Relationship Between Psychological Distress, Coping Mechanism and Academic Adjustments Among First-Year University Students in Tanzania

Justine Kavindi, January Basela, and Ochola Omoro

University of Dodoma Tanzania

Abstract: *This study examined the challenges faced by first-year university students in Tanzania, focusing on the interplay between psychological distress, coping mechanisms, and academic adjustment. A cross-sectional survey was conducted using Kessler's psychological distress scale, the Student Adjustment to College Questionnaire, and the Brief COPE scale among 374 students at two Tanzanian universities. The results of this study showed a significant relationship between psychological distress and academic adjustment, with coping mechanisms acting as a mediator. It was found that psychological distress has a profound impact on academic performance and that coping mechanisms play a pivotal role as mediators between these factors. This understanding can inform targeted interventions and support systems, promoting students' mental well-being, academic success, and overall satisfaction during their transition to university life.*

Keywords: Psychological distress, coping mechanism, academic adjustment, first-year university students

Transitioning from high school to university is a critical period in a student's life, characterized by several challenges. There are numerous demands associated with attending university, including the completion of academic requirements, assignments, and projects, the mastering of timetables, setting educational objectives, and registering for classes. Libraries are among the critical challenges that disturb first-year students who are joining universities (Venezia, 2013). Studies have shown that students are unprepared for post-secondary education for many reasons. For example, Venezia (2013) emphasized that the differences between what is taught in high school and what is done in universities are quite different. Mboya (2020) noted that peer influences, parental pressure, and other conditions encourage academic study. Similarly, Ruberman (2014) found that first-year students often face significant changes in their new academic environment, social interactions, and personal responsibilities. Similarly, the Child Mind Institute (2016) argues that these challenges can significantly lead to psychological distress (PD) and difficulties in the adjustment process.

Various psychologists and scholars have defined psychological distress (PD); however, the most accepted definition is that it encompasses a sense of depression, anxiety, and stress, which can have a profound effect on an individual (American Psychological Association, 2013). In the context of this study, psychological distress is defined as any mental dysfunction experienced by

students that could hinder students' academic adjustment and overall well-being. Besides, students' academic adjustment refers to how well a student can cope with education demands, such as the motive to accomplish academic requirements, academic efforts, and satisfaction within the academic environment (Kusumaningsih, 2016). In the current study, academic adjustment was regarded as the ability of first-year students to cope with new university academic demands. It was, thus, presumed that psychological distress could affect first-year university students' academic adjustment; thus, it is vital to investigate this relationship. Ling and Tini (2022) conducted a study in Malaysia that examined the relationship between psychological distress and academic adjustment in technical colleges, revealing that the increased number of mental health issues among students represents potential problems for the university and, more specifically, for the whole nation.

Understanding the complex relationship between psychological distress and academic adjustment is essential for educational stakeholders, including universities, educators, and counsellors, to provide adequate student support and intervention strategies. Thus, addressing first-year students' mental health needs during the transition phase can positively influence their academic and social achievement at the university (Verger et al. 2008). A large body of literature has highlighted the impact of psychological distress on students' academic adjustment. According to empirical evidence, psychological distress may lead to reduced motivation, impaired coordination, and difficulty coping with academic demands, contributing to academic underachievement and an increased dropout rate among first-year students (Agnafors et al. 2021). Persistent psychological distress among students can hinder their ability to engage in effective academic practices, social involvement, extracurricular activities and other aspects of university life, potentially leading to isolation and loneliness (Alipio, 2020). However, Hakami (2018) also asserts that psychological distress impacts people's social, emotional, and psychological well-being. This corroborates with the WHO (2020) estimates that establish that nearly 450 million people worldwide are affected by psychological distress in various aspects. In this regard, universities need to pay attention to the growing effects of PD on students, particularly first-year students.

Globally, research on related topics depicts that there is a direct link between psychological distress and students' academic performance. Adam (2017) in the USA discovered a positive relationship between students' active coping strategies and their overall university adjustment, while Miles (2017) in India found that 84% of students with depression, anxiety, or eating disorders struggled with academic and social adjustments. Similarly, previous studies reveal that students experiencing psychological distress face frequent discipline and school failure, dropout, intellectual impairment, difficulties in learning new academic knowledge, substance abuse, and other external problems (see Agnafors et al., 2021; Lyndon et al., 2014; Yamada et al., 2014). However, students with maladaptive coping skills will have a significant negative impact on their academic adjustment. This study suggested that if students' coping skills towards psychological distress were high, it would increase their effectiveness in academic adjustment and reduce the level of pain (Yamada et al., 2014). The suspension of classes and evacuation of students by universities due to the COVID-19 outbreak has led to negative psychological consequences among college students without regard for the student's year of study (Zhai & Du, 2020). As a result, this study concludes that low academic adjustment may be strongly associated with the prevalence of PD. In contrast, high academic adjustment may be related to psychological well-being. Thus, it is evident that PD negatively affects students' ability to adjust to new environments, threatening their ambitions to complete university.

In Africa, studies conducted on the relationship between psychological distress, bullying, and victimization among Ghana university students have revealed that depression, stress, and anxiety contribute to students dropping out and poor academic performance (Arhin et al., 2019). In the same vein, studies done in Ethiopia and Nigeria suggested that psychological distress can lead to an inability to concentrate, difficulties in paying attention, college dropout, problems answering examinations, sleep disorders, substance abuse, and physical and psychological impairment among students (Alem et al., 2008; Kelemu et al., 2020; Williams et al. 2008). These problems are associated with students' poor academic adjustment and the emergence of psychological distress, which implies that the two variables have a mutual effect.

Tanzania has no difference, with its students struggling to adjust academically because of psychological distress following the transition from secondary school to university (Mboya et al., 2020). However, the attitudes of the community toward psychological distress believe that individuals who are experiencing this problem are either bewitched or possessed by evil spirits; as a result, affected people are stigmatized and delay seeking appropriate care (Gureje & Alem, 2000). Previous studies have shown that years of study tend to increase the likelihood of psychological distress and poor adjustment among students (Lugata et al., 2020). In addition, studies by Onditi et al. (2014), and Rugira et al. (2013) focused on the general mental health of the student population, while others concentrated on students' willingness to seek help from the counselling services available at universities. It has been observed that there are not many scientific studies in Tanzania that have been tapped to address the issue of how psychological distress influences academic adjustment (AAD) among first-year university students. The impact of psychological distress on students' mental well-being and academic achievement is of great concern, as are the maladaptive strategies used by students to cope with psychological distress. Therefore, in order for universities to effectively help students with their adaptations, a thorough understanding of psychological distress and coping strategies is necessary.. Thus, the purpose of this study was to examine the level of prevalence of psychological distress and the relationships between these levels and students' coping mechanisms and academic and social adjustments as Tanzanian first-year students. This study hypothesized that there is a positive relationship between psychological distress, coping mechanisms and academic adjustment in the university study. Specifically, the study was guided by the following research questions: What is the level of psychological distress among students? What is the level of coping mechanisms among students? Is there any relationship between psychological distress, coping mechanisms and academic adjustment among students? The research findings indicate that the study contributes to the field of mental health and education by demonstrating the relationship between the risky lifestyle behaviours of these university students, maladaptive coping mechanisms, and student distress. It also emphasizes the complex association that exists between coping mechanisms, psychological distress, and academic and social adjustment among university students.

METHODOLOGY

RESEARCH DESIGN

This study employed a cross-sectional design to collect and analyze quantitative data on the prevalence of psychological distress (PD), the relationship between psychological distress (PD) and first-year students' academic and social adjustments (ASA), as well as the coping mechanisms toward PD at a single point in time. Data were gathered only once from the field through questionnaires distributed to first-year students to determine the prevalence of PD and the

relationship of PD to students' academic and social adjustments, as well as the level of coping mechanisms. In this study, the respondents' section includes populations from public and private universities, first-year undergraduate students of each university, and respondents studying educational courses, natural and allied sciences.

PARTICIPANTS

A study had a sample size of 374 first-year students from two selected universities. The target populations of this study were all undergraduate first-year students registered in academic year 2021/2022 at the University of Dodoma (UDOM) and St. John University of Tanzania (SJUT). This sample size of students was defined by using Yamane's (1967) formula for calculating sample size. In the actual process, students were obtained through stratified random sampling, in which, in the end, 374 respondents were sampled. As shown in the study, there was a slight difference in the proportion of males and females as 188, which is equal to 50%, and 186, which is equal to 49%, were female students.

MEASURES

The data collection process was done using Kessler's psychological distress scale (K-10) (Kessler, 1986). The scale consisted of ten items that were used as questions to measure the level of students' psychological distress through a five-point Likert scale ranging from one, which represents none of the time, to five, all of the time. For example, first-year university students were asked questions that required them to indicate how often they had been feeling nervous during the past 30 days: "In the past 30 days, how often did you feel nervous?" The total score for the K10 scale was 50; scores ranging from 10 to 19 were likely to be well, 20 to 24 were likely to have mild distress, 25 to 29 were likely to have moderate distress, and 30 to 50 were likely to have severe distress. Total Cronbach's alpha for K10 scale items was 0.77, which is acceptable, as a reliability coefficient above 0.7 is considered satisfactory.

Another instrument employed was the Student Adjustment College Questionnaire (SACQ), which consisted of 20 items rated on a five-point Likert scale. Respondents were to either strongly agree or strongly disagree with a question such as "I keep up-to-date with academic activities." The SACQ, developed by Baker and Siryk (1989), was adapted and modified to fit the context of this present study. After piloting the tool Cronbach Alpha for items, measuring academic adjustment was 0.727. This study summed up all items to obtain a total score for each respondent, whereby the higher total scores indicate better academic adjustment in the college.

Indeed, a Brief COPE inventory was used to assess first-year university students' ability to cope with challenging environments that lead to psychological distress. They were required to answer based on whether this strategy has been working or not, just whether or not they have been doing it. For example, one of the questions asked was, "I have been turning to work or other activities to take my mind off things." Students had to choose a response from a five-point Likert scale ranging from 1 = I haven't been doing this at all, 2 = 1 have been doing this a little bit, 3 = 1 have been doing this a medium amount, 4 = 1 have been doing this a lot, and 5 = I don't know. These coefficients indicate good internal consistency and reliability for each factor. Overall, the factor loadings and Cronbach's alpha coefficients were 0.880, which is acceptable and justifies the fact that it is an effective tool for capturing different coping strategies.

DATA ANALYSIS

Data were analyzed quantitatively, whereby descriptive statistics (percentages and frequencies) were used to describe the data, while inferential statistics were tested to assess the relationship between variables. In order to understand the relationship between psychological distress, coping mechanisms, and academic adjustment, the researcher used structural equation modeling.

In descriptive statistics, the mean of response was used to explore the salient features existing in students' psychological distress (PD), coping mechanisms (CM), and academic adjustment (AAD). The mean of responses was calculated as the sum of all items that measure PD (10 items), CM (28 items), and AAD (20 items) divided by the number of items. The mean of responses ranged from 1 to 5. The closer the average score is to 5, the better the student's outcome is (PD, CM, and AAD). The study used a Pearson correlation (r) test to assess the relationship between psychological distress, coping mechanisms, and academic adjustment. The alternative hypothesis was tested under 5% statistical significance, and the decision to reject the null hypothesis depended on the P-value. In the structural equation model, data were analyzed using constructed linear regression equations.

RESULTS

This section presents the findings of the current study on the relationship between psychological distress, coping mechanisms, and academic adjustment among university students in Tanzania. Interpretations follow the presentations, showing the implications and how the findings relate to existing studies.

BACKGROUND INFORMATION OF THE RESPONDENTS

This is a comprehensive exploration and understanding of the contextual details related to the individuals who are subject to the study. This was done in order to contextualize the findings, identify patterns, and draw meaningful conclusions in relation to the interplay of psychological distress, coping mechanisms and academic adjustment.

Table 1

*Background Information (Descriptive Statistics)*

	Mini	Max	Mean	Std Error	Std. Deviation	Variance	Skewness	Kurtosis
Age	19	38	22	0.139	2.689	7.231	2.732	9.888
Number of siblings in the family	0	10	5.4	0.122	2.359	5.564	-0.034	-0.532
Number of elder siblings who have employment	0	8	1.3	0.08	1.541	2.376	1.246	1.314

Table 1 describes the background information of the sample used in this study. It shows the age of respondents, the number of siblings in the family, and the number of older siblings who have employment. The mean age of the sample was 22.05 years. However, the high skewness and kurtosis values suggest that the age distribution was not normal, which could affect the generalisability of the findings. These variables were critical in the study as they were considered to have a potential influence on the academic and social adjustment of first-year university students in Tanzania. Results further revealed that 5.35 was the mean number of siblings in the family, suggesting that respondents came from relatively large families. Large family sizes have both positive and negative effects on academic adjustment among students. Thus, having more siblings could provide more opportunities for social support and companionship but could also lead to greater competition for resources such as parental attention and financial support. In addition, the mean number of older siblings with employment was 1.34, implying that at least one person in the respondent family is employed.

LEVEL OF PSYCHOLOGICAL DISTRESS AMONG STUDENTS

Respondents were asked to rate their level of psychological distress on the K–10 scale. Figure 1 provides a descriptive analysis (percentages) of the results. The results revealed that 38% (n = 142) of the first-year university students were experiencing severe psychological distress, 46.5% (n = 174) were experiencing moderate psychological distress, and only 15.5% (n = 58) were likely to be well.

Figure 1
Level of Psychological Distress Based on 10 PD Scores
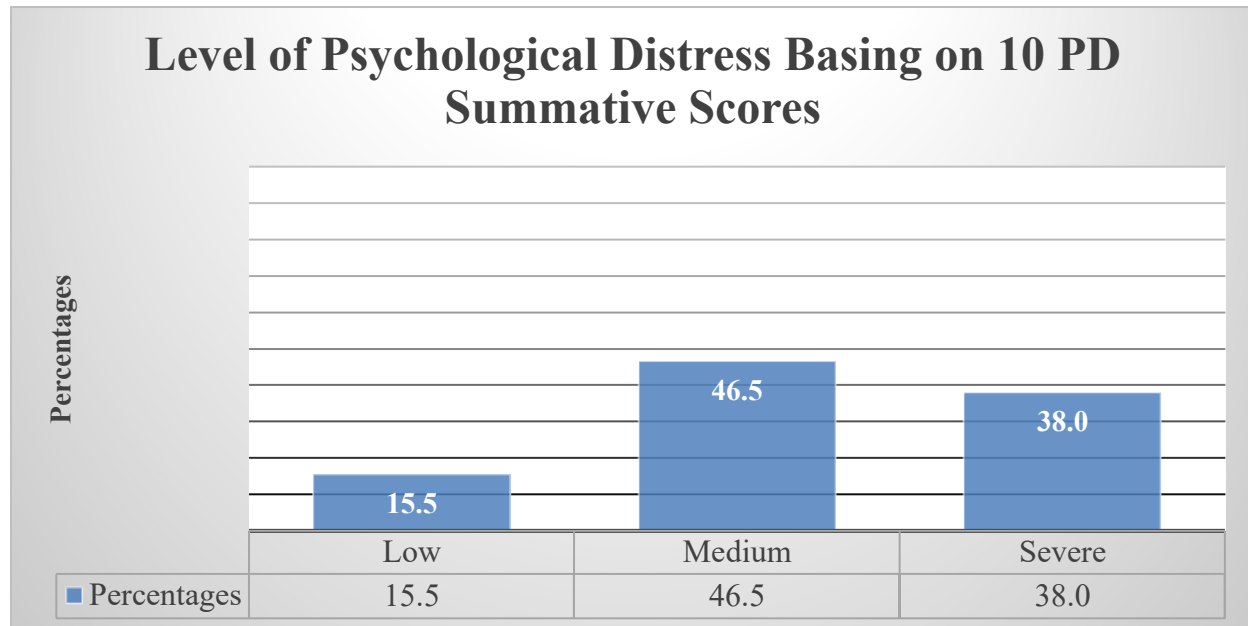
Source: Field Data (2023)

These levels of psychological distress, summarised in Figure 1, appear in the form of depression, anxiety and stress, which in turn lead to a significant barrier to students' academic adjustment. Surprisingly, almost 91% of students involved in the study showed moderate ability in coping mechanism (CM) skills. This informs that the majority of students are not capable of

dealing with psychological distress, and they sometimes cannot cope with the new academic demands (see Figure 2) that follow.

Findings revealed that the sampled first-year students had varying levels of coping mechanisms for the challenges they encountered in the course of their transition to university. They were depicted as lacking sufficient skills for coping with new university environmental challenges, which consequently led them to experience psychological distress. Figure 2 below summarizes the coping mechanism results:

Figure 2
Level of Coping Mechanism among University First-Year Students

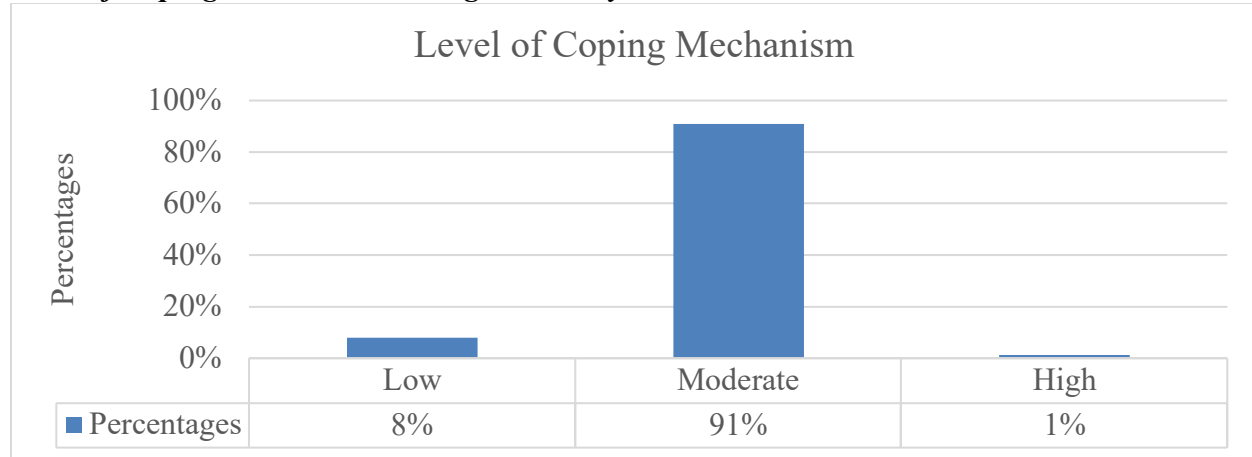|	Low	Moderate	High
■ Percentages	8%	91%	1%

Figure 2 above reveals a notable preponderance of the sampled first-year students had a moderate level of coping mechanism skills; almost 91%, equivalent to 340 sampled students, had moderate skills for coping mechanism; 30 first-year students, which is equivalent to 8%, were low; and 1% of them, which is equal to 4 respondents, had a high level of coping skills. High ratings show that the learner frequently employed the coping mechanisms listed on that scale to deal with the traumatic experience. These findings imply that the majority of first-year university students understand issues related to coping mechanisms. Still, they do not know how to apply those skills to solving various problems. Students have a medium ability to deal with new university challenges, specifically those related to academic, institutional, and social adjustment.

RELATIONSHIP BETWEEN PSYCHOLOGICAL DISTRESS, COPING MECHANISMS AND ACADEMIC ADJUSTMENT AMONG STUDENTS

The Pearson correlation coefficient value was employed to examine the relationship between psychological distress (PD), coping mechanisms (CM), and academic adjustment (AAD). The Pearson correlation coefficient was computed to investigate the linear relationship between psychological distress and academic adjustment.

Findings revealed that there was no statistically significant relationship between psychological distress and academic adjustment [$r = 0.109$, $p = 0.083$]. Thus, it is suggested that students' psychological distress does not have a direct relationship with their academic adjustment; that is, a student might not be struggling to adjust academically because of psychological distress alone, but there might be other factors involved. The findings are summarized in Table 2.

Table 2
Correlation Between Psychological Distress, Coping Mechanism and Academic Adjustment

Psychological distress	Pearson Correlation	Psychological distress	Coping mechanism	Academic adjustment
		1		
	Sig. (2-tailed)			
Coping mechanism	Pearson Correlation	0.11	1	
	Sig. (2-tailed)	0.034**		
Academic adjustment	Pearson Correlation	-0.083	0.214	1
	Sig. (2-tailed)	0.109	0.000***	
	N	374	374	374

**. Correlation is significant at the 0.05 level (2-tailed).

Findings in Table 2 revealed that the Pearson correlation coefficient for psychological distress and coping mechanisms was (0.110), indicating a positive relationship between psychological distress and coping mechanisms, with a statistical significance level of P-value 0.034**. This means that the observed relationship between psychological distress and coping mechanisms implies that the greater the psychological distress, the higher the coping mechanisms. In the context of this study, the findings suggest that first-year students' ability to use coping mechanisms depends on the level of psychological distress they experience.

Alongside that, the Pearson correlation coefficient (-0.083) in this table indicated a weak negative relationship between psychological distress and academic adjustment. This suggests that as psychological distress increases, academic adjustment tends to decrease. However, the significance level for it was a 0.109 p-value, which is greater than 0.05. In addition, the study found a positive relationship between coping mechanisms and students' academic adjustment through a Pearson correlation coefficient of 0.214, which suggests that as the coping mechanism increases, academic adjustment tends to increase as well. The relationship is stronger than other correlations. This relationship was statistically significant with a p-value of 0.000, which implies that the increase in students' coping mechanisms is attributed to the rise in successful academic adjustment. Therefore, a coping mechanism positively accelerates first-year students' adjustment to academic requirements.

For a thorough understanding of the complex relationships between psychological distress, coping mechanisms, and academic adjustment, a structural equation model (SEM) was computed. SEM revealed that both psychological distress and coping mechanisms influence students' academic adjustment. However, psychological distress can affect both coping mechanisms and academic performance. It was also used to test the mediation structure between variables. A summary of the results is presented in Table 3, which shows the estimation of structural equation modelling, while Table 4 shows the summary of mediation structure equation modelling.

Table 3

Estimation of Structural Equation Modelling

Standardised coefficients	Coef.	Td. Err.	Z	P>z	[95%Conf.Interval]	
	Structural model					
Dependent: Academic adjustment						
Coping mechanism	0.226	0.049	4.59	0	0.13	0.323
Psychological distress	-0.108	0.05	-2.15	0.031	-0.206	-0.01
_cons	5.998	0.453	13.25	0	5.111	6.885
Dependent: Coping mechanism						
Psychological distress	0.11	0.051	2.16	0.031	0.01	0.21
_cons	5.83	0.316	18.42	0	5.209	6.45
Var (e. Academic adjustment)	0.943	0.023			0.898	0.989
Var (e. Coping mechanism)	0.988	0.011			0.966	1.01

Table 3 reveals a strong positive and statistically significant relationship between the student's academic adjustment and coping mechanisms when adjusting for psychological distress. Both psychological distress and coping mechanisms have a substantial connection to academic adjustment. The standardized coefficient for coping mechanisms is 0.226, suggesting that for each unit increase in coping mechanisms, academic adjustment increases by 0.226 standard deviations. The coefficient is statistically significant, with a z-value of 4.590 and a p-value of 0.000 (<0.001). In addition, the standardized coefficient for psychological distress was -0.108, which means that for each increase in psychological distress, students' academic adjustment decreases by 0.108 standard deviations. This means that there is a negative relationship between the two variables. However, the coefficient value was statistically significant, with a z-value of -2.150 and a $p = 0.031$ (<0.05).

The results for coping mechanisms, where the dependent variable is psychological distress as an independent variable, were also revealed as follows: Psychological distress has a positive effect on coping mechanisms and is statistically significant. The coefficient value for psychological distress is 0.110, with a statistically significant level of 0.05 and a p-value of 0.03. Thus, the increase in psychological distress among university students is attributed to the rise in coping mechanisms among students. Therefore, SEM proves that there is a direct relationship between students' psychological distress and their academic adjustment, but it happens when they adjust to coping mechanism. This means psychological distress alone is not enough to influence students' academic adjustment; it depends on the student's ability to use coping mechanisms.

Furthermore, when the mediation structure was tested, structure equation modelling revealed a partial mediation effect among variables. The coping mechanism was observed to mediate the relationship between psychological distress and academic adjustment partially. Table 4 summarizes the mediation structure between these three variables.

Table 4
Summary of Mediation Structure Equation Modelling

Estimates	Delta	Sobel	Monte Carlo
Indirect effect	0.015	0.015	0.015
Std. Err.	0.008	0.008	0.008
z-value	1.93	1.93	1.853
p-value	0.054	0.054	0.064

Baron and Kenny's Approach to Testing Mediation

STEP 1 - CM: PD average score (X -> M) with B=0.078 and p=0.032

STEP 2 – AAD average score: CM (M -> Y) with B=0.189 and p=0.000

STEP 3 – AAD average score: PD average score (X -> Y) with B=-0.064 and p=0.033

As STEP 1, STEP 2, and STEP 3 are all significant, and Sobel's test above is not significant, the mediation is partial!

Zhao, Lynch and Chen's Approach to Testing Mediation

  STEP 1 – AAD average score: PD average score (X -> Y) with B=-0.064 and p=0.033 As the Monte Carlo test above is not significant and STEP 1 is Significant you have direct-   only no mediation (no mediation)!

       RIT = Indirect effect / Total effect (0.015 / 0.050) = 0.299. This means that about 30 % of the effect of PD average score. On AAD, CM mediates the average score**!**

       RID = Indirect effect / Direct effect (0.015 / 0.064) = 0.230. This means the mediated effect is about 0.2 times as large as the direct effect of the PD average score on the AAD average score!

Key: PD= Psychological Distress, CM= Coping Mechanism, AAD= Academic Adjustment

     The findings in Table 3 indicated that the estimates for the indirect effects showed that the mediation effect was 0.015, the standard error for the estimates was 0.008, the Z-value was 1.93, and the p-value was 0.054. Using both the Baron and Kenny approach, as well as Zhao, Lynch and Chen's approach, the findings were statistically significant at every step of the analysis and the findings indicated that there were no mediation structures found. The indirect effect is about 0.2 times as large as the direct effect, although around 30% of it is mediated by CM.

     This means mediation is determined to be partial. In the context of this study, these current results imply that while psychological distress has a direct impact on academic adjustment, a portion of that impact is influenced by the coping mechanisms employed by first-year students. The indirect effect, being about 0.2 times as large as the direct impact, suggests that coping mechanisms play a meaningful role in mediating this relationship, accounting for roughly 30% of the variance. Therefore, the current study ought to conclude that the mediation effect is partial, emphasizing the importance of coping mechanisms in understanding how psychological distress influences academic adjustment, even though the direct impact remains significant.

DISCUSSION

In assessing the level of psychological distress coping mechanisms among first-year university students, the study found that the majority of the sampled first-year university students were experiencing moderate to severe levels of psychological distress. This problem was associated with the challenges faced by students due to transitions from secondary school to university. Students encounter challenges at the university, which leads to experiences of various forms of psychological distress such as anxiety, depression, and stress. This situation might imply that first-year university students need to adjust or cope with the new environment as soon as they are admitted to the university. That is why the majority of them revealed to have a medium ability to cope and adjust to new academic situations at the university. Such results are in line with Mboya et al. (2020), who found that first-year students at universities are more affected by psychological distress than the general population. Similarly, a study from South Africa by Nguse & Wassenaar (2021), Ghana by Canavan et al. (2013), and Saudi Arabia by Hakami (2018) contended that as much as students face psychological distress, it has a significant impact on their mental health at university. It was also asserted that stress, anxiety, and depression are more common among college students (Cao et al., 2020; Son et al., 2020). This highlights the need for universities to think about designing intervention programs that could be used at least to reduce the effect of psychological distress among university students.

It was hypothesized that there is a positive relationship between students' psychological distress, coping mechanisms, and academic adjustment. The findings of the study revealed a negative relationship between psychological distress and academic adjustment. This may mean that psychological distress alone is not sufficient to be considered as the only influencing factor for first-year students' academic adjustment. Factors, such as coping mechanisms, have been found to increase or minimize the likelihood of psychological distress among students. By implication, the first-year university students' academic adjustment is negatively related to psychological distress meaning that as students' ability to adjust in all academic spheres, psychological distress tends to decrease while an inability to adjust leads to an increased chance of students' psychological distress. This finding concurs with Kapure and Singh (2021), who insisted on the existence of a negative correlation between academic stress and adjustment in adolescents. They both agree that many intervening factors influence both variables. More studies, such as Yassin et al. (2010), Thompson et al. (2019), and Amengual et al. (2022), revealed a significant negative relationship between psychological distress and social support, suggesting that higher social support may contribute to lower psychological pain among students.

Moreover, Ling and Tini (2022) conducted a study on the relationship between psychological distress and academic adjustment in technical colleges. The study found that psychological well-being has a significant effect on students' academic adjustment. Ling and Tini added that the learning environment, new ways of teaching methods, assignments, intimate relationships, and mastering the timetable constitute psychological distress among university students. Nevertheless, the current study is somewhat different from Kristensen et al. (2023) and Esteban et al. (2022). These studies revealed a positive and significant relationship between psychological distress and academic adjustment. Further, the authors argue that academic focus is strongly related to academic self-efficacy and psychological distress at the interpersonal level. In particular, Esteban et al. (2022) found a significant correlation between psychological distress, academic self-efficacy, and satisfaction. In this way, the level of student psychological distress

determines the level of students' academic adjustment as well as their level of intellectual satisfaction and self-efficacy.

On the other hand, the findings of this study revealed that coping mechanisms play a significant role in academic adjustment, meaning that there is a positive and meaningful relationship with the Pearson correlation coefficient of 0.214 between coping mechanisms and academic adjustment. As a result, students' coping mechanisms increase, leading to a greater degree of academic adjustment. Thus, students who employ better coping mechanisms will tend to have better academic adjustment throughout their university life. In contrast, those with difficulties in coping or adapting to university challenges experience psychological distress and challenging academic adjustment. These findings are similar to those of Miles (2017), who revealed that coping mechanisms have a positive and significant relationship with academic adjustment and psychological distress. Generally, universities are advised to enable students with skills and competencies on how they could face challenges encountered because of transitioning to university life.

This is because coping mechanism skills increase, academic adjustment among students also increases, which is consistent with Tini (2020) and Ling and Tini (2022). In the same vein, Bukhari and Ejaz (2020) investigated the relationship between psychological distress, coping strategies, and adjustment to university life among first-year university students and indicated that academic adjustment, social adjustment, institutional adjustment, personal adjustment, and total adjustment were significantly negatively correlated with psychological distress. They were found to be positively correlated with problem-focused coping and with overall coping mechanisms. This means that if first-year university students are enabled with coping mechanism strategies, they will positively adjust to all kinds of adjustment, which include academic, social, personal, and institutional adjustment. In addition, Mozid (2022) agreed that coping strategies alleviate stress and can facilitate the positive psychological well-being of the individual, which in the context of this study refers to first-year university students.

Therefore, this study discovered that when the level of students' psychological distress increases, the level of academic adjustment becomes consistently worse. This result implies that if first-year students constantly experience psychological distress, they will also have trouble making academic adjustments. Based on Tinto's interaction model (1975), students come to college or university with a variety of background characteristics, such as family background, educational and financial capabilities, race, culture, and traditions, which make up the first premise of their academic performance and social systems. With all other factors held constant, the higher the individual's level of social and academic integration, the higher the commitment and intention to graduate, and the lower the rate at which students drop out of the institution. The model insists that academic adjustment is the connection between a student's intellectual growth and the intellectual environment. Thus, successful integration of the two reduces the likelihood of psychological distress and inculcates positive academic adjustment.

CONCLUSION AND RECOMMENDATIONS

The findings of the present study shed light on the relationships between psychological distress, coping mechanisms, and first-year academic adjustment among university students. Coping mechanisms have a mediating effect on psychological distress and academic adjustment. It was found that psychological distress had a negative relationship with academic adjustment, and psychological distress alone cannot affect students' academic adjustment unless it is accompanied

by other factors, such as an inability to cope, that affect this relationship. The finding helps to understand and evaluate issues related to psychological distress among first-year students and its influence on academic adjustment at universities. By understanding and addressing these relationships, educational stakeholders, such as university management, counsellors, and educators, can better support students' mental health and academic achievement during this transitional phase from high school to university.

It is important to provide students with psychosocial and psychosexual education to empower them with effective coping strategies, foster their resilience, and contribute to their overall university experience. Creating a supportive and inclusive environment that promotes resilience and coping skills can allow first-year students to navigate the challenges of university academic life more effectively. This study contributes to the growing body of knowledge on psychological distress, coping mechanisms, and academic adjustment among first-year university students in Tanzania. It also helps the Tanzanian community grasp a better understanding of psychological distress, coping mechanisms, and students' academic adjustment.

LIMITATIONS AND FUTURE RESEARCH

This study was limited to only two universities, one from the public and the rest from private universities; thus, to get a bigger picture of the phenomenon, another investigative study that includes more than two universities is recommended. As mentioned, this study relies on self-reported responses obtained through questionnaires, which are susceptible to response bias and cultural differences between respondents. This might affect the honesty of some respondents in reporting what they feel about their psychosocial status. Therefore, mixed research is proposed to explore these relationships over a more extended period and in diverse cultural and institutional settings. Furthermore, the study dealt with undergraduate first-year university students only, of which there is a chance to investigate other levels of education, such as final-year students for undergraduate or postgraduate students, to speculate more about the relationship between psychological distress, coping mechanisms, and academic adjustment. A study like this may be conducted at the primary and secondary school levels of education, as they are also in a transition period from various stages of education. Additionally, an intervention study may be recommended to improve students' mental health and psychological well-being at university in the Tanzanian context.

REFERENCES

Adams, S. (2017). *Adjustment to university: Investigating the effect of emotional-cognitive predictors on students' transition to higher education.* University of Chester, 76. Retrieved from http://hdl.handle.net/10034/620958

Agnafors, S., Barmark, M., & Sydsjö, G. (2021). Mental health and academic performance: a study on selection and causation effects from childhood to early adulthood. *Social psychiatry and psychiatric epidemiology*, *56*, 857-866.

Alem, A., Kebede, D., Fekadu, A., Shibre, T., Fekadu, D., Beyero, T. Kullgren, G. (2008). Clinical course and outcome of schizophrenia in a predominantly treatment-naive cohort in rural Ethiopia. *Oxford University Press On*, *Schizophrenia*, 646–654, 2009. https://doi.org/10.1093/schbul/sbn029

Alipio, M. (2020). Adjustment to college and academic performance: Insights from Filipino first-year college students in an allied health science course. *Science Gate*, *76*(4) 10.35542/osf.io/74ysf (January), 43.

Amengual, J. M., Badii, I. C., Casas-Baroy, J. C., Altarriba, C., Company, A. C., Pujol-Farriols, R., Baños, J. E., Galbany-Estragués, P., & Cayuela, A. C. (2022). Psychological distress, burnout, and academic performance in first year college students. *International Journal of Environmental Research and Public Health*, *19*(6). https://doi.org/10.3390/ijerph19063356

American Psychiatric Association. (2013) .*Diagnostic and statistical manual of mental disorders, 5th edn*. American Psychiatric Publishing, Arlington, VA.

Arhin, D. K., Oppong, K., Kugbey, N., & Oti-Boadi, M. (2019). The relationship between psychological distress and bullying victimisation among school-going adolescents in Ghana: A cross-sectional study. *BMC Research Notes*, *12*(1), 1–5. https://doi.org/10.1186/s13104-019-4300-6

Bukhari, S. R., & Ejaz, T. (2020). Relationship between psychological distress, coping strategies and adjustment to university life among university freshmen. *Pakistan Journal of Medical Research*, *59*(2), 66-69. https://pjmr.org.pk/index.php/pjmr/article/view/113

Canavan, M. E., Sipsma, H. L., Adhvaryu, A., Ofori-Atta, A., Jack, H., Udry, C., ... & Bradley, E. H. (2013). Psychological distress in Ghana: associations with employment and lost productivity. *International Journal of Mental Health Systems*, *7*, 1-9.

Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry research*, *287*, 112934.

Child Mind Institute. (2016). *Child Mind Institute Children's Mental Health Report*. Retrieved from http://childmind.org/wp-content/uploads/Child-Mind-Institute-2016-Childrens-Mental-Health-Report.pdf

Esteban, R. F., Mamani-Benito, O., Caycho-Rodriguez, T., Lingán-Huamán, S. K., & Ruiz Mamani, P. G. (2022). Psychological distress, anxiety, and academic self-efficacy as predictors of study satisfaction among Peruvian university students during the COVID-19 pandemic. *Frontiers in Psychology*, *13*, 809230.

Gureje, O., & Alem, A. (2000). Mental health policy development in Africa. *Bulletin of the world health organization*, *78*(4), 475.

Hakami, R. M. (2018). Prevalence of psychological distress among undergraduate students at Jazan University: A cross-sectional study. *Saudi journal of medicine & medical sciences*, *6*(2), 82-88.

Kapure, R & Singh, M. (2021). Relationship between academic stress and suicide. *Child Psychiatry & Human Development*, *37*(2), 133–143.

Tesfaye Kelemu, R., Bayray Kahsay, A., & Ahmed, K. Y. (2020). Prevalence of mental distress and associated factors among Samara university students, northeast Ethiopia. *Hindawi Depression research and treatment*, *2020*,7836296, 1-7https://doi.org/10.1155/2020/7836296

Kelemu, R. T., Kahsay, A. B., & Ahmed, K. Y. (2020). *Prevalence of mental distress and associated factors among Samara University Students, Northeast Ethiopia*. https://doi.org/10.1155/2020/7836296

Kessler, R. C., Barker, P. R., Colpe, L. J., Epstein, J. F., Gfroerer, J. C., Hiripi, E., ... & Zaslavsky, A. M. (2003). Screening for serious mental illness in the general population. *Archives of General Psychiatry*, *60*(2), 184-189.

Kristensen, S. M., Larsen, T. M. B., Urke, H. B., & Danielsen, A. G. (2023). Academic stress, academic self-efficacy, and psychological distress: A moderated mediation of within-person effects. *Journal of youth and adolescence*, *52*(7), 1512-1529. https://doi.org/10.1007/s10964-023-01770-1

Kusumaningsih, R. A. L. P. S. (2016). College adjustment of first year students: The role of social anxiety. *Journal of Educational, Health and Community Psychology*, *5*(1), 30-39.

Ling, Y.-L., & Tini, J. (2022). A correlational study examining the relationship between psychological distress and academic adjustment in technical college. *Journal of Education & Social Sciences*, *10*(1), 66–79. https://doi.org/10.20547/jess1012210105

Lo, C.-F. (2017). Stress and coping strategies among university freshmen in Hong Kong: Validation of the coping strategy indicator. *Psychology*, *8*(8), 1254–1266. https://doi.org/10.4236/psych.2017.88081

Lugata, S., Elinisa, M., Doshi, B., Kashuta, R. A., Hango, S., Mallosa, W. J., ... & Ngocho, J. S. (2020). Symptoms and predictors of depression among university students in the Kilimanjaro region of Tanzania: a cross-sectional study. *Journal of mental health*, *30*(2), 255-262, 1–8. https://doi.org/10.1080/09638237.2020.1793129

Lyndon, M. P., Strom, J. M., Alyami, H. M., Yu, T. C., Wilson, N. C., Singh, P. P., Hill, A. G. (2014). The relationship between academic assessment and psychological distress among medical students: a systematic review. *Perspectives on Medical Education*, *3*(6), 405–418. https://doi.org/10.1007/S40037-014-0148-6

MacKenzie, C. S., Wiprzycka, U. J., Hasher, L., & Goldstein, D. (2009). Associations between psychological distress, learning, and memory in spouse caregivers of older adults. *Journals of Gerontology - Series B Psychological Sciences and Social Sciences*, *64*(6), 742–746. https://doi.org/10.1093/geronb/gbp076

Mboya, I. B., John, B., Kibopile, E. S., Mhando, L., George, J., & Ngocho, J. S. (2020). Factors associated with mental distress among undergraduate students in northern Tanzania. *BMC psychiatry*, *20*, 1-7.

Miles, D.A (2017). *Psychological distress and adjustment in college students*. *Theses and Dissertations*. Rowan University. Retrieved from https://rdw.rowan.edu/etd/2487

Mozid, N. E. (2022). Association between psychological distress and coping strategies among students engaged in online learning. *Plos one*, 1–22. *17*(7), e0270877. https://doi.org/10.1371/journal.pone.0270877

Nguse, S., & Wassenaar, D. (2021). Mental health and COVID-19 in South Africa. *South African Journal of Psychology*, *51*(2), 304-313.

Onditi, H. Z., Moses, I., & Masatu, F. B. (2014). Psychosocial stressors and help-seeking behaviour among undergraduate student teachers in Tanzania. *International Journal of Learning and Development*, *4*(1), 98-114. https://doi.org/10.5296/ijld.v4i1.5087

Ruberman, L. (2014). Challenges in the transition to college: The perspective of the therapist back home. *American Journal of Psychotherapy*, *68*(1), 103–115. https://doi.org/10.1176/appi.psychotherapy.2014.68.1.103

Rugira, J., Nienaber, A. W., & Wissing, M. P. (2013). Psychological well-being among Tanzanian university students. *Journal of Psychology in Africa*, *23*(3), 425–429. https://doi.org/10.1080/14330237.2013.10820647

Sharpley, C., Wark, S., Hussain, R., McEvoy, M., & Attia, J. (2015). The influence of social support on psychological distress in older persons: an examination of interaction processes in Australia. *Psychological Reports*, *117*(3), 883-896. Https://doi.org/10.2466/21.10.pr0.117c27z5

Son, C., Hegde, S., Smith, A., Wang, X., & Sasangohar, F. (2020). Effects of COVID-19 on college students' mental health in the United States: Interview survey study. *Journal of medical internet research*, *22*(9), e21279.

Thompson, M. N., Her, P., Fetter, A. K., & Perez-Chavez, J. (2019). College student psychological distress: Relationship to self-esteem and career decision self-efficacy beliefs. *The Career Development Quarterly*, *67*(4), 282-297.

Venezia, A., & Jaeger, L. (2013). Transitions from high school to college. *The future of children*, *Spring*, *23*(1), 117-136.

Verger, P., Combes, J. B., Kovess-Masfety, V., Choquet, M., Guagliardo, V., Rouillon, F., & Peretti-Wattel, P. (2009). Psychological distress in first-year university students: Socioeconomic and academic stressors, mastery and social support in young men and women. *Social Psychiatry and Psychiatric Epidemiology*, *44*(8), 643–650. https://doi.org/10.1007/s00127-008-0486-y

Williams, D. R., Herman, A., Stein, D. J., Heeringa, S. G., Jackson, P. B., Moomal, H., & Kessler, R. C. (2008). Twelve-month mental disorders in South Africa: prevalence, service use and demographic correlates in the population-based South African Stress and Health Study. *Psychological medicine*, *38*(2), 211-220.

World Health Organization. (2020). *Mental disorders.* Retrieved from https://www.who.int/en/news-room/fact-sheets/detail/mental-disorders

Yamada, Y., Klugar, M., Ivanova, K., & Oborna, I. (2014). Psychological distress and academic self-perception among international medical students: The role of peer social support. *BMC Medical Education*, *14*(1), 1–8. https://doi.org/10.1186/S12909-014-0256-3/FIGURES/1

Yassin, A. A., Razak, N. A., Saeed, M. A., Al-Maliki, M. A. A., & Al-Habies, F. A. (2021). Psychological impact of the COVID-19 pandemic on local and international students in Malaysian universities. *Asian Education and Development Studies*, *10*(4), 574-586. https://doi.org/10.1108/AEDS-05-2020-0098

Zhai, Y., & Du, X. (2020). Addressing collegiate mental health amid COVID-19 pandemic. *Psychiatry research*, *288*, 113003.