

DOI: 10.5281/zenodo.17488217

THE MEDIATING ROLE OF RESILIENCE IN THE RELATIONSHIP BETWEEN COPING STRATEGIES AND PSYCHOLOGICAL WELLBEING: A CROSS-CULTURAL STUDY OF UNIVERSITY STUDENTS

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Received: 29/06/2024

Accepted: 22/10/2024

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ABSTRACT

University students often face various stressors that can affect their psychological well-being, including academic pressures and personal challenges. Coping mechanisms and resilience are essential elements in stress management and the preservation of mental health. This study aimed to investigate the correlation between coping mechanisms, resilience, and psychological well-being in university students, emphasising the mediating function of resilience. A quantitative research methodology was utilised, gathering data from 250 university students using an online survey. The research employed SPSS and Smart PLS for data analysis, utilising regression analysis to evaluate both direct and indirect impacts. The findings indicated that coping methods accounted for 71.1% of the variation in psychological well-being, with resilience serving as a notable mediator (indirect impact $\beta = 0.3638$, BootCI: 0.2397 to 0.5061). The findings suggest that students who use effective coping strategies are more likely to build resilience, which in turn enhances their psychological well-being. These results highlight the importance of fostering adaptive coping and resilience in the university context. Educational interventions aimed at strengthening these factors can improve students' mental health and academic success, particularly in culturally diverse populations. Integrating such interventions into university support services can create healthier learning environments and provide more effective mental health support to students.

KEYWORDS: Coping Strategies, Resilience, Psychological Well-Being, University Students, Cross-Cultural Differences, Regression Analysis.

1. INTRODUCTION

1.1. Research Background

Psychological well-being of university students is highly impacted by the pressure or stressors such as academic pressure, social pressure and personal development pressure, among so many. Psychological well-being is defined as a student's general mental health, emotional stability, and the capacity to deal with stress successfully (Morales-Rodríguez et al., 2020). Maintaining psychological well-being in the face of these stressors is accomplished by means of resilience and coping strategies. Adaptive or maladaptive coping strategies are the behavioural or cognitive efforts made by an individual in attempting to cope with stress. Moeller et al. (2020) states that these adaptive coping strategies like seeking social support, getting physical exercise and practicing mindfulness have been related to positive mental health outcomes among university students. On the other hand, maladaptive coping strategies, such as avoidance or substance use, frequently increase psychological distress and are detrimental to one's well-being. This is also the process of resilience that is measured by the ability to bounce back from failure and to cope with the adversities. Individuals who are resilient can take on problems that do not lead to lasting harm. Research highlights that resilience is effective in guarding against the negative impacts of stress and enhances overall wellbeing as it allows learners to maintain emotional equilibrium despite the pressure (Akash & Suganya, 2024).

Both coping strategies and resilience are significantly influenced by cultural factors, requiring cross cultural research on psychological well being to take these factors into account. However, coping strategies differ from culture to culture since societies across the globe have different set of values and norms. For example, De Vaus et al.'s (2018) research demonstrated that students residing in individualistic cultures (e.g., United States or Western Europe) tend to put more effort on problem solving for coping with stressors as what those coping strategies essentially do is seek practical solutions to particular stressors. On the other hand, students in collectivist cultures, such as East Asian societies, tend to possess high emotion focused coping, or seek help from relatives or close friends. For example, when the student from China is experiencing academic stress, he or she is likely to use their family or community for emotional support, as is the case in a typical collectivist society (Cao et al., 2021). In addition, a student from the United

States would find it easier to do the independent tackling of the problem, not inquiring anything from outsiders. The variations that are present in coping strategies by these cultural, can have a quite a disastrous effect on students' mental health and well being. Cultural values that shape these coping mechanisms are highly important to understand in order for it become possible to develop culturally appropriate interventions that promote student mental health (Troy et al., 2022).

Resilience itself is also influenced by the social and cultural contexts within which individuals exist, and in addition, cultural differences in coping strategies. The cultural factors like family support and community resources play an important role in resilience (Flaskerud, 2022). Social networks and family structures offer a great emotional and material support to people in collectivist cultures, thereby increasing their resilience. For example, Asian students can receive help from family and community members to situate academic challenges and with the coping with stress (Park et al., 2017). Students from the more individualistic cultures may learn resiliency because of personal reflection, self-reliance, and problem solving skills however. An American student is likely to cope with stress by using self-help resources or go to professional counselling. Therefore, it is important to understand resilience as a dynamic and context dependent trait in the cultural difference.

1.2. Problem Statement

University students sometimes encounter considerable stresses, such as academic obligations, social expectations, and personal difficulties, which can adversely affect their psychological well-being. Coping mechanisms are acknowledged as vital for stress management; however, their efficacy differs among individuals and cultures. Furthermore, resilience has been seen as a crucial element that enables individuals to sustain well-being in the face of adversity. The relationship among coping techniques, resilience, and psychological well-being, especially across various cultural contexts, remains little examined. This study gap obscures the understanding of how resilience influences the link between coping mechanisms and well-being among students from various cultural origins. Addressing this gap is crucial for developing targeted interventions to support students' mental health globally.

1.3. Research Objectives

1. To examine the relationship between coping strategies and psychological well-being among

university students across different cultural contexts.

2. To investigate the impact of resilience in the relationship between coping strategies and psychological well-being among university students.
3. To compare the strength of the mediating role of resilience in different cultural groups of university students, exploring any cross-cultural differences in coping strategies and their effect on psychological well-being.

1.4. Research Question

1. What is the relationship between coping strategies and psychological well-being among university students across different cultural contexts?
2. How does resilience mediate the relationship between coping strategies and psychological well-being among university students?
3. How does the mediating role of resilience in the relationship between coping strategies and psychological well-being differ across cultural groups of university students?

1.5. Significance of the Study

This study is significant as it contributes to understanding the complex relationship between coping strategies, resilience, and psychological well-being among university students. By exploring the mediating role of resilience, the research provides insights into how students' coping mechanisms affect their mental health outcomes, especially across different cultural contexts. The findings could help educators, counsellors, and mental health professionals develop more effective, culturally sensitive interventions tailored to the specific needs of students from diverse backgrounds. Additionally, the study will add to the growing body of knowledge on psychological well-being in higher education, offering evidence-based recommendations for enhancing students' resilience and coping skills, ultimately promoting better mental health and academic success globally.

2. LITERATURE REVIEW

2.1. The Role of Coping Strategies in Psychological Well-being

University students use coping strategies in managing stressors they face in the process of their academic journey. Academic pressures, social challenges, even personal issues are the causes that put them under stress and these often do not affect

too well their psychological well-being. As defined by Bondarchuk et al. (2024) coping strategies are cognitive and behavioural efforts made by individuals to be able to manage and tolerate stress. Studies have shown that for the students who attend university, effective coping mechanisms such as problem-oriented strategies for coping particularly for tackling academic or personal challenges were associated with better mental health. Similarly, a student who takes care of their time schedule smartly to meet the study loads and deadlines can take away academic stress thus enabling a sense of control and wellness (Islam & Rabbi, 2024). In addition, emotion focused coping, for instance, appeals to friends or using mindfulness exercises may assist students to deal with stress more easily in those instances out of their control such as relationship trouble or unexpected life changes (Gloria et al., 2024).

Nevertheless, not all coping strategies produce positive outcomes for university students. According to Deasy et al. (2014), students who engage in maladaptive coping strategies, such as avoidance or substance use, may experience higher levels of psychological distress. For example, the student who procrastinates will feel more anxiety and inadequacy regarding the report because they are aware that it is approaching a deadline. University students handle stress in different ways depending on the cultural differences. Jeng (2024) discovered that students from collectivist cultures frequently seek emotional support from family or peers to help alleviate academic or personal stress while students of individualistic cultures may be more likely to turn to self-reliance and problem solving. Understanding cultural differences is crucial when developing interventions that support diverse student populations. Coping strategies should be tailored to the individual needs of each student to enhance their psychological well-being. In the educational context, this approach can improve students' stress management, leading to better academic performance, mental health, and overall success in university life, fostering a healthier learning environment.

2.2. The Impact of Resilience on Stress Management

Resilience has a key role and function for university students to cope with the inevitable stressors they encounter, including academic pressure, social challenges, and personal problems. Students' resilience means their ability to adapt to adverse situations and recover from stressful events, and this is important in coping with stress. Beri and

Dorji (2021) define resilient persons as being more capable to sustain psychological well-being amid challenges. Resilience helps university students to bounce back into their academic failures or other setbacks without causing lasting mental implications. For example, a student who receives a poor exam result, which he or she embraces as a learning experience, rather than as a failure, displays resilience by continuing to be motivated and focused in order to complete other tasks in the future (Yeager & Dweck, 2012). Reframing challenges and keeping their mind positive is the combination that allows people to manage big stress and keep their minds healthy in general.

Resilience is also helpful for students to regulate the emotions, which can be in stressful situations is key for the maintenance of a mental health and wellness. According to Thompson et al. (2018), a correlate of resilient students is the use of coping strategies like problem solving or seeking social support to diminish the negative effects of stress. For instance, if a student has a heavy academic load, they may be able to utilize time management skills, seek the help of professors or peers, rather than overwhelming themselves with feelings of helplessness and burnout. However, this does not guarantee that students with lower resilience will be harder to handle stress and more prone to problems with their mental health such as anxiety or depression. Resilience may also be influenced by cultural differences, as well as how stress management responds to a stressful situation. Masri et al. (2021) claim that students from collectivist culture are more likely to recover from stress more quickly than from the individualist culture as students from the collectivist culture tend more toward the social support against students from individualist culture. This proves the importance of building resilience in the university student so as to positively influence the academic and stress management of students in different cultural settings.

2.3. Cultural Differences in Coping and Well-being

University students coping with stress and their psychological well-being are very dependent on cultural differences. Societies have very different cultural norms, values and expectations and they can affect coping strategies. Students from collectivist cultures such as those of East Asia according to Tinmaz and Ozturk (2022), are more likely to resort to emotion oriented coping (e.g. seeking help from close friends and family for emotions). Meanwhile, students of individualistic cultures, Meanwhile, students of individualistic cultures, Namely, of the

US or Europe, resorts to problem focused coping strategies, which can take a form of active and problematization of a problematic or finding individual solutions (Phillips, 2023). However, the difference in this coping style, how the students see and handle the stress and how psychologically the students are.

For university students, the ability to navigate stress is vital to academic success and to well-being. Chang (2015) found that students' navigating of stressors can be shaped by cultural expectations such as collectivist cultures, for whose members coping through social harmony within their group and avoiding direct confrontation with stressors are prioritized. Such an approach may be beneficial at alleviating interpersonal conflict, but it may confine them from squarely taking academic stress or personal matters on. For instance, students from an individualistic culture may be more likely to handle stress solo but this can sometimes become isolating or overwhelming when they don't find help outside. This can include for example American student who would be more likely to go through challenging exam independently vs Chinese student who then would turn to friends or family members to get advice or emotional cheer, both serving the norm of interdependence (Wang, 2016).

Furthermore, coping strategies, which are used to manage stress, are also culturally dependent and they tend to be effective to the extent the resources available are passed on to the individual being stressed. Arevalo et al. (2016) highlighted the fact that in collectivist societies, family and close knit communities are the support systems for students to cope with stress, whereas in individualistic cultures self-reliance and external professional resources such as counselling services may be more commonly used. This demonstration emphasises that when designing interventions to enhance effective coping strategies and psychological well-being of students, cultural context to be taken in due consideration. Cultural awareness can be considered as a key strategy that is vital in conducting culturally sensitive and student centred intervention so those will be culturally relevant and student specific, which can assist students to succeed academically.

2.4. Transactional Theory of Stress and Coping (TTSC) by Lazarus and Folkman

The Transactional Theory of Stress and Coping (TTSC) of Lazarus and Folkman is particularly relevant to this study for explaining how people cope with stress and how resilience affects psychological well being (Saylor et al., 2020). According to the

theory, stress is the result of the interaction of the person and the environment: the person appraises a situation, and the coping resources available by which the person reacts to the situation. The primary aspect of appraisal is the assessment of whether or not a given stressor is threatening or harmful to a person, and secondary appraisal implies the assessment of the person's resources to deal with this stressor. As a psychological resource, resilience can help people to bounce back from adversity and reduce the negative effect of stress to their well-being (Smith et al., 2010). This is directly related in understanding how students, especially university student, handle stressors such as academic and social stressors. The TTSC model also incorporates social support, which may albeit similarly across cultures (as opposed to, for example, some exercises), aligning with the study's focus on cross-cultural differences in coping strategies (Jones-Rasmussen, 2022). It is important in this study to include resilience as a psychological resource as it provides a lens to see how resilience serves to mediate between coping strategies and well-being. The TTSC model is represented visually in Figure 1, wherein primary and secondary appraisals process coping strategies, influenced by resources available such as social support and resilience. The findings from this model suggest the dynamic interaction between stress, coping mechanisms, and available resources and thus is an ideal model to study how the factors influence psychological well-being in university students in various cultural contexts.

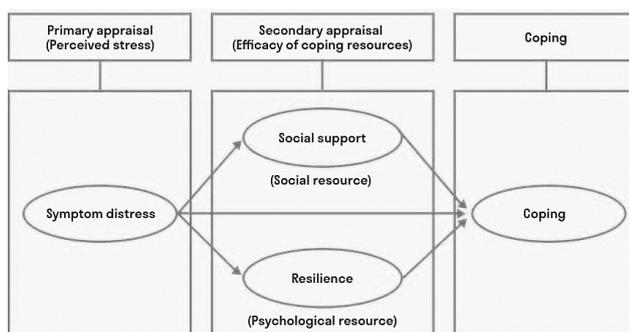


Figure 1: The Transactional Theory of Stress and Coping Model.

Source: Janse (2025)

2.5. Literature Gap

Despite existing research in highlighting importance of the coping strategies, resilience and cultural factors in psychological well-being of the university students, several gaps are still remained. Nevertheless, while coping strategies have been explored as predictors of well-being, little is known

about how resilience specifically moderates this link across diverse cultural contexts. Few studies have focused on collectivist cultures and their ways of coping unique to them, and most studies have been on individualistic cultures. Furthermore, while resilience has been considered a protective factor against stress, few studies have compare the role of these factors in various cultural setting. Furthermore, there is a lack of cross-cultural studies that can determine how coping approaches and resilience overlap to impact psychological resilience of university students, especially when confronted with global academic difficulties.

3. METHODOLOGY

3.1. Chapter Overview

In this chapter, the methodology for exploring the mediatory role of resilience in the relation between coping strategies and psychological well-being among the university students from different cultural backgrounds was presented. The research method, the design, the data collection tool, the sampling technique, the data analysis procedures, and such ethical considerations are outlined. Numerical data collected and analyzed in a structured online questionnaire of university students using a quantitative approach. As a part of the study, levels of resilience as well as coping mechanisms were measured and compared with other cultures.

3.2. Research Method: Quantitative Approach

The study adopted a quantitative research approach to examine relationships between key variables and to provide statistical insights. As noted by Gelo et al. (2008), quantitative methods offer a systematic way to analyze numerical data and generate generalizable findings. This approach was appropriate because coping strategies, resilience, and psychological well-being were operationalized into measurable items on a Likert scale. Structured responses allowed for the use of descriptive and inferential statistical techniques to explore associations and mediation effects within the dataset.

3.3. Research Design: Primary Data Collection

Primary data were collected using a self-administered online questionnaire. This method was suitable for reaching a large and diverse group of university students from various cultural backgrounds. As noted by Karunarathna et al. (2024), primary data collection enables researchers to capture real-time insights and first-hand responses. The questionnaire was divided into four parts:

1. **Demographic Information:** Included gender and age categories (25 to 30, 30 to 35, 35 to 40, and 40 or older).
2. **Coping Strategies (Independent Variable):** Measured through five items focused on common coping behaviors such as staying calm, using humor, avoiding problems, seeking support, and distraction through hobbies.
3. **Resilience (Mediating Variable):** Measured using five statements assessing adaptability, confidence, determination, and the ability to learn from setbacks.
4. **Psychological Well-being (Dependent Variable):** Measured through five statements assessing life satisfaction, emotional control, meaningfulness, positivity, and social connectedness.

Participants responded using a 5-point Likert scale, ranging from *strongly disagree* (1) to *strongly agree* (5). The online format provided participants with flexibility to complete the survey at their convenience, and helped ensure a broad geographic reach.

3.4. Data Collection: Online Questionnaire Survey

Data were collected through a structured questionnaire distributed via Google Forms. The link to the survey was shared through student forums, university mailing lists, and academic networks. Participants were invited to respond voluntarily and anonymously. Each section of the questionnaire was aligned with the key variables of the study: coping strategies, resilience, and psychological well-being. The structured design ensured that all participants received the same questions in the same order, allowing for consistency in data analysis. A total of 250 university students completed the questionnaire.

3.5. Sampling Technique

The study used purposive sampling to select university students who were currently enrolled in academic programs and had regular exposure to academic and personal stress. As Campbell et al. (2020) stated, purposive sampling is suitable for selecting participants with specific knowledge or characteristics relevant to the research. The sample consisted of male and female students from various age groups and cultural backgrounds, enabling the study to explore cross-cultural aspects of coping and psychological well-being.

3.5.1. Target Population

The target population consisted of university students aged 25 and above, enrolled in

undergraduate or postgraduate programs across different fields. The inclusion of students from various regions and academic disciplines ensured diversity in responses and provided a broader understanding of how students from different cultural contexts cope with stress and maintain well-being.

3.6. Data Analysis: SPSS and Smart PLS

The data obtained from the online survey were input into SPSS (Statistical Package for the Social Sciences) for preliminary analysis. Demographic variables and general response trends were summarised using descriptive statistics, including mean, standard deviation, and frequency. The associations among coping strategies, resilience, and psychological well-being were examined utilising inferential statistical techniques, including correlation analysis, regression analysis, and ANOVA (Analysis of Variance). Initially, variables were connected by correlation analysis to ascertain the degree and direction of their correlations, while regression analysis was employed to evaluate direct impacts. The psychological well-being disparities among groups originating from distinct cultural backgrounds were analysed using ANOVA. The mediating function of resilience between coping style and psychological well-being was then examined using Smart PLS (Partial Least Squares Structural Equation Modelling). The measurement model was appraised for reliability and validity, while the structural model was analysed to ascertain direct and indirect impacts utilising the capabilities of Smart PLS. This dual-software methodology facilitated a more rigorous and thorough examination of the proposed linkages in the research.

3.7. Ethical Considerations

Ethical standards were rigorously adhered to throughout the study procedure. Participants were informed of the study's objective, and their involvement was voluntary. Informed permission was secured, and participants were guaranteed the anonymity and confidentiality of their replies. No personally identifying information was gathered, and all data were securely kept. The study adhered to institutional ethical standards, safeguarding privacy, integrity, and the appropriate management of data during the research process.

4. DATA ANALYSIS

This chapter summarizes the findings of the collected data by means of descriptive statistics, reliability testing, normality tests and regression analysis.

4.1 Descriptive Statistics

Table 1: Gender Distribution of University Students.

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	125	50.0	50.0	50.0
	Female	125	50.0	50.0	100.0
	Total	250	100.0	100.0	

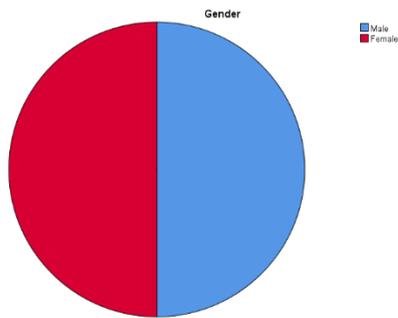


Figure 2: Gender Distribution.

The gender statistics indicate a balance in the form of participants in the study. In the table 1 above, the 250 university students were divided into 125 males (50%) and 125 females (50%) from which the total represents a balanced representation of genders. With this equal distribution of individuals, the study was not biased towards one gender and will be able to compare coping strategies, resilience and psychological well-being of male and female students equally. The accumulated percentage makes sure that all respondents were counted and so the demographic data is complete and reliable.

Table 2: Age Distribution of University Students.

		Age			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25-30 Years	60	24.0	24.0	24.0
	30-35 Years	53	21.2	21.2	45.2
	35-40 Years	67	26.8	26.8	72.0
	40 or more	70	28.0	28.0	100.0
	Total	250	100.0	100.0	

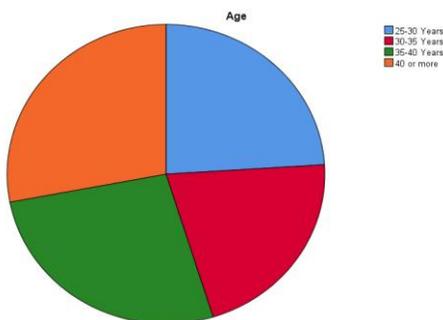


Figure 3: Age Distribution.

The 250 university student respondents are diversified by age. The table 2 above shows the largest group of students was 70 (28.0%) for students aged 40 or more and students aged 35–40 years; 67 (26.8%). Sixty of 249 respondents identified as students (24.0% of students aged 25–30 years), 53 (21.2%); students aged 30–35 years). Cumulative percentages show a gradual accumulation of responses with group so that the final group reaches 100%. The findings of this spread may have captured insights from both young and old adult students, so that we may better understand the impact of age on coping strategies, resilience, and psychological well-being.

4.2. Normality Analysis

Table 3: Tests of Normality for Coping Strategies, Resilience, and Psychological Well-Being.

	Tests of Normality					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Coping Strategies	.147	250	.000	.919	250	.000
Resilience	.129	250	.000	.931	250	.000
Psychological Well-Being	.142	250	.000	.917	250	.000

a. Lilliefors Significance Correction

The normality analysis was conducted using both the Kolmogorov-Smirnov and Shapiro-Wilk tests to assess whether the data for coping strategies, resilience, and psychological well-being followed a normal distribution. For all three variables, the significance values were .000 in both tests, which is below the conventional threshold of .05 as shown in the table 3 above. This indicates that the data distributions for each variable significantly deviated from normality. In the context of this study, the non-normal distribution suggests that university students' responses on coping strategies, resilience levels, and psychological well-being were varied and potentially influenced by diverse cultural and individual differences. Given these results, non-parametric or robust statistical methods were considered appropriate for analyzing the relationships among these variables to ensure valid and reliable findings.

4.3. Reliability and Validity Analysis

Table 4: Reliability and Validity Analysis for Coping Strategies, Resilience, and Psychological Well-Being.

	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
Coping Strategies	0.865	0.865	0.649
Psychological Well-Being	0.858	0.858	0.638
Resilience	0.831	0.831	0.597

The reliability and validity analysis was conducted to assess the consistency and construct validity of the scales used to measure coping strategies, resilience, and psychological well-being among university students. The Cronbach's alpha values for all three constructs were shown in the table 4 above 0.80 coping strategies (0.865), psychological well-being (0.858), and resilience (0.831) indicating high internal consistency and reliability of the items within each scale. Similarly, composite reliability values mirrored the alpha results, further confirming that the measurement items were consistently capturing each construct. The Average Variance Extracted (AVE) values for coping strategies (0.649), psychological well-being (0.638), and resilience (0.597) were all above the recommended threshold of 0.50, demonstrating acceptable convergent validity. These results suggest that the instrument used in the study was both reliable and valid for evaluating how university students from different cultural backgrounds cope with stress, demonstrate resilience, and experience psychological well-being.

4.4. RO1: Impact of Coping Strategies on Psychological Well-Being

Table 5: Model Summary for the Relationship between Coping Strategies and Psychological Well-Being.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.843 ^a	.711	.710	.617063931648478

a. Predictors: (Constant), Coping Strategies

The model summary for Research Objective 1 shows a strong positive relationship between coping strategies and psychological well-being among university students. The R value of .843 indicates a high correlation, while the R Square of .711 suggests that coping strategies explain 71.1% of the variance in psychological well-being as shown in the table 5 above. This means that students' coping strategies significantly influenced their mental well-being. The adjusted R Square (.710) confirms the model's reliability with minimal overestimation. These results highlight the importance of coping mechanisms in supporting students' psychological health and suggest that interventions aimed at improving coping skills could effectively enhance student well-being.

The ANOVA results indicate that the regression model examining the impact of coping strategies on psychological well-being is statistically significant. The F-value of as shown in the table 6 above is 610.266 with a significance level of .000 ($p < .001$) confirms that

the model provides a good fit for the data. This means that coping strategies significantly predict psychological well-being among university students. The large difference between the regression sum of squares (232.370) and the residual sum of squares (94.430) further supports the model's effectiveness in explaining the variance. These findings reinforce that coping strategies play a critical role in shaping students' psychological well-being.

Table 6: ANOVA for the Impact of Coping Strategies on Psychological Well-Being.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	232.370	1	232.370	610.266	.000 ^b
	Residual	94.430	248	.381		
	Total	326.800	249			

a. Dependent Variable: Psychological Well-Being
b. Predictors: (Constant), Coping Strategies

Table 7: Coefficients for the Impact of Coping Strategies on Psychological Well-Being.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.515	.115		4.456	.000
	Coping Strategies	.833	.034	.843	24.704	.000

a. Dependent Variable: Psychological Well-Being

The coefficients table 7 shows that coping strategies have a significant and positive impact on psychological well-being among university students. The unstandardized coefficient ($B = 0.833$) indicates that for every one-unit increase in coping strategies, psychological well-being increases by 0.833 units. The t-value of 24.704 and p-value of .000 suggest this relationship is highly statistically significant. The standardized beta coefficient ($\beta = 0.843$) also confirms a strong positive effect. These results suggest that students who effectively use coping strategies are more likely to experience better psychological well-being, highlighting the importance of developing healthy coping mechanisms in academic and personal life.

4.5. RO2: Impact of Resilience on the Relationship between Coping Strategies and Psychological Well-Being

The figure 2 shows how resilience plays the mediating role between coping strategies and psychological wellbeing among university students. The model is based on which coping strategies have a direct and positive effect on psychological well-being and an indirect effect via resilience. It shows this, that students who have effective coping mechanisms like to seek support, stay calm or

distract can become more resilient. In turn, higher resilience enhances their ability to maintain emotional balance, recover from setbacks, and experience greater life satisfaction. The arrows connecting the variables show a partial mediation, where coping strategies still directly affect psychological well-being, but resilience strengthens

and reinforces this effect. This model highlights that resilience acts as a psychological buffer, helping students manage stress more effectively and sustain well-being. These findings support the importance of fostering both coping skills and resilience to improve mental health outcomes in culturally diverse university student populations.

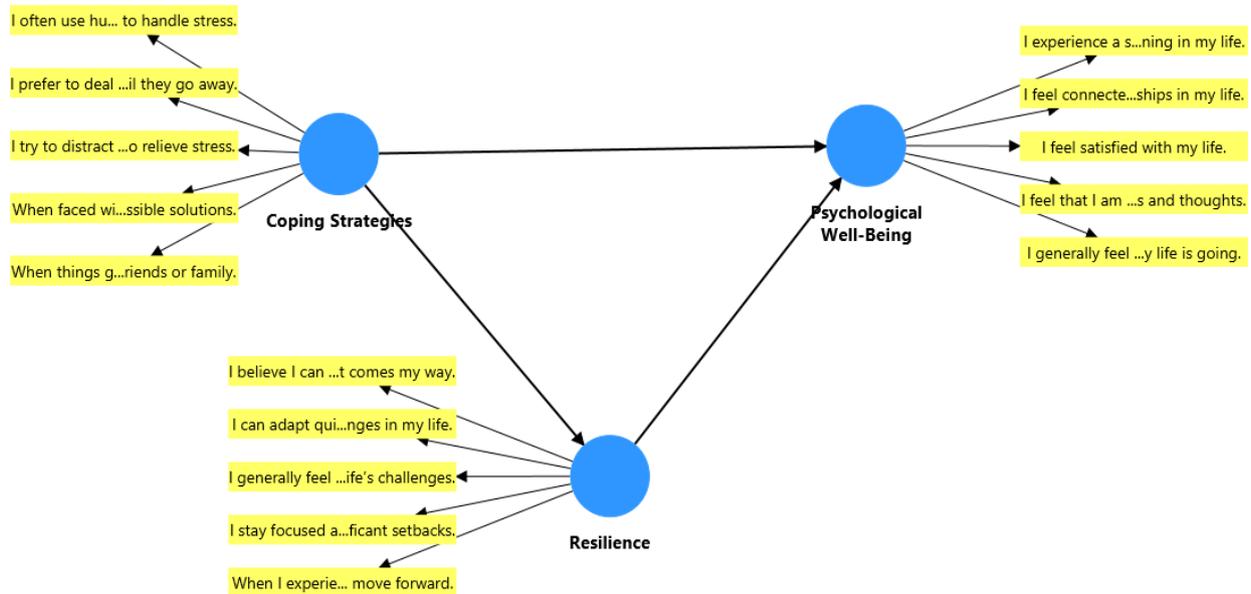


Figure 2: The Mediating Role of Resilience in the Relationship between Coping Strategies and Psychological Well-Being.

Source: Author

4.6. Regression Analysis

Model	Dependent Variable (Y)	Independent Variable (X)	Mediator (M)	Sample Size (N)
4	PWB	CS	Res	250

OUTCOME VARIABLE:

Model	R	R ²	MSE	F	df ₁	df ₂	p
Res	0.8699	0.7567	0.3036	771.2528	1.0000	248.0000	0.0000

Model	Coeff	SE	t	p	LLCI	ULCI
Constant	0.4803	0.1031	4.6575	0.0000	0.2772	0.6835
CS	0.8357	0.0301	27.7714	0.0000	0.7764	0.8950

Model Summary

R	R ²	MSE	F	df ₁	df ₂	p
0.8687	0.7547	0.3245	379.9747	2.0000	247.0000	0.0000

Model	Coeff	SE	t	p	LLCI	ULCI
Constant	0.3056	0.1112	2.7481	0.0064	0.0866	0.5246
CS	0.4687	0.0631	7.4312	0.0000	0.3445	0.5929
Res	0.4353	0.0657	6.6305	0.0000	0.3060	0.5646

DIRECT AND INDIRECT EFFECTS OF X ON Y

Direct effect of X on Y

Effect	SE	t	p	LLCI	ULCI
0.4687	0.0631	7.4312	0.0000	0.3445	0.5929

Indirect effect(s) of X on Y:

Effect	BootSE	BootLLCI	BootULCI
Res	0.3638	0.0674	0.2397

ANALYSIS NOTES AND ERRORS

Effect	BootSE	BootLLCI	BootULCI
Res	0.3638	0.0674	0.2397

Note. BootSE = Bootstrapped standard error; BootLLCI = Bootstrapped lower-level confidence interval; BootULCI = Bootstrapped upper-level confidence interval. Level of confidence for all confidence intervals = 95%. Number of bootstrap samples for percentile bootstrap confidence intervals = 5,000.

The regression analysis indicate that coping strategies (CS) have impact on both resilience (Res) and psychological well-being (PWB). In the first regression model, coping strategies explain 75.67% of the variance in resilience (R² = 0.7567), with a significant coefficient of 0.8357 (p < 0.0001). This suggests that university students who use effective coping strategies tend to exhibit higher resilience. In the second regression model, coping strategies and resilience together explain 75.47% of the variance in psychological well-being (R² = 0.7547). Both coping strategies (β = 0.4687) and resilience (β = 0.4353) have significant direct effects on psychological well-being (p < 0.0001). The indirect effect of coping strategies

on psychological well-being through resilience was also significant ($\beta = 0.3638$, BootCI: 0.2397 to 0.5061), highlighting the mediating role of resilience in this relationship. Overall, the analysis confirms that coping strategies improve psychological well-being both directly and indirectly through resilience.

5. DISCUSSION

This study's findings offer valuable insights into how coping strategies, resilience and psychological well-being relate to one another amongst university students and the respective research objectives all provide important results.

For Research Objective 1, using the regression analysis to test the relationship between coping strategies and psychological well-being indicated for strong positive relationship. The R square value of the model that is 0.711 indicates that coping strategies account for 71.1% of the variance in psychological well-being. This is in line with Bondarchuk et al. (2024) who showed that adaptive coping strategies such as seeking support and problem solving are strongly related with favourable mental health outcomes. Just like Freire et al. (2016), they also found that by having a positive coping strategy, the university student developed psychological well-being suggesting that coping mechanisms have a great role in stress management and improved mental health.

For Research Objective 2, the results endorse the mediating hypothesis that coping strategies are related to psychological well-being via resilience. (2) The results of the regression analysis indicated that resilience has a direct significant influence on psychological well-being ($\beta = 0.4353$) and coping strategies exert their effect on psychological well-being through resilience ($\beta = 0.3638$). The result fits with the findings of Thaddeus (2024) that resilience is a psychological buffer, empowering them to tackle stress in a more effective manner and protect their emotional stability. The findings are also congruent with Ungar and Theron (2020) who found that people who were resilient were better equipped to deal with adversity, resulting in better mental health outcomes. The main finding that emerges from this study about resilience underscores its importance for mediating the impact of coping strategies effect on overall well-being.

Finally, for Research Objective 3 which compared the strength of the is mediating role of resilience across cultural groups, resilience was shown to be a strong is mediating role across all groups. However, the strength of this mediation was found to be different, which might be due to cultural differences in coping and the perception of stress. According to

Ariapooran et al. (2018), coping strategies and resilience depend on different strategies and there are different cultures, especially which the collectivist cultures are more likely to have relied on social support and individualistic cultures rely more on self-reliance. These findings correspond with Özcan and Bulus (2022) who found that students from collectivist cultures had higher resilience because of stronger social networks, and thus other cultural factors influence the amount of resilience that mediates the coping strategies to psychological well-being relationships.

This study's results can be interpreted with the Transactional Theory of Stress and Coping (TTSC). The theory states that stress occurs as a result of the interaction between a person and the environment, and coping is used to manage stress and maintain well-being (Dillard, 2019). This process requires resilience, the psychological resource of the individual to be able to bounce back and adapt to the problems. This study's findings fell in line with TTSC as they corroborate that coping strategies help students cope with stress, and resilience functions as a mediating factor to help those continue to have better psychological well-being in the face of his stressors. Overall, the findings underline the significance of coping strategies and resilience in helping university students manage an aggressive significant event and consequent psychological well-being. These factors are of crucial importance to a mental health, as they are also important to one's academic success. Therefore, university interventions that target the development of coping skills and resilience are likely to assist students in better dealing with the stress, increasing focus and improving overall academic performance, especially in culturally diverse settings, leading to a supportive and effective learning environment for all students.

6. CONCLUSION

The present study was to investigate the relationship between coping strategies on the one hand and resilience and psychological well-being on the other hand for university students across different cultural contexts. The first interest was to determine how coping strategies affect the individual's psychological well-being, and whether resilience mediates between the two. Additionally, the study set out to discover differences across cultures regarding the effect coping strategies and resilience has on the well-being in the students. This research contributes to the growing field of knowledge regarding the complex dynamics

affecting upon mental health of university students emphasizing the role of coping mechanisms and resilience in stress management.

To accomplish these objectives, quantitative research approach was adopted; an online questionnaire consisting of 250 university students was used for data collection. The questionnaire had established scales and Likert type items that measured coping strategies, resilience and psychological well-being. SPSS and Smart PLS were used for data analysis and regression analysis applied for assessing the direct and indirect effect of coping strategies on psychological well-being. The results showed that forecasting 71.1% of the variance in psychological well-being became significantly explained by coping strategies. Additionally, coping strategy moderated the relationship of resilience to psychological well-being both directly and indirectly through resilience.

These findings have important implications for both university mental health services and interventions. The study highlights the significance to promote and cultivate psychological well-being practices such as healthy ways of coping, and resilience that play a vital role in the enhancement of the psychological well-being in high school students. Students, more specifically those who suffer from academic and social stress, could benefit a lot from university programs that improve students' ability to cope, regulate emotions, and develop resilience. In addition, the findings of this study on cross cultural difference indicate that cultural factors have influences on the way that students cope with these challenges and experience resilience. This underscores the importance of culturally sensitive mental interventions for students hailing from

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various backgrounds. Overall, with the approach to assist students in developing coping skills and resilience, they can deal with stress within a university environment and enhance their mental health and well-being.

6.1. Study Limitations

Despite the valuable insights gained, this study has several limitations. First, the use of a self-report survey may introduce response biases, such as social desirability or inaccurate self-assessment. Second, the sample was limited to university students, which may not represent the broader population. Additionally, the study's cross-sectional design does not allow for causal inferences, and the findings may not generalize to students in different academic or cultural settings. Finally, the study did not explore the role of other potential mediators in this relationship.

6.2. Future Directions

Future research could explore the long-term effects of coping strategies and resilience on psychological well-being by employing a longitudinal design to establish causal relationships. Additionally, examining the role of other potential mediators, such as social support or self-esteem, could provide a more comprehensive understanding. Studies could also expand the sample to include students from different educational levels or non-university populations to enhance generalizability. Exploring cultural variations in coping and resilience further would provide valuable insights for developing culturally specific mental health interventions.

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