

# Exploring the Factors Influencing the Psychological Well-Being of Hearing-Impaired Students in Higher Education Institutions

Aina Sofia Rusaine<sup>1</sup>, Lokmanul Hakim Hamid<sup>2</sup> & Nasrudin Subhi<sup>3\*</sup>

<sup>1,2,3</sup>Centre for Research in Psychology and Human Well-Being, Faculty of Social Sciences and Humanities, The National University of Malaysia, 43600 Bangi, Selangor, Malaysia

\*Correspondent Author Email: nas2572@ukm.edu.my

To Link this Article: <http://dx.doi.org/10.6007/IJARPED/v14-i2/25255> DOI:10.6007/IJARPED/v14-i2/25255

**Published Online:** 11 April 2025

## Abstract

Hearing-impaired students in higher education face unique challenges that impact their psychological well-being, from communication barriers to social inclusion. Understanding these influences is crucial in creating a more inclusive and supportive learning environment. This study aims to identify the factors influencing their psychological well-being. Using a qualitative approach, this study involved semi-structured interviews with hearing-impaired students from selected Higher Education Institutions (HEIs). A total of three students volunteered comprised of two males and one female. The findings reveal that their psychological well-being is influenced by two main factors: factors that contribute to psychological well-being and factors that hinder it. For factors that contribute to psychological well-being five themes emerged: (1) comfortable and private environment, (2) relaxing activities, (3) social support from friends, (4) space relax and calm down, and (5) hobbies as self-therapy. Meanwhile, for factors that hinder psychological well-being four themes emerged: (1) financial stress, (2) academic and task overload, (3) loneliness and lack of social interaction, and (4) fatigue and physical health. The psychological well-being of students with hearing disabilities in HEIs is shaped by both supportive and challenging factors. Hence, a comprehensive approach involving institutions, the academic community, and the students themselves is essential to sustaining their well-being. The implications of this study highlight the need for more inclusive educational policies and the provision of comprehensive emotional and academic support for hearing-impaired students in HEIs.

**Keywords:** Psychological Well-Being, Hearing-Impaired Students, Social Support, Inclusive Education, Coping Strategies.

## Introduction

Psychological well-being is a crucial aspect of student life, particularly for individuals with hearing impairments pursuing higher education. These students encounter unique challenges that can significantly impact their well-being, including communication barriers, limited access to learning resources, and difficulties in forming social connections.

Understanding the factors that influence their psychological well-being is essential for developing targeted and effective support systems within Higher Education Institutions (HEIs).

Previous research highlights social support as a key determinant of psychological well-being among students with hearing impairments. Rosli et al. (2021) found that students who received both emotional and academic support from peers and teaching staff exhibited higher levels of well-being. Additionally, access to inclusive educational resources, such as sign language interpreters and assistive technologies, has been shown to enhance the learning experiences of these students (Ali et al., 2024). Furthermore, the ability to adopt effective coping strategies in managing academic and social stress also contributes significantly to their overall psychological well-being.

A study by Al Samih (2024) explored the social experiences of 12 deaf female university students through semi-structured interviews, identifying four key themes: the university environment, peer interactions, communication, and personal barriers. While many participants reported positive experiences, such as peer acceptance, they also encountered challenges, including social isolation and a lack of faculty understanding. These findings underscore the critical role of social support in enhancing the psychological well-being of deaf students. However, the study's limitations, including its small sample size and exclusive focus on female students, restrict the generalizability of its findings.

Similarly, Firmanda (2024) conducted a quantitative study involving 270 deaf adolescents in West Sumatra, using survey through questionnaires to examine the relationship between social support, life experiences, and psychological well-being. The findings revealed a significant association ( $p < 0.000$ ) between social support, life experiences, and psychological well-being, highlighting the essential role of social networks in helping deaf adolescents navigate life challenges. While this study reinforces the importance of social support, its reliance on a quantitative approach may not fully capture the subjective dimensions of psychological well-being. Future research could benefit from a mixed-methods approach to provide a more comprehensive understanding of the lived experiences of deaf students.

Browman and Crowe (2023) examined the effects of the COVID-19 pandemic on the emotional well-being, self-efficacy, and sense of loneliness among deaf students at Gallaudet University using a qualitative approach. Their findings indicate that most deaf students successfully adapted to online learning, largely due to the university's supportive infrastructure, which played a crucial role in facilitating meaningful social connections. However, these results may not be generalizable to institutions with less developed support systems, where limited access to technological and communication resources could yield different outcomes for deaf students.

In the context of mainstream education, Partington et al. (2024) explored the challenges faced by deaf students concerning their sense of belonging, identity, and the development of social and emotional skills. This study employed a literature review alongside insights from the authors' professional experience in special education for students with hearing impairments. However, the lack of empirical data from deaf students themselves

presents a key limitation. Future research could address this gap through case studies or interviews, offering a more comprehensive understanding of their lived experiences.

Ma et al. (2022) investigated the impact of discrimination on the subjective well-being of 246 deaf adolescents in China, with a particular focus on the moderating role of deaf identity. Their findings indicate that discrimination is linked to lower levels of well-being; however, a strong deaf identity serves as a protective factor, mitigating its negative effects. While this study offers valuable insights into the relationship between discrimination and well-being, longitudinal research is necessary to examine how deaf identity development and well-being evolve over time.

Furthermore, a study by Scherer et al. (2023) examined factors affecting the psychological well-being of deaf and hard of hearing children in the Gaza Strip through in-depth interviews and focus group discussions with 17 deaf children, 10 caregivers, 8 teachers, as well as experts in the field of hearing problems. The main themes identified include the lack of easily accessible communication, social exclusion, as well as negative attitudes towards deafness that affect the identity of these children. The study emphasizes that deaf children in conflict areas are at high risk of developing mental health problems. These findings underscore the need for more effective strategies in improving the well-being of deaf children, especially in contexts prone to political and social uncertainty.

In conclusion, the studies discussed affirm that the psychological well-being of deaf students is influenced by factors of social support, educational experience, discrimination, as well as deaf identity. Despite efforts to improve the psychological well-being of deaf students through the provision of social support and inclusive education, there are still gaps in research that require further exploration.

In summary, these studies collectively demonstrate that the psychological well-being of deaf students is shaped by multiple factors, including social support, educational experiences, discrimination, and deaf identity. Despite ongoing efforts to enhance their well-being through inclusive education and support systems, research gaps remain, necessitating further investigation to develop more comprehensive and effective strategies.

This study aims to identify the key factors influencing the psychological well-being of students with hearing disabilities in Higher Education Institutions (HEIs) in Malaysia. Adopting a qualitative approach, it focuses on the lived experiences of these students and their strategies for adapting to the academic environment. The findings are expected to contribute to the academic discourse and inform the development of more inclusive and supportive educational policies for students with hearing disabilities. By examining social, communication, and support-related factors, this study provides a comprehensive understanding of the elements shaping the psychological well-being of students with hearing disabilities. Social support, identity formation, and active engagement in positive interactions with peers and the broader community emerge as critical determinants in fostering their well-being within educational institutions.

## Methodology

### *Study Design*

The design of this study is a qualitative approach that uses a case study method using interview techniques as a method of data collection. Through this method, the researcher can ask questions openly to the respondents to obtain more in-depth and comprehensive information. In this study, a semi-structured interview method was conducted on three HEIs students with hearing disabilities. Interviews focused on factors that affect their psychological well-being. The interviews were conducted face-to-face or online and recorded using digital recording equipment in addition to hand-written notes. The identity of all respondents is kept confidential.

### *Study Locations*

For this study, the location involved several institutions of Higher Learning (HEIs) with hearing impaired students in three states, namely Johor, Negeri Sembilan, and Selangor. The selection of the location of the study by the researchers was also done after considering geographical factors. The selection of a study location that is close to the place of residence and place of study allows researchers to collect study information easily.

### *Study Sampling*

Since this study aims to explore the factors that affect the psychological well-being of students with hearing disabilities in Higher Education Institutions (HEIs), the sampling technique of this study uses purposeful sampling techniques. There are three students with hearing disabilities who are studying at HEIs which include Politeknik Ibrahim Sultan (PIS) in Johor, Universiti Sains Islam Malaysia (USIM) in Negeri Sembilan, and Universiti Kebangsaan Malaysia (UKM) in Bangi, Selangor. A total of three respondents is seen as sufficient for the study. The characteristics of the respondents chosen to answer the research questions are in accordance with the purpose of the study. Respondents have to meet certain criteria as follows: (1) have a documented hearing disability either partial or complete, (2) be registered as students at HEIs including polytechnics and universities, and (3) use assistive devices such as hearing aids, cochlear implants, or sign language in their daily lives.

### *Data Collection*

Firstly, individuals with hearing impairments enrolled in Higher Education Institutions (HEIs), such as universities and polytechnics, were identified as the study population. Respondents were chosen using purposive sampling. This implies that students are encouraged to take part in the study if they fulfil certain requirements, such as having a partial or whole hearing impairment. Next, potential respondents were contacted through WhatsApp to explain the study's goal and obtain their consent if they opted to participate. An interview was set up as soon as approval is received. Depending on the respondent's comfort level and compatibility, interview was performed in-person or via suitable online platforms. Every interview was videotaped with the respondent's permission to aid the process of data analysis. The obtained data was then transcribed before being analysed using a theme analysis approach to find important patterns and themes concerning students' emotional intelligence and psychological well-being.

*Data Analysis*

The initial stage in data analysis is to transcribe the interview recording into text format. This transcription must be completed carefully to ensure that every word and aspect of the respondents' communication, including sign language gestures, is faithfully documented. Once the material has been transcribed, the researcher will read it several times to familiarise themselves with it. This technique of repeated reading aids in comprehending the whole context and spotting early indications to potential topics. Coding is the process of finding meaningful units of information in data and giving labels, sometimes known as 'codes'. Coding was done manually. These codes are then organised into broader groups or topics. After the coding is finished, the next stage is to determine the major themes that emerge from the codes. These topics indicate major patterns in data on the emotional intelligence and psychological well-being of students with hearing disabilities in HEIs. This method entails integrating related codes and eliminating repeated or irrelevant themes.

**Results***Respondents' profile.*

This study involved a total of three students with hearing impairment who were selected by sampling to obtain information on factors that affect their psychological well-being. All respondents were university and polytechnic students who were studying at three different HEIs and had hearing impairment but could still communicate directly. To meet the objectives and research questions of the study, information on factors affecting the psychological well-being of students with hearing impairment in HEIs was obtained through interviews. All three respondents had a documented hearing impairment that was either partial or complete. In addition, they are also registered as students at HEIs including polytechnics and universities such as UKM, USIM and PIS. In addition, there were two respondents who used hearing aids in their daily lives while one respondent did not use any hearing aids. The profile of the respondents is as stated in Table 1.

Table 1

*Respondents' Profile*

Respondents	Sex	Higher Education Institutions (HEIs)	Categories of Hearing Impairment	Hearing Aids Used
1	Female	Universiti Sains Islam Malaysia (USIM)	Partial	Hearing aids
2	Male	Politeknik Ibrahim Sultan (PIS)	Partial	Hearing aids
3	Male	Universiti Kebangsaan Malaysia (UKM)	Partial	Without hearing aids

*Factors Affecting the Psychological Well-Being of Students with Hearing Disabilities in HEIs*

The thematic analysis conducted in this study aims to explore and understand the psychological well-being factors of hearing impairment students in HEIs. The results of these interviews, well-being factors that affect the psychology of hearing impaired students were broken down into two main parts namely, (1) factors that contribute to psychological well-being, and (2) factors that inhibit psychological well-being. Factors that contribute to psychological well-being comprised of five themes: (1) comfortable and private environment,

(2) relaxing activities, (3) social support from friends, (4) space to relax and calm down, and (5) hobbies as self-therapy.

#### *Comfortable and Private Environment*

Having a comfortable and private space has a positive effect on the psychological well-being of students with hearing impairment. They are more comfortable in an environment that allows them to relax, focus, and feel safe. According to respondent 1 it is more comfortable to be in her own personal space where she can control her environment according to her preferences, "... if I'm near my own room, I feel calmer. I like to decorate my workstation with my comfort, so I prefer to study near it."

#### *Relaxing Activities*

Students with hearing disabilities also use certain activities as a mechanism to control stress and stabilize their emotions. For example, respondent 1 reported she used music as a tool to calm himself and manage emotions, "I like to listen to music. If I'm feeling stressed or not okay, I'll put on my earphones and listen to a song."

While respondent 2 shared he chose activities that were more reflective in nature such as sitting in a quiet place to find peace; "Sometimes I sit by the lake by myself, look at the water, then feel calmer."

#### *Social Support from Friends*

Social support plays an important role in the psychological well-being of students with hearing impairment. Friends become a place for them to express themselves, get help, and find peace. According to respondent 3, social interaction with friends helps him reduce stress and gives encouragement; "If I'm feeling stressed, I'll find a friend I can trust. I think it would be better if I could talk to him about it." In addition, respondent 3 emphasizes the importance of having someone trusted to share problems that help in emotional stability.

#### *Space to Relax and Calm Down*

In addition to calming activities, hearing impaired students also need physical and mental space to relax. This space for relaxation focuses on a temporary place that is used to find peace when experiencing stress or want to be alone for a while. According to respondent 2, he used the religious space as a place to calm down, showing spiritual importance in psychological well-being; "I like to go to the mosque when I feel like I need to calm down. Sitting in the mosque feels different, like it's more spacious."

Meanwhile, respondent 3 stated that being quiet and resting without interruption is a form of emotional therapy for him; "Sometimes I sit in my room, not wanting to do anything. Just be quiet. That's enough to make me feel okay again."

#### *Hobbies as Self-Therapy*

Moreover, students with hearing disabilities in HEIs use hobbies as a form of self-therapy to maintain their psychological well-being. For example, respondent 1 uses art as a medium of emotional expression and a way to calm the mind; "I like to do art. When I'm stressed, I draw."



While respondent 2 used music as a self-therapy to maintain psychological well-being; "Playing the guitar releases tension for me. Sometimes I play alone in a [my] room."

### *Factors that Hinder Psychological Well-Being*

In addition to the factors that contribute to psychological well-being, there are also challenges and obstacles that negatively affect the emotional and mental well-being of students with hearing impairment in HEIs. Based on the interview findings, four themes emerged which hindering their psychological well-being: (1) financial stress, (2) academic and task overload, (3) loneliness and lack of social interaction, and (4) fatigue and physical health.

### *Financial Stress*

Difficulties in managing finances are becoming one of the main factors affecting the psychological well-being of students with hearing impairment. They must face challenges in daily expenses, academic needs, and the cost of living at the university. According to respondent 2, he faced financial stress that required him to carefully evaluate every expense; "Sometimes I think about buying things too many times, even essential things. Sometimes I have enough money, sometimes I don't."

While respondent 3 is also no exception when he needs to decide between academic needs and other expenses; "You [means I] have to think twice or three times before printing an assignment, because you [means I] have to save money for other things too."

### *Academic and Task Overload*

Academic stress, such as numerous assignments, challenges in understanding lessons, and the pressure to fulfil academic requirements within a limited timeframe, also impacts the psychological well-being of students with hearing impairments. This thought has been raised by respondent 1 where she at times becomes overwhelmed by all the task that he needs to complete and feels that time is not on her side; "Sometimes there's so much work that I don't know where to start. It feels like there's not enough time."

### *Loneliness and Lack of Social Interaction*

Hearing-impaired students also face challenges in forming close social relationships, leaving them feeling lonely and lacking emotional support. According to respondent 2, he faced an internal conflict between wanting to be alone but at the same time feeling lonely; "I like to sit alone, but sometimes I feel lonely. If my friends don't invite me out, I just sit in my room."

Moreover, respondent 3 shares that sometimes he feels excluded and unimportant due to the lack of initiative from friends to interact. In other words, he often relies on others to initiate social interactions and questioning their sense of belonging; "I wait for people to invite me first. If no one invites me, I don't go out. Sometimes I feel like people don't care."

### *Fatigue and Physical Health*

Physical fatigue due to a busy academic schedule, lack of sleep, and mental stress are also factors that contribute to a decrease in psychological well-being. Respondent 3 states that physical fatigue has a direct relationship with emotional stability. For example, when he

is too tired, he is more prone to stress and anger; "Sometimes when my body is really tired, I feel emotionally unstable. I get angry quickly, I get stressed quickly."

Whereas respondent 1 had difficulty focusing when she did not get enough sleep, which in turn affected her academics and emotions; "If you don't get enough sleep, you really can't focus. Everything feels fuzzy."

In conclusion, positive aspects that contribute to psychological well-being include a comfortable atmosphere, personal activities, and social support. Financial stress, academic strain, and physical and mental exhaustion are more likely to impair psychological well-being.

## Discussion

The results of the study showed that having a comfortable and private space provided peace of mind to hearing impaired students. Besides that, this comfortable and private space can improve one's focus and mental well-being. The finding is in line with Al Samih (2024) who emphasized the importance of a friendly environment for deaf students in improving psychological well-being.

In addition, another factor that supports psychological well-being is that hearing impaired students use certain activities to manage stress. This research found that listening to music helps in managing emotions is in line with a study by Bowman and Crowe (2023) who found that deaf students at Gallaudet University used various strategies to adapt to academic and social stress. Nonetheless, there are those who choose the opposite whereby opted for a quiet moment to find peace and tranquility as a way of managing their psychological well-being.

Another key supporting factor is that social interaction plays an important role in emotional well-being. For most this is achieved through spending time with friends can helped to reduce stress. This finding is in accordance with Firmanda's (2024) findings that showed that social support had a significant influence on psychological well-being. Furthermore, this study emphasises the importance of having a trusted person to talk to, stressing that quality interpersonal relationships are necessary to maintain emotional stability.

This study found that religious space is seen as a place that can provide peace and comfort. Religious spaces such as mosque play a crucial role in promoting psychological well-being by providing a sense of community, emotional support, and spiritual fulfilment. These spaces serve as sanctuaries where individuals can engage in prayer, meditation, and social interactions, all of which contribute to mental health and overall well-being. Engaging in religious practices within sacred spaces has been linked to lower levels of stress and anxiety. Mindfulness practices such as prayer and meditation promote relaxation and emotional regulation, enhancing overall mental health (Pargament, 2011) including psychological well-being.

Engaging in hobbies plays a significant role in maintaining and improving psychological well-being by reducing stress, enhancing cognitive function, and promoting social connections. Hobbies provide an outlet for self-expression, relaxation, and personal growth,



all of which contribute to overall mental health. As shared by the respondents they resorted to arts and music as hobbies to maintain good psychological well-being. This finding is in line with a study by Scherer et al. (2023) which showed that self-expression activities help reduce emotional stress among deaf individuals. Furthermore, Pressman et al. (2009) found that engaging in enjoyable leisure activities reduces stress and anxiety by promoting relaxation and mindfulness, leading to lower cortisol levels and improved mood.

The findings for factors that hinder psychological well-being are that financial stress has a direct impact on psychological well-being. Undeniably things are getting expensive by the day thus all are affected including university students. For those coming from a less fortunate socioeconomic background will be more affected by the situation and if among them are those having hearing impairment the effect might be double. The findings are in accordance with Firmanda (2024) which shows financial stress as the main factor that hinders the psychological well-being of deaf students in West Sumatra. This situation has an impact on their emotional well-being because financial worries can cause prolonged mental stress.

In addition, academic and task overload are factors that also hinder psychological well-being. For those having hearing impairment might need extra time in terms of completing an assignment as compared to ordinary students due to their handicap. This study also found that they might feel hesitant to ask questions in a class although they do not understand what was being taught. This situation demonstrates the importance of academic support for hearing-impaired students, as discussed by Ma et al. (2022) who found that academic discrimination can have a negative impact on the well-being of deaf students.

The next barrier factor is loneliness and lack of social interaction. Loneliness and limited social interaction significantly affect the psychological well-being of individuals with hearing impairment, leading to increased stress, anxiety, and depression. This study found that respondent do experience conflict between wanting to be alone and the feeling of loneliness. Another issue was the feeling of being neglected by friends who did not take the initiatives to interact first. Communication barriers often make it challenging for individuals with hearing impairment to engage in social activities, leading to feelings of isolation and exclusion. Studies have found that social isolation is a major risk factor for depression and reduced life satisfaction among individuals with hearing difficulties (Shukla et al., 2020). The findings are further being supported by Lee et al. (2022) stating that feeling of not being accepted in the community can increase the risk of mental health problems for hearing impaired individuals.

Lastly, this study found that physical fatigue is also a factor that hinders the psychological well-being of students with hearing impairment. Respondents stated that physical fatigue is closely related to emotional stability, where stress and anger are more likely to happen when the body is too tired. Besides that, physical fatigue can also be caused by lack of sleep, which ultimately affects physical and psychological well-being. This finding is in line with a study by Scherer et al. (2023) which shows that physical factors such as fatigue can increase the risk of emotional disorders among hearing impaired individuals.

## Conclusion

This study emphasizes that the psychological well-being of hearing-impaired students in HEIs is influenced by a variety of interrelated factors including social support, access to inclusive education facilities, and individual coping mechanisms. Findings indicate that factors that support psychological well-being, such as emotional support from family and peers, access to comfortable learning spaces, and engagement in calming activities, play an important role in helping students adapt to academic and social challenges. However, the study also identified several challenges that hinder the psychological well-being of students, such as financial stress, academic and task overload, loneliness due to lack of social interaction, as well as physical fatigue that affects emotional stability. These factors not only have an impact on the mental well-being of students but can also affect their academic performance in the long run.

The implications of this study emphasize the need for HEIs to strengthen inclusive education policies by providing more academic and psychosocial support to students with hearing disabilities. Measures such as expanding access to sign interpreters, introducing specialized counselling programs, as well as creating a more deaf-friendly learning environment for students can help improve their psychological well-being. In addition, this study suggests that students with hearing disabilities be given more opportunities to build effective coping skills, such as exploring stress management activities, strengthening communication skills, and increasing awareness of the importance of mental well-being.

In conclusion, the psychological well-being of hearing impaired students in HEIs is influenced by a combination of supportive and inhibitory factors. Therefore, a holistic approach involving the institution, the academic community, and the students themselves is needed to ensure that their well-being continues to be preserved. Future studies are recommended to explore more effective interventions in improving the psychological well-being of students with hearing impairment in the context of HEIs.

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