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SELF-CARE PRACTICES AND MENTAL HEALTH OUTCOMES AMONG MEDICAL STUDENTS IN A NIGERIAN FAITH-BASED UNIVERSITY

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Abstract

Mental health concerns among medical students have gained sustained attention within medical education due to the demanding nature of medical training and its documented association with psychological distress. This study investigates self-care practices and mental health outcomes among medical students in a faith-based university in Nigeria. A cross-sectional survey research design was used, involving 235 medical students. Two research questions and three hypotheses were formulated and tested using means, standard deviations, and multiple regression analysis at .05 alpha level. Results showed considerable depression and moderate anxiety and stress among medical students. Self-care practices significantly predicted depression ($F_{(6,229)}$=181.20, Adj. R^2=.82), anxiety ($F_{(6,229)}$=79.72, Adj. R^2=.67), and stress ($F_{(6,229)}$=72.65, Adj. R^2=.65). Physical self-care consistently reduced all outcomes, while interpersonal, behavioural, and existential practices reduced depression and anxiety; cognitive and emotional self-care showed positive associations. Based on these findings, it was recommended, among others, that medical schools should prioritize structured initiatives that encourage physical self-care among students.

Keywords: Self-care practices, mental health outcomes, medical students, Nigerian faith-based university.

INTRODUCTION

Mental health concerns among medical students have gained sustained attention within medical education due to the demanding nature of medical training and its documented association with psychological distress (Kihumuro et al., 2022; Mekonnen et al., 2024; Mhata et al., 2023). Medical education is widely regarded as academically rigorous, highly competitive, and emotionally taxing, placing students at increased risk of depression, anxiety, stress, sleep disturbances, and burnout when compared with students in other disciplines (Auttama et al., 2021; Ho et al., 2023; Vagiri et al., 2024). These mental health challenges not only affect

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students' personal well-being but also influence academic performance, professional development, and future clinical practice (Slavin, 2021; Nair et al., 2023).

Global evidence indicates that the psychological well-being of medical students declines progressively during training, with early academic years characterized by adjustment stress and clinical years marked by heightened emotional strain arising from patient care responsibilities, examinations, and long study hours (Mckerrow et al., 2020; Scullion et al., 2023). Recent studies report that a substantial proportion of medical students experience clinically significant symptoms of depression, anxiety, and stress, with prevalence estimates ranging between 30% and 60% across regions (Azim, 2020; Vagiri et al., 2024). These outcomes raise concerns for medical schools, particularly as untreated psychological distress may persist into professional life and compromise the quality of healthcare delivery (Bhugra et al., 2019; Mendonca et al., 2025).

Within low- and middle-income countries, including Nigeria, mental health challenges among medical trainees are increasingly recognized as a public health issue. Empirical studies conducted in Nigerian universities indicate that medical students report higher stress levels than their non-medical peers, attributed to dense curricula, frequent assessments, limited leisure time, inadequate sleep, and pressure to achieve academic excellence (Okereke et al., 2025; Mekonnen et al., 2024). Resource constraints, stigma associated with help-seeking, and limited access to structured psychological support further compound these challenges, resulting in underutilization of available mental health services among medical students (Alsalman et al., 2024).

Self-care has emerged in contemporary health literature as a protective practice with relevance for individuals exposed to sustained academic and emotional demands. The World Health Organization (2020) defines self-care as the ability of individuals and communities to promote health, prevent disease, and cope with illness, either independently or with professional support. Among medical students, self-care includes deliberate actions such as regular physical activity, adequate sleep, healthy nutrition, emotional regulation, social engagement, spiritual practices, and time management (Ayala et al., 2018; Wan et al., 2024). Empirical studies suggest that students who engage consistently in self-care practices report lower perceived stress and better mental health outcomes (Ayala et al., 2017; Wan et al., 2024).

Despite growing recognition of the value of self-care, research focusing on its specific influence on mental health outcomes among medical students remains limited, particularly within faith-based universities in sub-Saharan Africa. Faith-based institutions often integrate spiritual values, moral discipline, and structured

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lifestyle practices into academic life, which may shape students' self-care behaviours and coping strategies in distinctive ways (Metais et al., 2025). However, limited empirical attention has been given to how such institutional characteristics interact with self-care practices to influence mental health among medical trainees (Tempski et al., 2015; Vazquez Morgan, 2021).

Furthermore, existing studies frequently address self-care within the general student population, which may obscure the unique stressors and developmental vulnerabilities experienced by medical students transitioning from adolescence to early adulthood (Tang, 2023; Suraj et al., 2025). There is also insufficient clarity regarding which categories of self-care practices are most strongly associated with positive mental health outcomes among medical students facing intense academic and clinical demands (Gold et al., 2014; Michael et al., 2024).

Against this background, the present study examines self-care practices and mental health outcomes among medical students in a faith-based university in Nigeria. By focusing on depression, anxiety, and stress, the study seeks to provide empirical evidence on how self-care behaviours relate to mental well-being within this population (Animasahun & Chapman, 2019; Okwudishu, 2024). Findings from this research are expected to inform student support initiatives, guide institutional mental health strategies, and contribute to the growing body of African scholarship on medical student well-being (Esan et al., 2019; Udam et al., 2024).

Objectives

The general objective of this study is to examine the influence of self-care practices on the mental health outcomes of medical students in a faith-based university in Nigeria. The specific objectives of the study are:

1. determine the levels of depression, anxiety, and stress among the medical students; and
2. examine the influence of self-care practices on depression, anxiety, and stress among the medical students.

Research Questions

The following research questions guide the study:

1. What are the levels of depression, anxiety, and stress among the medical students?
2. What influence do self-care practices have on depression, anxiety, and stress among the medical students?

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Hypotheses

$H0_1$: Self-care practices have no significant influence on depression among medical students in the Nigerian faith-based university.

$H0_2$: Self-care practices have no significant influence on anxiety and stress among medical students in the Nigerian faith-based university.

Literature Review

Mental health problems among medical students have attracted increasing scholarly attention because of their implications for academic performance, professional development, and quality of future healthcare delivery (Coentre et al., 2016; Mao et al., 2019). Depression, anxiety, and stress are the most frequently examined outcomes, although researchers often differ in the way these conditions are conceptualised and measured (Mao et al., 2019). Most studies rely on self-report screening instruments rather than clinical diagnoses, making comparisons across settings difficult and possibly contributing to variations in reported prevalence (Rotenstein et al., 2016).

Depression appears to be particularly common among medical students. A meta-analysis of more than 180 studies found that approximately 27% of medical students experience depressive symptoms, with a significant proportion also reporting suicidal ideation (Rotenstein et al., 2016). Similarly, Dyrbye et al. (2006) observed that emotional distress and burnout tend to increase during medical training, particularly as students progress into clinical years. Although these studies consistently identify medical education as a source of psychological burden, they are largely cross-sectional and therefore cannot establish whether the educational environment directly causes depression or whether students with pre-existing vulnerabilities are more likely to experience depressive symptoms (Moutinho et al., 2017; Pokhrel et al., 2020). In addition, most evidence originates from high-income countries, leaving uncertainty about the extent to which these findings apply to medical students in African and faith-based universities.

Anxiety has also been reported at high levels among medical students. Quek et al. (2019) estimated that nearly one-third of medical students worldwide experience clinically significant anxiety symptoms. However, the relationship between anxiety and academic performance is not entirely straightforward. While moderate anxiety may motivate preparation and achievement, persistent or excessive anxiety is associated with impaired concentration, sleep disturbance, and emotional exhaustion (Chen & Sun, 2022; Jamil et al., 2022). This distinction suggests that the influence of anxiety may depend on its severity and duration, an issue that many prevalence studies do not adequately address (Jamil et al., 2022).

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Stress is commonly regarded as a precursor to both depression and anxiety. Studies consistently identify workload, long study hours, financial concerns, and clinical responsibilities as major stressors for medical students (Dyrbye et al., 2006; American Psychological Association, 2024). Although stress itself is not necessarily pathological, prolonged exposure increases the likelihood of developing more severe psychological problems (Quek et al., 2019). Nevertheless, much of the existing literature treats stress primarily as an outcome rather than examining the factors that may reduce or moderate its influence (Greeson et al., 2015; Slavin et al., 2014). This limitation has encouraged greater interest in protective behaviours such as self-care (Ayala et al., 2018; Slavin et al., 2014).

The World Health Organization (2019; 2022) defines self-care as the ability of individuals to promote and maintain health, prevent disease, and manage illness, either independently or with support from healthcare providers. This broad definition extends beyond physical health practices to include emotional regulation, self-awareness, and the management of social and psychological demands (Martinez-Linero et al., 2024). The concept overlaps with related constructs such as self-compassion and self-regulation, although researchers do not always distinguish clearly between them (Leary et al., 2007; Martinez-Linero et al., 2024).

Self-Care Practices and Depression among Medical Students

Recent research suggests that self-care practices may protect medical students against depressive symptoms. Studies have shown that interventions promoting mindfulness, reflection, and stress management improve emotional regulation and coping abilities (Wan et al., 2024). Peer-led and mind-body programmes have also been associated with lower perceived stress and stronger self-efficacy (Scullion et al., 2023), both of which are recognised protective factors against depression.

Despite these encouraging findings, the evidence remains inconclusive. Many studies examine stress reduction rather than depression as the primary outcome, making it difficult to determine whether self-care directly reduces depressive symptoms or merely influences related psychological factors (Malarkey et al., 2024; Rotenstein et al., 2016). Furthermore, much of the available research employs small samples, qualitative approaches, or short-term interventions, limiting the strength of causal conclusions (Edwin, 2024). This suggests that the relationship between self-care and depression requires further investigation using broader populations and more rigorous research designs (Malarkey et al., 2024). An additional concern is that existing studies often assume that students have equal opportunities to engage in self-care. Factors such as academic workload, institutional culture, and access to support services may influence students' ability to practise self-care effectively (Slemon et al., 2021). These issues have received limited attention, particularly

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within faith-based universities where spiritual beliefs and communal values may shape health behaviours differently (Animasahun & Chapman, 2019; Olowookere et al., 2020).

Self-Care Practices and Anxiety among Medical Students

Self-care practices have also been proposed as a means of reducing anxiety among medical students. Interventions centered on mindfulness, emotional awareness, and relaxation techniques have been associated with improved coping and lower levels of emotional distress (Wan et al., 2024). Students who develop greater self-awareness and self-regulation often report feeling better equipped to manage academic and clinical pressures (Kriakous et al., 2020).

However, the evidence base presents certain inconsistencies. While many studies report reductions in perceived anxiety following self-care interventions, relatively few employ rigorous experimental designs or long-term follow-up assessments (Bennett-Weston et al., 2024; Scullion et al., 2023). As a result, it remains uncertain whether observed improvements are sustained over time or reflect temporary responses to structured programmes (Wang et al., 2023). In addition, anxiety outcomes are often measured alongside stress and burnout, making it difficult to isolate the specific contribution of self-care to anxiety reduction (Kriakous et al., 2020; Wang et al., 2023).

The cultural setting of existing studies also deserves consideration. Much of the evidence comes from Western institutions where educational systems and social support structures may differ considerably from those found in Nigerian universities (Esan et al., 2019). Consequently, there is a need to determine whether similar relationships exist among Nigerian medical students, particularly within institutions where religious values may influence attitudes toward coping and personal care (Adaramola et al., 2022; James et al., 2017).

Self-Care Practices and Stress among Medical Students

Stress has been the mental health outcome most frequently linked with self-care practices. Sperling et al. (2023) reported that mindfulness-based interventions produce significant reductions in perceived stress among medical students, while evaluations of mind-body programmes have demonstrated improvements in self-efficacy and stress management (Büssing et al., 2023). These findings support the view that intentional self-care behaviours can help students manage the demands of medical training.

Nevertheless, the literature also reveals important limitations. Many intervention studies rely on voluntary participation, raising the possibility that students who choose to engage in self-care programmes may already

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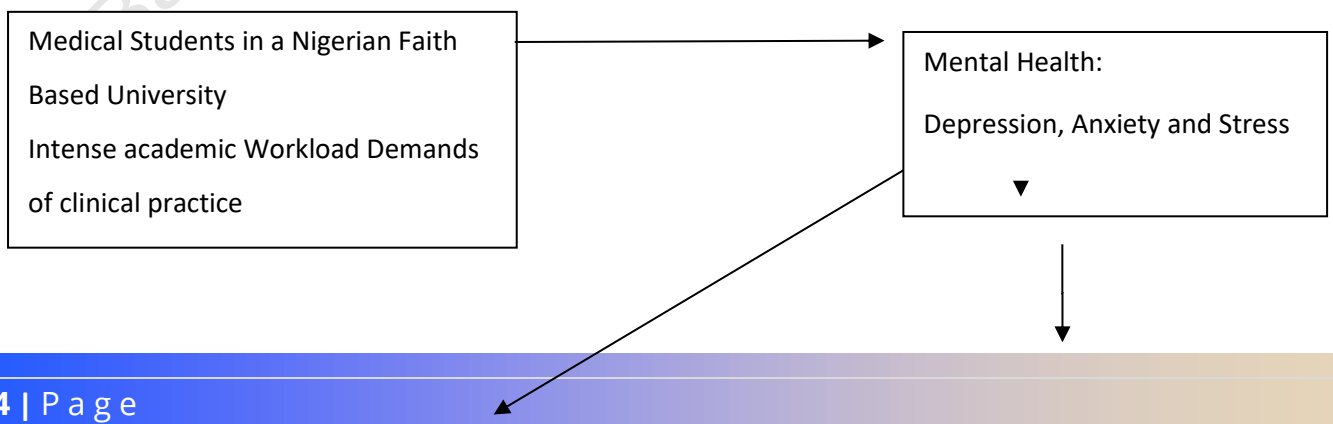
possess stronger coping skills or greater motivation to improve their well-being (Büssing et al., 2023; Malarkey et al., 2024). This selection effect may overestimate the benefits of self-care. Furthermore, most studies focus on short-term outcomes, providing little evidence regarding the sustainability of these effects across the different stages of medical education (Malarkey et al., 2024; Sperling et al., 2023).

Wan et al. (2024) argued that integrating self-care education into medical curricula may strengthen students' capacity to cope with academic and emotional demands. However, there remains limited evidence regarding which components of self-care are most effective or whether their effectiveness varies across cultural and institutional settings (Malarkey et al., 2024). In particular, little attention has been given to Nigerian faith-based universities, where religious practices may form an important aspect of students' coping strategies. This gap provides a strong justification for examining the relationship between self-care practices and depression, anxiety, and stress among medical students in a Nigerian faith-based university (Animasahun & Chapman, 2019; Olowookere et al., 2020).

Theoretical Framework

This study is theoretically grounded in Solution-Focused Brief Therapy (SFBT) and Cognitive Behavioural Therapy (CBT) to address depression, anxiety, and stress among medical students. SFBT offers a strengths-based, future-oriented framework that utilizes techniques like scaling and exception-finding to help students identify existing resources and build resilience (Zak et al., 2024; Franklin et al., 2024). In contrast, CBT focuses on identifying and restructuring the maladaptive thought patterns and behaviors that drive psychological distress (Beck et al., 2021; David et al., 2024). Both therapies have proven effective in reducing burnout and emotional exhaustion while enhancing coping mechanisms in demanding academic environments (Kulbaş et al., 2025; Jalali et al., 2026). Together, they provide a complementary foundation for developing targeted intervention strategies that foster adaptive coping and improve overall student mental health.

The integration of these theories supports the development of effective intervention strategies aimed at enhancing psychological well-being, promoting adaptive coping, and improving the overall mental health of medical students



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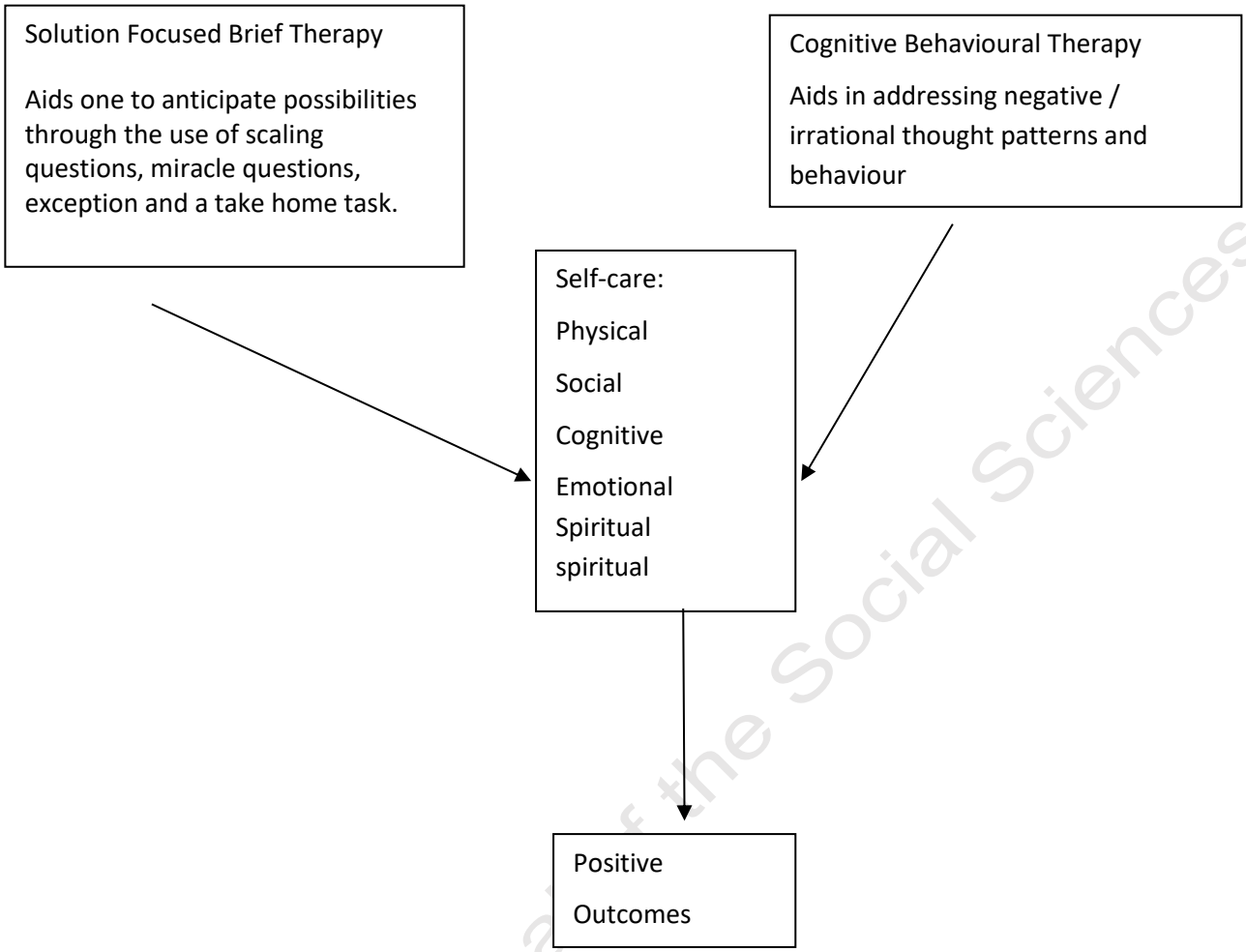

Figure 1: Conceptual model of the study

Source: David, 2025

This conceptual framework illustrates how self-care practices—spanning physical, emotional, social, cognitive, and spiritual dimensions—influence undergraduate medical students' mental health by targeting depression, anxiety, and stress. Guided by Solution-Focused Brief Therapy (SFBT) and Cognitive Behavioural Therapy (CBT), the framework explains how active self-care enhances student well-being and provides a theoretical foundation for developing evidence-based recommendations.

Literature Gap

Despite high rates of psychological distress among medical students (Rotenstein et al., 2018; Mekonnen et al., 2024; Mahgoub et al., 2022) and the proven benefits of multidimensional self-care and therapeutic interventions (Deng et al., 2024; Neff, 2023; Vermeulen-Oskam et al., 2025), institutional barriers persist and self-care education remains poorly integrated into medical curricula (Wan et al., 2024; Metais et al., 2025; Crisp et al., 2025). Furthermore, existing literature is heavily concentrated in Western and Asian contexts and

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often oversimplifies self-care as a single construct, leaving critical gaps regarding how its individual physical, emotional, social, cognitive, and spiritual dimensions affect mental health in African settings like Nigeria. Neff (2003) argued that self-compassion enables individuals to respond to personal difficulties with understanding rather than excessive self-criticism, thereby promoting emotional stability. Similarly, Tangney et al. (2004) linked self-regulation with improved decision-making and behavioural control. Although these studies support the value of self-care-related behaviours, they focus largely on general populations rather than medical students. Consequently, the extent to which these concepts operate within the unique pressures of medical education remains uncertain (Ayala et al., 2018; Martinez-Linero et al., 2024).

Another limitation in the literature is the lack of consistency in the operationalisation of self-care (Martinez-Linero et al., 2024; Wan et al., 2024). Some studies define self-care primarily in terms of mindfulness and relaxation practices, whereas others include sleep, exercise, social relationships, spiritual activities, and time management (Ayala et al., 2018; Wan et al., 2024). This variation makes direct comparison between studies difficult and may partly explain differences in reported outcomes. It also suggests the need for studies that adopt a clearly defined and measurable approach to self-care practices (Martinez-Linero et al., 2024). To address these gaps, this study uses validated quantitative instruments to examine the relationship between multidimensional self-care and the mental health of medical students at a Nigerian university.

METHODOLOGY

This study adopted a quantitative, cross-sectional survey design to examine the association between self-care practices and mental health outcomes among medical students in a Nigerian faith-based university. Data were collected at a single point in time from undergraduate medical students across different academic levels. The design was considered suitable for measuring the prevalence of self-care behaviours and mental health outcomes and for statistically testing the influence of self-care practices on depression, anxiety, and stress within the study population. The study targeted all 570 undergraduate medical students (200 to 500 level) enrolled in an MBBS program at a Nigerian faith-based university during the 2024/2025 academic session. Using the Taro Yamane formula with a .05 margin of error, a sample size of 235 participants was established. To ensure proportional representation and reduce bias, the researchers utilized stratified sampling across academic levels, followed by simple random sampling within each stratum.

Research Instruments

Data were collected using a structured, self-administered questionnaire comprising two standardised instruments. The first section measured self-care practices using a modified version of the Self-Care Assessment Scale to evaluate the frequency of well-being behaviors across five domains, with minor wording

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adaptations tailored for Nigerian medical students. The second section assessed mental health outcomes using the Depression, Anxiety, and Stress Scale (DASS-21 which assesses depression, anxiety, and stress through three subscales that are summed and doubled to provide standard full-length equivalent scores. In addition, the questionnaire included items on participants' socio-demographic characteristics, such as age, sex, level of study, marital status, and religious participation.

Table 1: Cronbach's Coefficient Alpha Reliability Score

S/N	Variables	No of Items	Cronbach's Alpha Coefficient	Composite Reliability	Remark
1	Self-care	30	0.779	0.764	Reliable
2	Mental Health	21	0.783	0.768	Reliable

Source: Researcher's Pilot Test (2025)

Table 2: Validity of the Research Instrument

S/N	Variables	Number of Items	KMO	Bartlett Test of Sphericity	AVE
1	Section B	30	0.683	269.712	0.6730
2	Section C	21	0.661	301.526	0.6109

Source: Pilot study SPSS Result, (2025)

The findings from the expert validation process, factor analysis, and reliability assessment provided sufficient evidence that the questionnaire was suitable for measuring self-care practices and mental health outcomes among medical students in the study setting.

Results

Analysis of Research Objectives/Hypotheses

Research Objective 1: to determine the levels of depression, anxiety, and stress among the medical students

Table 1: Descriptive Statistics for the Levels of Depression, Anxiety, and Stress among Medical Students

Mental Health Outcome	Number of Items	Grand Mean	Standard Deviation	Level of Experience
Depression	7	2.59	1.08	Considerable
Anxiety	7	2.47	1.06	Moderate

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Stress	7	2.49	1.03	Moderate to Considerable

Table 1 presents the descriptive statistics for the three mental health outcomes examined in the study. Depression recorded the highest grand mean score (M = 2.59, SD = 1.08), indicating that depressive symptoms were experienced to a considerable degree among the medical students. Anxiety had a grand mean score of 2.47 (SD = 1.06), reflecting a moderate level of experience, while stress recorded a mean score of 2.49 (SD = 1.03), indicating a level between moderate and considerable. The findings suggest that psychological distress was relatively common among the participants, with depression emerging as the most pronounced mental health concern.

Research Objective *2*: to examine the influence of self-care practices on depression, anxiety, and stress among the medical students

Hypothesis 1: Self-care practices have no significant influence on depression among medical students in the faith-based university.

Table 2: Model Summary and Coefficients of the Multiple Regression Analysis for Influence of Self-Care Practices on Depression

	B	Std. Error	Beta	t	Sig.	$F_{(6,229)}$	F-Sig	Model Summary
(Constant)	36.346	.751		48.376	.000	181.195	.000	R = .909
Physical Self-Care	-1.461	.110	-.855	-13.247	.000			R^2 = .826
Cognitive Self-Care	.442	.093	.247	4.769	.000			Adj. R^2 = .821
Psychological/Emotional Self-Care	.203	.058	.119	3.513	.001			Std. Error = 1.24859
Behavioural Self-Care	-.212	.089	-.120	-2.390	.018			
Interpersonal Self-Care	-.395	.050	-.255	-7.845	.000			

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Existential Self-Care	-.143	.057	-.090	-2.525	.012			

Dependent Variable: Depression

Predictors: (Constant), Existential Self-Care, Interpersonal Self-Care, Psychological/Emotional Self-Care, Cognitive Self-Care, Behavioural Self-Care, Physical Self-Care.

Table 2 presents the results of a multiple regression analysis examining the influence of self-care practices on depression among medical students. The model was statistically significant ($F_{(6, 229)}$ = 181.195, p< .001). The model produced an R value of .909 and an adjusted R^2 value of .821, indicating that approximately 82.1% of the variance in depression scores was explained by the combined influence of the six self-care dimensions. The relatively high adjusted R^2 values observed in the regression models were therefore interpreted as reflecting the substantial conceptual overlap between self-care behaviours and psychological well-being rather than statistical artefacts arising from multicollinearity or model misspecification. Diagnostic analyses demonstrated that the assumptions for regression analysis were satisfied. Among the individual predictors, physical self-care exhibited the strongest negative association with depression (B = -1.461, β = -.855, t = -13.247, p < .001). Interpersonal self-care (B = -.395, β = -.255, t = -7.845, p < .001), behavioural self-care (B = -.212, β = -.120, t = -2.390, p = .018), and existential self-care (B = -.143, β = -.090, t = -2.525, p = .012) also made significant negative contributions.

Conversely, cognitive self-care (B = .442, β = .247, t = 4.769, p < .001) and psychological/emotional self-care (B = .203, β = .119, t = 3.513, p = .001) showed positive associations with depression. This pattern may indicate that students already experiencing depressive symptoms are more likely to adopt reflective and emotional coping strategies in an attempt to manage their psychological condition. Since the overall regression model was statistically significant, the null hypothesis was rejected. Self-care practices significantly predicted depression among the medical students.

Hypothesis 2: Self-care practices have no significant influence on anxiety among medical students in the faith-based university.

Table 3: Model Summary and Coefficients of the Multiple Regression Analysis for Influence of Self-Care Practices on Anxiety

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	B	Std. Error	Beta	T	Sig.	$F_{(6,229)}$	F-Sig	Model Summary
(Constant)	31.543	.961		32.813	.000	79.718	.000	R = .822
Physical Self-Care	-1.397	.141	-.872	-9.903	.000			R^2 = .676
Cognitive Self-Care	.530	.119	.315	4.464	.000			Adj. R^2 = .668
Psychological/Emotional Self-Care	.334	.074	.208	4.509	.000			Std. Error = 1.59753
Behavioural Self-Care	-.287	.114	-.173	-2.528	.012			
Interpersonal Self-Care	-.204	.064	-.140	-3.166	.002			
Existential Self-Care	-.151	.072	-.101	-2.080	.039			

Dependent Variable: Anxiety

Predictors: (Constant), Existential Self-Care, Interpersonal Self-Care, Psychological/Emotional Self-Care, Cognitive Self-Care, Behavioural Self-Care, Physical Self-Care.

Table 3 presents the results of a multiple regression analysis assessing the influence of self-care practices on anxiety among medical students. The regression model for anxiety was statistically significant ($F_{(6, 229)}$ = 79.718, p< .001), with an adjusted R^2 value of .668. This indicates that the six dimensions of self-care jointly explained 66.8% of the variation in anxiety scores. Physical self-care emerged as the strongest negative predictor of anxiety (B = -1.397, β = -.872, t = -9.903, p < .001). Behavioural self-care (B = -.287, β = -.173, p = .012), interpersonal self-care (B = -.204, β = -.140, p = .002), and existential self-care (B = -.151, β = -.101, p = .039) also showed significant negative relationships with anxiety. Cognitive self-care (B = .530, β = .315, p < .001) and psychological/emotional self-care (B = .334, β = .208, p < .001) demonstrated significant positive relationships with anxiety. As with depression, this finding may reflect greater utilisation of reflective coping strategies among students experiencing higher anxiety levels. Accordingly, the null hypothesis was rejected. Self-care practices significantly predicted anxiety among the medical students.

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Hypothesis 2: Self-care practices have no significant influence on stress among medical students in the faith-based university.

Table 4: Model Summary and Coefficients of the Multiple Regression Analysis for Influence of Self-Care Practices on Stress

	B	Std. Error	Beta	t	Sig.	$F_{(6,229)}$	F-Sig	Model Summary
(Constant)	30.002	.842		35.646	.000	72.647	.000	R = .810
Physical Self-Care	-1.326	.124	-.975	-10.734	.000			R^2 = .656
Cognitive Self-Care	.572	.104	.400	5.501	.000			Adj. R^2 = .647
Psychological/Emotional Self-Care	-.078	.065	-.057	-1.199	.232			Std. Error = 1.39868
Behavioural Self-Care	-.088	.100	-.062	-.882	.379			
Interpersonal Self-Care	-.031	.056	-.025	-.542	.588			
Existential Self-Care	-.094	.063	-.074	-1.480	.140			

Dependent Variable: Stress

Predictors: (Constant), Existential Self-Care, Interpersonal Self-Care, Psychological/Emotional Self-Care, Cognitive Self-Care, Behavioural Self-Care, Physical Self-Care.

Table 4 presents the results of a multiple regression analysis examining the influence of self-care practices on stress among medical students. The regression analysis revealed that the overall model was statistically significant ($F_{(6, 229)}$ = 72.647, p< .001), with an adjusted R^2 value of .647. The six self-care dimensions jointly explained 64.7% of the variance in stress scores. Diagnostic testing indicated that the assumptions required for multiple regression were met. Physical self-care had a significant negative influence on stress (B = -1.326, β = -.975, t = -10.734, p < .001), indicating that greater engagement in physical self-care behaviours was associated with lower stress levels.

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Cognitive self-care was positively associated with stress (B = .572, β = .400, t = 5.501, p < .001), suggesting that students experiencing greater stress may engage more frequently in reflective or cognitive coping activities. Psychological/emotional self-care (p = .232), behavioural self-care (p = .379), interpersonal self-care (p = .588), and existential self-care (p = .140) did not contribute significantly to the prediction of stress after controlling for the other self-care dimensions. Therefore, the null hypothesis was rejected. The findings indicate that self-care practices, particularly physical self-care, significantly predict stress among medical students.

Discussion

This study found that depression, anxiety, and stress were common among medical students in a Nigerian faith-based university, with depression emerging as the most prominent psychological challenge. The higher prevalence of depressive symptoms compared with anxiety and stress suggests that the cumulative effects of sustained academic demands, frequent examinations, prolonged study routines, and limited opportunities for rest may gradually progress from acute stress to more persistent mood-related difficulties. These findings are consistent with previous studies reporting higher levels of psychological distress among medical students than among their non-medical peers and demonstrating that emotional strain tends to intensify as students advance through medical training (Azim, 2020; Scullion et al., 2023; Vagiri et al., 2024).

The regression analyses further demonstrated that self-care practices were significant predictors of mental health outcomes, although their influence varied across depression, anxiety, and stress. Physical self-care was the strongest protective factor against all three outcomes, indicating that behaviours such as regular exercise, adequate sleep, and sufficient rest may reduce psychological distress through improved physiological functioning and emotional regulation. Interpersonal, behavioural, and existential self-care also showed significant negative associations with depression and anxiety, suggesting that social support, healthy routines, and meaning-oriented practices contribute to better psychological well-being. In contrast, cognitive and psychological or emotional self-care were positively associated with depression and anxiety, likely reflecting reverse causality whereby students experiencing greater distress engage more frequently in reflective and emotional coping strategies. For stress specifically, physical self-care remained the only significant protective factor, while cognitive self-care was positively associated with stress, possibly because highly stressed students engage more intensively in planning, monitoring, and self-evaluation. Other self-care dimensions did not significantly predict stress, implying that stress among medical students may be more directly influenced by immediate academic pressures than by emotional, social, or existential factors (Azim, 2020; Scullion et al., 2023; Vagiri et al., 2024).

Based on the findings of the study, the following recommendations are proposed:

1. Medical schools should prioritize structured initiatives that encourage physical self-care among students. These may include protected time for physical activity, promotion of adequate sleep through balanced timetabling, and access to recreational facilities.
2. The university should enhance peer-support structures, mentoring programmes, and collaborative learning activities that foster healthy interpersonal relationships. This may help reduce emotional isolation and improve psychological well-being among medical students.
3. Student support units should provide structured guidance on the appropriate use of cognitive and emotional self-care strategies. Training should emphasize adaptive coping methods and caution against excessive rumination or self-monitoring, which may be associated with higher levels of distress.
4. Faith-based counselling, meaning-oriented activities, and value-driven support programmes should be integrated with professional mental health services. This may strengthen student resilience and encourage early help-seeking.

Conclusion

This study concludes that depression, anxiety, and stress are prevalent among medical students in a Nigerian faith-based university, with depressive symptoms emerging as the most pronounced mental health challenge. The findings demonstrate that self-care practices are strongly associated with mental health outcomes, with physical self-care consistently showing a protective impact across depression, anxiety, and stress. Interpersonal, behavioural, and existential self-care were also associated with reduced depression and anxiety, while cognitive and psychological or emotional self-care showed positive associations with distress, suggesting that these practices may reflect reactive coping among students experiencing higher symptom levels. These results underscore the importance of promoting structured, evidence-informed self-care practices within medical training, while highlighting the need for targeted guidance on coping strategies to support the psychological well-being of medical students in faith-based educational settings.

References

Adaramola, O. G., Idowu, O. M., Toriola, O. I., Olu-Festus, D. M., Oyebanji, T. E., Uche-Orji, C. I., Ogunnubi, P. P., & Odukoya, O. O. (2022). Coping strategies of Nigerian medical students during the COVID-19 pandemic. *Ghana Medical Journal, 56(1), 15–22. https://doi.org/10.4314/gmj.v56i1.3*

Alsalman, A. J., Al-Hadidi, D. A., & Alzahrani, A. M. (2024). Barriers to mental health help-seeking among medical students: A systematic review. BMC Medical Education, 24(1), 118-129.

Animasahun, V. J., & Chapman, H. J. (2019). Psychosocial health challenges and coping mechanisms among undergraduate medical students in a private Nigerian university. *BMC Medical Education, 19(1), 1–11.* https://doi.org/10.1186/s12909-019-1588-y

Auttama, N., Suksatan, W., & Chaimongkol, N. (2021). Stress and coping strategies among medical students in Southeast Asia. *Journal of Educational Health Promotion, 10, 327.*

Ayala, E. E., Winseman, J. S., Mason, H. R. C., & Uddin, M. M. (2017). Self-care practices and perceived stress among medical students. *Medical Education Online, 22(1), 139-148.* https://doi.org/10.1080/10872981.2017.139001

Ayala, E. E., Omrod, D. J., Morris, M. H., & Mason, H. R. C. (2018). U.S. medical students who engage in self-care report less stress and higher quality of life. *BMC Medical Education, 18(1), 338. https://doi.org/10.1186/s12909-018-1396-6*

Azim, S. R. (2020). Psychological distress among medical students: A cross-sectional study. *Journal of Mental Health and Human Behaviour, 25(2), 95-101.*

Bhugra, D., Sauerteig, S. O., Bland, D., Lloyd-Kendall, A., Wijesuriya, J., Singh, G., ... & Ventriglio, A. (2019). A descriptive study of mental health and well-being of doctors and medical students in the UK. *International Review of Psychiatry, 31(7–8), 563–568.* https://doi.org/10.1080/09540261.2019.1648621

Büssing, A., Starck, L., & Schoppe, A. (2023). Self-care strategies for medical students: an uncontrolled mixed-methods evaluation of a mind-body-medicine group course. *BMC Medical Education, 23(1), 812.* https://doi.org/10.1186/s12909-023-04791-7

Cassady, J. C., & Johnson, R. E. (2002). Cognitive test anxiety and academic performance. *Contemporary Educationa l Psychology, 27(2), 270-295.* https://doi.org/10.1006/ceps.2001.1094

Chen, H., & Sun, R. (2022). A study on the relationship between sleep, anxiety and academic performance of applied psychology major in a university in Tianjin. *Advances in Social Science, Education and Humanities Research, 528–533.* https://doi.org/10.2991/978-2-494069-31-2_65

Coentre, R., Faravelli, C., & Figueira, M. L. (2016). Assessment of depression and suicidal behaviour among medical students in Portugal. *International Journal of Medical Education, 7, 354–363.* https://doi.org/10.5116/ijme.57f8.c468

Cooper, C. L., & Quick, J. C. (Eds.). (2017). The handbook of stress and health: A guide to research and practice. Wiley-Blackwell.

Dyrbye, L. N., Shanafelt, T. D., Werner, L., Sood, A., Satele, D., & Wolanskyj, A. P. (2017). The impact of a required longitudinal stress management and resilience training course for first-year medical students. *Journal of General Internal Medicine, 32(12), 1309-1314.*

Edwin, J. (2024). What medical students want from mental health self-help resources. https://doi.org/10.1016/j.ssaho.2024.100490

Esan, O., Esan, A., Folasire, A., & Oluwajulugbe, P. (2019). Mental health and wellbeing of medical students in Nigeria: a systematic review. *International Review of Psychiatry, 31(7-8), 661–672.* https://doi.org/10.1080/09540261.2019.1677220

Greeson, J. M., Toohey, M. J., & Rosenzweig, S. (2015). An open-label pilot study of mindfulness-based stress reduction for surrogate decision-makers. *Journal of Palliative Medicine, 18(11), 979–982. https://doi.org/10.1089/jpm.2015.0116*

Gold, J. A., Johnson, B., Leydon, G., Rohrbaugh, R. M., & Wilkins, K. M. (2014). Mental health self-care in medical students: a comprehensive look at help-seeking. *Academic Psychiatry, 39(1), 37–46. https://doi.org/10.1007/s40596-014-0202-z*

Ho, C. S. H., Chee, C. Y. I., & Ho, R. C. M. (2023). Mental health strategies for medical students. *Academic Psychiatry, 47(2), 157-165.*

James, B. O., et al. (2017). Psychosocial correlates of perceived stress among undergraduate medical students in Nigeria. *International Journal of Medical Education, 8, 382–388. https://doi.org/10.5116/ijme.59c6.3075*

Jamil, H., Alakkari, M., Al-Mahini, M. S., Alsayid, M., & Al Jandali, O. (2022). The impact of anxiety and depression on academic performance: A cross-sectional study among medical students in Syria. *Avicenna Journal of Medicine, 12(3), 111–119. https://doi.org/10.1055/s-0042-1755181*

Kihumuro, R. B., et al., (2022). Perspectives on mental health services for medical students at a Ugandan medical school. *BMC Medical Education, 22(1), 746. https://doi.org/10.1186/s12909-022-03815-8*

Kriakous, S. A., Elliott, K. A., Lamers, C., & Owen, R. (2020). The effectiveness of mindfulness-based stress reduction on the psychological functioning of healthcare professionals: a systematic review. *Mindfulness, 12(1), 1–28. https://doi.org/10.1007/s12671-020-01500-9*

Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. Springer Publishing Company.

Leary, M. R., Tate, E. B., Adams, C. E., Batts Allen, A., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: The implications of treating oneself kindly. *Journal of Personality and Social Psychology, 92(5), 887–904. https://doi.org/10.1037/0022-3514.92.5.887*

Malarkey, M., Edwards, C. R., & Mastro, K. (2024). Enhancing self-care education amongst medical students: a systematic scoping review. *BMC Medical Education, 24(1), 24. https://doi.org/10.1186/s12909-023-04987-x*

Mao, Y., Zhang, N., Liu, J., Zhu, B., He, R., & Wang, X. (2019). A systematic review of depression and anxiety in medical students in China. *BMC Medical Education, 19(1). https://doi.org/10.1186/s12909-019-1744-2*

Martinez-Linero, J., Garcia-Arroyo, J. A., & Osca, A. (2024). The multi-dimensional nature of self-care: A systematic review of conceptual boundaries, self-regulation, and psychological health outcomes. *Current Psychology, 43(14), 12541–12558. https://doi.org/10.1007/s12144-023-05310-9*

Mckerrow, I., Carney, P. A., Caretta-Weyer, H., Furnari, M., & Miller Juve, A. (2020). Trends in medical students' stress, physical, and emotional health throughout training. *Medical Education Online, 25(1), 170-180.*

Mekonnen, T., Fekadu, W., & Alemu, S. (2024). Depression and anxiety among medical students in sub-Saharan Africa: A systematic review. *PLOS Global Public Health, 4(2), e0002156.*

Mekonnen, C. K., Abate, H. K., Beko, Z. W., Zegeye, A. F., & Azagew, A. W. (2024). Prevalence of depression among medical students in Africa: Systematic review and meta-analysis. *PLOS ONE, 19(10), e0312281. https://doi.org/10.1371/journal.pone.0312281*

Metais, E., Wan, M., & Lefevre, J. H. (2025). Promoting wellbeing in medical education: Institutional approaches and student self-care. *Medical Teacher, 47(1), 12-20.*

Mhata, N. T., Ntlantsana, V., Tomita, A. M., Mwambene, K., & Saloojee, S. (2023). Prevalence of depression, anxiety and burnout in medical students at the University of Namibia. *South African Journal of Psychiatry, 29, 2044. https://doi.org/10.4102/sajpsychiatry.v29i0.2044*

Michael, K., Schujovitzky, D., & Karnieli-Miller, O. (2024). The associations between resilience, self-care, and burnout among medical students. PLOS ONE, 19(8), e0309994. https://doi.org/10.1371/journal.pone.0309994

Moutinho, I. L. D., Maddalena, N. D. C. P., Roland, R. K., Lucchetti, A. L. G., Tibiriçá, S. H. C., Ezequiel, O. D. S., & Lucchetti, G. (2017). Depression, stress and anxiety in medical students: A cross-sectional comparison between students from different semesters. *Revista da Associação Médica Brasileira, 63(1), 21–28. https://doi.org/10.1590/1806-9282.63.01.21*

Nair, A. G., Ahmed, T., & Gandhi, R. A. (2023). Physician wellbeing and medical education reform. *Indian Journal of Ophthalmology, 71(6), 2411-2416.*

Neff, K. D. (2003). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity, 2(2), 85-101.*

Okereke, C. D., Okechukwu, E. F., & Adebayo, S. O. (2025). Stress and mental health outcomes among Nigerian medical students. *African Journal of Health Sciences, 38(1), 45-57.*

Okwudishu, O. (2024). Evaluation of the prevalence and factors affecting the mental health of undergraduate medical students in a Nigerian university: A cross-sectional study. *Nigerian Medical Journal, 65(3).*

Olowookere, S. A., Rauf, N. O., Adewuyi, A. O., & Temowo, T. S. (2020). Religious coping, religiosity, and psychological distress among university students in southwestern Nigeria. *Journal of Religion and Health, 59(5), 2391–2404. https://doi.org/10.1007/s10943-020-01015-w*

Pokhrel, N. B., Khadayat, R., & Tulachan, P. (2020). Depression, anxiety, and burnout among medical students and residents of a medical school in Nepal: a cross-sectional study. *BMC Psychiatry, 20(1), 290. https://doi.org/10.1186/s12888-020-02645-6*

Quek, T. T-C., Tam, W. W., Tran, B. X., Zhang, M., Zhang, Z., Ho, C. S-H., & Ho, R. (2019). The global prevalence of anxiety among medical students: A meta-analysis. *International Journal of Environmental Research and Public Health,16(15), 2735.*

Rotenstein, L. S., Ramos, M. A., Torre, M., Segal, J. B., Peluso, M. J., Guille, C., Sen, S., & Mata, D. A. (2016). Prevalence of depression, depressive symptoms, and suicidal ideation among medical students: A systematic review and meta-analysis. *Journal of the American Medical Association, 316(21), 2214-2236.*

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55(1), 68-78.*

Scullion, R., Icke, K., &Tissen-Diabaté, T. (2023). Self-care strategies for medical students: An uncontrolled mixed-methods evaluation of a mind-body-medicine group course. *BMC Medical Education, 23, 816.*

Self-care strategies for medical students: An uncontrolled mixed-methods evaluation of a mind- body-medicine group course (2023). *BMC Medical Education, 23, 816.*

Slemon, A., Jenkins, E., & Bungay, V. (2021). Safety, health, and systemic barriers: A qualitative study of student well-being and institutional cultures. Nurse Education Today, 106, 105081. https://doi.org/10.1016/j.nedt.2021.105081

Slavin, S. J., Schindler, D. L., & Chibnall, J. T. (2014). Medical student mental health 2.0: Managing energy, not time. *Academic Medicine, 89(11), 1473–1477.* *https://doi.org/10.1097/ACM.0000000000000426*

Slavin, S. J. (2021). Addressing student mental health in medical education. *Academic Medicine, 96(6), 775-779.*

Sperling, E. D., Hulett, J. M., Maltby, H. J., & Threadgould, M. (2023). The effect of mindfulness interventions on stress in medical students: A systematic review and meta-analysis. *PLOS ONE, 18(10), e0286387. https://doi.org/10.1371/journal.pone.0286387*

Suraj, K., Patel, R., & Mehta, S. (2025). Sleep quality and mental health among medical students in low-resource settings. *Sleep Health, 11(1), 45-52.*

Tang, W. (2023). Coping strategies and mental wellbeing among medical students. *BMC Medical Education, 23(1), 612.*

Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality, 72(2), 271-324.*

Tempski, P., et al., (2015). Relationship among medical student resilience, educational environment and quality of life. *PLOS ONE, 10(6), e0131535. https://doi.org/10.1371/journal.pone.0131535*

Udam, T. G., Salibi, G., & Tzenios, N. (2024). Awareness and practice of mental health promotion among students at the University of Calabar, Nigeria. *Special Journal of the Medical Academy and Other Life Sciences, 2(9). https://doi.org/10.58676/sjmas.v2i9.93*

Vagiri, R., Sudhir, P., & Kumar, K. (2024). Psychological morbidity among medical students: A multicentre study. *Asian Journal of Psychiatry, 88, 103-118.*

Vazquez Morgan, M. (2021). Promoting student wellness and self-care during COVID 19: The role of institutional wellness. *Frontiers in Psychiatry, 12, 797355. https://doi.org/10.3389/fpsyt.2021.797355*

Wan, M., Metais, E., & Lefevre, J. H. (2024). Integrating self-care education into undergraduate medical training. *Medical Education, 58(4), 389-398.*

Wang, Q., Wang, F., Zhang, S., Liu, C., Feng, Y., & Chen, J. (2023). Effects of a mindfulness-based interventions on stress, burnout in nurses: a systematic review and meta-analysis. *Frontiers in Psychiatry, 14, 1218340. https://doi.org/10.3389/fpsyt.2023.1218340*

World Health Organization (2019). WHO guideline on self-care interventions for health. World Health Organization.

World Health Organization (2020). Self-care interventions for health. World Health Organization Press.

World Health Organization (2022). Self-care interventions for health and well-being. World Health Organization.