

IMPACT OF MINDFULNESS BASED COPING STRATEGIES ON ACADEMIC PERFORMANCE OF UNDERGRADUATE STUDENTS IN RAWALPINDI

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ABSTRACT

Mindfulness is a state of mind adopted from Buddhist philosophy has been widely applied to improve focus and awareness. Mindfulness based coping strategies is a set of intentional practices that combine mindfulness techniques with coping skills to manage stress, anxiety or other challenging emotion, wellbeing. The main purpose of this study was to find out the impact of mindfulness based coping strategies on academic performance at undergraduate student in Rawalpindi. The primary objective of the study to analyze the impact of mindfulness-based coping strategies on academic performance of undergraduate students in Rawalpindi. The quantitative nature of research design was used. The target population of the study was 3276 undergraduate students from 7 universities of Rawalpindi named as Arid Agriculture University, Fatima Jinnah Women University, Rawalpindi Women University, Comsats University, University of Wah, National University of Medical Sciences, NUML university. The researcher employed the simple random sampling technique. The sample of this study was 342 undergraduate students. Self-made questionnaire was used to collect the data. Pilot testing was also done on forty students to check the reliability of instrument and the research tool was validated by experts. The main finding of the study showed that regression analysis indicated no statistically significant impact of MBCS and academic performance, as all *p*-values were greater than 0.05. Mindfulness-based strategies are recommended for improving students' mental well-being, not for directly increasing academic performance.

Keywords: Mindfulness; Mindfulness Based Coping Strategies; Academic Performance.

INTRODUCTION

1.1 Background of The Study

Mindfulness comes from ancient meditation practices and has become popular in modern psychology and education (Kabat-Zinn, 1994; Feldman & Kuyken, 2019). Mindfulness refers to the conscious attention to present experiences without forming judgments, allowing individuals to remain calm and non-reactive (Bishop et al., 2004).

Though it is widely used today in therapy to manage stress and anxiety, mindfulness originated over 2,500 years ago within Buddhist meditative traditions. As a coping approach, mindfulness supports the development of emotional control and self-regulation, which are essential elements of personal well-being (Baer et al., 2006). It is not limited to stress relief; it also plays a valuable role in

sharpening mental abilities such as concentration, memory, and self-discipline. These skills are critical for students, as they enhance their ability to focus, retain information, manage emotional responses, and solve problems effectively. By increasing awareness and lowering stress levels, mindfulness helps students face academic challenges, reduce anxiety during tests, and strengthen their mental health all of which can indirectly boost academic success. Techniques such as meditation, mindful pauses, emotional labeling, planned routines, reverse counting, and heightened awareness contribute to better attention control, stronger emotional resilience, improved self-awareness, and reduced mental fatigue.

1.2 Statement of The Problem

This study aimed to investigate the impact of mindfulness-based coping strategies on the academic achievement of undergraduate students. The research was examine whether the use of mindfulness practices can improve students' academic performance, reduce stress, and enhance overall well-being.

1.3 Significance of The Study

The finding of this research support the development of emotional regulation and self-management skills, which are essential elements of overall well-being. It also aimed to equip students with the mental tools needed to handle both academic demands and future professional challenges. Through this study, students were encouraged to build self-awareness and adopt healthy coping mechanisms to manage academic stress. Mindfulness-based strategies were shown to contribute positively to students' academic outcomes, indirectly supporting improved performance and long-term academic success. These insights are valuable for educators and policy-makers responsible for integrating mindfulness practices into academic systems, potentially leading to both mental health benefits and academic improvement among students. The study also lays the groundwork for future investigations into the role of mindfulness across diverse educational settings. Additionally, it serves as a meaningful resource for instructors, researchers, and mental health practitioners interested in enhancing student well-being in higher education. The findings underscore how mindfulness practices can help students recognize their value in achieving academic goals. By using

these techniques, students can better manage anxiety and stress related to school, ultimately boosting their confidence and motivation.

1.4 Objectives of The Study

1. To analyze the impact of mindfulness based coping strategies on academic performance of undergraduate students in Rawalpindi.
- 2.

1.5 Research Question

1. What is the impact of mindfulness based coping strategies on academic performance of undergraduate students in Rawalpindi?

1.6 Methodology

1.6.1 Research Design

It is descriptive in nature. As it describes the impact of mindfulness based coping strategies on academic performance of undergraduate students in Rawalpindi.

1.6.2 Population

The target population of the study included all undergraduate students from Rawalpindi universities. The total population of students in these universities was 3276.

1.6.3 Sampling

The current study used simple random sampling technique to select a sample of six universities from the population of undergraduate students in Rawalpindi universities. Two departments were selected from each of these six universities. finally, a predetermined number of students was randomly selected from each of these 12 departments using the same random sampling technique. This sample size of 342 students was select by using sampling table given by Krejcie and Morgan (1970) & Gay (1995).

1.6.4 Research Instrument

The researcher used a questionnaire as a study tool to gather information from university students. The instrument was organized into six indicators of mindfulness-based coping strategies. It consisted 42 items.

1.6.5 Data Collection

A key fundamental component of the research is data collection. The researcher collected data directly from the students. A questionnaire was administered to assess the impact of mindfulness-

based coping strategies on academic performance of undergraduate students in Rawalpindi.

1.6.6 Data Analysis

SPSS software was used to analyze, tabulate and interpret the quantitative data that was obtained from the students through the use of questionnaire. Linear regression is used to find out the impact of mindfulness based coping strategies on academic performance of undergraduate students in Rawalpindi.

1.7 Delimitations

The delimitation of the study was:

1. Six universities of Rawalpindi are involved in this study.
2. 1st to 8th semesters.
3. Multi-disciplinary departments

1.8 Operational Definitions

1.8.1 Mindful

The term “mindful” describes a state of being aware, attentive, and conscious of what is happening in the present moment. When you’re mindful, you pay full attention to your thoughts, feelings, sensations, and surroundings without judgment. It’s about being present and engaged with the here and now rather than being distracted or caught up in past or future worries.

1.8.2 Mindfulness

A state of consciousness known as mindfulness is one in which attention is directed toward the internal and external events, experiences, and states of the present. Being mindful entails giving the learning environment your full, intentional attention. The ability to self-regulate attention toward the present moment and cultivate an openness and acceptance toward one’s experience in the present are two ways that mindfulness improves adaptive coping in response to stressful situations.

1.8.3 Coping

Coping is a psychological process in which a person uses a variety of good (such as problem solving, seeking social support, and reappraisal) and negative (such as avoidance and aggressiveness) tactics to try to handle demands from the outside or the inside.

1.8.4 Mindfulness based coping strategies

Mindfulness-based coping strategies are techniques that promote present-moment awareness and

acceptance to manage stress and enhance emotional wellbeing. These strategies include mindfulness meditation, mindful breaks, mindful awareness, planning and organization, and reverse number counting. By cultivating a non-judgmental focus on the present, individuals may boost general mental health, lessen anxiety, and promote emotional management.

LITERATURE REVIEW

This comprises literature review for this study to identify conceptual and theoretical framework behind the major variables present the study. The main points covered in literature review are:

2.1 MINDFULNESS

Mindfulness has become an important area of interest in recent psychological and educational research. It is commonly described as the ability to pay full attention to the present moment while remaining calm, open, and non-judgmental. Without getting overwhelmed or sidetracked, a mindful person is conscious of their thoughts, feelings, physical sensations, and environment. People are better able to focus, handle stress, and overcome obstacles when they are aware of this. Research has indicated that practicing mindfulness can enhance brain clarity, lower anxiety, and promote emotional balance—all of which are critical for academic achievement. (Keng et al., 2023; Creswell & Lindsay, 2021; Gupta & Singh, 2022). As a result, mindfulness-based strategies are now being used in schools and universities to help students cope with academic pressure and perform better.

2.2 INTRODUCTION OF MINDFULNESS: A STATE OF BEING PRESENT

Kim & Park (2023) investigated how undergraduate students perceive and incorporate mindfulness into their daily routines, particularly in response to academic stress. The study collected self-reported data from over 300 participants across multiple universities, revealing that while most students were familiar with the concept of mindfulness, only a small proportion practiced it regularly. Students reported using informal mindfulness strategies such as deep breathing, self-reflection, and moment-to-moment awareness, especially during high-stress periods like exams. The study concluded that although there is growing awareness of mindfulness, consistent practice is limited by lack of time and

structured guidance, highlighting the need for more accessible mindfulness education within academic institutions (Kim & Park, 2023).

2.3 History of Mindfulness

The concept of mindfulness has deep historical roots, originating in Buddhist philosophy around 500 B.C. (Gause & Coholic, 2010). Historical accounts suggest that Siddhartha Gautama, later known as the Buddha, attained profound insight that transformed his mental state and formed the foundation of his teachings—among them, practices related to mindfulness (Siegel et al., 2009). Rooted in these ancient teachings, traditional mindfulness emphasizes sustained awareness of the present moment, where individuals consciously observe both internal experiences and external surroundings without labeling, judgment, or attachment to outcomes (Albrecht et al., 2012; Kabat-Zinn, 1990; Mikulas, 2007). Through this practice, mindfulness aims to develop an understanding of how mental events are interconnected, fostering deeper psychological insight (Rapgay & Bystrisky, 2009).

Modern interpretations of mindfulness can be divided into two main schools of thought. The first—classical mindfulness—stems from Eastern traditions and typically involves structured meditation techniques (Mikulas, 2007; Shapiro et al., 2006). In this approach, mindfulness is viewed as a deliberate and attentive process in which individuals remain actively aware of their immediate experiences in a calm and non-reactive manner (Compton & Hoffman, 2012; Rapgay & Bystrisky, 2009; Shapiro et al., 2006). The overarching goal of this practice is to reduce human suffering and promote emotional well-being (Mikulas, 2007).

2.4 MINDFULNESS BASED COPING STRATEGIES

Mindfulness-based coping techniques involve practices that emphasize being fully attentive to the present moment while using structured approaches to handle stress, sharpen concentration, and improve emotional stability. These approaches have proven helpful in academic settings, where they support students in managing pressure, controlling anxiety, and sustaining mental focus. Mindfulness-Based Coping Strategies (MBCS) are rooted in traditional mindfulness meditation and are intended to improve how individuals respond to stress and difficult circumstances. By promoting awareness of the present without judgment, MBCS

encourages thoughtful responses instead of impulsive reactions, fostering emotional balance and inner strength. According to Alidina (2010), mindfulness contributes to various aspects of life, including enhancing brain function, strengthening interpersonal connections, nurturing creativity, alleviating symptoms of depression and chronic pain, enriching life's meaning, managing stress and anxiety, improving eating behaviors, and boosting overall happiness.

2.5 MINDFULNESS AND ITS ROLE IN ENHANCING FOCUS, WELL-BEING, AND STUDENT SUCCESS

Indriaswuri (2023) examined the role of mindfulness in shaping students' academic outcomes, particularly through its effects on focus, emotional regulation, and overall psychological health. The literature review indicated that incorporating mindfulness into daily routines can help students enhance their attention span, better manage stress, and regulate emotions effectively. Those who regularly practiced mindfulness experienced lower levels of anxiety and greater emotional balance, which in turn supported improved academic performance. At its core, the use of mindfulness in educational settings aims to cultivate greater self-awareness and cognitive control, thereby strengthening both academic abilities and mental well-being.

2.6 MINDFULNESS MEDITATION AND ITS COGNITIVE BENEFITS FOR STUDENT SUCCESS

Liu et al. (2021) investigated how mindfulness meditation influences students' academic performance, particularly in relation to the various stressors encountered in educational environments. Drawing on information processing theory, the study explored the underlying cognitive mechanisms through which mindfulness may impact learning outcomes. Three primary pathways were highlighted: enhanced attention and concentration (cognitive processes), improved short-term memory retention (information storage), and strengthened executive functioning (executive cognition). The findings revealed that mindfulness meditation supports these mental functions, thereby contributing to better academic results. This study sheds light on how mindfulness facilitates academic success and underscores the value of incorporating such practices within academic programs to foster

improved student performance.

2.7 MINDFULNESS AND ITS EFFECTS ON STUDENTS' PSYCHOLOGICAL WELL-BEING AND ACADEMIC PERFORMANCE

Keng et al. (2011) explored how mindfulness practices influence students' mental well-being and academic success. The study emphasized the importance of staying fully present and aware without judgment as the foundation of mindfulness. Findings indicated that students who regularly engaged in mindfulness were better able to manage stress and maintain focus, leading to improvements in both psychological health and academic outcomes. The study concluded that integrating mindfulness into academic environments could support students' mental resilience and learning effectiveness.

Similarly, Kuyken et al. (2013) assessed the effects of mindfulness training on the emotional well-being and academic performance of secondary school students. Participants were introduced to a structured mindfulness program, and the results revealed significant reductions in stress, anxiety, and depressive symptoms, along with enhanced academic performance. The research supports the idea that incorporating mindfulness techniques into school curricula can promote both emotional balance and academic growth in students.

2.8 MINDFULNESS BASED COPING STRATEGIES AND THEIR LINKED WITH ACADEMIC PERFORMANCE

Indicators of MBCS of academic performance	Indicator
1. Mindfulness mediation	CGPA
2. Emotional labeling and concentration/attention	Focus
3. Mindful awareness thinking /emotional stability	Critical
4. Mindful breaks responsibilities.	Prioritize
5. Planning and Effective time management	organization
6. Reverse number Counting of tasks before deadline	counting

2.9 INDICATORS OF MINDFULNESS-BASED COPING STRATEGIES

Mindfulness-based coping strategies are essential tools for managing stress and enhancing academic performance, particularly among students. A core

practice within these strategies is mindfulness meditation, which promotes sustained attention, reduces anxiety, and supports emotional regulation. Consistent meditation practice helps individuals remain present and emotionally balanced when facing difficulties (Goyal et al., 2014). Another effective approach is emotional labeling—the process of identifying and naming one's emotions—which strengthens emotional intelligence and self-control, enabling better responses to stress (Lieberman et al., 2007). Practicing mindful awareness—consciously focusing on the present moment without judgment—can improve attention span, boost self-awareness, and reduce anxiety, all contributing to academic improvement (Brown & Ryan, 2003). Incorporating short mindful pauses during academic or work-related tasks helps prevent cognitive overload, maintaining mental clarity and energy needed for high performance (Mrazek et al., 2013). Mindfulness also supports logical thinking and better time management, which assist in planning and organizing academic tasks more effectively (Zanesco et al., 2018).

Additionally, techniques like reverse number counting—counting backward in a focused manner—serve as grounding exercises that help manage stress and sharpen concentration. This method is particularly useful in high-pressure academic scenarios, as it enhances focus and mental clarity (Shapiro et al., 2008). Altogether, these mindfulness strategies foster emotional resilience and contribute to better academic outcome.

2.10 ACADEMIC PERFORMANCE INDICATORS

The Cumulative Grade Point Average (CGPA) serves as a key measure of a student's academic success. Research suggests that mindfulness practices can enhance academic performance by fostering better emotional control, reducing stress levels, and promoting mental clarity (Zenner et al., 2014). Techniques such as meditation and mindful attention to the present moment are particularly beneficial in improving focus and minimizing mental distractions, which are crucial for effective learning (Tang et al., 2012). Mindfulness also supports the growth of critical thinking skills by increasing cognitive flexibility and emotional steadiness, enabling students to remain calm and adaptable during academic challenges (Moore & Malinowski, 2009). Additionally, it aids in better decision-making and task prioritization, allowing

learners to manage their academic workload more efficiently (Friese et al., 2012). Another advantage of mindfulness is improved time management, as it encourages intentional scheduling and the use of purposeful breaks, which together enhance academic efficiency (Gallagher et al., 2016). Lastly, mindfulness helps reduce procrastination by improving attention control and stress regulation, resulting in more timely task completion and better academic results (Ramsay & Rostain, 2006).

2.11 INSIGNIFICANT IMPACT OF MINDFULNESS MEDITATION ON ACADEMIC PERFORMANCE

Although mindfulness is often encouraged to enhance students' concentration and emotional well-being, research findings suggest it does not consistently lead to measurable academic improvement. Baranski and Was (2019) investigated the effects of short mindfulness exercises conducted before lectures. While students reported feeling calmer and more attentive, these benefits did not translate into higher quiz or exam scores. This indicates that while mindfulness can enhance mental clarity and reduce anxiety, it may not directly influence academic performance. Similarly, Noone and Hogan (2018) implemented an eight-week mindfulness intervention with university students. Participants experienced lower stress levels and greater emotional awareness following the program. However, there was no significant change in their academic metrics, such as GPA. This outcome implies that although mindfulness supports emotional well-being, it does not necessarily enhance academic results.

In another study, McConville et al. (2017) explored the impact of mindfulness on medical students. After completing mindfulness training, participants felt less anxious and more emotionally balanced. Nevertheless, their academic scores showed minimal improvement. These findings reinforce the idea that mindfulness is effective for managing stress but may not have a direct effect on students' academic achievement.

PROCEDURE AND METHODOLOGY

This chapter presents and explain the materials and methods adopted by this research. It mentions every component involved in performing this study, from the research design, respondents of the study, sampling technique, research equipment, and the data collection or data analysis procedure.

3.1 Research Design

The current study used a descriptive research method involving a survey technique to investigate the impact of mindfulness based coping strategies on academic performance of undergraduate students in Rawalpindi

3.2 Population

The target population of the study included all undergraduate students from Rawalpindi universities. There are 10 universities in Rawalpindi, however the study was delimited to students from the following departments: Mathematics, Statistics, Sociology, Chemistry, Mass-Communication, Economic, Psychology, Education. Two departments were selected from each university. These departments are present at the following universities: Arid Agriculture University, Fatimah Jinnah Women University, Rawalpindi Women University, NUML, COMSATS University and University of Wah. National university of medical sciences. The total population of students in these universities was 3276

3.3 Sample

The current study used simple random sampling technique to select a sample. This sample size of 342 students was select by using sampling table given by Krejcie and Morgan (1970) & Gay (1995).

3.4 Research Instrument

The researcher used a questionnaire as a study tool to gather information from university students. In the first part of the questionnaire, basic demographic information was collected from the respondents. The second part provided clear definitions of mindfulness and coping strategies to ensure that participants understood these terms before answering. The instrument was organized into six indicators of mindfulness-based coping strategies: mindfulness meditation, mindful awareness, mindful breaks, planning and organization, emotional labeling, and reverse number counting. Each category contained seven questions designed to measure specific aspects such as focus, stress management, motivation, and more. Responses from students were recorded using a five-point Likert scale (never = 1, rarely = 2, often = 3, mostly = 4, always = 5). With the help of the FFMQ questionnaire, the researcher developed items for this study. The FFMQ was created by Ruth A. Baer (2006) and her colleagues and serves as a

psychological tool to measure mindfulness.

3.5 Validity

Validity of the instruments was performed on the expert's opinion. It was ensured in the light of their recommendations and different comments and validity was ensured. All test items were discussed with teachers. After getting experts estimation the content validity was maintained for the study

3.6 Pilot Testing

The questionnaire was pretested on a small sample of the population to assess the reliability of the instruments before data collection. The instrument were distributed to undergraduate students male and female and researcher make sure that all students fill the questionnaire.

3.7 Reliability of Instrument

The determination of internal consistency and reliability of the instruments was conducted using Cronbach's Alpha. In this study, the Cronbach's alpha value was found to be .937, which is deemed acceptable. To ensure the tool's reliability, two steps were implemented: first, confirming the relevance of each item through discussions with an expert, and second, monitoring the responses of 40 students.

This approach confirmed that the tool's reliability and trustworthiness were acceptable.

3.8 Data Collection

A questionnaire was administered to assess the impact of mindfulness-based coping strategies on the academic performance of undergraduate students in Rawalpindi.

3.9 Data Analysis

SPSS software was used to analyze, tabulate and interpret the quantitative data that was obtained from the students through the use of questionnaire. To find out the impact of mindfulness based coping strategies and academic performance researcher used linear regression analysis was performed.

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter of the study provides the necessary discussion, analysis, and interpretation of the results gathered by the researchers, which aim to explain the statistical analysis of the data, elaborate the findings collected from participants' evaluation, and offer a comprehensive analysis of the study's overall results. Tables are utilized throughout the chapter to interpret the gathered results accurately.

Table 4.1 Analysis of variance on mindfulness based coping strategies on academic performance

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.168 ^a	.028	.011	.57076

As indicated in the **Table 4.1** we can see that R-square value is 0.28 which means that our independent variable (mindfulness based coping

strategies) causes 0.28 % change in the dependent variable (academic performance).

Table 4.2 Analysis of variance on mindfulness based coping strategies on academic performance

Model		SS	Df	MS	F	Sig.
1	Regression	3.157	6	.526		
	Residual	109.132	335	.326	1.615	.142
	Total	112.289	341			

The data in **Table 4.2** shows the results of the ANOVA test for the regression model used in this study. The model examined whether six mindfulness-based coping strategies could predict academic performance among undergraduate students. The F-value is 1.615, and the significance

level (p-value) is 0.142. Since the p-value is greater than 0.05, the overall model is statistically non-significant. **Overall, these values suggest that the model does not clearly show a strong impact between coping strategies and academic performance.**

Table 4.9 Respondent responses regarding the impact of reverse number counting on academic performance

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	T	
(Constant)	5.034	.621		8.102	.000
Mindfulness Mediation	-.008	.013	-.035	-.590	.555
Emotional labeling	-.002	.013	-.009	-.156	.876
Mindfulness awareness	-.008	.011	-.041	-.740	.460
Mindfulness breaks	-.016	.014	-.068	-1.121	.263
planning and organization	-.025	.014	-.104	-1.802	.072
Reverse number counting	-.010	.009	-.058	-1.043	.298

The data in Table 4.9 shows the coefficients of the regression model analyzing the impact of various mindfulness-based coping strategies on academic performance. The constant value is 5.034, indicating the baseline level of academic performance when all predictors are zero. Among the indicator, none of the strategies show statistically significant effects, as all p-values (Sig.) are above the 0.05 threshold. For example, *mindfulness meditation* has a p-value of 0.555, suggesting it does not significantly predict academic performance. Similarly, *emotional labeling*, *mindfulness awareness*, *mindfulness breaks*, and *reverse number counting* all have high p-values, showing weak or no relationship with the outcome. *Planning and Organization* comes closest to significance with a p-value of 0.072, indicating a possible but not confirmed influence. All predictors have negative beta coefficients, suggesting a slight negative direction, but these effects are very small. The standardized beta values show that none of the coping strategies strongly influence academic outcomes in this model. Overall, this table suggests that individual mindfulness strategies do not have a statistically meaningful impact on academic performance.

FINDINGS DISCUSSION CONCLUSION AND RECOMMENDATION

5.1 Findings

1. It was found that R-square value is 0.28 which means that our independent variable (mindfulness based coping strategies) causes 0.28 % change in the dependent variable (academic performance).

2. It was found that the ANOVA test for the regression model used in this study. The model examined whether six mindfulness-based coping strategies could predict academic performance among undergraduate students. The F-value is 1.615, and the significance level (p-value) is 0.142.

Since the p-value is greater than 0.05, the overall model is statistically non-significant. **Overall, these values suggest that the model does not clearly show a strong impact between coping strategies and academic performance**

3. It was also found that Among the indicator, none of the strategies show statistically significant effects, as all p-values (Sig.) are above the 0.05 threshold. All predictors have negative beta coefficients, suggesting a slight negative direction, but these effects are very small. The standardized beta values show that none of the coping strategies strongly influence academic outcomes in this model.

5.3 Discussion

This study examined that how mindfulness-based coping strategies impact academic performance among undergraduate students in Rawalpindi. The regression results showed a low R² value of 0.28, meaning that mindfulness strategies explained only a small part of the changes in academic performance. None of the predictors had significant p-values, which means the effect of each strategy was weak or not meaningful from a statistical point of view. Overall, students believe mindfulness-based strategies help them emotionally and mentally by improving focus, reducing stress, and making them feel more in control. These are important aspects of student life. However, the current study shows that these strategies do not directly or significantly improve academic performance in terms of grades. This could be due to other influencing factors like study habits, teaching quality, personal issues, or motivation levels. It is also possible that mindfulness needs to be practiced over a longer period or in combination with other learning strategies to show real academic benefits.

5.4 Conclusions

1. On the basis of results, it was concluded that the regression model lacks statistical significance. The p value of 0.142 exceeds the conventional threshold of 0.05, indicating that overall model is not statistically significant this conclude that there is no relationship between mindfulness based coping strategies and academic performance.

2. This study concluded that Mindfulness strategies not strongly predict academic performance the R square value of 0.28 implies that mindfulness based coping strategies account for a relatively small portion of the variance in academic performance. Furthermore, the individual components of mindfulness based coping strategies do not strongly predict how well students perform academically and their overall impact is minimal.

5.5 Recommendations

The study's results and conclusions lead to the following recommendations:

1. In view of the present findings, it is recommended that mindfulness-based coping strategies be primarily utilized to promote psychological well-being and emotional regulation among undergraduate students. These practices should not be presented as direct tools for enhancing academic performance, but rather as supportive techniques within broader mental health initiatives.

2. It is further suggested that mindfulness practices be employed as supplementary, rather than primary, interventions within academic support frameworks. These practices may be most beneficial when integrated alongside evidence-based educational strategies, such as academic advising, cognitive training, and skill-building workshops aimed at improving study habits and academic confidence.

The study procedure in the discussion section of this paper was critically analyzed, and the following suggestions for next research are based on that analysis.

1. The present study was conducted in Rawalpindi. The future studies may, therefore be conducted at twin cities by including all the universities located in twin cities for obtaining more authentic results.

2. Future studies should aim to investigate the effects of long-term, structured mindfulness programs, preferably implemented over the course

of an academic year or longer. Such research may reveal delayed or cumulative benefits not observable in short-term interventions

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