

Original Research Report



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## Mental Health Literacy among First-Generation University Students with Visual Impairments

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**Abstract:** The major objective of this study was to investigate whether visual impairments (VI) impact mental health literacy among first-generation university students (FGUS). A descriptive survey research method was used to examine the mental health literacy of 132 purposive sample of FGUS with and without VI from three federal universities in Southern Nigeria. A 35-item MHL Scale (MHLS) for university students (Cronbach's  $\alpha=0.83$ ) with 5-point response was used for data collection. Questionnaire distribution was achieved through the help of two research assistants. Means, standard deviations, analysis of variance and regression plot were employed to analyze the research data. Participants' mean age was  $24.96\pm 3.86$  years. Results showed a higher level of mental health literacy across seven domains of the MHL Scale among students with VI compared to those without this disability. The students identified mental health literacy they possess including the ability to recognize specific disorders, the ability to seek mental health information, the ability to identify risk factors and causes, the ability to understand self-treatment options, the ability to access professional assistance, and positive behaviors that promote awareness and help-seeking. VI did not significantly impact the mental health literacy of FGUS with VI. VI explained only 6.31% of the variation in MHL among FGUS with VI. Accordingly, mental health literacy is an essential skill that should be acquired by everyone, including those who suffer from specific disorders and professionals who care for them. Further effort is required in order to improve the mental literacy of FGUS without VI in Nigerian universities.

**Keywords:** Mental Health Literacy, First-Generation University Students, University Students, Visual Impairments

## 1. Introduction

The concept of mental health literacy (MHL) encompasses seven characteristics, which include the ability to recognize specific disorders, the ability to seek mental health information, the ability to identify risk factors and causes, the ability to understand self-treatment options, the ability to access professional assistance, and attitudes that promote awareness and proper help-seeking (Jorm et al., 1997). MHL is also described in simple term as knowledge and beliefs about mental disorders that are helpful in identifying, managing, or preventing these disorders (Al-Yateem et al., 2022; Jorm, 2000). In this study, first generation university students (FGUS) are university students whose parent(s) have never gone to university so they are considered as the first people to attend a university in their family (Motsabi et al., 2020). The term FGUS is also used to describe those students whose parent(s) did not complete a university degree regardless of the education level of other members of the family. University students who are first-generation are critically important, and their number is on the rise. In Africa, approximately 75% of first-year students are the first people in their family to attend university (Independent Online, 2022). A substantial number of FGUS come from economically disadvantaged families with limited exposure to higher education opportunities (Motsabi et al., 2020). There has been an abundance of research conducted on first-generation university students, but information is lacking regarding their mental health literacy, particularly among those who have disabilities and are living in developing countries. For instance, Chukwu (2019) explored the learning experiences of first-generation Nigerian graduate students with regard to their educational background, transitions, adjustments, and access to learning services at the University of Saskatchewan, whereas, Motsabi et al. (2020) explored the role of social support in the persistence of first-year first-generation African students in a higher education institution in South Africa.

While it is not uncommon for FGUS to have a variety of experiences, many of them do lack access to a knowledge network relevant to their mental health literacy. First-generation students are at risk of experiencing mental health issues, which can have an influence on their academic progress and well-being (Kalkbrenner et al., 2021). In their work, Spiker and Hammer (2019) concurred to conceptualizing mental health literacy as a theory and adopting certain principles of theory development. Mental Health Literacy theory (MHLt) posits that a person's knowledge, attitudes and beliefs about the following mental illness domains – causes, recognition, how to seek information, and sources of help – can predict their help-seeking behaviors (Bamgbade, Harrision & Barner, 2014). Consequently, this research is based on MHLt with the following additional clarifications: (i) the recognition of mental illness can directly impact the efficacy of help-seeking and the maintenance of positive mental health (Lu et al., 2021). (ii) MHL includes the knowledge and abilities necessary to promote mental health; it is a key factor for mental health behaviours of individual (Bjørnsen et al., 2017). (iii) MHL comprises of all those knowledge and skills that can be used to advocate for health promotion and change in an environment which can lead to improved mental health and well-being (Kutcher, Wei & Coniglio, 2016).

The MHL of student population in Nigeria seems to be very discouraging. Only 4.8% of Nigerian secondary school students (Aluh et al., 2018) and 12.1% of Nigerian university students

(Aluh, Okonta, & Odili, 2019) of those surveyed could correctly identify and label the symptoms of depression and schizophrenia respectively. In terms of seeking professional help, the majority of students do not consult psychiatrists or psychologists but often turn to family, friends, or other non-medical sources for assistance (Aluh et al., 2018). These prior studies demonstrates a pressing necessity to further investigate and improve mental health awareness and literacy among Nigerian students. The studies investigated MHL in general student population but missed the opportunity to examine whether disability impact Nigerian students' MHL when compared to their non-disabled peers. Choi et al. (2023) observed that in order to achieve optimal health and educational outcomes, patient education and health literacy must seek to improve knowledge of health and self-care practices in all individuals. Nevertheless, it seems that not enough attention is paid particularly to individuals with visual impairments (VI) who need specific modifications for increased health literacy and access to healthcare. It seems that individuals with VI have worse mental health connected to their vision than do those without VI (Varma et al., 2006). MHL is critical for increasing mental health awareness and help-seeking behaviours among university students who face unique challenges, such as FGUS with VI (Eseadi & Diale, 2022). However, research into MHL in this particular demographic is sparse. Therefore, the major purpose of this study was to investigate whether VI impact mental health literacy among FGUS in Nigeria. The sub-objective of this study include:

- a) To investigate the level of mental health literacy among FGUS with and without VI.
- b) To identify different mental health literacy skills possessed by FGUS with VI.
- c) To examine the impact of VI on mental health literacy of FGUS.

## **2. Materials and Methods**

### *2.1.1 Ethics Statement*

Ethical approval was received for the study from the Research Ethics Committee at the Faculty of Education, University of Nigeria. The participants were required to provide informed consent prior to completing the survey.

### *2.1 Research Design*

A descriptive survey research design was used to examine the mental health literacy of first-generation university students with and without VI. This design was chosen because it can help a researcher to investigate the characteristics, actions, and perceptions of students. Descriptive surveys can also be used to gather information on the experiences, attitudes, and performance of students. The descriptive survey allow researchers to methodically collect data on a target group without manipulating any variables (Siedlecki, 2020).

### *2.2 Population and Sample*

The study population consists of all first-generation university students with and without visual impairments attending Nigerian public universities. Nigeria's public universities are funded by either the state or federal governments depending on ownership. The state governments fund state universities, whereas the federal government of Nigeria funds federal universities. This study's participants were 132 purposive sample of first-generation university students with and without visual

impairments from three public universities funded by the federal government in Southern Nigeria. Participants' mean age was  $24.96 \pm 3.86$  years old. Eight male and 14 female students with VI partook in the study while, 43 male and 67 female students without VI also took part in the study.

### 2.3 Instrumentation and Data Collection

A 35-item MHL Scale (MHLS) for university students (Overall Cronbach's  $\alpha = .83$ ) with 5-point response scale (0-4; strongly agree, agree, undecided, disagree, strongly disagree) and seven domains (five items each) developed based on mental health literacy conceptualization by Jorm et al. (1997) and Kutcher, Wei and Coniglio (2016) and a previous scale by O'Connor and Casey (2015) was used for data collection. Low total eye health scores of the student sample with VI showed that it was a group with VI based on the National Eye Institute Visual Function Questionnaire -25 (VFQ-25) (Mangione et al., 2001). During the data collection process, the MHLS was read out to students with VI and their responses were documented by the research assistants. Students without VI completed the scale without such assistance. Questionnaire distribution was achieved through the help of two research assistants.

### 2.4 Method of Data Analysis

Means, standard deviations, analysis of variance (ANOVA) and regression plot were employed to analyze the research data. The use of means and standard deviations provided a clear and concise way for the researcher to describe the central tendency and spread of the MHL scores, allowing for comparisons between student groups with and without VI. ANOVA was used to test for differences in students' MHL scores by considering groups with and without VI. It allowed the researcher to determine if there are statistically significant differences in mental health literacy between the different groups of students analysed in this study. Regression plot allows for the examination of the impact of mental health literacy in students with and without VI.

## 3. Results and Discussion

**Table 1:** Analysis of responses of FGUS with and without VI across the domains of MHL

MHL domains	FGUS with VI Mean(SD) (n=22)	FGUS without VI Mean(SD) (n=110)	F (df=1, 130)	P-value
Ability to recognize specific disorders	18.05(1.17)	9.60(1.02)	1202.60	<.001
Ability to seek mental health information	17.64(0.95)	6.95(1.37)	1211.96	<.001
Ability to identify risk factors and causes	13.55(0.91)	4.94(0.88)	1731.65	<.001
Ability to understand	14.18(2.67)	5.03(0.79)	915.42	<.001

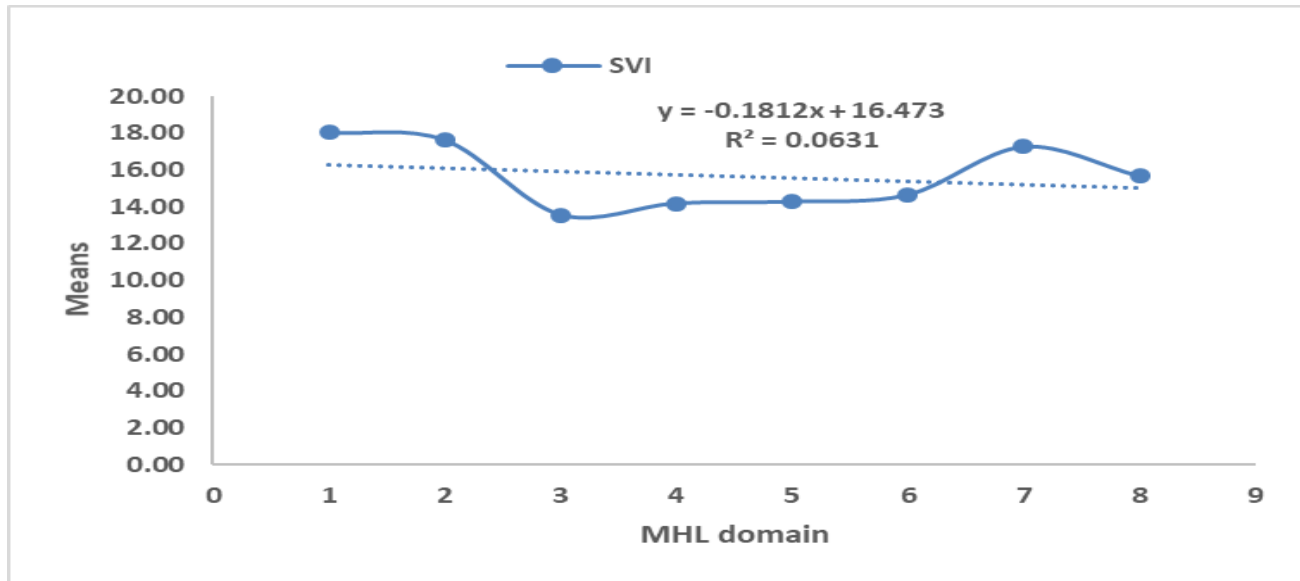
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self-treatment options				
Ability to access professional assistance	14.27(0.77)	5.65(0.89)	1782.17	<.001
Positive behaviors that promote awareness	14.64(3.39)	4.65(1.51)	485.25	<.001
Proper help-seeking	17.27(1.72)	7.62(0.96)	1368.54	<.001
<i>Overall MHL score</i>	15.66(0.81)	6.35(0.45)	5804.29	<.001

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SD=Standard Deviation, MHL=Mental Health Literacy, VI=Visual Impairment

Table 1 showed that a higher level of mental health literacy across seven domains of the MHL Scale was evident among students with visual impairments compared to those without such disability. The students identified mental health literacy they possess including the ability to recognize specific disorders, the ability to seek mental health information, the ability to identify risk factors and causes, the ability to understand self-treatment options, the ability to access professional assistance, and positive behaviors that promote awareness and help-seeking. Accordingly, mental health literacy is an essential skill that should be acquired by everyone, including those who suffer from specific disorders and professionals who care for them. The results of this study are consistent with those of Eseadi and Diale (2022), who found that FGUS with VI had higher levels of mental health literacy than students without VI across seven domains of the MHL Scale. However, the study finding on MHL level in FGUS is at variance with another research that investigated MHL level of university students and reported low MLS (Seboka et al., 2022). The findings did not also support those of Aluh et al. (2018) and Aluh, Okonta, and Odili (2019) who reported that the students had low level of MHL. The discrepancies in findings could be attributed to the prior study's focus on the general student population that might have included both continuing- and first-generation students, as well as those with and without disabilities, like those with VI. Furthermore, it is important to note that factors such as gender, digital health literacy, extent of seeking mental health-related information and exposure to mental illness in the family are important variables linked to variations in MHL levels among university students (Seboka et al., 2022).



**Figure 1:** Regression plot of impact of VI on MHL of first-generation university students with VI (SVI)

Figure 1 showed that VI did not have significant impact on the mental health literacy of FGUS with VI. The regression R-score of 0.0631 indicates that VI explained only 6.31% of the variation in MHL among FGUS with VI. This suggests that VI alone is not a strong predictor of mental health literacy in this population. Given that the R-score of 0.0631 is quite low, VI is not a primary factor driving differences in students' MHL. Other individual, family, and environmental factors are likely playing a larger role to account for any variations in MHL scores among students. Harrison et al. (2012) discovered that the MLS of individuals with VI was commendable, as their study participants identified a variety of health promotion topics, types of devices used to gather health information, and several barriers to health information that could be removed. Although, in many regions of the world, individuals with VI still face barriers in MHL which can result in mental health problems when compared to the general population (Augestad, 2017; Dike et al., 2024). Some major barriers include limited understanding of the impact of vision loss on mental health and the available treatment options, low health literacy makes it difficult to obtain accessible health information, self-stigma regarding both VI and mental health issues, and misattribution of mental health symptoms, such as fatigue and loss of daily activities, as solely caused by VI (van Munster et al., 2021). To assist in improving the MHL of those with VI who still face significant mental health problems, it is necessary to prioritize practical support for vision issues over mental health, increase access to psychoeducation about mental health risks, symptom recognition, and improve support options for this population (van Munster et al., 2021), increase access to supportive social networks and healthcare providers who understand mental health in this population, gradually introduce new and challenging tasks to build confidence in those with VI, and use relaxation techniques and cognitive behavioral therapy adapted for this population to improve their MHL (Loftin, 2024). Implementing school-based mental health literacy programs can significantly increase students' knowledge, attitudes, and confidence towards depression and other mental illnesses (Atilola et al., 2022).

One implication of this study is that it is possible for first-generation university students with

visual impairments to serve as mental health literacy mentors for prospective students with low mental health literacy. Peer facilitation programs may also be necessary to effectively utilize these students' mental health literacy. In the present study, the results are limited to the FGUS sample and the universities studied. As this was a quantitative survey research, it was not possible to explore the lived experiences of FGUS regarding their mental health literacy in the context of this study. In spite of its limitations, descriptive survey research can provide valuable insight into mental health literacy levels among FGUS with and without VI in developing regions. There is a need for universities to encourage the organization of workshops and symposiums focused on mental health literacy topics for students, and more specifically for FGUS. The university counseling units should assist in providing mental health literacy counseling to FGUS as soon as they are admitted, perhaps during orientation. It is recommended that FGUS without VI seek counseling related to their mental health in order to receive guidance on mental health literacy matters. Future research should utilize a qualitative research paradigm in order to better understand the mental health literacy of FGUS with and without VI. It may be worthwhile to conduct a comparative study involving second-generation students in order to gain a deeper understanding of the mental health literacy of FGUS by comparing their experiences. Whether a student has a disability such as VI or not, mental health literacy is essential for every student and professional in school setting.

#### **4. Conclusion**

This research suggests that there is an encouraging level of MHL among FGUS with VI in Nigerian public universities. Students with VI were found to have a higher level of mental health literacy across seven domains of the MHL scale compared to students without this disability. The condition of visual impairments did not have significant impact on the MHL of FGUS with VI. To be able to better understand the MHL of FGUS with and without VI, future research should utilize a qualitative research paradigm. A need exists for universities to encourage the organization of workshops and symposiums that are focused on mental health literacy topics for students, and more specifically for FGUS. To further improve the mental health of FGUS with and without VI, a mental health literacy strategy is required. This should include educating all students to recognize signs and symptoms of mental health concerns, promoting help-seeking behavior and decreasing stigma, providing access to mental health resources and support services, training faculty and staff to recognize and aid distressed students, and addressing specific health difficulties experienced by the students. Overall, Nigerian public universities can help FGUS succeed by improving their mental health literacy and fostering a supportive campus atmosphere among them.

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## Availability of Data Statement

The data from this research can be obtained upon reasonable request from the author.

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## Conflict of interest

The author declares that there is no conflict of interest to disclose.

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