

Mental Health Challenges and Coping Strategies Among Mukuba University Students: An Exploratory Study Using a Chi Square Test

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Publication Date: 2026/03/07

Abstract: This study examined mental health challenges, contributing factors, and coping experiences among Mukuba University students. A cross-sectional descriptive survey was conducted among 370 students selected through stratified random sampling. Quantitative data were collected using an electronic questionnaire which incorporated a likert scale, and qualitative data were collected using an interview guide across six focus groups. Data were analyzed with SPSS, employing descriptive statistics and a chi square test to independence between Health challenges and Coping experiences. Findings revealed that 83% of respondents reported experiencing stress in the past month, 46.2% reported anxiety, and 37.7% reported symptoms of depression. The majority (84.2%) cited academic pressure as the main contributing factor, followed by financial stress (67%) and family expectations (24.9%). Coping experiences include talking to friends or family (60.5%), engaging in religious or spiritual activities (53.2%), and using social media (53.2%), while only (2.3%) reported seeking professional counseling. The Chi square test revealed that coping strategies are not independent of mental health challenges. The study concluded that mental health challenges are widespread among Mukuba University students, yet professional help-seeking remains low. These findings underscore the need for accessible mental health services, awareness campaigns, and student centered support programs to promote academic success and wellbeing.

Keywords: Mental Health Challenges, Coping Strategies, University Students, Exploratory, Chi Square Test.

How to Cite: Alex Samuel Mungo; Wezi Banda; Obrian Lumamba Mweemba; Chikwe Nambeye; Vincent Nacidze (2026) Mental Health Challenges and Coping Strategies Among Mukuba University Students: An Exploratory Study Using a Chi Square Test. *International Journal of Innovative Science and Research Technology*, 11(2), 2819-2825. <https://doi.org/10.38124/ijisrt/26feb865>

I. INTRODUCTION

➤ Background

Mental health issues are increasingly prevalent among university students globally, with anxiety, depression and stress being common challenges. The university environment, academic pressures and lifestyle changes can exacerbate these issues. In Zambia, mental health support systems are still developing, making it essential to understand the specific needs and experiences of students. At Mukuba University, a public university growing at high rate and having 90 percent of students from rural areas of Zambia faces the same challenges, hence making this need crucial.

Additionally, mental health challenges are increasingly recognized as a significant concern among university students worldwide. In Zambia, studies have reported high prevalence rates of depression, anxiety, and stress among university students. For instance, a study found that 28.5% of students at the University of Zambia experienced stress (Kapungwe *et al.*, 2015). Similarly, another study reported that 69% of students at Mulungushi University were unlikely to seek help for mental health problems due to stigma (Mweemba *et al.*, 2022).

Moreover, the transition from secondary school to university life can be overwhelming for many students due to increased academic demands, financial pressures,

homesickness, and social isolation. These stressors can be particularly challenging for first-year students who are adapting to a new environment with limited coping mechanisms. Without structural mental health support and awareness programs in place, these students are at a heightened risk of developing anxiety disorders, depression, or even engaging in harmful behaviors such as substance abuse. Addressing these challenges early through prevent education, accessible services, and a supportive campus culture is crucial for promoting long-term mental well-being (Chiluba & Mumba, 2021).

II. METHODOLOGY

The target population for this study included all full-time undergraduate students at Mukuba University. This includes students across all faculties, departments, and year groups. Given the total student population of approximately 3,000 at Mukuba University, thus the required sample size calculated was approximately 374 students. This study used a mixed-methods research design, employing both quantitative and qualitative data collection methods.

Quantitative data were collected using a structured questionnaire which incorporated a likert scale was administered electronically to the selected sample of 374 students. Furthermore, In-depth interviews were conducted with key informants such as students, lecturers, and administration staff members, including six focus group discussions among students. Data was analyzed with SPSS, employing descriptive statistics such as frequencies,

percentages, and means. Furthermore, a chi square test was done to test for independence of coping strategies to mental health challenges. Moreover, Permission to conduct the study was obtained from relevant university authorities. Informed consent was obtained from all participants. Confidentiality and anonymity were strictly maintained.

III. RESULTS

➤ *Socio-Demographic Characteristics*

The majority of respondents were aged between 18 and 22 years, followed by those aged 23–27 years. A small number of participants were under 18 years or aged 28 years and above. Female students (184) slightly outnumbered male students (154), while a few respondents preferred not to disclose their gender.

Most participants were in their third year of study (126), followed by first-year (89), second-year (66), and fourth-year students (64). Regarding accommodation, most students lived either on-campus (169), followed by off-campus students (166), with only a few staying with family members (9).

➤ *Mental Health Challenges Experienced*

In the 30 days preceding the survey, stress was the most commonly reported mental health challenge (286), followed by anxiety (158) and depression (129). Burnout (46) and suicidal thoughts (20) were also reported, while only a small number of students (13) indicated that they had not experienced any of the listed challenges.

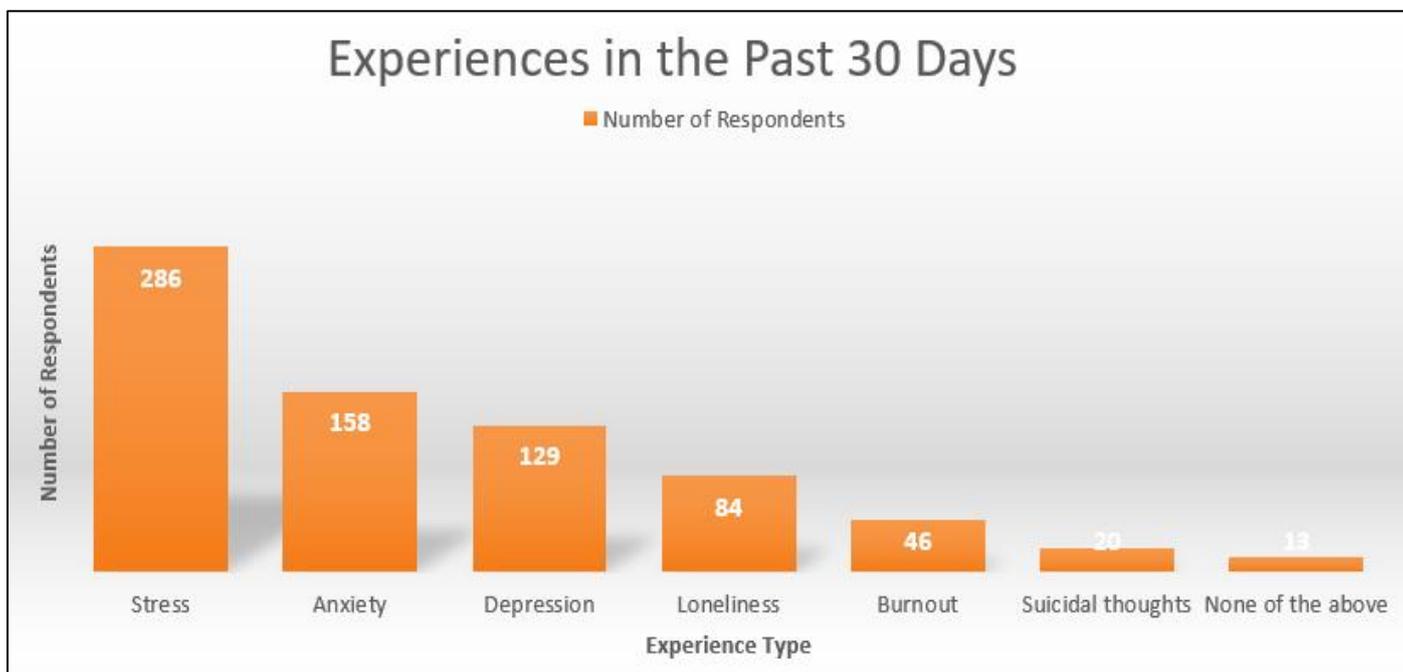


Fig 1 Experiences in the Past 30 Days

➤ *Effects of Mental Health Challenges by Gender*

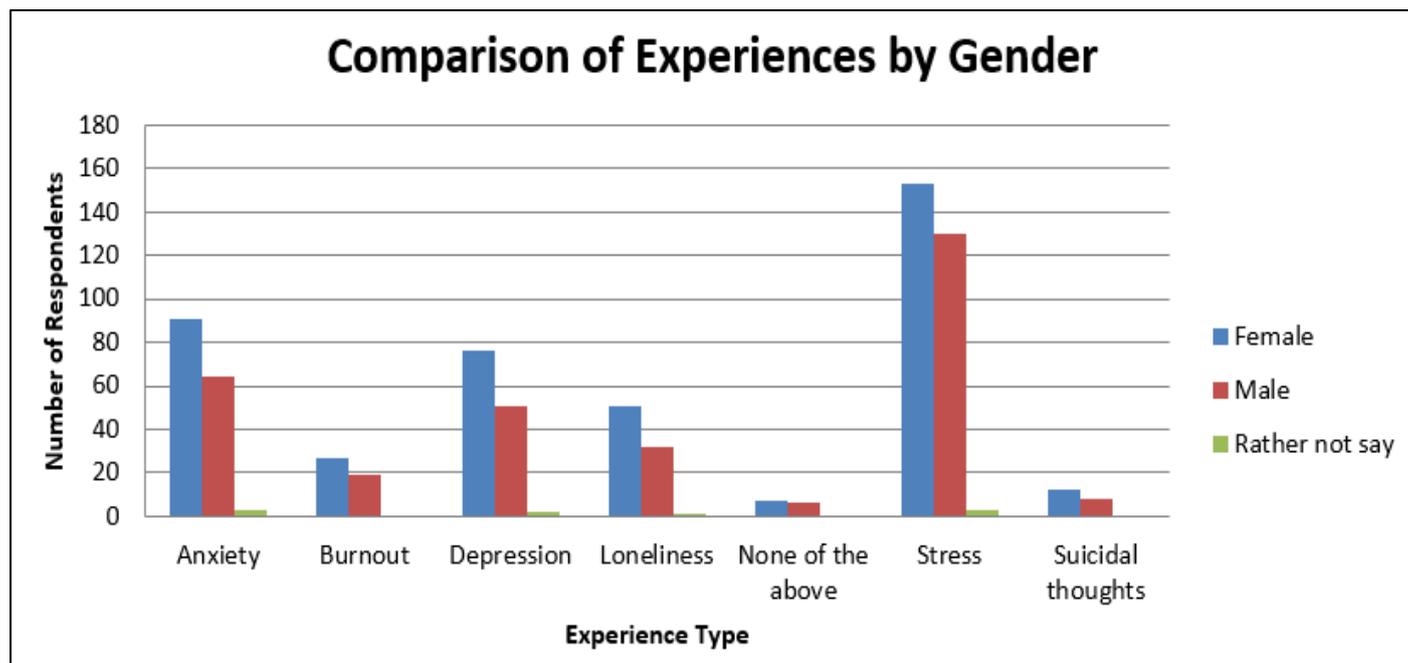


Fig 2 Comparison of Experiences by Gender

In terms of Gender Females at Mukuba University are more affected in mental health issues compared to Males.

➤ *Self-Rated Mental Health Status*

When asked to rate their overall mental health, most students described it as fair (148). Others rated their mental health as good (116) or excellent (34). However, a notable proportion rated their mental health as poor (36) or very poor (10).

➤ *Academic Overwhelm*

A large proportion of students reported feeling overwhelmed by academic responsibilities either sometimes (153) or often (103). Some indicated that they always felt overwhelmed (48), while very few reported rarely (37) or never feeling overwhelmed (5).

➤ *Factors Affecting Mental Wellbeing*

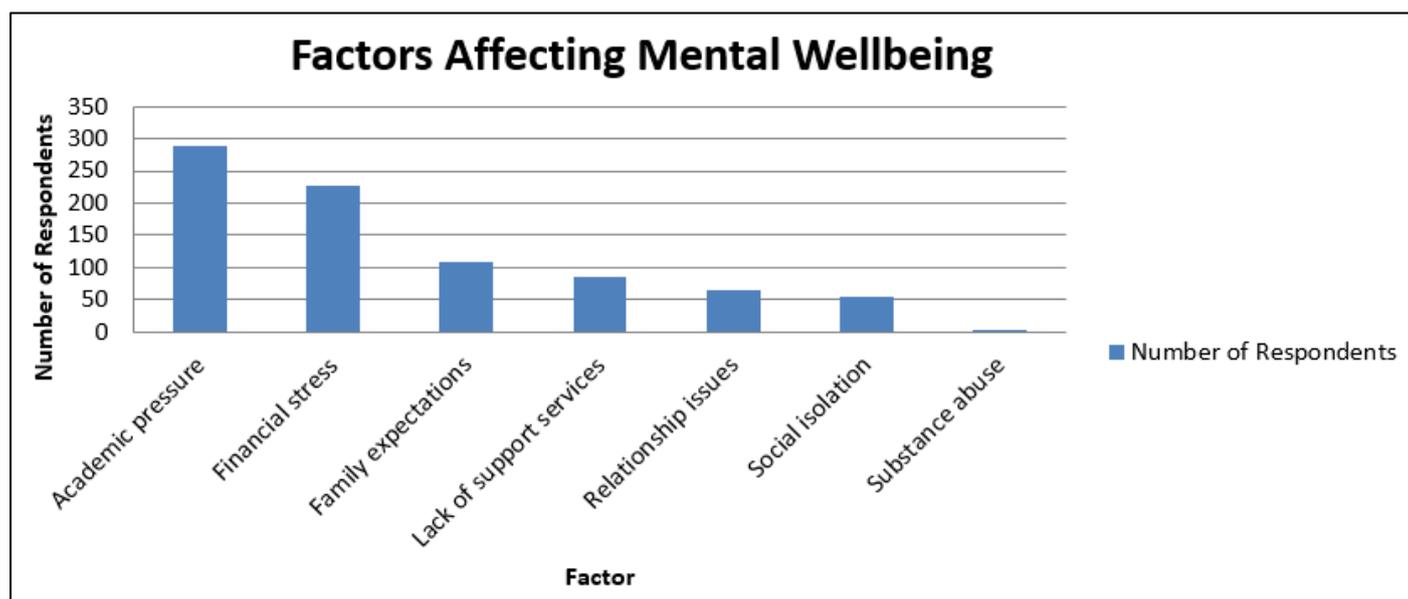


Fig 3 Factors Affecting Mental Wellbeing

Academic pressure was the most frequently reported factor affecting mental wellbeing (288), followed closely by financial stress (229). Other contributing factors included

family expectations (111), lack of support (85), social isolation (54), relationship issues (66), and substance abuse (1).

➤ *Coping Strategies*

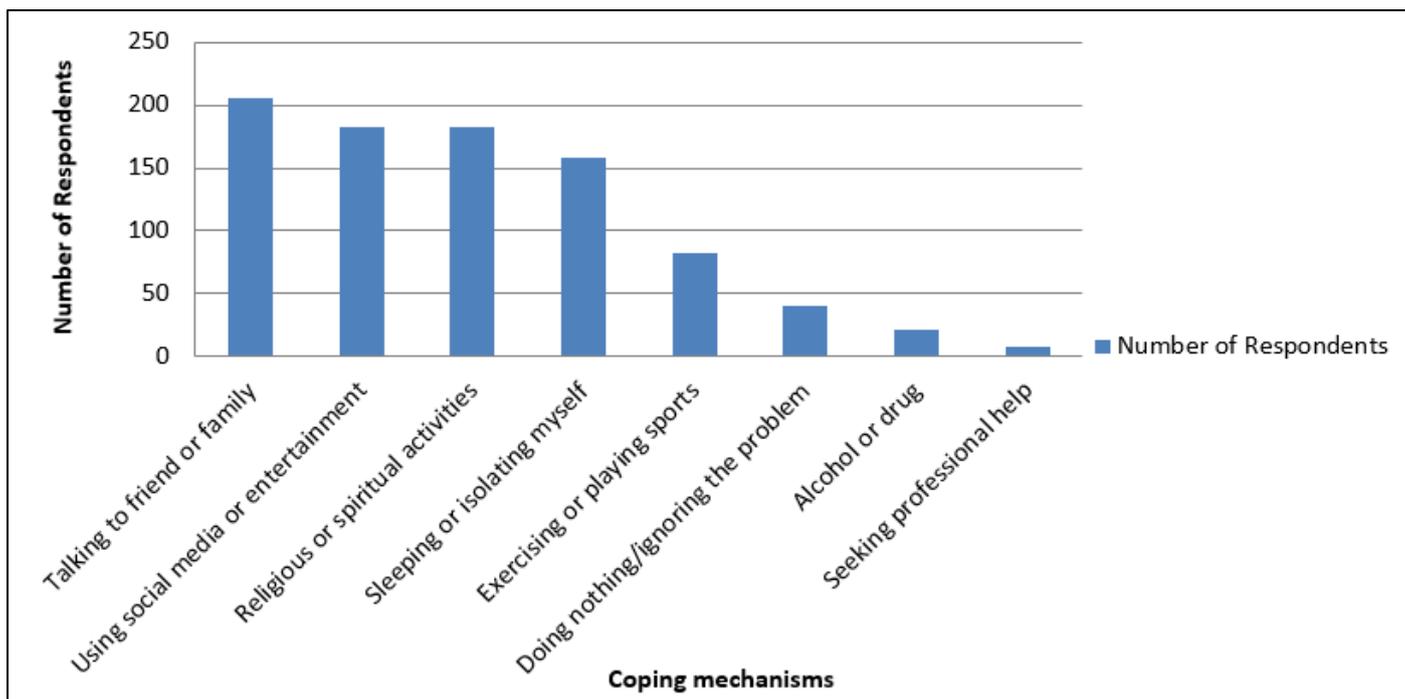


Fig 4 Number of Respondents

Students employed various coping mechanisms to manage mental health challenges. The most common strategies were talking to family and friends (207) and engaging in religious or spiritual activities (182). Other coping strategies included using social media (182), sleeping or isolating oneself (158), exercise (84), doing nothing (41), and alcohol or drug use (22). Only a small number of students reported seeking professional mental health help (8).

➤ *Utilization and Awareness of Mental Health Services*

Only (27) students reported having sought help from a mental health professional or counselor, while (257) had not

sought help. Lastly, (64) students indicated that they wanted to seek help but did not know where to go.

Awareness of mental health services offered at the university was low, with only (78) students reporting awareness, while many were either unaware (218) or unsure (46). Consequently, utilization of on-campus counseling services was minimal, with only (19) students having ever used these services. Many students rated the accessibility of mental health services as poor (303) or indicated that they did not know about the accessibility of such services (23).

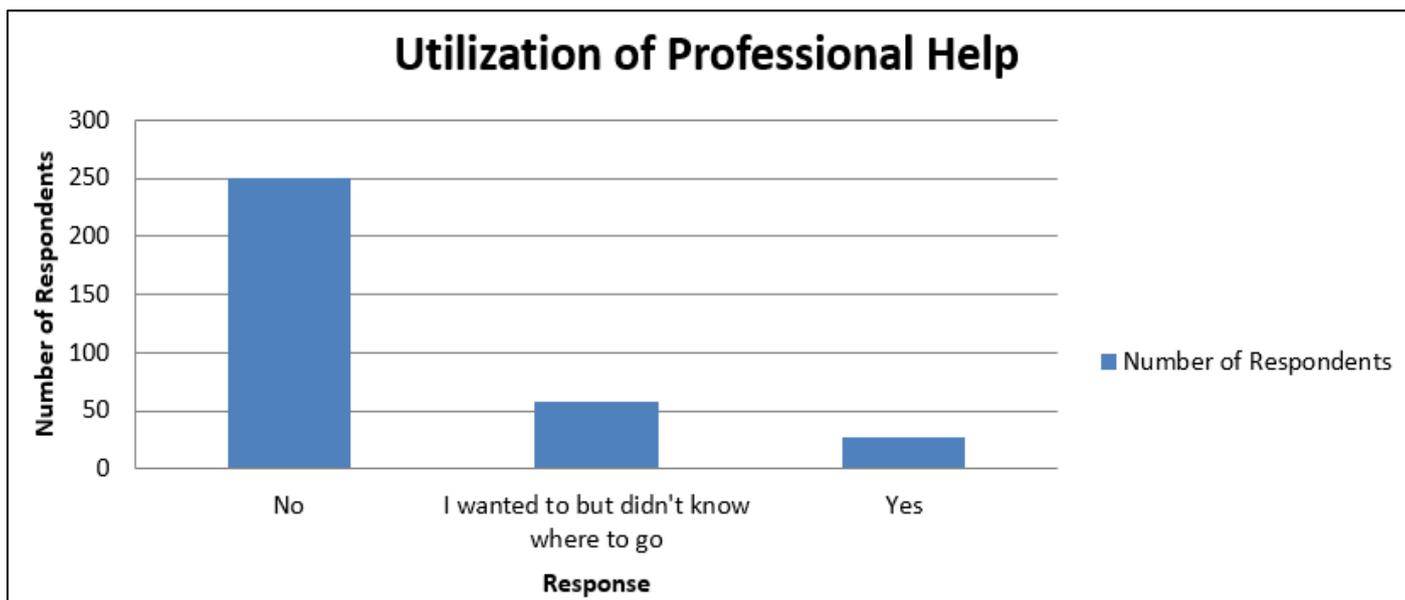


Fig 5 Utilization of Professional Help

➤ *Accessibility of Mental Health Services*

Regarding the accessibility of mental health services, few students rated the services as very accessible (14) or accessible (36). A larger proportion felt that services were not very accessible (91) or not accessible at all (57), while many students (147) indicated that they did not know about the accessibility of the services.

➤ *Barriers to Accessing Mental Health Support*

The main barriers to accessing mental health support on campus included lack of information about available services (198), fear of being judged (152), stigma and shame (125), lack of trust in counselors (123), and the perception that services were not available (99). A smaller number of students also cited long waiting times (31) as a barrier.

➤ *University Response to Mental Health Issues*

When asked whether they believed the university takes mental health seriously, most students responded negatively (161), while only a few agreed (49). A substantial number of respondents were unsure (134).

➤ *Qualitative Findings*

Qualitative responses revealed themes of academic overload, financial hardship, fear of stigma, and lack of information about available mental health services. Several students emphasized reliance on peers, family, and faith-based practices as primary sources of support. The following were the scripts extracted direct from the six student focus groups. One respondent said *“the prevalence of mental health is high at Mukuba University because I witnessed attempts of suicide and one suicide case.”* On personal family issues another student expressed the following; *“high expectations*

from the family, because you are the only person they are looking up to carry the family in the future.” Another student put it plainly, *“Personally, I have a friend I talk to on the phone, but still I feel empty, so I just sleep and cry, wake up the following day life goes on, so acceptance is key, but it haunts you until you talk to someone who gives you practical steps to deal with it.”* On personal experience a first-year student said it straight, *“peer pressure, usually gives you depression when you can’t have what your friends have. Also, some lecturers the things they say and the pressure they put on us piles up.”*

A female participant worded it bluntly, *“when depressed I would not want to interact with other people or join groups. The social life goes down, and on personal level less self-care is apparent.”* On the availability of mental health services at Mukuba University a student expressed that, *“I feel like they are there, but they don’t advocate for them, so the majority are not aware.”* On the accessibility of mental health services at Mukuba University a respondent narrated, *“I do not know how to access them, and if it is outside the institution, it would mean finding money for transportation which I can’t manage.”* When it comes to coping strategy a student shared, *“from a personal point of view I don’t really cope I just learn to live with the mental health challenges.”* The last respondent recommended, *“we should have a lot of professional bodies, so that we can know where to access them.”* “Them” meaning mental health counselling services.

➤ *Chi Square Test Findings*

The quantitative data was arranged in a cross section in a table as shown in the following table for easier application of the chi square test.

Table 1 Chi Square Test Findings

	Social Support	Personal Strategy	Institutional support	Total
Academic challenges	63	70	36	169
Social Challenges	52	39	14	105
Personal Challenges	14	36	17	67
	129	145	67	341

The Chi square value is approximately $\chi^2 \approx 11.83$, with degrees of freedom (df = 4), and the p-value is approximately 0.019.

This means there is a statistically significant association between the type of mental challenge and the type of support or coping strategy at a 5% significance level (p < 0.05). The results suggest that the type of support or coping strategy is not independent of the type of mental challenge.

So, the significant association means that the type of support (social, personal strategy, or institutional) is related to the type of challenge (academic, social, or personal) students are facing.

- Academic challenges are more likely to be addressed with personal strategies (70) and social support (63).
- Social challenges are more likely to get social support (52).

- Institutional support is relatively low across all challenges, especially for social challenges (14).

This could imply that the institution Mukuba University might need to play a more significant role in supporting students, especially with social challenges.

IV. DISCUSSION

The findings of this study indicate a high prevalence of mental health challenges among students at Mukuba University, particularly stress, anxiety, and depression. These findings are comparable to studies conducted in higher learning institutions in Zambia, which have consistently reported high levels of psychological distress among university students. For example, Mudenda *et al.* (2022) reported that a substantial proportion of students in a Zambian public university experienced symptoms of stress, anxiety,

and depression, largely linked to academic and socio-economic pressures.

Academic pressure and financial stress were identified as the most significant factors contributing to poor mental wellbeing in this study. Similar findings have been reported in studies conducted among students in Zambian higher education institutions, where heavy academic workload, fear of poor academic performance, and financial difficulties were major predictors of mental health problems (Mweemba & Siziya, 2019; Mudenda *et al.*, 2022). These stressors are often intensified by limited financial support mechanisms and high expectations from families, particularly for students from low-income households.

The low utilization of professional mental health services observed in this study is also consistent with evidence from Zambia. Previous studies among university students in Zambia have shown that despite experiencing mental health challenges, many students do not seek professional help due to stigma, lack of awareness of available services, and limited access to campus-based counseling facilities (Mudenda *et al.*, 2022). The finding that some students wanted to seek help but did not know where to go further highlights gaps in mental health information dissemination within universities.

The reliance on informal coping strategies such as talking to family and friends, engaging in religious or spiritual activities, and self-isolation is consistent with coping patterns reported among students in Zambian higher learning institutions. Studies conducted in Zambia have shown that students often prefer informal and faith-based coping mechanisms over professional mental health services, largely due to cultural beliefs and perceived stigma associated with mental illness (Siziya *et al.*, 2018).

Overall, the findings of this study align closely with existing Zambian literature on student mental health and underscore the need for strengthened, context-specific mental health interventions within higher learning institutions. These should include improved visibility and accessibility of counseling services, mental health education, and stigma reduction initiatives tailored to the Zambian university context (Mudenda *et al.*, 2022.)

From the chi square test, the results show that the coping strategies student use are not independent of the mental challenge they face. This means that the type of a coping strategy a student finds him/herself heavily depends on the type of mental health the student is experiencing. Therefore we can quickly identify types of mental health challenges Mukuba students experience by simply analyzing the coping strategies they adopt.

V. CONCLUSION

Mental health challenges are common among students at Mukuba University, with stress, anxiety, and depression being the most prevalent. Academic pressure and financial stress are key contributing factors, while awareness and

utilization of mental health services remain low. The study showed that coping strategies students use are not independent of the type of Mental challenges they face.

Some of the recommendations from the study are that the university should strengthen mental health awareness and education programs. Counseling and mental health services should be made more visible and accessible to students. Mental health screening and support should be integrated into student orientation programs. Peer support and referral systems should be enhanced.

VI. LIMITATIONS OF THE STUDY

The cross-sectional design limits causal inference. The study relied on self-reported data, which may be subject to recall and social desirability bias.

ACKNOWLEDGEMENTS

The authors acknowledge UNESCO 3 Plus Mukuba University cluster for financial support, the students who participated in this study, the University Administration for granting permission to conduct the research and the editors who took time to perfect this work.

- Conflict of Interest: Authors declare no conflict of interest.

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