Garmezy's Resilience Theory

Norman Garmezy is a clinical psychologist and is known as the founder of research in Resilience. According to Garmezy's Resilience theory, someone with great resilience is not necessarily someone who is extremely brave despite adversity, it is someone who is able to show functional adequacy despite the emotional turmoil. Garmezy (1991) defines resilience as "not necessarily impervious to stress. Rather, resilience is designed to reflect the capacity for recovery and maintained adaptive behavior that may follow initial retreat or incapacity upon initiating a stressful event" (Garmezy, 1991a). He very well made sure that all children experience stress at some time, and resilient children are not in any kind of "hero" in front of the non-resilient children or who faces the stressful situation with retreat or despair (Garmezy, 1991b). According to him, to

be resilient one need to show “functional adequacy (the maintenance of competent functioning despite an interfering emotionality) despite an interfering emotionality, as a benchmark of resilient behavior under stress” (Garmezy, 1991a).

Garmezy held an ecological view of resilience; based on this view he contended that protective factors at the individual and familial levels, and external to the family, all influence resilience. Some of these influences include:

1. Individual factors – The child's dispositional characteristics include temperament (activity level), how they approach new situations (positive response to others), and cognitive abilities.

2. Familial factors – Familial togetherness and warmth (despite poverty or marital strife), the presence of a caring adult in the absence of responding parents (such as a grandmother), or parental interest in the welfare of their children.

3. Support factors – Beyond the family sphere, this involves the accessibility and utilization of external support systems by parents and children. These systems could encompass a dependable maternal figure, an encouraging and attentive teacher, or a structural setup that nurtures connections with the broader community, such as a church or a social worker.

Through Garmezy’s research he developed three models that explained resilience (Garmezy et al.,1984):

- Compensatory model – This is an additive paradigm, where stresses reduce competence while personal qualities increase adaptability. Competence is predicted by a combination of stress variables and personal characteristics. A youngster could grow up in a family with a lot of tension while yet having a nice, close relationship with their grandparents. If a youngster is

resilient, it can be because their bond with their grandparents makes up for their unstable family life.

- Protective vs. vulnerability model (Immunity vs. vulnerability) – This is an interaction link between stressors and personal traits in which the degree to which stress is associated with a certain outcome fluctuates. For instance, a child who lives in great poverty could have a stable family environment that works in concert with poverty to reduce risk.
- Challenge model – Stressors improve adjustment, but not at very low or very high levels, according to this curvilinear connection. High levels of stress reduce competency.

Emmy Werner Theory of Resilience

Emmy Werner defined resilience as, “The capacity [of individuals] to cope effectively with the internal stresses of their vulnerabilities [unusual sensitivities] and external stresses [illness, major losses, and dissolution of the family]” (Werner, 1982). She considered children who demonstrated resilience as those who "worked well, played well, loved well, and expected well."

Werner held an ecological view of resilience, focusing on protective factors that promoted resilience at the individual, family and community level (Werner, 1989). Protective factors include individual dispositional attributes, family emotional support, and external support systems like church and work. Werner believed the more stressful situation will be, the more protective factors will be required (Werner, 1982). Werner’s longitudinal approach provided a window into changes in resilience over time. She suggested developmental stage balance shifts influenced by stressful life events, gender, and protective factors (Werner, 1989).

Suniya Luthar's Theory of Resilience

Suniya Luthar (2000), defined resilience as "a dynamic process encompassing positive adaptation with the context of significant adversity." According to her, two significant things are important for one to be resilient and those are- exposure to the significant stress and the achievement of positive adaptation. Luthar also proposes that resilience is not a personal trait but a product of the environment and the interaction between the child and the environment (Luthar et. al., 2000).

According to the theory, there are three types of protective factors (Luthar et al., 2000) and those are:

1. Protective-stabilizing (despite the increasing risk, attribute gives stability to competence)

2. Protective-enhancing (engaging stress and increasing confidence within self)

3. Protective but reactive (general advantages but not with high-stress levels)

She suggests that researchers need to be cognizant of the multidimensional nature of resilience, and that children can show competence in some domains but not in others (Luthar et al., 2000). In one study by Luthar (1991), resilient children showed higher competence under stress but were significantly more depressed and anxious than other children. Luthar proposes that if it is inevitable that young people exposed to stressors experience some negative effect, then perhaps the goal for resilience should be the "least detrimental of all symptoms" (Au & Shean, 2015).

Ann Masten Theory of Resilience

In 2014, Ann Masten defined resilience as "the capacity of a dynamic system to adapt successfully to disturbances that threaten system function, viability, or development" (Masten,

2014). Masten is well known for suggesting that resilience is "ordinary magic", and that normative processes and basic human adaptation systems account for the majority of resilience findings (Masten, 2001, Masten et. al., 2009).

Masten indicates there must be two criteria present to be considered resilient, namely a measure of positive adaptation or development and the past or current presence of conditions that threaten to disrupt positive adaptation (Masten et al., 2009).

The two models of resilience frequently referred to by Masten are the Variable Focused and Person Focused approaches (Masten et al., 2009; Masten, 2011; Masten, 2001). The variable-focused technique investigates patterns of connections between variables using multivariate analysis. The Person Focused method aims to comprehend how resilient and non-resilient people vary by contrasting them, looking at life course paths, and comparing their characteristics. In the groupings that they inevitably create inside every individual, a range of criteria are investigated.

In 2014, Masten introduced the concepts of context and culture. She stated that "such judgments are influenced by cultures of science, as well as sociocultural and historical context" (Masten, 2014). She believes that individual variations depend on experience and environment and that it is important to comprehend what well-being means in each of these contexts.

Empirical review

In order to enhance our comprehension of psychological distress and resilience within the context of hearing-impaired students, along with understanding the correlation between these variables among this demographic, it was essential to examine the existing body of literature. The empirical review involves a comprehensive overview of the studies conducted by other researchers that are relevant to the present study.

Psychological distress among hearing impaired students

Dammeyer (2010) evaluates the prevalence of psychosocial difficulties in a Danish population in relation to different explanatory variables in his research. The study was conducted in a sample population of 334 children with hearing loss. Results showed that the prevalence of psychosocial difficulties was 3.7 times greater compared with a group of hearing children. In the group of children with additional disabilities, the prevalence was 3 times greater compared with children without additional disabilities. If sign language and/or oral language abilities are good, the children do not have a substantially higher level of psychosocial difficulties than do hearing children.

Brown & Cornes (2014) studied the mental health problems of 89 deaf and hard-of-hearing adolescents in New South Wales, Tasmania, and Western Australia. Results showed that, overall, deaf and hard of hearing students reported increased levels of mental health problems compared with hearing peers. Also, the findings showed that the language used at home was a significant predictor of mental health problems.

Adeniyi et al., (2018) investigated the predictive strength of gender, onset and degree of hearing loss, school type and parents' communication competence on psychological distress of adolescents with hearing impairment in two states of Nigeria. A total of 63 distressed adolescents with hearing impairment were participated in the study. The results showed that gender, degree of hearing impairment, school type and parents' communication competence were significantly predictive of psychological distress among adolescents with hearing impairment. On the extent to which each of the independent variables (gender, degree of hearing loss, school type and parents' communication competence) contributed to the prediction of dependent variable (psychological distress) among adolescents with hearing impairment. The degree of hearing loss is most powerful

factor that predisposes the population to psychological distress, while gender contributed least significant effect on the development of psychological distress among the population. Noticeably, adolescents with hearing impairment, regardless of degrees of hearing loss, suffer psychological distress.

A study by Cheng et al. (2019) was conducted to examine the prevalence of bullying victimization among deaf and hard of hearing adolescents in Taiwan and ascertain the relationship between bullying victimization experiences and family and school variables and their psychological well-being. The sample included 355 deaf and hard of hearing adolescent students. The results showed that deaf and hard of hearing adolescents who experienced bullying victimization, in particular, exclusion and verbal bullying, exhibited higher psychological distress than adolescents who did not have such an experience.

Alramamneh, et. al. (2020) conducted a study to identify the social and psychological problems of hearing-impaired students and investigate the coping strategies adopted in deaf schools. The data was collected from a sample that consisted of 150 deaf students; 67 males and 83 females. The findings showed that hearing-impaired students face social problems such as difficulties encountered in public places and feeling scared of violence by others. The findings also showed that students with hearing impairment face frequent psychological problems such as explanation of mistakes, fear of making mistakes, and separation anxiety. However, the study results revealed that students with hearing impairment have a medium level of psychological and social problems.

Lambez et al., (2020) examined the association between identity (acculturation patterns of deaf identity) and emotional distress among Jewish deaf and hard of hearing adolescents in Israel. The sample of 129 including 69 deaf and hard-of-hearing and 60 hearing adolescents participated

in the study and their ages ranged from 10 to 18. The findings show that measures of emotional distress, social support, and exposure to discrimination did not significantly differ between deaf and hard of hearing and their hearing counterparts.

Resilience among hearing impaired students

A study by Narayanan & Radhakrishnan (2012) was conducted to find out the possible effect of hearing impairment and level of resilience on the emotional processing of the individuals. A purposive sample of 80 hearing impaired and 89 non-impaired adolescents in the age group of 14 to 19 years were taken from two Government schools situated in Thrissur, Kerala for the investigation. The findings of the study imply that the hearing-impaired needs to understood in terms of their emotional processing tendency. The hearing-impaired adolescents seem to suppress and do not give free vent to their emotions. This may in turn lead to internal distress in addition to affecting their adaptability.

Radovanović et al. (2020) proposed a study to determine the level of resiliency, as well as its relation to internal and external factors, in deaf and hard-of-hearing adolescents. The sample included 55 deaf and hard-of-hearing students (23 boys and 32 girls) in the age group of 12–14 years, enrolled in schools for deaf and hard-of-hearing children in Serbia, with no additional disabilities and disorders. The obtained results showed that deaf and hard-of-hearing students perceived their resiliency in the average to high level.

According to Eichengreen et al. (2021) the study examined retrospective perspectives of mainstreamed deaf and hard of hearing young adults on the protective processes that supported their coping with hearing loss and promoted their resilience from childhood to young adulthood. The sample size 56 participants were selected. The result indicated that the participants’

perspectives on coping resources promoting resilience were diverse. The findings of the study indicate that some of participants perceived this association (minimization of the hearing loss contributed to the ability to socialize with hearing peers) as causal.

A study conducted by Bizuneh (2022) to describe deaf and female adolescents' resilience with their respective counterparts. The study was conducted on 160 adolescents which includes 80 hearing impaired and 80 hearing students. The results revealed that hearing adolescent students' average resilience score was significantly greater than deaf students. Findings also revealed that there was a significant difference in resilience score among deaf female, deaf male, adolescent students in which deaf female adolescent students' resilience score was the lowest. The difference in resilience between deaf and hearing students signified deaf students' capability to cope with stressors and academic demands was less than their counterparts.

Mutahi (2022) conducted a study to determine the prevalence, patterns of psychopathology, associated risk and resilience factors among deaf and hard of hearing adolescents in Nairobi County Special Unit Schools. The study was conducted in a population of 107 deaf and hard of hearing adolescents aged 11-17years. The results showed that moderate to high internalizing and externalizing problems as well as psychiatric symptomatology was prevalent. The findings also highlighted risk factors of stigma, language barrier, poverty, adverse childhood events among others for mental health problems.

Psychological distress and resilience among hearing impaired students

As per the study of Blom et al. (2014) possible differences in online activities, friendship quality and well-being between deaf and hard of hearing and hearing students in the US and the Netherlands was investigated. Participants were 113 deaf and hard of hearing and 109 hearing

students from the Netherlands and the United States. The results in general showed that deaf and hard of hearing adolescents were not found to have lower friendship qualities or lower levels of psychological well-being compared to their hearing peers. Results regarding well-being showed no difference due to hearing status. This is a remarkable finding, as deaf and hard of hearing students were not less satisfied or lonely than hearing peers. It concludes that hearing-impaired adolescent students' psychological discomfort and capacity for resiliency are significantly influenced by their level of social and community participation.

Conclusion

The empirical reviews stated involves a comprehensive overview of the studies conducted by other researchers relevant to the present study. Based on the researches stated here, it can be concluded that most of the studies among the hearing-impaired adolescents the psychological or emotional distress level seems to be high as compared to hearing adolescents (Alramamneh, et. al**,** 2020; Dammeyer, 2010) and the resilience level seems to be moderate to high (Radovanović et al.,2020; Bizuneh, 2022). Moreover, most of these studies are conducted in abroad countries which indicates that there are only limited studies in Kerala or in India. The present study aimed to address this gap in the literature because it is essential to conduct research on minority groups like differently abled people, such as hearing-impaired populations, and the need to address them is relevant in this era.

CHAPTER III

METHOD

Research methodology refers to the systematic process and steps that a researcher follows in conducting a research study. The researcher selects and employs specific methods and techniques to collect, analyze, and interpret data in order to address the research questions and achieve the research objectives. This process involves making decisions about the appropriate data collection tools, such as surveys or interviews, and the methods for data analysis, such as statistical analysis or thematic analysis. According to Kothari (2004), research methodology is defined as a way to systematically solve the research problem.

Research design

The research design is the overall plan for obtaining answers to the research questions, including specifications for enhancing the study's integrity. Kerlinger, (1986) describes research design as a plan, structure and strategy of investigation that is adopted with an aim of obtaining answers to research questions with optimal control of variables. According to Creswell (2014), research design is the plan, structure, and strategy of investigation used to obtain answers to research questions or problems.

For the purpose of this study, a descriptive research design seems to be appropriate. Survey method using questionnaires were used to collect data about the variables of the study. Calderon (2006), defined descriptive research as a purposive process of gathering, analyzing, classifying, and tabulating data about prevailing conditions, practices, processes, trends, and cause-effect relationships and then making adequate and accurate interpretation about such data with or without

or sometimes minimal aid of statistical methods. Survey method involves gathering information about people's activities, believes, preferences and attitudes via direct questioning.

Participants

A total of 120 hearing impaired students was selected as sample by using the convenience sampling method (non-probability sampling method). The sample consists of 60 male and 60 female participants within the age group of 13 to 20 years. The sample consisted of participants belonging to five deaf schools in the Thiruvananthapuram, Kollam, Pathanamthitta and Kottayam districts of Kerala. Data was collected from Govt. Vocational Higher Secondary School for the Deaf, Jagathy, CSI Vocational Higher Secondary School for the Deaf, Valakom, CSI Vocational Higher Secondary School for the Deaf, Thiruvalla, CSI Higher Secondary School for the Partially Hearing, Adoor and Assisi Higher Secondary School for the Deaf, Neerpara.

Tools used for data collection

Variables: The variables in the current study are psychological distress and resilience.

Kessler Psychological Distress Scale (K10)

The Kessler Psychological Distress Scale (K10) is a psychological screening tool designed to identify individuals with significant levels of psychological distress. It is developed by Kessler (2003). The K10 scale involves 10 questions about emotional states each with a five-level response scale. The measure can be used as a brief screen to identify levels of distress.

Reliability and validity

The 2000 Collaborative Health and Well-Being Survey were used to test reliability of the K10. The ending and weighted scores ranged from 0.42 to 0.74, indicating that the K10 is a

moderately reliable instrument. Although supplementary research on the clinical cut-off times and the scoring are needed to determine psychological distress, the K10 is a brief, simple, and reliable instrument to detect mental health conditions in the population.

Scoring

Scores are calculated by adding the values corresponding to each item's response and the total score is the score on the Kessler Psychological Distress Scale (K10). Scores will range from 10 to 50 with higher scores indicating a higher severity of psychological distress. People seen in primary care who score under 20 are likely to be psychologically well, score 20-24 are likely to have a mild psychological distress, 25-29 are likely to have moderate psychological distress and score 30 and over are likely to have a severe psychological distress.

Resilience Scale (RS 14)

The RS-14 is the short version of the Resilience Scale developed by Wagnild & Young in 2009. It consists of 14 Resilience Scale items, each rated on a 7-point Likert scale ranging from ‘1—strongly disagree’ to ‘7—strongly agree.’ The RS-14 demonstrates the brevity, readability, and ease of scoring that have been identified as important characteristics when selecting instruments for use with adolescents (Pritzker and Minter, 2014).

Reliability and validity

The original Resilience Scale (RS) and the RS14 are strongly correlated ($r = 0.97, p > 0.001$), and the Cronbach's alpha ranges from .89 to .96. Its construct validity has been assessedthrough content analysis, known groups, convergent/discriminant studies, correlation studies, factor analysis and pretest-posttest intervention studies.

Scoring

Scores are calculated by a summation of response values for each item, thus enabling scores to range from 14 to 98. Higher scores mean higher levels of resilience tendencies and lower score suggests lower level of resilience. Individuals who score from 14 to 48 tends to have low resilience tendency, 49 to 63 shows an average resilience tendency and 64 to 98 indicates high resilience tendency.

Personal Data Sheet

To collect the sociodemographic details of the participants, a personal data sheet was provided, which included the variables such as name, age, gender, school name, district, religion, contact number, level of hearing impairment and assistive devices that they are using (if any).

Informed Consent Form

An informed consent form is a legal document used in healthcare, research, and services to ensure participants are aware of risks, benefits, and implications before consenting to a decision.It outlines necessary information for medical procedures, research studies, and other activities. The participants were provided with an informed consent form outlining the purpose of the research and confidentiality policies to ensure their voluntary participation.

Procedure for Data Collection

In order to gather data, questionnaires were directly distributed to the hearing-impaired students. Initially, permission from the authorities of the respected schools was taken for interacting with students and collecting responses directly. The participants were selected according to convenience. A healthy rapport was built with the participants, and then consent was

acquired. The teaching staff volunteered to help because the children's hearing was impaired. In data collection, every participant’s voluntary participation was ensured. The consent form as well as the personal data sheet used for data collection have been attached in the appendix. After that, questionnaires were provided to the participants and described about all the necessary information for filling out the questionnaires and interpreted the instructions on the questionnaires in both their native language and sign language. Also, each question was read and translated to their native language and sign language for the participants' understanding. The participants were also requested to give honest responses to all the questions. 20-30 minutes were given for filling out the questionnaires. After that the questionnaires were collected back from them and acknowledged their valuable time and cooperative attitude. Following data collection, scoring was done and subjected to statistical analysis.

Statistical Techniques used for Data Analysis

The statistical techniques used for analyzing the data are frequency distribution, percentage, mean, standard deviation, t-test and Pearson product-moment correlation. The statistical analysis of the data was done using the SPSS-22 (Statistical Package for Social Sciences) version.

Frequency distribution and percentage

Frequency distribution is a descriptive statistical strategy that illustrates the number of times each participant's selected response happens and how frequently particular variable values occur. Percentage is represented by the symbol % and it indicates "per hundred".

Mean and standard deviation

The mean refers as a measure of central tendency computed by summing all scores and dividing by the total number of cases. In statistics, it condenses a complete dataset into a single value that reflects the average or typical figure of the data. Evaluating the mean of the entire population involves considering various scenarios, such as the population's normality, size, variance knowledge, and type of alternative hypothesis. Standard deviation is the most frequently used statistic for measuring the degree of variability in a set of scores. It calculates the extent to which data deviates from the mean, indicating its dispersion.

t-test

t-test is a parametric statistical test for analyzing the difference between two means. It is frequently used in hypothesis testing in order to determine whether a methodology or intervention actually has an impact on the intended population, or whether two groups are independent of one another. The t-test relies on the t-distribution and is deemed a suitable method for assessing the importance of a sample mean or for determining the significance of the distinction between the means of two samples.

Pearson correlation coefficient

The Pearson correlation coefficient, also called the Pearson product-moment correlation coefficient which designating the magnitude of relationship between two variables measured on at least an interval scale. It is denoted by ‘r’. The Pearson product-moment correlation seeks to establish a line that best fits the data of two variables, and it signifies the extent to which all these data points deviate from this optimal fitting line.

CHAPTER IV

RESULTS AND DISCUSSION

The primary objective of this research is to examine the levels of psychological distress and resilience in students with hearing impairments. A total of 120 students with hearing impairments were included in the study, with an equal distribution of 60 males and 60 females. These students were selected from different districts in Kerala: Thiruvananthapuram, Kollam, Pathanamthitta, and Kottayam. The age range of the participants was between 13 and 20 years.

To assess psychological distress and resilience, standardized questionnaires were utilized. The Kessler Psychological Distress Scale (K10) developed by Kessler in 2003 was employed to measure psychological distress, while the Resilience Scale (RS14) was used to gauge resilience. The collected data were analyzed using descriptive statistical methods. The normality of the data distribution was assessed through measures of skewness and kurtosis. Since the data displayed a normal distribution, appropriate parametric tests were applied for further analysis. The analysis was conducted using the Statistical Package of Social Sciences (SPSS-22.0 version). Various statistical techniques were employed, including frequency distribution and percentage, mean and standard deviation calculation, t-test, and Pearson’s Product Moment Correlation.

This study not only investigates the levels of psychological distress and resilience among hearing impaired students based on their gender and educational category but also explores the potential relationship between psychological distress and resilience within this group. The results of interest have been presented in tabular form, and these findings are discussed in relation to the study's objectives and hypotheses.

Psychological distress among hearing impaired students

The results obtained for psychological distress among hearing impaired students are discussed in the following tables:

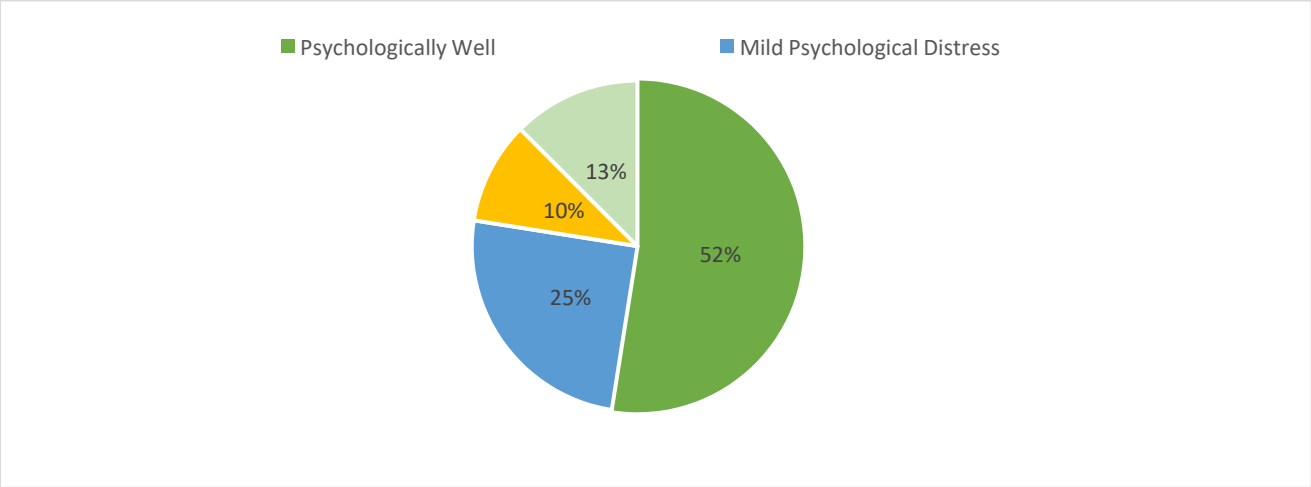
Table 4.1

Frequency distribution of psychological distress among hearing impaired students

Variable	Level	Hearing Impaired Students (N 120)
Psychological Distress	Psychologically Well	63
	Mild Psychological Distress	30
	Moderate Psychological Distress	12
	Severe Psychological Distress	15

Figure 4.1

Frequency distribution of psychological distress among hearing impaired students



Frequency distribution of psychological distress among hearing impaired students

Table 4.1 and the respective figure 4.1 presents the frequency distribution of psychological distress among hearing impaired students (N-120). Both the table and the pie chart show that

among 120 hearing impaired students 13% (15) of students have severe psychological distress, 10% (12) of students have moderate psychological distress, 25% (30) of students have mild psychological distress and 52% (63) of students are psychologically well.

Table 4.2

Psychological distress among hearing impaired students

Variables	N	Mean	S.D.
Psychological Distress	120	20.450	6.881

Table 4.2 shows the mean and standard deviation of psychological distress among hearing impaired students. The mean value of psychological distress among hearing impaired students (N-120) is found to be 20.450 (S.D. = 6.881). Thus, the result, indicates that hearing impaired students in the present study as a whole have a mild level of psychological distress.

Table 4.3

Psychological distress among hearing impaired students based on gender

Variable	Gender	N	Mean	S.D.	t value	Sig.
Psychological distress	Male	60	23.200	7.373	4.759	0.000
	Female	60	17.700	5.076		

Table 4.3 shows the scores of psychological distresses among hearing impaired students based on gender. The mean value of psychological distress among male students (N-60) is 23.200 (S.D. = 7.373) and female students (N-60) is 17.700 (S.D. = 5.076). Thus, the result demonstrates that there is difference in the mean values of psychological distress between male and female students. The obtained t-value is 4.759 and p-value is 0.000 ($p < 0.01$). The t- value is significant

at 0.01 level. Hence, the null hypothesis that states ‘there is no significant difference in psychological distress among hearing impaired students based on gender’ is rejected. Therefore, it can be concluded that female students have been found to have a low distress level than male students.

According to the study by Adeniyi et al. (2018) gender contributed least significant effect on the development of psychological distress among the population which is contradictory to the present study showing a significant difference in psychological distress among hearing impaired students based on gender.

Table 4.4

Psychological distress among hearing impaired students based on educational category

Variable	Educational Category	N	Mean	S.D.	t value	Sig.
Psychological Distress	High School Students	67	21.925	7.485	2.804	0.006
	Higher Secondary Students	53	18.584	5.558		

Table 4.4 shows the scores of psychological distresses among hearing impaired students based on their educational category. The mean value of psychological distress among high school students (N-67) is 21.925 (S.D. = 7.485) and higher secondary students (N-53) is 18.584 (S.D. = 5.558). Thus, the result demonstrates that there is difference in the mean values of psychological distress between high school and higher secondary school students. The obtained t-value is 2.804 and p-value is 0.006 ($p < 0.01$). The t- value is significant at 0.01 level. Hence, the null hypothesis that states ‘there is no significant difference in psychological distress among hearing impaired students based on their educational category’ is rejected. Based on these findings, high school

students who are younger seem to be more distressed than higher secondary school students who are older.

Resilience among hearing impaired students

The results obtained for resilience among hearing impaired students are discussed in the following tables:

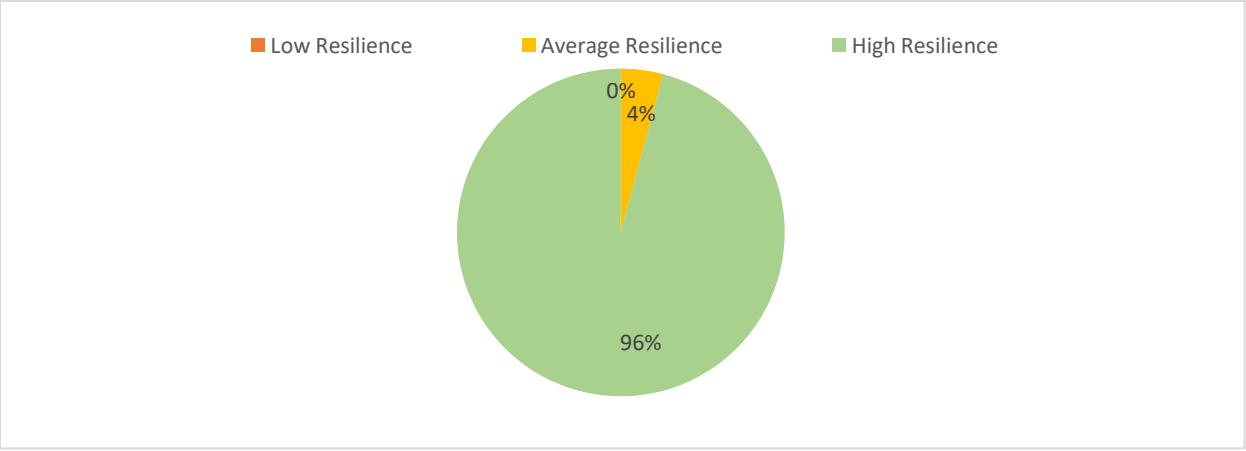
Table 4.5

Frequency distribution of resilience among hearing impaired students

Variable	Level	Hearing Impaired Students (N 120)
Resilience	Low	0
	Average	5
	High	115

Figure 4.5

Frequency distribution of resilience among hearing impaired students



Frequency distribution of resilience among hearing impaired students

Table 4.5 and the respective figure 4.5 presents the frequency distribution of resilience among hearing impaired students (N-120). Both the table and the pie chart show that among 120

hearing impaired students 0% (0) of students have low resilience, 4% (5) of students have average resilience, 96% (115) of students have high resilience.

Table 4.6

Resilience among hearing impaired students

Variables	N	Mean	S.D.
Resilience	120	87.283	6.792

Table 4.6 shows the mean and standard deviation of resilience among hearing impaired students. The mean value of resilience among hearing impaired students (N-120) is found to be 87.283 (S.D. = 6.792). Thus, the result, indicates that hearing impaired students in the present study as a whole have a high level of resilience. From the observation and personal interview done with the data collection process, it is found that these schools follow a structured teaching method, the students are getting opportunities to perform in various platforms like science fairs, mathematics fair, etc., encouraging extra-curricular activities like sports, arts and other talent competitions. Also found that most of these schools are providing Scout and Guide programs. These factors may contribute to increase the students' resilience and adaptability to handle an emergency situation.

Table 4.7

Resilience among hearing impaired students based on gender

Variable	Gender	N	Mean	S.D.	t value	Sig.
Resilience	Male	60	85.366	7.77	3.210	0.002
	Female	60	89.200	5.011		

Table 4.7 shows the scores of resilience among hearing impaired students based on gender. The mean value of resilience among male students (N-60) is 85.366 (S.D. = 7.77) and female

students (N-60) is 89.200 (S.D. = 5.011). Thus, the result demonstrates that there is difference in the mean values of resilience between male and female students. The obtained t-value is 3.210 and p-value is 0.002 ($p < 0.01$). The t- value is significant at 0.01 level. Hence, the null hypothesis that states 'there is no significant difference in resilience among hearing impaired students based on gender' is rejected. Therefore, it can be concluded that female students have been found to have a better resilience level than male students.

According to the study by Bizuneh (2022), the results shown that female adolescent students' average resilience score was found to be significantly lower than their counterparts. Hearing-impaired female adolescent students' resilience score was the lowest, which is contradictory to the present study.

Table 4.8

Resilience among hearing impaired students based on educational category

Variable	**Educational Category**	**N**	**Mean**	**S.D.**	**t value**	**Sig.**
Resilience	High School Students	67	86.164	7.283	2.108	0.037
	Higher Secondary Students	53	88.698	5.882		

Table 4.8 shows the scores of resilience among hearing impaired students based on their educational category. The mean value of resilience among high school students (N-67) is 86.164 (S.D. = 7.283) and higher secondary students (N-53) is 88.698 (S.D. = 5.882). Thus, the result demonstrates that there is difference in the mean values of resilience between high school and

higher secondary school students. The obtained t-value is 2.108 and p-value is 0.037 ($p < 0.05$). The t- value is significant at 0.05 level. Hence, the null hypothesis that states 'there is no significant difference in resilience among hearing impaired students based on their educational category' is rejected. Based on these findings, higher secondary students who are older seem to be more resilient than high school students who are younger.

Psychological Distress and Resilience among hearing impaired students

Table 4.9

Relationship between Psychological Distress and Resilience among hearing impaired students

Variables	**r**	**Sig.**
Psychological Distress Resilience	.485**	0.01

**Correlation is significant at the 0.01 level (2-tailed).

The findings for the correlation between psychological distress and resilience among hearing impaired students are shown in table 4.9. The correlation coefficient was found to be r = 0.485 and the correlation is significant at 0.01 level. This indicates that there is a significant relationship between psychological distress and resilience among hearing impaired students. Hence the null hypothesis which states that there is no significant relationship between psychological distress and resilience among hearing impaired students is rejected. It was observed that the magnitude of the relationship between psychological distress and resilience among hearing impaired students was low. From the result obtained from the current empirical study, the relationship between psychological distress and resilience among hearing impaired students is inversely proportional.

CHAPTER V

SUMMARY AND CONCLUSION

This research aimed to investigate the psychological distress and resilience levels among students with hearing impairments in Kerala. A total of 120 hearing impaired students, 60 males and 60 females, were selected from various districts. The study used standardized questionnaires, including the Kessler Psychological Distress Scale (K10) and the Resilience Scale (RS14), to measure psychological distress and resilience. Data were analyzed using descriptive statistical methods, assessing normality through skewness and kurtosis, and using appropriate parametric tests. The study also explored the potential relationship between psychological distress and resilience within this group. The findings are presented in tabular form, and the findings are discussed in relation to the study's objectives and hypotheses.

Summary of the study

The major aim of the study was to assess the psychological distress and resilience among hearing impaired students. The other objectives include to examine the gender difference in psychological distress and resilience among hearing impaired students, to examine the educational category difference in psychological distress and resilience among hearing impaired students and to examine the relationship between resilience and psychological distress among hearing impaired students. And hypotheses of the study states that, there is no significant difference in resilience among hearing impaired students based on gender and based on educational category, there is no significant difference in psychological distress among hearing impaired students based on gender and based on educational category and there is no significant relationship between resilience and psychological distress among hearing impaired students.

A sample of 120 students with hearing impairment of both genders (60 males and 60 females) are selected from high school and higher secondary school category from 5 deaf schools of Thiruvananthapuram, Kollam, Pathanamthitta and Kottayam districts in Kerala using the convenient sampling technique. A descriptive research approach was applied in the study. The tools used are Informed consent form, Personal data sheet, The 14- Item Resilience Scale (RS-14) by Wagnild and Young (2009) and Kessler Psychological Distress Scale (K10) by Kessler (2003). The collected data was statistically analyzed using the SPSS - 22 version. The frequency distribution and percentage, mean and standard deviation, t-test, and Pearson product-moment correlation technique were used to analyze the data.

The study's major findings can be concluded as the participants in the present study as a whole have mild level of psychological distress and high level of resilience. Moreover, it found that there is a significant difference in psychological distress and resilience among hearing-impaired students based on their gender and based on their educational category. Also, the result shows that there is an inversely proportional relationship between psychological distress and resilience among hearing impaired students.

Major findings of the Study

The major findings of the study can be concluded as:

- Among 120 hearing impaired students 52% (63) of students are psychologically well.
- The participants in the present study as an average have mild level of psychological distress.
- There is significant difference in psychological distress among hearing impaired students based on gender.

- There is significant difference in psychological distress among hearing impaired students based on their educational category.
- Among 120 hearing impaired students 96% (115) of students have high resilience.
- The participants in the present study as a whole have high level of resilience.
- There is significant difference in resilience among hearing impaired students based on gender.
- There is significant difference in resilience among hearing impaired students based on their educational category.
- There is a significant relationship between psychological distress and resilience among hearing impaired students.

Tenability of hypotheses:

The tenability of hypotheses based on the results obtained from the study is discussed here:

Table 5.1

Tenability of Hypotheses

No.	Hypotheses	Tenability
1.	There is no significant difference in psychological distress among hearing impaired students based on gender.	Rejected
2.	There is no significant difference in psychological distress among hearing impaired students based on educational category.	Rejected
3.	There is no significant difference in resilience among hearing impaired students based on gender.	Rejected
4.	There is no significant difference in resilience among hearing impaired students based on educational category.	Rejected

5.	There is no significant relationship between resilience and psychological distress among deaf school students.	Rejected

Implications of the study

The findings of the present study convey that the participants have a mild level of psychological distress. Based on the results, providing awareness and training to teachers for following a structured teaching method and for the students to promote inclusivity, educating with life skills, social skills and coping strategies, counselling, yoga and different meditation techniques to improve resilience and to reduce their distress levels. In the same way, as the individual becomes older, their ability to address challenging circumstances will advance. Also providing training and education regarding the sign language to the parents/caregivers/relatives/friends are recommended to reduce the barriers of communication.

Limitations of the study

- Sample size was limited to 120 hearing impaired adolescents and it could impact the generalizability of the results.
- Conducting an in-depth exploration of the data collection process needed to be limited because of the time constraints.
- Challenges with communication between researcher and participants may have an impact on the data obtained.
- Only a small geographical area (4 districts) was covered, so might not be generalized.

Suggestions for future research

- Further studies can be done including other age groups.

- Comparative studies with other populations could be conducted.
- More researches can be carried out including other geographical areas.
- Future researches including more dependent and independent variables could be done.
- The role of peer relationships and social isolation in the psychological well-being of hearing-impaired students could be explored.

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APPENDICES

I. Informed Consent Form

Dear Participant,

My name is Greena John, and I'm currently pursuing Master's in Counselling Psychology at Loyola College of Social Sciences, Sreekariyam, Thiruvananthapuram. As part of my curriculum, I'm conducting research on the topic "Psychological Distress and Resilience among Hearing Impaired Students". In advancing my study, your perspectives will be really beneficial, and to facilitate this research, I am seeking participants to complete a set of questionnaires, which should take around 10 to 15 minutes of yourtime. Your sincere opinions are kindly requested. I respect your privacy and will ensure that all theinformation collected during the study remains confidential and will only be used for research purposes. Your participation in this study would be greatly appreciated, and I extend my sincere thanks for your time and cooperation.

Sincerely,

Greena John

Participant's Signature: ……

Date: ……

II. Personal Data Sheet

Name :

Age :

Gender :

School Name :

District :

Religion :

Contact number :

Do you have a hearing impairment?

If yes, please specify the level of hearing impairment: ……

Do you use any assistive devices?

III. Kessler Psychological Distress Scale (K10)

Please tick the answer that is correct for you:	All of the time (5)	Most of the time (4)	Some of the time (3)	A little of the time (2)	None of the time (1)
1. In the past 4 weeks, about how often did you feel tired out for no good reason?					
2. In the past 4 weeks, about how often did you feel nervous?					
3. In the past 4 weeks, about how often did you feel so nervous that nothing could calm you down?					
4. In the past 4 weeks, about how often did you feel hopeless?					
5. In the past 4 weeks, about how often did you feel restless or fidgety?					
6. In the past 4 weeks, about how often did you feel so restless you could not sit still?					
7. In the past 4 weeks, about how often did you feel depressed?					
8. In the past 4 weeks, about how often did you feel that everything was an effort?					
9. In the past 4 weeks, about how often did you feel so sad that nothing could cheer you up?					
10. In the past 4 weeks, about how often did you feel worthless?					

IV. Resilience Scale (RS-14)

Please read the following statements. To the right of each you will find seven numbers, ranging from "1" (Strongly Disagree) on the left to "7" (Strongly Agree) on the right. Circle below the number which best indicates your feelings about that statement.

Seria No.	Circle in the appropriate column	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
1	I usually manage one way or another							
2	I feel proud that I have accomplished things in my life							
3	I usually take things in stride							
4	I am friends with myself							
5	I feel that I can handle many things at a time							
6	I am determined.							
7	I can get through difficult times because I've experienced difficulties before.							
8	I have self-discipline.							
9	I keep interested in things							
10	I can usually find something to laugh about.							
11	My belief in myself gets me through hard times.							
12	In an emergency, I'm someone people can generally rely on.							
13	My life has meaning.							
14	When I'm in a difficult situation, I can usually Find my way out of it.							