

Psychological Distress and General Well-being of Deaf and Hearing Students: A Comparative Study

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ABSTRACT

The present study examines the general well-being of deaf and hearing Indian students pursuing diploma programs in Indian sign language at MD University, Rohtak. A total of 64 students (41 hearing and 23 deaf, with 33 males and 31 females) with a mean age of 22.44 (SD = 3.14) years participated in the study. To uniformly assess general well-being, psychological distress, and physical distress, the PGI General Well-being Measure and PGI Health Questionnaire N1 were administered to all individuals. The analytical review included inferential methodology (Mann-Whitney U Test) and descriptive metrics (mean and standard deviation). Results highlighted a lack of difference in general well-being scores between hearing and deaf male and female pupils. The discussion that follows places these findings in the context of the earlier studies and clarifies how they affect the group of deaf students.

Keywords: *General Well-Being, Psychological Distress, Deaf and Hearing Students*

Mental well-being is a fundamental aspect of overall health that surpasses physical limitations. In India, the deaf community faces unique challenges that can impact their mental health. Communication barriers, social isolation, limited access to resources, and societal stigma can contribute to feelings of frustration, anxiety, and loneliness among deaf individuals.

As per the census of 2011, with ensuing revision in 2016, the number of individuals with varied forms of disabilities¹ amounts to roughly 2.68 crore, making up around 2.21 percent of India's total population. Males (56%) outnumber females (44%) if considering all types of disabilities. Out of all 21 types of disabilities recognized as per the RPwD Act (2016). The number of deaf or hard-of-hearing individuals constitutes about 63 million (Varshney, 2016), who despite all-around development and technological advancement, are rendered feeling ignored and isolated for want of steps in the direction of inclusiveness.

Despite significant efforts by the community at various levels to integrate deaf individuals into the societal mainstream, effective communication remains a persistent difficulty, as their sole dependence on sign language, which eludes comprehension by the general population, leaves them feeling excluded. Consequently, they continue to have disproportionately lower levels of participation in the workforce. This situation further

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deteriorates by the fact that they are precluded from social activities, which may result in feelings of isolation and estrangement and, in turn, cause worry, emotional distress, and symptoms of depression that imperil their holistic well-being. To effectively address the psychological and physiological well-being of the deaf population, an adroit strategy involving advancement in communicative accessibility, increased awareness campaigns, and the equitable provision of mental health services tailored to their specific needs is required. The overall well-being of India's deaf population demands a two-pronged strategy incorporating both psychological and physiological aspects. A more complex and all-encompassing state of well-being is fostered within the deaf community as a result of strategic interventions aimed at enhancing communicative inclusivity, heightening cognizance of mental health, facilitating social assimilation, and ensuring equity in healthcare provisions.

KEY TERMS

Psychological distress

Psychological distress refers to non-specific symptoms of anxiety, depression, and stress. APA Dictionary of Psychology² defines psychological distress as a set of painful mental and physical symptoms that are associated with normal fluctuations of mood in most people. Chronic and high levels of psychological distress may lead to impaired mental health and mental health problems. Furthermore, it connotes a state of physical discomfort, unease, or dysregulation that arises from various internal or external stressors, involving physiological responses that indicate the body's reaction to stress, anxiety, or other challenging circumstances. These responses can include changes in heart rate, blood pressure, respiratory rate, muscle tension, and other bodily functions. Lastly, physiological distress is often associated with psychological and emotional stress, highlighting the intricate connection between the mind and body.

General well - being

General well-being refers to the state of contentment, happiness, life satisfaction or satisfaction with experiences of life, one's role in the world of work, a sense of achievement, with a sense of belongingness and utility, and having no distress, dissatisfaction, or worry, etc. (Diener and Diener, 1996). General well-being is a state of harmonious functioning of the physical as well as psychological aspects of the personality which gives satisfaction to the self and also benefits society at large.

LITERATURE REVIEW

While research on the relationship between physiological distress and well-being in the deaf community is gaining attention, there is still a need for more comprehensive studies that investigate the nuances of this relationship. Though there is a dearth of studies relating to psychological distress, coping strategies, and the overall health and well-being of the deaf, literature scanning relating to this area revealed that some studies have been conducted on the deaf and hard of hearing. Sreedhar and Reddy (2013), on the basis of their study among hearing-impaired children, reported that mute and deaf children have a higher level of stress and decreased coping. A recent study by Niazi, Ejaz, and Muazzam (2023) examined the psychological distress and subjective well-being of hearing-impaired older adults. They found significant differences in psychological distress between the male and female genders, with males having to face more distress overall. However, gender differences did not exist in subjective well-being. Psychological distress was found to be a significant predictor of subjective well-being.

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In a study conducted by Mousely and Choudoir (2018), stigma-related experiences of discrimination are related to suboptimal well-being among the deaf. Considering the less explored area of well-being in a distinct light and looking for inclusion in the mainstream section of society, i.e., the deaf, the present study was planned to examine the psychological distress and well-being of deaf students.

Research Objectives

1. To examine and compare the psychological distress and well-being of deaf and hearing students.
2. To inspect the psychological distress and well-being between males and females across the two sections, i.e. (deaf and hearing students).

Hypotheses

- Hypothesis 1: The study does not infer any statistically significant variations in psychological distress and overall well-being scores between deaf and hearing students.
- Hypothesis 2: The study finds no figuratively notable gender differences in psychological distress and holistic well-being scores among deaf and hearing learners.

Research Design

To achieve the objectives of the study a two-group study design was employed: One for deaf pupils and the other for students with normal hearing abilities.

Research Sampling

A sample of 64 students pursuing a diploma in teaching Indian Sign Language (23 deaf students) and a diploma in Indian Sign Language interpretation (41 Hearing students) from Maharshi Dayanand University (MDU), Rohtak were selected as participants on the basis of availability. There were 33 male students and 31 female students. The mean age of the participants was 22.44 with an SD of 3.14 years. Only those who consented to be participants were included in the sample. The age range of the participants was 18-24 years. All the participants were healthy with no physical or psychological problems. The deaf students were also healthy reporting no other health problems other than deafness.

Tools of Inquiry

1. PGI Health Questionnaire N-1. Developed by Verma, Pershad, and Wig (1985, reprinted in 2005), it entails 38 items divided into two sections. Section A has 16 items and measures physical distress and section B has 22 items and measures psychological distress. Participants have to read the items and put a tick mark against an item with which they agree. It has a test-retest reliability coefficient of 0.88 and split-half reliability of 0.86. It has significant correlations with the Cornell Medical Index, indicating its validity. The total score for physical and psychological distress will be the total number of items ticked by participants in sections A and B respectively.
2. General well-being was measured using a 20-item General well-being measure developed by Verma and Verma (2009 reprinted in 2016). The items are to be endorsed on a three-point scale - "Fully True", "Somewhat True" and "Fully Untrue" - with a score of 2, 1, and 0 respectively. It is reported to have significant interrater (.86) and inter-scorer (1.0) reliabilities (Moudgil, Verma, Kaur & Pal, 1986). Internal

consistency reliability was also reported to be high at 0.98 (Verma, Dubey & Gupta, 1983).

Procedure

After the selection of the general well-being and the distress scale, a sign language interpreter was trained to administer the scales to the participants. The researcher along with the interpreter administered all the scales to the hearing students pursuing the diploma in Indian sign language interpretation (DISLI) and the deaf students pursuing the diploma in teaching Indian sign language (DTISL) uniformly. As these were shorter scales taking a few minutes, all the scales were administered in one sitting.

FINDINGS AND DISCUSSION

The obtained data were analyzed using descriptive i.e., mean and standard deviation and inferential statistics Mann-Whitney U test as the sample size was small. The results are shown in Table 1. -Whitney U test as the sample size was small. The results are shown in Table 1.

Table 1 Mean, SD and significance of Mann-Whitney U Test

| | General Well being | | Psychological Distress | Physical Distress | |
|--------|--------------------|------|------------------------|-------------------|------------|
| | Mean | SD | Mean | Mean | SD |
| DISLI | 29.31* | 6.84 | 1.56* | 4.65* | 1.50 |
| DTISL | 31.91* | 5.59 | 3.30* | 6.69* | 3.33 |
| Male | 32.33@ 6.00 | | 2.15@ 2.67 | | 4.39@ 4.37 |
| Female | 28.03@ 6.36 | | 2.23@ 2.24 | | 5.71@ 3.97 |

NS= Non significant

*@U test non-significant

SD 3.80 4.85

Results (Table 1) revealed that the mean general well-being score of DISLI (Hearing) students were 29.31(SD=6.84) and for the DTISL (Deaf) students it was 31.91 (SD=5.59), which is above average indicating above average well-being of both hearing as well as deaf students. It is interesting to note that the deaf students scored slightly higher than the hearing students, but the difference in the mean scores was not significant.

The male students scored an average of 32.33 (SD=6.00), slightly higher than female students (Mean= 28.03, SD=6.36). The general well-being of males was found to be above average while that of females was average. The significance of the difference in mean scores was checked using the Mann-Whitney U test and it was negligible, indicating that the male and female students did not differ significantly in their general well-being scores (Table 1) and thus allow the second hypothesis to be rejected. Thus, the findings of the study align with those of Niazi, Ejaz, and Muazzam, (2023) reporting almost similar general well-being scores among the deaf and hearing adults.

As far as physical and psychological distress is concerned, the DTISL (deaf) students scored slightly higher than the DISLI (hearing) students, and the males scored slightly lower than the females (Table 1). However, when compared, the mean scores did not differ significantly, thus the first hypothesis that deaf students will score higher on psychological distress and lower scores on general well-being measures is rejected. The results of the study

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did not support the findings of Niazi, Ejaz & and Muazzam (2023), reporting a higher level of psychological distress in males than females.

It is imperative to understand that deaf students encounter a unique communication barrier since they lack spoken language and auditory information, two essential avenues for sensory and motor connection in humans. The absence of pivotal communication channels may prevent them from fully integrating into society. According to Sreedhar and Reddy's (2013) research, this situation frequently results in increased stress and emotional exhaustion. Such problems appear everywhere, be it people navigating hospitals, police stations, or markets. Regrettably, the consequent feeling is one of seclusion, estrangement, and contempt. Such emotions can result in serious consequences like anxiety, and depression, along with multifarious behavioral and mental issues.

Interestingly, the study found no evident difference in general well-being and distress levels between deaf and hearing students. The age and circumstances of the individuals may be Results (Table 1) revealed that the mean general well-being score of DISLI (Hearing) students were 29.31(SD=6.84) and for the DTISL (Deaf) students it was 31.91 (SD=5.59), which is above average indicating above average well-being of both hearing as well as deaf students. It is interesting to note that the deaf students scored slightly higher than the hearing students, but the difference in the mean scores was not significant.

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Interestingly, the study found no evident difference in general well-being and distress levels between deaf and hearing students. The age and circumstances of the individuals may be

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responsible for such eventuality. The majority of the study group were young people who had just finished their 12th-grade exams and were taking advantage of their enrolment in a reputed government school. They either lived at home or in comfortable university dorms, where they benefited from nurturing family settings. Their conditions will alter as they grow older, join the workforce, engage in familial duties, and navigate through the complexities of daily life.

The actuality that these individuals indicate above-average levels of well-being and appreciably lower levels of physical and psychological hardship is nonetheless encouraging.

Limitations of the Study

While assessing the outcomes of the study, certain limitations need to be inspected.

First and foremost, the sample size of the study is rather small, which restricts the applicability of the findings to the larger population of deaf and hearing students in India, resulting in reduced statistical ability and an increased susceptibility to chance outcomes.

Furthermore, because the study is cross-sectional, we cannot exhibit seminal correlations between psychological distress, well-being, and hearing circumstances. Longitudinal research might concur more valuable acumen into how these fabricates advance over a period of time.

Another notable restriction is the specimen's uniformity, which is primarily composed of students registered in diploma programs at the institution. Such a small group of students may not accurately reflect the diversity of experiences found in the wider deaf and hearing student populations. Moreover, the study's nucleus on a single educational institution may discern selection bias, as considerations specific to this university may impact the outcomes. Lastly, the utilization of self-report methodologies to consider psychological distress and well-being sets up the eventuality of response bias. Individuals may underreport or overreport their exposure based on the issues' social desirability or individual understanding. Furthermore, the mechanisms engaged are restricted in their scope to apprehend the complete intricacies of psychological discomfort and well-being. Future research should attempt to utilize a wider range of corroborated instruments to scrutinize these constructs holistically.

Future Scope of the Study

Provided the limitations highlighted previously, there is scope for further research to augment our discernment of the psychological well-being of deaf and hearing students in India.

Firstly, a sizeable and more sundry sample of students from multifarious educational setups and localities might elevate the findings' external validity. This widening may ensure the exploration of consequential moderating adjustable, such as cultural disparities or socioeconomic status, that may alter the connection between hearing status and psychological distress.

To navigate through the limitations of cross-sectional constructs, longitudinal studies could potentially trace students' psychological welfare and suffering over a time period. This would further permit the inference of patterns, fluctuations, and probable instrumental links. Moreover, by including quantitative techniques with qualitative insights, one could dispense

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a more rounded outlook, empowering a more nuanced analysis of the hurdles and appreciation for strengths encountered by deaf and hearing students.

Lastly incorporating neurophysiological standards, such as cortisol levels or heart rate variance, within the study could dispense objective indicators of stress and well-being, complementing the self-report metrics employed for the study. Furthermore, scrutinizing the effectiveness of interventions directed at ameliorating the mental health of deaf students, such as communication workshops or counseling initiatives tailored to their requirements, might also create an ecosystem of pragmatic solutions for their welfare.

CONCLUSION

To conclude, the primary focus of the study is to advance the discussion on the psychological well-being of deaf and hearing students in India. While there were no noteworthy differences in overall well-being or psychological distress between the two categories, the sample proportion and cross-sectional constructs require prudence in interpretation. The intricacies of the deaf happenings, involving communication hindrances, social isolation, and stigmatization, necessitate continuing investigation. Further research may enable better comprehension of the various determinants affecting the mental health of deaf and hearing students by expanding the scope of their investigation and embracing varied perspectives, eventually guiding the evolution of focused interventions and support mechanisms. The journey towards inclusiveness and well-being for the deaf requires an extensive and robust research approach, one that transcends current restrictions.

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Conflict of Interest

The author(s) declared no conflict of interest.

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