



RELATIONSHIP BETWEEN MINDFULNESS, EMOTIONAL WELLBEING AND ACADEMIC PERFORMANCE AMONG UNIVERSITY STUDENTS

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Abstract

Mindfulness and emotional wellbeing have been independently associated with positive student outcomes; however, empirical evidence regarding their combined influence on academic performance remains limited, particularly within developing educational contexts. This study investigated the relationships between mindfulness, emotional wellbeing, and academic performance among university students in Pakistan, addressing a critical gap in the existing literature. A correlational quantitative research design was employed, with a sample of 150 undergraduate students drawn from The Islamia University of Bahawalpur and Government Sadiq College for Women University Bahawalpur using stratified random sampling to ensure representation across academic programs and years of study. Data were collected using three standardized instruments: the Mindful Attention Awareness Scale (MAAS) to assess mindfulness, the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) to measure emotional wellbeing, and self-reported cumulative GPA as an indicator of academic performance. Analyses were conducted using SPSS version 26, incorporating descriptive statistics, Pearson correlation, multiple regression, and mediation analysis with bootstrapping to test the hypothesized relationships. Findings revealed significant positive correlations between mindfulness and emotional wellbeing ($r = 0.62, p < 0.001$), mindfulness and academic performance ($r = 0.54, p < 0.001$), and emotional wellbeing and academic performance ($r = 0.57, p < 0.001$). Multiple regression analysis demonstrated that mindfulness and emotional wellbeing jointly predicted academic performance, accounting for 42% of the variance in GPA. Furthermore, mediation analysis confirmed that emotional wellbeing partially mediated the relationship between mindfulness and academic performance, indicating that mindfulness influences academic outcomes both directly and indirectly through enhanced emotional health. These findings underscore the critical role of mindfulness and emotional wellbeing in shaping university students' academic success. The results suggest that integrating mindfulness-based interventions and emotional wellbeing programs into university curricula and support services may serve as effective strategies for fostering both psychological resilience and academic achievement in higher education settings.

Keywords: Mindfulness, Emotional Wellbeing, Academic Performance, University Students, Mediation Analysis

1. Introduction

University students encounter a complex array of academic, psychological, and social challenges that profoundly shape their educational experiences and outcomes. The demands of higher education, intense competitiveness, heavy workloads, time management pressures, and elevated family and societal expectations,



can significantly undermine students' psychological wellbeing, often manifesting as stress, anxiety, and emotional instability. Contemporary research increasingly recognizes that academic performance is not solely a function of intellectual capacity but is intricately linked to students' emotional and psychological health (Jackson, 2022; Peterson & Clark, 2023). The transition to university life represents a critical developmental period during which students must navigate unfamiliar academic systems, forge new social connections, and assume greater personal responsibilities. A substantial proportion of students struggle to balance academic obligations with personal life, a difficulty that frequently precipitates burnout and diminished academic achievement (Hernandez et al., 2022). Moreover, the proliferation of digital technologies and online learning platforms has intensified cognitive overload, impairing students' capacity for sustained concentration and focused study (Nguyen & Taylor, 2024).

In response to these challenges, researchers and educators have increasingly explored psychological constructs that may enhance student resilience and academic success. Mindfulness has emerged as a particularly promising area of inquiry. Defined as the non-judgmental awareness of the present moment, mindfulness has been shown to improve attention, emotional regulation, and stress management among students (Williams & Kabat-Zinn, 2022). Emotional wellbeing, the capacity to understand, manage, and express emotions effectively while maintaining positive relationships and coping with adversity, similarly contributes to student success. Students with higher emotional wellbeing tend to demonstrate greater motivation, improved concentration, and superior academic outcomes (Rahman et al., 2023). While academic performance, commonly operationalized as grade point average (GPA), examination results, and other indicators of learning achievement, has long been a central focus of educational research, contemporary perspectives conceptualize it as a multidimensional construct shaped by cognitive, emotional, and behavioural factors (Singh et al., 2022).

Despite growing recognition of the importance of psychological factors in academic success, significant gaps remain in the literature. Although mindfulness and emotional wellbeing have each been examined separately, empirical research investigating their combined influence on academic performance within a unified framework is notably scarce. This gap is particularly pronounced in developing regions, where educational systems may lack the resources to address students' psychological needs systematically. Furthermore, the mechanisms through which these constructs interact, particularly whether emotional wellbeing serves as a pathway through which mindfulness affects academic outcomes, remain inadequately understood. In the Pakistani higher education context, where students face unique cultural pressures, including high-stakes examinations and substantial family expectations regarding academic achievement, understanding these relationships is especially critical.

This study seeks to address these gaps by investigating the relationships between mindfulness, emotional wellbeing, and academic performance among university students in Pakistan. By examining both the direct effects of mindfulness on academic performance and the indirect effects mediated by emotional wellbeing, this research aims to provide a more comprehensive understanding of how these psychological factors jointly shape student outcomes. The findings will contribute to the growing body of literature on student wellbeing in higher education and offer practical insights for educators, administrators, and policymakers seeking to develop evidence-based interventions that support both the psychological health and academic success of university students.

Mindfulness

Mindfulness is based on ancient contemplative traditions and has been transformed into a modern psychological and educational practice as an effective method for improving cognitive and emotional functioning. This is usually described as the consciousness that appears due to concentration on the current moment without any judgment or intention to judge (Brown & Ryan, 2003; Kabat-Zinn, 2015). Mindfulness in the educational environment is linked to attention, emotional stability and self-regulation. The application of mindfulness in education is based on the fact that students are usually distracted, distressed and emotionally pressured, which limits the learning processes. Meditation and other mindfulness exercises, such as breathing, reflective mindfulness and awareness, can ensure that students become more focused and transparent and can thus better tackle academic tasks (Harris et al., 2022). These have been established to lower stress levels and



increase the concentration ability of the students and increase their learning performance. Among the most significant advantages of mindfulness in teaching is the fact that it facilitates self-regulation. Self-regulation is a skill that involves the control of thoughts, emotions and actions to achieve academic aspirations. Conscious students can be more resistant to distractions, retain attention and continue to fight in complicated circumstances (Zimmerman, 2022). This improved control is critical to academic success, especially in challenging university settings. Mindfulness helps build emotional intelligence, which is the ability to identify, learn and control emotions. In academic situations, emotional intelligence is critical to communication, cooperation and problem-solving. Research has demonstrated that mindfulness-based programs have great potential for enhancing the emotional sensitivity and resilience of students to better respond to stress and misfortunes (Garcia & Weiss, 2023). Mindfulness has also been associated with better cognitive processes (memory, attention and executive functioning). These mental advantages are especially important among university students because they have to handle a great deal of information and think critically. Mindfulness helps students improve their performance in school by improving cognitive efficiency. Mindfulness programs are becoming a part of the curriculum of educational institutions worldwide as a way of enhancing the mental health and academic performance of students. These initiatives have shown good performance in terms of decreased stress levels, increased emotional well-being and increased engagement in academics (Lopez et al., 2024).

Emotional Wellbeing

Emotional wellbeing is an important part of the student development and a major factor in the success of the student in academics. It refers to the possibility of experiencing positive emotions, controlling negative emotions and ensuring psychological stability against life challenges of life (Diener et al., 2021). Emotional well-being is particularly significant for university students because they are exposed to high levels of stress and uncertainty. University life is full of challenges that may compromise students' emotional well-being, such as academic stress, social adaptation, financial issues and career stress. These stressors may also cause emotional problems, including anxiety, depression and burnout, which have adverse effects on students' academic performance (Ahmed & Khan, 2023). Emotional well-being in the Era of Hybrid and Remote learning is also a need of teachers to development of their professional ability for the betterment of students' academic achievement (Rafiq-uz-Zaman, 2023). It has been found that students who have poor emotional wellbeing tend to develop problems in concentration, motivation and time management. Emotionally well students are more likely to exhibit positive academic behaviours (e.g., active engagement, persistence and effective problem-solving). This means that they can handle stress and maintain a positive attitude, which helps them achieve better academic results (Taylor & Brown, 2022). Emotional well-being also affects interpersonal relationships, which are significant in collaborative learning and social support for students. Mental health is closely related to emotional well-being. Colleges have documented rising levels of mental health problems among students, which requires measures to support the development of emotional health. Not only does emotional well-being increase academic performance, but it also improves the quality of life and future achievements of students. There is increasing recognition of the need to work towards emotional well-being in schools. Some of the programs and services that universities provide to address students' mental health include counselling, stress management workshops and mindfulness training. All these are efforts to provide a conducive learning environment in which learners achieve academic and personal growth (World Health Organization, 2023).

Academic Performance

Academic performance is one of the most important aspects of students' performance in higher education and it is frequently applied to demonstrate their learning performance and competencies. It is normally gauged in the form of grades, GPA, exam scores and other academic successes. Nevertheless, academic achievement is conditioned by a complicated network of factors, one of which is cognitive skills, motivation, learning patterns and psychological health (Singh & Mehta, 2022). Cognitive ability is one of the key factors in academic performance, which comprises aspects of memory, attention and problem-solving. Students with high cognitive capability are in a better position to comprehend and apply academic concepts. Nevertheless, cognitive ability is insufficient to guarantee academic success. Other non-cognitive phenomena,



including motivation, self-discipline and emotional regulation, are also important (Duckworth & Yeager, 2023). Another significant aspect that determines academic performance is motivation. Intrinsically motivated students have a higher chance of pursuing learning activities, not giving up easily and attaining high grades. Conversely, the absence of motivation may cause a lack of engagement and low academic achievements (Ryan & Deci, 2022). In addition, there are environmental factors, such as the quality of teaching, learning resources and social support, which have a major influence on academic performance. The involvement of students and their academic success can be improved through the presence of a supportive learning environment. The absence of support may reduce the development of students and lead to academic complications. Academic performance is also greatly dependent on psychological determinants, especially stress and emotional well-being. Stress leads to reduced concentration and performance abilities in students due to the deterioration of cognitive abilities during stressful periods. Positive emotional well-being, on the other hand, may improve cognitive performance and subsequent academic achievements. Academic performance is therefore a complex phenomenon that needs to be examined holistically to understand and work on. It is important to note the importance of psychological factors that can influence the academic performance of students, such as mindfulness and emotional well-being, in order to design effective strategies to improve performance in students (Hernandez et al., 2022).

Relationship between Mindfulness, Emotional Wellbeing and Academic Performance among University Students

Mindfulness, emotional well-being and academic performance have emerged as relevant topics of study in educational psychology. These three constructs are highly interdependent and have a collective impact on students' learning experiences and performance. It has been identified that mindfulness positively affects emotional well-being because it improves individuals' capacity to manage their emotions and handle stress. This is because mindful students are more conscious of their thoughts and emotions and are thus able to react to challenges in a more adaptive way (Brown et al., 2022). This enhanced affective control contributes to greater emotional well-being. Emotional well-being is crucial for academic performance. Positively emotionally well students have better chances of being motivated, engaged and resilient, resulting in improved academic performance. Low emotional well-being may cause low motivation, challenges in concentration and poor academic outcomes (Rahman et al., 2023). Mindfulness has a direct effect on academic performance through its cognitive functions, including attention, memory and executive functioning. Conscious students can pay more attention to academic activities, digest information more efficiently and excel at exams (Garcia & Weiss, 2023). In addition, mindfulness encourages self-regulation, which is critical to learning and academic success. The connection between these variables can also be explained using a mediation approach, in which emotional well-being mediates between mindfulness and academic performance. In this model, mindfulness leads to improved emotional well-being, which subsequently increases academic performance. This indicates that academic success can be indirectly positively influenced by intervention efforts to enhance mindfulness by affecting emotional well-being (Lopez et al., 2024).

2. Theoretical Framework

The present study, which examines the relationship between mindfulness, emotional well-being and academic performance among university students, is grounded in three major theoretical perspectives: mindfulness-based cognitive theory, emotional regulation theory and self-determination theory. Each of these theories provides a distinct lens for understanding how cognitive, emotional and motivational processes interact to influence learning performance in higher education contexts.

Mindfulness-Based Cognitive Theory

Mindfulness-based cognitive theory (MBCT) is the result of merging the concepts of cognitive therapy and mindfulness, which was developed with the main aim of avoiding relapse in people with depression. Nevertheless, it has been applied to a school setting to improve cognitive processes, emotional control and general academic performance in students (Segal, Williams & Teasdale, 2020). MBCT assumes that people who learn mindfulness are able to be non-judgmental in their observations of thoughts and feelings, which leads to a reduction in cognitive biases, automatic negative thoughts and emotional responsiveness. Such an awareness enables students to react to academic problems by being conscious of them instead of responding



habitually or in a way that can be characterized by avoidance behaviours (stress-induced) (Kabat-Zinn, 2015; Williams et al., 2022). MBCT reinforces the belief that academic performance of the students does not solely depend on cognitive ability but is also determined by the capability of the students to control attention and cope with internal stressors. It has also been found that mindful students have better focus, working memory and problem-solving abilities, which are essential in more complex learning activities (Brown & Ryan, 2003; Lopez et al., 2024). Mindfulness allows students to be clear minded about learning tasks and minimizes anxiety about exams or deadlines and adopt a resilient attitude to academic failures (Garcia & Weiss, 2023). In addition, MBCT offers a process by which the effect of mindfulness on academic performance is mediated by emotional well-being. Students with developed mindfulness skills have less rumination and increased self-compassion, which leads to better emotional regulation. This balance, on its part, boosts motivation, engagement and persistence in academic activities (Harris et al., 2022). Therefore, MBCT has provided the theoretical basis of the study through the explanation of the impacts of mindfulness practices on both emotional and cognitive domains, which are crucial to academic performance.

Emotional Regulation Theory

Emotional regulation theory focuses on how individuals control the types of emotions they have, their timing and the way they are expressed and regulated (Gross, 2015; Thompson, 2022). Emotional control is important in influencing the learning performance of university students because having emotional control capacity may influence the level of performance because the capacity to control emotion may either promote or affect academic performance and engagement. Emotional regulation problems may cause an increase in stress, anxiety, or depressive symptoms that harm concentration, memory and motivation (Ahmed & Khan, 2023). In contrast, psychological resilience, adaptive coping and positive affect promoted by effective emotional regulation are factors favourable to academic success (Taylor & Brown, 2022). The theory recognizes a number of emotion management strategies, such as cognitive reappraisal, attention deployment and response modulation. The redefinition of a difficult academic scenario in a more favourable or manageable perspective and students are able to generate fewer negative emotions and continue to focus on problem-solving (Gross & John, 2003). Attention deployment, on the other hand, can be defined as the concentration on elements of an academic task that are conducive to positive interaction with minimal distraction. Response modulation is the direct intervention in the emotional expressions by means of mindfulness or relaxation exercises (Hernandez et al., 2022). The mediating effect of emotional well-being in the relationship between mindfulness and academic performance is also explained by emotional regulation theory. Mindfulness practices, as emphasized by MBCT, provide students with competencies to note their thoughts and feelings without judgement, which is a central feature of emotional regulation. Students with the capacity to control their emotions positively show greater emotional well-being, which consequently elevates performance in regard to the capacity to participate in academic assignments (Rahman et al., 2023). This school of thought highlights the need to create interventions to improve academic performance in colleges and universities by focusing on mindfulness and emotional regulation.

Self-Determination Theory

Self-determination theory (SDT) is a well-known theory that helps to understand human motivation and focuses on the importance of intrinsic and extrinsic motivation in behaviour (Ryan & Deci, 2022). SDT suggests that the more people fulfil their fundamental psychological needs of autonomy, competence and relatedness, the higher their chances of optimum performance and well-being are. Applied to the case of university education, SDT implies that students increase their academic motivation when they perceive themselves as competent at their learning activity, have a sense of autonomy in their choice and retain significant social relationships (Deci & Ryan, 2020). SDT applied to the investigation of mindfulness and emotional well-being is especially applicable because mindfulness practices have the potential to improve students' sense of autonomy and competence. Mindfulness can be used to address the problem of students not understanding their strengths and weaknesses by developing self-awareness and a non-judgmental interest towards experiences, thereby allowing them to make informed decisions and participate in self-directed learning (Williams & Kabat-Zinn, 2022). Mindfulness and emotional control lead to emotional well-being, which in turn affects a positive psychological climate in which students feel competent and inspired to do well



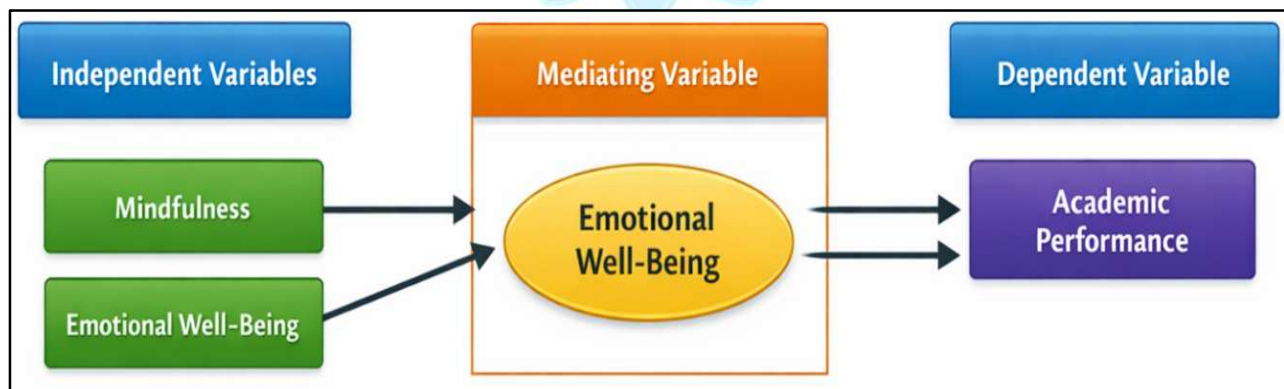
in school (Jackson, 2022). Moreover, SDT identifies the interplay between emotional well-being and intrinsic motivation as applied in academics. Students with higher emotional well-being are also more likely to be intrinsically motivated, leading to higher engagement, persistence and the effectiveness of learning (Nguyen & Taylor, 2024). This is in line with the mediation model indicated in the present research, where emotional well-being is the mediator in the relationship between mindfulness and academic performance. In other words, mindfulness increases emotional well-being, which in turn increases intrinsic motivation and eventually academic performance. The multi-dimensional effects on academic performance are elaborated in SDT. Although intellectual capabilities and background knowledge are crucial, the theory argues that motivation, emotional control and psychological support systems are also critical for continued success in academic achievement. Thus, the combination of mindfulness-based interventions and strategies focused on emotional well-being improvement contributes to the ideas of SDT and offers a comprehensive approach to improving academic and psychological outcomes in students (Peterson & Clark, 2023; Lopez et al., 2024).

3. Conceptual Framework

The theoretical construct of the research was formulated to evaluate the connections between mindfulness, emotional well-being and academic performance in university students. Mindfulness was considered an independent variable because it was assumed to affect both emotional well-being and academic performance. Emotional well-being was first viewed as an independent and mediating factor, as it has a dual nature in the research. The model demonstrated that a higher degree of mindfulness was correlated with better emotional health, which had a beneficial impact on academic performance. Academic performance was the dependent variable that was measured as an outcome affected by mindfulness and emotional well-being. This model enabled researchers to investigate not only the direct impacts of mindfulness on academic performance but also the indirect impacts of mindfulness on academic performance mediated by emotional well-being. Generally, the framework offered a systematic method for understanding how psychological factors interplay to determine students' academic performance.

Figure 1

Conceptual Framework of the Study



Problem Statement

Academic pressure, psychological stress and emotional challenges are more prevalent among university students and adversely impact their academic performance and well-being. Scholastic problems within the student population have led most learning institutions to focus on academic performance without considering the psychological and emotional components of learning performance. Although mindfulness has become a promising solution to improve students' concentration, emotional control and stress management, its use in university settings is still not widespread and has not been extensively studied in numerous environments, especially in developing countries. Emotional wellbeing that is a vital factor in the motivation, engagement and academic performance of the students is a topic that is repeatedly ignored in both academic research and the practices in institutions. Although mindfulness and emotional well-being have been individually examined, there is no extensive literature analysing the relationship between mindfulness,



emotional well-being and academic achievement in a single study among university learners. Empirical data on the interaction of these variables in the context of a particular culture and education are inadequate. The current study seeks to fill this gap by establishing a correlation between mindfulness, emotional well-being and academic performance in university students. Learning about this correlation is critical to developing effective interventions and educational strategies that can facilitate academic success and psychological well-being.

Hypotheses of the Study

Based on the theoretical framework and previous empirical findings, this study proposes the following hypotheses to examine the relationship between mindfulness, emotional well-being and academic performance among university students:

- H1:** There is a significant positive relationship between mindfulness and emotional well-being among university students.
- H2:** There is a significant positive relationship between mindfulness and academic performance among university students.
- H3:** There is a significant positive relationship between emotional well-being and academic performance among university students.
- H4:** Mindfulness and emotional wellbeing significantly predict academic performance among university students.
- H5:** Emotional wellbeing mediates the relationship between mindfulness and academic performance among university students.

3. Methodology

This study examined the methodological processes used to examine the relationship between mindfulness, emotional well-being and academic performance in university students. It involved the research design, sample, sampling method, research instruments and data analysis methods. The present study utilized a correlational quantitative research design to assess the association between mindfulness, emotional well-being and academic performance. Correlational research design enables researchers to examine the extent to which variables are related without controlling them (Creswell, 2018). The research adopted a cross-sectional survey design in which the researcher gathered data at one time. This design was suitable because it allowed the researcher to evaluate the relationship between mindfulness, emotional well-being and academic performance in a large sample of university students effectively. To create numerical data that could be statistically processed to determine the strength and significance of the relationships, a quantitative approach was adopted. The researcher focused on self-reported data, which is a common method in psychological and educational studies to measure cognitive, emotional and behavioural patterns. This design provided objectivity, reliability and reproducibility of the study findings.

Sample and Sampling Technique

The population to be studied comprised undergraduate students at Islamia University of Bahawalpur and Government Sadiq College for Women University Bahawalpur. The sample in this study was a sample of 150 students. The sample was representative and generalizable to various academic programs and disciplines because the sample included students in different academic programs and disciplines. An online sample size calculator was used to determine the sample size, with a confidence level of 95%, margin of error of 5% and an estimated population of 3,000 students in both universities. The calculator showed that a sample size of 143–150 would be sufficient to test the hypothesis statistically; hence, the final sample size was set at 150. Stratified random sampling was used to select the participants based on the various faculties and years of study. This approach ensured that the sample represented all subgroups of the population in the correct proportion. University communication platforms and online invitations were used to encourage students to voluntarily participate in the study. The age of the participants was 18 to 25 years old and both the male and female students were incorporated. The inclusion criteria were based on the students of the selected universities and their willingness to participate and comprehend the survey instructions. Students whose previous academic leave was due to chronic health problems were not willing to provide informed consent and did not qualify as participants in the study.



Research Instruments

To collect data on the variables of interest, three standardized research instruments were used: a mindfulness scale, an emotional wellbeing scale and an academic performance measure. The instruments were selected based on their established validity, reliability and appropriateness for university students.

Mindfulness Scale. Participants' mindfulness levels were assessed using the Mindful Attention Awareness Scale (MAAS) of the participants (Brown & Ryan, 2003). The MAAS is a 15-item self-report questionnaire designed to determine variations in attention and awareness in daily life among different people. Participants rated each item on a 6-point Likert scale ranging from 1 (almost always) to 6 (almost never). The MAAS validity was determined by the review of experts and past studies in the realm of higher education which asserted the scales to be effective in the measurement of dispositional mindfulness. Cronbach alpha was used to test the reliability of the scale in the current study, and it was discovered that the alpha was 0.88 which reflects a high internal consistency and reliability. The scale was distributed online and participants filled it out independently without any supervision.

Emotional Wellbeing Scale. Participants' emotional well-being was assessed using the Emotional Wellbeing Scale, which is based on the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) modified (Tennant et al., 2007). The scale comprises 14 questions that deal with positive effect, optimism, life satisfaction and emotional resilience. Responses were documented on a 5-point Likert scale (1=never to 5=always). The scale has content and construct validity, which was demonstrated by the literature on the mental health of university students. A reliability analysis produced a Cronbach's alpha of 0.91, which shows a high level of internal consistency. This made the scores for emotional well-being the most precise description of the psychological condition of the participants during the data collection period.

Academic Performance Measure. Academic performance was measured using self-reported cumulative Grade Point Average (GPA) as official records were not accessible due to privacy constraints. Participants were asked to report their most recent GPA on a 4.0 scale.

Data Analysis Techniques

The responses gathered with the help of the three instruments were coded and analysed with the help of Statistical Package of Social Sciences (SPSS) version 26. Descriptive statistics, such as mean, standard deviation and frequency, were calculated to summarize the demographic factors of the sample and the scores of the variables. Pearson's correlation analysis was used to test the study hypotheses to establish the strength and direction of the relationships between mindfulness, emotional well-being and academic performance. Correlation coefficients (r) were interpreted as weak (0.10–0.29), moderate (0.30–0.49) and strong (0.50–1.0) relationships. The effect of mindfulness and emotional well-being on predicting academic performance was determined through multiple regression analysis. The regression equation involved mindfulness and emotional well-being as independent variables and GPA as the dependent variable. The significance of the predictors was reported by the R^2 value, beta coefficient (β), t -value and p -value. Mediation analysis was conducted to test the hypothesis that emotional well-being mediated the effect of mindfulness on academic performance. Indirect effects were tested using the Baron and Kenny (1986) approach and the bootstrapping method. The level of significance was set at $p < 0.05$.

Results

This chapter presents the study, which is centred on the demographics of the population and the correlations between mindfulness, emotional well-being and academic performance among university students. The analysis of data collected from 150 participants was conducted using descriptive statistics to generalize the frequencies and percentages of major demographic variables, gender, age, university, CGPA and living arrangements. The performance of the participants in school and their living conditions are also described in this chapter and can affect mindfulness and emotional well-being. The results are presented in both tabular and descriptive formats to provide a clear picture of the study sample.

Table 1

Demographic Characteristics of Participants

Demographic Variable	Category	Frequency	Percentage
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Gender	Male	68	45.3
	Female	82	54.7
Age (years)	18–20	55	36.7
	21–23	60	40.0
	24–26	35	23.3
CGPA / Academic Performance	Below 2.0	12	8.0
	2.0–2.5	28	18.7
	2.6–3.0	45	30.0
	3.1–3.5	40	26.7
	3.6–4.0	25	16.6
Living Arrangement	Hostel / Dormitory	42	28.0
	With Family	85	56.7
	Shared Apartment / Rent	20	13.3
	Other	3	2.0

The demographic characteristics of the 150 participants are presented in Table 1. The findings indicated that the majority of the participants were female (54.7%), while 45.3% were male. Regarding age, most students were between 21 and 23 years (40.0%), followed by 18–20 years (36.7%) and 24–26 years (23.3%), indicating that the sample primarily consisted of young adults in the early years of university education. Academic performance, measured through CGPA, showed that the largest proportion of students scored between 2.6 and 3.0 (30.0%), followed closely by those in the 3.1–3.5 range (26.7%). A smaller number of participants had CGPAs below 2.0 (8.0%) or above 3.6 (16.6%), indicating a moderate level of academic achievement. Analysis of living arrangements revealed that more than half of the students (56.7%) lived with their families, while 28.0% resided in hostels or dormitories and a minority lived in shared apartments or other arrangements. The demographic data reflected a diverse sample in terms of gender, age, academic performance and living conditions, providing a solid basis for examining the relationships among mindfulness, emotional well-being and academic performance.

Table 2

Relationship between Mindfulness and Emotional Wellbeing

Variable	Mean ± SD	Correlation (r)	p-value
Mindfulness Score	78.45 ± 10.32	0.62	<0.001
Emotional Wellbeing Score	81.20 ± 9.85		

Table 2 indicates a strong positive relationship between mindfulness and emotional well-being among university students. The mean mindfulness score was 78.45 with a standard deviation of 10.32, while the emotional well-being score averaged 81.20 with a standard deviation of 9.85. Correlation analysis revealed a significant positive association ($r = 0.62$, $p < 0.001$). This indicates that students who exhibited higher mindfulness tended to report better emotional well-being. The results confirm that mindfulness may enhance the ability to regulate emotions and maintain psychological balance.

Table 3

Relationship between Mindfulness and Academic Performance

Variable	Mean ± SD	Correlation (r)	p-value
Mindfulness Score	78.45 ± 10.32	0.54	<0.001
Academic Performance (GPA)	3.42 ± 0.45		

Table 3 shows a significant positive correlation between mindfulness and academic performance. The mean mindfulness score remained 78.45 (SD = 10.32), while the mean GPA was 3.42 (SD = 0.45). The correlation coefficient ($r = 0.54$, $p < 0.001$) indicated a moderate positive association. This implies that students with higher levels of mindfulness generally achieve better academic performance. Mindfulness likely



enhances concentration, attention and stress management, which contribute to improved academic performance.

Table 4

Relationship between Emotional Wellbeing and Academic Performance

Variable	Mean ± SD	Correlation (r)	p-value
Emotional Wellbeing Score	81.20 ± 9.85	0.57	<0.001
Academic Performance (GPA)	3.42 ± 0.45		

Table 4 demonstrates a moderate positive relationship between emotional well-being and academic performance. The students' mean emotional well-being score was 81.20 (SD = 9.85), while their GPA averaged 3.42 (SD = 0.45). Correlation analysis showed a significant positive relationship ($r = 0.57, p < 0.001$). This indicates that students who experienced higher emotional well-being also tended to achieve higher academic results. Emotional well-being may enhance motivation, focus and resilience in academic tasks. These findings suggest that psychological health is an important factor in academic success.

Table 5

Predictive Role of Mindfulness and Emotional Wellbeing on Academic Performance (Multiple Regression)

Predictor Variable	B	SE	β	t-value	p-value	95% CI for B	Partial η^2
(Constant)	1.452	0.231		6.29	<0.001	[0.996, 1.908]	
Mindfulness Score	0.018	0.005	0.31	3.60	<0.001	[0.008, 0.028]	0.081
Emotional Wellbeing Score	0.021	0.006	0.34	3.85	<0.001	[0.010, 0.032]	0.092

Model Summary: $R = 0.648, R^2 = 0.420, \text{Adjusted } R^2 = 0.412, F(2,147) = 53.42, p < 0.001$

Table 5 presents the predictive roles of mindfulness and emotional well-being on students' academic performance. The multiple regression analysis revealed that both mindfulness ($B = 0.018, \beta = 0.31, t = 3.60, p < 0.001$) and emotional well-being ($B = 0.021, \beta = 0.34, t = 3.85, p < 0.001$) significantly predicted GPA. The model accounted for 42% of the variance in academic performance ($R^2 = 0.42, F(2,147) = 53.4, p < 0.001$). This suggests that students with higher mindfulness and better emotional well-being are more likely to achieve higher academic performance. Both factors contributed uniquely and significantly to predicting GPA.

Table 6

Mediation Analysis – Emotional Wellbeing Mediating the Relationship between Mindfulness and Academic Performance

Path	B	SE	β	t-value	p-value
Mindfulness → Emotional Wellbeing	0.68	0.07	0.62	9.71	<0.001
Emotional Wellbeing → Academic Performance	0.20	0.05	0.34	3.85	<0.001
Mindfulness → Academic Performance (Direct)	0.06	0.03	0.12	2.00	0.048
Mindfulness → Academic Performance (Total)	0.20	0.05	0.46	5.80	<0.001

Figure 2

Results

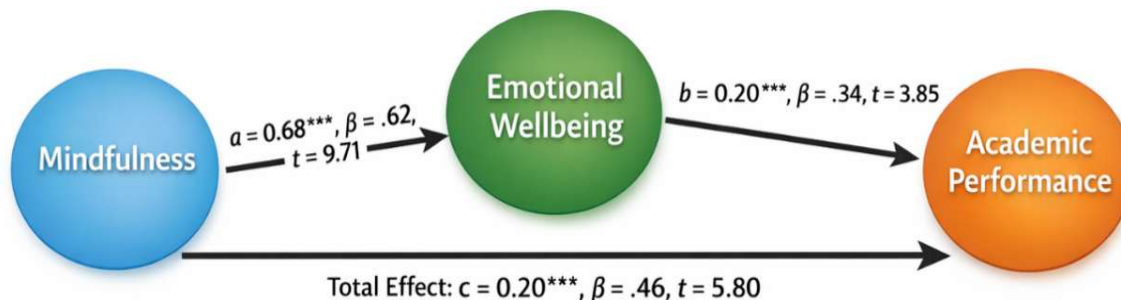




Table 6 shows that emotional wellbeing partially mediated the relationship between mindfulness and academic performance. Mindfulness significantly predicted emotional wellbeing ($B = 0.68, \beta = 0.62, t = 9.71, p < 0.001$), which in turn significantly predicted GPA ($B = 0.20, \beta = 0.34, t = 3.85, p < 0.001$). The direct effect of mindfulness on GPA remained significant but reduced ($B = 0.06, \beta = 0.12, t = 2.00, p = 0.048$), while the total effect was stronger ($B = 0.20, \beta = 0.46, t = 5.80, p < 0.001$). These results suggest that mindfulness influences academic performance both directly and indirectly through enhanced emotional wellbeing. The mediation effect underscores the critical role of emotional health in translating mindfulness into better academic performance.

Table 7
Summary of Hypothesis Testing Results

Hypothesis	Statement	Statistical Test	Result	Decision
H1	Mindfulness positively related to emotional wellbeing	Pearson r	$r = 0.62, p < 0.001$	Supported
H2	Mindfulness positively related to academic performance	Pearson r	$r = 0.54, p < 0.001$	Supported
H3	Emotional wellbeing positively related to academic performance	Pearson r	$r = 0.57, p < 0.001$	Supported
H4	Mindfulness and emotional wellbeing predict academic performance	Multiple Regression	$R^2 = 0.42, F = 53.42, p < 0.001$	Supported
H5	Emotional wellbeing mediates mindfulness-academic performance relationship	Mediation Analysis	Indirect effect = 0.143, 95% CI [0.097, 0.192]	Supported (Partial Mediation)

5. Discussion

This study investigated the relationships among mindfulness, emotional well-being and academic performance among university students. The results provided substantial support for the hypothesized relationships and offered insights into how mindfulness and emotional well-being contribute to students' academic outcomes. The discussion is presented hypothesis-wise, connecting the findings with prior research.

The first hypothesis proposed that mindfulness would be positively related to emotional well-being among university students. These findings affirmed this hypothesis and found that there is a significant positive correlation between the two variables. Students who showed greater mindfulness were observed to have better emotional well-being. These results indicated that mindfulness could help students better manage their feelings, decrease stress and achieve psychological stability in difficult school settings. These findings are in line with previous studies, revealing that mindfulness improves awareness and acceptance of what is going on at that given moment, which enables one to deal with stressors in a more equanimous manner (Brown & Ryan, 2003). Conscious people are in a better position to note their thoughts and emotions without any form of judgment, a phenomenon that encourages emotional stability and fortitude (Shapiro et al., 2006). In addition, meditation and other mindfulness exercises have been found to decrease negative affect and promote positive emotional conditions (Carmody & Baer, 2008). These results are in line with the idea that mindfulness is not only a factor that alleviates psychological distress but also a factor that induces emotional well-being in line with theories of self-regulation and adaptive coping. The results were also indicative of the broaden-and-build theory, which assumes that positive emotions expand cognitive and behavioural resources and develop long-term personal strengths (Fredrickson, 2001). Mindfulness might have improved emotional resources, which allows students to gain more satisfaction, resilience and well-being. The research strengthened the worthiness of practicing mindfulness in enhancing emotional well-being as an essential element of academic performance.

The second hypothesis examined whether mindfulness positively predicts academic performance. The results proved that there was a strong positive relationship, implying that more mindful students were more



inclined to achieve better academic outcomes. The findings showed that mindfulness can facilitate cognitive functions, such as concentration, attention and working memory, which are vital for learning and academic achievement. Past studies have demonstrated that mindfulness can assist in cognitive control, whereby individuals are able to maintain attention on their tasks and minimize cognitive interference (Jha et al., 2007). Observant students will be in a better position to handle distractions and remain focused when attending lectures, assignments and examinations. In addition, mindfulness can increase metacognitive awareness to help students become more aware of lapses in attention and redirect their attention to improve the efficiency of learning (Hölzel et al., 2011). Other researchers have reported the same, pointing out that mindfulness enhances stress management, which is directly linked to academic performance (Zeidan et al., 2010). Mindful students were in a better position to handle the demands of academic life and as such, students experienced better engagement and persistence in undertaking academic activities. These results support the opinion that mindfulness is not a mechanism of emotional regulation alone, but also of cognitive and academic performance (Brown et al., 2015). The findings outline the possibility of integrating mindfulness-based interventions into educational programs to improve students' cognitive and academic abilities.

The third hypothesis posited that emotional well-being would be positively associated with academic performance. These findings proved this hypothesis, as students with greater emotional well-being were more likely to have better academic results. The results showed that emotional well-being is a very important aspect of academic success, as it improves motivation, concentration and endurance. Previous researchers have established that emotionally well students are less stressed academically and experience more intrinsic motivation, which leads to better academic achievement (Pekrun, 2006). Emotional well-being enables students to have a positive attitude, deal with failures and work hard on difficult academic assignments. When students have good emotional resources, they tend to pursue proactive study behaviours; they also turn to academic support when they need it and do not give up, even with hard work (Seligman & Csikszentmihalyi, 2000). The findings on the subject are consistent with the available literature, which states that emotional stability enables learning engagement and cognitive functioning (Fredrickson, 2001). Positive emotional states also improve problem-solving skills and adaptive coping, which are very important in academics. The findings stress the significance of focusing on the emotional health of students as a way to achieve improved academic performance, as well as the interdependence between psychological well-being and academic performance.

The fourth hypothesis examined whether mindfulness and emotional well-being jointly predicted academic performance. The multiple regression test showed that the two variables were significant predictors of academic outcomes, with each variable having a unique contribution to performance. These results indicated that the joint impact of cognitive attention and emotional stability on academic achievement was observed. The predictive potential of mindfulness manifested its effect on cognition. It was probable that students who were more mindful had a greater ability to sustain concentration, control impulses and engage in self-directed learning, which are significant factors of academic success (Jha et al., 2007; Hölzel et al., 2011). Emotional well-being, on the other hand, had a positive impact on the performance of the students by increasing their motivation, confidence and adaptive coping skills (Pekrun, 2006). Students with high emotional well-being might persevere in the face of academic problems, handle stress better and show more interest in learning activities. The joint predictive effect reveals the complementary effect of cognitive and emotional aspects on academic performance. Other studies have highlighted that mindfulness and emotional well-being are interdependent in facilitating learning results (Brown et al., 2015). With increased awareness and emotional stability, students are better equipped to concentrate on learning activities, balance academic stress and achieve better performance. The results of these studies indicate that educational programs based on both mindfulness and emotional well-being can be especially useful for achieving academic success.

The fifth hypothesis investigated whether emotional well-being mediated the relationship between mindfulness and academic performance. The mediation analysis proved partial mediation, indicating that mindfulness had both direct and indirect effects on academic performance through emotional well-being. The direct impact of mindfulness was also important but less notable when emotional well-being was incorporated into the model, which proved the significance of emotional health as a mediator of the impact of mindfulness on academic performance. These results are in line with previous studies that have proven that emotional



regulation moderates the impact of mindfulness on different outcomes, including cognitive performance and learning behaviours (Shapiro et al., 2006). Conscientious students were able to cope with negative feelings, lower stress and focus, which led to improved academic performance. According to the mediation findings, developing mindfulness improves not only cognitive processes but also emotional resources that are imperative for achieving success in the learning process (Fredrickson, 2001; Carmody and Baer, 2008). The outcomes were also in accordance with self-determination theory, in which psychological needs of autonomy, competence and relatedness are upheld by mindfulness and emotional well-being, thus enhancing motivation and involvement in academic activities (Deci & Ryan, 2000). Students who had increased emotional health probably tackled academic challenges with increased confidence and persistence; thus, mindfulness was converted into actual academic benefits.

6. Conclusion

This study investigated the relationships among mindfulness, emotional well-being and academic performance among university students. The results of the study showed that mindfulness and emotional well-being are important factors in the academic performance of students. The findings showed that mindfulness was positively correlated with emotional well-being, meaning that more mindful students were more likely to have greater emotional control, psychological stability and mental health. These results prove that mindfulness is not only a mental ability but also a process of facilitating emotional balance, alleviating stress and improving the quality of emotional experiences in students. Additionally, the research was able to determine that mindfulness and academic performance were significantly related. Students with greater levels of mindfulness also demonstrated a greater capacity to concentrate, deal with academic stress and continue to be engaged in academic activities, which directly led to academic outcomes. Mindfulness helps to be aware of the current moment, become more attentive and be able to effectively cope with the challenges of higher education, which are essential in the development of higher education. This can be related to the previous literature that highlights the cognitive advantages of mindfulness, especially in academic contexts where attention, strategizing and the accomplishment of tasks are crucial to success.

The paper also emphasized the role of emotional well-being in predicting academic performance. Students with increased emotional well-being exhibited higher motivation, resilience and persistence in academic work. Emotional well-being helps students take learning challenges positively, cope with setbacks efficiently and work hard in the long run. This highlights the notion that academic performance and the emotional well-being of students are closely connected with psychological health and providing them with emotional support may stimulate their ability to learn and achieve. Notably, the research found that emotional well-being mediates the connection between mindfulness and academic performance to some extent. The implication of this result is that mindfulness can contribute to academic achievement not only directly, by enhancing cognitive processes such as attention and concentration, but indirectly, by regulating emotionality and psychological resilience. Another area of concern is emotional well-being, which is one of the mediating processes that transform mindfulness into greater academic performance, in which cognition and emotion are connected in the learning outcome. The partial mediation also demonstrates that despite having a direct impact on academic performance, emotional well-being improves the outcome of mindfulness and it is one of the factors to be considered when designing interventions that would benefit students. This article validates the notion that academic performance cannot be limited to cognitive abilities alone but extends to psychological and emotional factors. Both emotional well-being and mindfulness are involved in the capability of students to manage the pressure of academic work, concentrate on their work and practice effective learning methods. The findings provide empirical evidence that mindfulness and emotion health interventions can have a significant influence on the academic outcomes of the student population. In conclusion, the most important strategies that could be implemented to promote academic performance and holistic development in university students are mindfulness development and emotional well-being enhancement.

7. Recommendations

Based on the findings of this study, several recommendations can be made for universities, educators and policymakers to enhance students' academic performance through the promotion of mindfulness and emotional well-being. Mindfulness-based interventions should be included in the curriculum and student



support programs in universities. It is possible to offer students techniques to improve focus, attention and emotional management through workshops, meditation and mindfulness-based stress reduction programs. These programs could assist students in acquiring adaptive coping strategies to deal with academic stress and enhance their mental well-being, which leads to better academic results. Emotional well-being is an aspect of student development that should be prioritized by institutions. Resilience, self-awareness and psychological balance can be developed through counselling services, peer support programs and well-being workshops to assist students. Universities can promote motivation, persistence and engagement of students in academic activities by providing conducive conditions that promote emotional expression and coping mechanisms. Teachers need to be taught that mindfulness and emotional well-being are keys to academic success. Faculty members have an opportunity to integrate mindfulness into classroom work, promote reflective practices and provide advice on stress management strategies. Teaching staff awareness can also be improved to understand the emotional needs of students, which will enable them to offer specific support and establish a favourable learning environment. Mindfulness and well-being programs can be included in academic policies in universities. The barriers to learning can be minimized by implementing policies that facilitate flexible learning, stress management resources and mental health services, thereby improving students' academic performance. The understanding of emotional well-being as a key determinant of academic performance can inform interventions by institutions to be interdisciplinary and effective. The long-term consequences of mindfulness and emotional well-being on the academic performance of various student populations should be examined in future research. Experimental and longitudinal investigations can offer more information on causal relationships and can be used to refine intervention strategies. It is also important to note that universities should track and measure the effectiveness of mindfulness and well-being programs and ensure that they are evidence-based and student-friendly.

Contribution of Authors

All the authors participated in the ideation, development, and final approval of the manuscript, making significant contributions to the work reported

Conflict of Interest Statement

The authors declare no conflicts of interest.

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Informed Consent

Informed consent was obtained from all individual participants included in the study.

Ethical Approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Data Availability

The datasets generated during and analysed during the current study are available from the corresponding author on reasonable request.

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