

**THE IMPACT OF MINDFULNESS PRACTICES ON STRESS
REDUCTION AMONG COLLEGE STUDENTS**

Dissertation submitted to

ST. TERESA'S COLLEGE (Autonomous)

ERANAKULAM



Affiliated to

MAHATMA GANDHI UNIVERSITY

In partial fulfilment of requirement for the

**AWARD OF THE DEGREE OF MASTER OF SCIENCE IN
HOME SCIENCE (BRANCH A)**

CHILD DEVELOPMENT

BY

ASHIDHA MAHAL NAYANA

(REGISTER NO: AM22HCD004)

DEPARTMENT OF HOME SCIENCE AND CENTRE FOR RESEARCH

APRIL 2024

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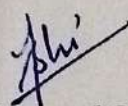


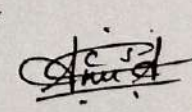


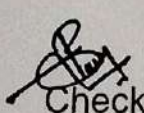
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INTRODUCTION

CHAPTER 1

INTRODUCTION

In today's fast-paced world, where stress and anxiety seem to be constant companions, the practice of meditation offers a beacon of hope for cultivating inner peace and happiness. Central to meditation are two primary components: acceptance and attention. Through acceptance, individuals learn to observe their thoughts and emotions without judgment, fostering a sense of inner tranquillity. Meanwhile, attention involves tuning into present experiences, such as the breath, thoughts, and bodily sensations, thereby sharpening focus and promoting mental clarity. Various tools, including yoga, guided teachings, and breathing techniques, serve as invaluable aids in mindfulness practices.

Mindfulness-based interventions, such as mindfulness-based stress reduction (MBSR) and mindfulness-based cognitive therapy (MBCT), have emerged as leading modalities for promoting mental well-being. MBSR emphasizes weekly group sessions and daily exercises, while MBCT integrates elements of cognitive behavioural therapy (CBT) and MBSR to effectively treat conditions like depression and alleviate stress-related symptoms. Research underscores the efficacy of mindfulness-based therapy in reducing stress, anxiety, and depressive symptoms, offering a holistic approach to mental health.

Beyond its therapeutic benefits, mindfulness equips individuals with the tools to navigate life's challenges with resilience and equanimity. By fostering a deeper awareness of thoughts and emotions, mindfulness enables individuals to respond to stressors with greater clarity and composure. Moreover, mindfulness practices activate the "being" mode of mind, associated with relaxation, while tempering the reactivity of the "doing" mode, linked to stress and agitation. Neuroscientific studies suggest that mindfulness meditation diminishes activity in the amygdala, the brain region responsible for initiating the stress response, thereby fostering a profound sense of calm and well-being.

Incorporating mindfulness into daily life offers a myriad of benefits, from enhancing emotional intelligence to improving focus and productivity. Simple practices, such as taking mindful

walks, enjoying meals mindfully, and engaging in relaxation techniques, can significantly reduce stress and promote overall well-being. Furthermore, mindfulness practices like body scan meditations and breathing exercises offer practical tools for managing stress and cultivating inner peace. As individuals embrace mindfulness as a way of life, they embark on a journey towards greater resilience, balance, and happiness in today's hectic world.

The study "The Effect of Mindfulness and Stress Among College Students" may disrupt this stress related cascade by training one's capacity for emotional regulation, focused attention, and nonjudgmental awareness amid challenging circumstances (Greeson et al., 2014). Drawing from this theory, the current study hypothesizes that higher dispositional mindfulness enables undergraduates to self-regulate neurobiological responses to common college stressors. Specifically, students with greater present-moment attention and acceptance are expected to perceive lower stress and exhibit less stress-related symptoms compared to their less mindful peers. Testing these associations will provide insight into whether mindfulness buffers the impacts of stress on wellbeing. Implications may inform student health services and higher education policy regarding mindfulness-based programming as a vital component of campus wellness initiatives.

Mindfulness-based stress reduction (MBSR) has emerged as a potential intervention for alleviating mental health concerns among college students in India. The study conducted by Rao et al. (2017), published in the Indian Journal of Psychiatry, stands as a seminal exploration into the efficacy of MBSR specifically tailored for Indian college students. This pilot study scrutinized the effects of MBSR on depression, anxiety, and stress levels, aiming to elucidate its potential as a therapeutic tool within the unique socio-cultural context of India. By examining the impact of MBSR on these multifaceted dimensions of psychological well-being, Rao et al. provided preliminary insights into the adaptability and effectiveness of mindfulness interventions among college students in India. However, this study represents just one piece of the broader scholarly discourse surrounding MBSR within the Indian context. As such, the thesis seeks to contextualize and build upon the findings of Rao et al. (2017) within the larger body of research exploring the implications of MBSR for mental health and well-being among college students in India. Through a comprehensive synthesis of existing literature, the thesis

endeavours to elucidate the mechanisms underlying the effectiveness of MBSR and its potential implications for promoting mental health resilience within the collegiate population of India.

The contemporary college experience is often marked by high levels of stress, stemming from academic pressures, social expectations, financial concerns, and personal challenges. As evidenced by numerous studies, stress has become a pervasive issue facing college students worldwide, with detrimental effects on mental health, academic performance, and overall wellbeing. In response to this pressing concern, mindfulness practices have emerged as promising tools for mitigating stress and promoting resilience among college students. Mindfulness, defined as the practice of intentionally focusing one's attention on the present moment with acceptance and non-judgment, offers a holistic approach to stress reduction by cultivating awareness, acceptance, and self-regulation skills. While the efficacy of mindfulness practices in reducing stress has been demonstrated across various populations, including clinical and non-clinical samples, their relevance within the college student population warrants further exploration. The thesis seeks to address this gap by examining the impact of mindfulness practices on stress reduction among college students, with a specific focus on understanding the mechanisms underlying their effectiveness and identifying strategies for implementation within higher education settings.

In the fast-paced realm of modern life, working adults find themselves grappling with an array of challenges that can cast a pall over psychological well-being and workplace productivity. Negative stress and unhappiness emerge as formidable adversaries, insidiously eroding mental health and hindering professional efficacy. Amidst this crucible of adversity, mindfulness practices have surfaced as a beacon of hope, offering a promising avenue for stress reduction in working adults. However, the mechanisms through which these positive effects are realized remain shrouded in uncertainty, beckoning further elucidation.

The thesis embarks on a pioneering exploration, delving into the intricate interplay between mindfulness interventions, stress levels, happiness, and productivity within the context of a professional complaint handling workplace. Through a meticulously designed randomized study, 33 adults working in a professional complaint handling workplace were randomly assigned to either a mindfulness condition or an active control condition, with the aim of

investigating whether a short-term mindfulness intervention could catalyse positive transformations in trait mindfulness, stress, happiness, and productivity over a four-week period. Despite observing no significant changes in trait mindfulness, happiness or productivity, the mindfulness condition experienced significant reductions of self-reported stress from pre-post intervention. The control condition exhibited no substantial shifts in any of the variables under scrutiny. These promising results, though raising questions about the underlying mechanisms driving stress reduction and underscoring the need for further examination of short-term mindfulness interventions, ignite a flame of hope for working adults seeking respite from the relentless onslaught of stress.

Parallel to this exploration, the thesis delves into the realm of undergraduate students, where stress and ineffective emotion regulation (ER) strategies can cast a pall over psychological well-being. Once again, mindfulness practices emerge as a potential panacea, having demonstrated their capacity to enhance stress management and ER within student populations. However, the mechanisms by which these positive effects manifest remain veiled, inviting further inquiry.

Through a meticulously designed randomized study, 34 undergraduate students were randomly assigned to either a mindfulness condition or an active control condition, with the aim of investigating whether a short-term mindfulness intervention could catalyse positive transformations in trait mindfulness, stress, and ER over a four-week period. While no significant changes in stress levels were observed, the mindfulness condition experienced significant increases in trait mindfulness and significant decreases in difficulties in ER from pre-post intervention. No significant changes in any of the variables were found for the control condition. ER was also found to mediate between mindfulness and stress in the final week, suggesting that ER is one mechanism of action by which mindfulness improves well-being.

The current study therefore offers promising theoretical directions; however, the efficacy of short-term interventions needs further delineation.

As we navigate the intricate tapestry of social anxiety, mindfulness emerges as a potential ally, with the mindfulness-based stress reduction program demonstrating effectiveness in improving clinical problems, psychological symptoms, and quality of life for individuals grappling with this pervasive condition. Recognizing the significance of addressing social anxiety in the lives of students, the thesis endeavours to examine the efficacy of the mindfulness-based stress reduction program in enhancing mindfulness and assertiveness among students afflicted by social anxiety.

Through a meticulously designed quasi-experimental pre-test-post-test study with a control group, 30 female students from the Islamic Azad University of Kashan, identified as suffering from social anxiety according to the social phobia inventory (SPI) by Conveyor, were selected by the purposive sampling method. 15 individuals were randomly assigned to the experimental group and 15 to the control group. The experimental group underwent 8 sessions of mindfulness-based stress reduction program training, while the control group served as a comparative benchmark.

Employing robust statistical analyses, the findings unveiled a statistically significant increase in mindfulness and assertiveness levels among students in the experimental group, underscoring the transformative potential of mindfulness-based stress reduction training in nurturing these vital qualities among individuals grappling with social anxiety.

Furthermore, the thesis embarks on an exploration of Mindfulness Based Stress Reduction (MBSR) interventions, with a particular focus on young female adults in the age group of 18 - 22 years. Through a pilot study involving 40 female college students, equally divided into an experimental group and a control group, the thesis aims to measure the impact of an 8-week MBSR intervention on traits such as mindfulness, attention, and stress perception. Utilizing a battery of validated instruments, including the Stroop task, change detection, KIMS, and perceived stress scale, this study seeks to shed light on the efficacy of MBSR in cultivating mindfulness and mitigating stress among this cohort of young adults.

The findings unveil an overall small to moderate effect size, underscoring the superiority of mindfulness treatments over active control comparison conditions and their potential to mitigate iatrogenic harm. Notably, a significantly larger effect size was observed on psychological symptoms compared to other dependent variable types, and for studies drawn from clinical samples compared to non-clinical samples. These revelations position mindfulness as a promising intervention modality for youth, with future research poised to focus on clinical settings and target symptoms of psychopathology.

As we traverse the hallowed halls of education, we bear witness to the growing field of mindfulness teaching for young people, exploring its social and policy context, applications, and areas of potential synergy. Through a comprehensive literature review, the thesis delves into the current state of evidence for such teaching, drawing upon significant and high-quality studies that comprise the evidence base for mindfulness and the young.

The findings unveil a burgeoning interest in the use of mindfulness-based interventions (MBI) with students in school settings, prompting a systematic review of existing literature on applied studies employing MBI in these contexts. Through a meticulous coding process spanning methodologies, student characteristics, intervention characteristics, and outcome variables, this review quantitatively summarizes the coded variables and identifies strengths and limitations in the literature, culminating in specific recommendations for future intervention scientists wishing to study the utility of MBI in school settings.

As we delve into the realm of critical care nursing students, we confront the reality of their vulnerability to stressors during academic and clinical experiences, which can impede their learning process. Through a meticulously designed study, the thesis aims to explore the stress levels and perceived stressors of critical care nursing students at King Saud Ben Abdulaziz University for Health Sciences, while pinpointing the relationship between stress and academic achievement.

Employing a self-reported questionnaire developed by researchers, the study unveils compelling insights, revealing that while 65% of respondents experienced low stress levels, a staggering 68.3% grappled with multiple health problems during their critical care nursing course. The findings also uncover a statistically significant difference between stress levels and perceived stressors, yet no significant correlation between perceived stressors and academic achievement. These revelations underscore the low to moderate stress levels experienced by critical care nursing students, with no discernible impact on their academic performance.

Through this comprehensive synthesis of diverse perspectives and empirical investigations, the thesis endeavours to illuminate the intricate tapestry of mindfulness practices, unveiling their potential as catalysts for stress reduction, well-being enhancement, and productivity optimization across various domains of human endeavour.

RELEVANCE OF THE STUDY

Prolonged stress can weaken the immune system and exacerbate a host of other health issues. Mindfulness has the potential to have systemic impacts by reducing the stress response. Researchers studying psychology have shown that mindfulness alters the structure and function of two distinct brain stress circuits, which are linked to attention and emotion control. Researchers are also starting to identify the components of mindfulness that contribute to its positive outcomes. Researchers studying psychology discovered compelling evidence in a review of meditation studies that those receiving MBCT were less likely to experience negative thoughts or harmful emotional reactions under stressful situations. Additionally, they discovered tepid evidence that those who engaged in MBSR or MBCT had improved present focused attention and less likely to worry and to think about a negative thought or experience over and over.

A period of change, self-discovery, and stress is associated with emerging adulthood. Going to school and the accompanying transitions cause a lot of stress for a lot of emerging individuals. According to recent studies, mindfulness exercises can help college students become more effective by fostering their academic self-efficacy and improving their capacity to manage the constant stress in their lives. They will also be able to improve their general well-being.

Subsequent studies on college students ought to concentrate on experimental designs capable of measuring mindfulness practices in combination with stress and self-efficacy levels. Other stressful aspects of university students' lives, such as social anxiety and living away from home for the first time, may be the subject of future research.

Furthermore, studies on mindfulness as a general concept have been conducted; more research on various forms of mindfulness activities would be helpful. Examining various forms of mindfulness and the associated advantages might help professionals determine which behaviours will most effectively assist individuals in need and enhance wellbeing in general.

AIM

To highlight the advantages of practicing mindfulness on college students' ability to effectively cope with stress.

OBJECTIVE

- To understand the methods used for reducing stress and improving emotional wellbeing.
- To measure the level of emotional distress among college students.
- To evaluate the student's capacity for mindfulness living.
- To evaluate stress management techniques for college students.
- To investigate emotional wellbeing's impact on academic performance.

**REVIEW
OF
LITERATURE**

CHAPTER 2

REVIEW OF LITERATURE

The literature pertaining to the study on ‘**The Impact of Mindfulness Practices on Stress Reduction Among College Students**’ is reviewed under the following heads.

2.1 The Effect of Mindfulness Based Stress Reduction (MBSR) for Mitigating symptoms of stress.

2.2 Enhance Resilience entails efficiently managing adversity, emotions and setbacks.

2.3 Linking Stress Reductive Actions with Mindfulness.

2.4 Exploring the Impact of Mindfulness on Academic Achievements and Psychological well-being.

2.1 The Effect of Mindfulness Based Stress Reduction (MBSR) For Mitigating Symptoms of Stress.

Transitioning to college life poses numerous challenges for students, particularly those entering demanding fields like nursing, where academic rigor and clinical training add to the stressors. Anxiety and depression are common among college students, with nursing students experiencing even higher rates due to the unique pressures of their education. The stressors inherent in nursing education, including academic demands, clinical placements, and fear of failure, contribute significantly to elevated anxiety levels among nursing students compared to peers in other health programs. Heightened anxiety adversely affects academic performance by impairing memory, concentration, and problem-solving skills, increasing the risk of academic setbacks. Moreover, unaddressed anxiety during nursing education can impede the transition to professional practice, potentially compromising patient care quality. Mindfulness meditation, characterized by nonjudgmental awareness of present experiences, presents a promising strategy for managing anxiety in nursing students. Although mindfulness meditation has demonstrated efficacy in reducing stress and anxiety across various populations, its specific impact on nursing students remains relatively unexplored. Consequently, further research is

needed to investigate the effectiveness and lasting benefits of mindfulness interventions in nursing education. (**Wiguna Etal., 2018**).

The amalgamation of research on depression, anxiety, and stress among students highlights the critical need for educators to grasp child psychology nuances and refrain from overestimating students' capabilities. Academic pressures have been identified as antecedents to depression receiving appropriate guidance in course selection. A nurturing and intellectually stimulating environment emerges as crucial for safeguarding students' mental well-being. Furthermore, the literature scrutinizes the interplay between depression, anxiety, and stress, underscoring the importance of identifying stressors to fully comprehend their detrimental effects. (**Arneja Ram Prakash, 2019**).

Recommendations stemming from these studies advocate for the provision of tailored mental health support and counselling services to address students' specific needs. The structured review, categorized into four main areas—depression, anxiety, stress, and the intricate relationship among them—draws upon a diverse array of sources, including journals, books, and online resources, enriching the understanding of these phenomena within educational contexts. (**Anita Fatemi, Rezvan, 2018**).

The impact of Hinduism strategies, particularly on Heart Rate Variability (HRV) and internal organ autonomic regulation, remains poorly understood. A study addressed this gap by examining subjects who mimicked Hindu strategies through paced respiration and focused concentration tasks. Analysis of HRV using coherence plots, spectrograms, and fast frequency return plots revealed that low-frequency respiration (<12 cpm) significantly influenced HRV, indicating potential physiological benefits associated with these practices. Despite yoga's known effects on physical and mental well-being, research exploring its physiological impacts on individuals with psychotic conditions remains limited in peer-reviewed literature. However, a recent study sheds light on this aspect, indicating promising effects of yoga on the physiological responses of psychotic individuals, leading to reduced stress levels among college-aged men. Nonetheless, further investigation is necessary to fully comprehend the extent and mechanisms of yoga's benefits in this population. (**J. Thenmozhi, 2021**).

2.2 Enhance Resilience entails efficiently managing adversity, emotions and setbacks.

Mindfulness-Based Cognitive Therapy (MBCT) has demonstrated effectiveness in addressing a range of disorders, encompassing both physical and psychological issues. Prior studies have underscored the efficacy of cognitive behaviour therapy (CBT) in mitigating anger and anxiety among adolescents. The involvement of mindful mentor's aids adolescents in cultivating the skill to observe their thoughts without immediate reaction, leading to a shift in emotional experiences over time. Buddhist Psychology provides insights into emotions as transient visitors to the heart, with mindfulness enabling adolescents to perceive emotions as temporary and context-specific phenomena. Emotions are typically categorized along a spectrum of healthy or unhealthy, with emotions existing on a continuum potentially impeding awareness of one's mind and surroundings. During mindfulness practice, certain emotions may emerge as unwelcome guests, eliciting negative feelings and discomfort, allowing participants and instructors to observe the entire spectrum of emotional transformation. The literature review endeavours to explore the relationships between these variables and their interactive effects on adolescents.

The report on "Ending of Childhood Obesity," the article underscores the urgent and substantial challenge posed by childhood obesity, which not only impacts immediate health but also influences educational achievements and overall quality of life. Government policies and actions are recommended to address the obesogenic environment and provide necessary guidance and support for optimal development throughout the life-course. The report stresses the significance of addressing the needs of obese children, given the physical and psychological health consequences extending from childhood through adolescence into adulthood. However, a notable hindrance to progress in combating childhood obesity lies in the lack of political commitment and the failure of governments and other stakeholders to take requisite actions. The review of literature is geared towards identifying pertinent variables for research, avoiding redundancy, and elucidating the meaning and interrelation among these variables. **(World Health Organization's, 2016)**

The study by Zenner, Herrnleben-Kurz, and Walach delves into the burgeoning field of Mindfulness-Based Interventions (MBIs), which have gained momentum in both research and practical implementation. Rooted in Eastern traditions and Buddhist psychology, mindfulness

involves consciously staying present with one's experiences, fostering acceptance and curiosity. Techniques like meditation, yoga, and tai chi aid in enhancing attentional capacity and broadening focus. Jon Kabat-Zinn's pioneering introduction of mindfulness through the Mindfulness-Based Stress Reduction Program (MBSR) marked a significant milestone, laying the groundwork for adaptations like Mindfulness-Based Cognitive Therapy (MBCT) and Acceptance and Commitment Therapy (ACT). Reviews and meta-analyses have consistently highlighted the efficacy of MBIs in alleviating stress-related and clinical disorders, bolstering well-being, and enhancing personal development. Recognizing these benefits, efforts have been directed toward adapting MBIs for children and adolescents, showing promise in reducing symptoms of ADHD, depression, and anxiety, while enhancing social skills and academic performance. Schools, grappling with the mental health challenges faced by youths, have emerged as promising settings for implementing mindfulness programs, aligning with the foundational skills required for education in the 21st century. Despite growing enthusiasm, evidence for the efficacy of MBIs in schools remains somewhat limited, underscoring the need for further research and synthesis of existing studies to fully understand their potential in addressing educational and mental health needs.

The psychotherapeutic interventions, particularly cognitive therapy (CT), are integral in the treatment of depressed patients in hospital settings, where group and individual psychotherapy sessions are utilized alongside pharmacotherapy to enhance patient compliance and alleviate depression symptoms. Research indicates the effectiveness of CT in treating depression, with early improvements often indicative of continued progress throughout therapy, contrasting with limited improvement for patients who do not respond favourably initially. Studies have consistently shown CT to be comparable to antidepressant medication in efficacy. Moreover, CT has demonstrated effectiveness in addressing post-traumatic stress disorder (PTSD) by targeting thoughts, emotions, and behaviours associated with traumatic experiences. Notably, hopelessness emerges as a critical predictor of therapy outcomes, with early non-responsive hopelessness signalling poorer prognosis. Additionally, the concept of explanatory style, which pertains to how individuals attribute negative events, has been identified as a mechanism of change within CT for depressive patients. Further research suggests that CT may reduce the risk of depression symptom recurrence following successful treatment, with changes in explanatory style playing a mediating role in this preventive capacity. When applied to patients with residual depression symptoms, adjunct CT has shown varying effects on depression

severity, specific psychological symptoms, and social functioning. In summary, CT emerges as a robust intervention for depression, addressing core symptoms and associated psychological and social impairments commonly observed in depressed patients. **(Safara, Maryam, 2010).**

2.3 Linking Stress Reductive Actions with Mindfulness.

The review of related literature on yoga therapy, metabolic syndrome, and stress provided valuable insights for the investigator, aiding in the identification of relevant topics and variables, formulation of suitable hypotheses, and support for study findings. Notably, the literature highlighted the positive effects of yoga practice on academic performance, memory, and grades, suggesting its potential as a beneficial intervention. Stress emerged as a significant concern for students, with academic factors identified as major stressors. The introduction of stress management education within the curriculum was proposed as a viable strategy to address this issue effectively. Moreover, the review emphasized the importance of incorporating stress management education into college curricula and developing mechanisms aimed at reducing stress levels among students. **(R. Ananthakrishnan, 2017).**

The document delves into several studies investigating the effects of yoga on diverse aspects including flexibility, mental performance, psycho-motor skills, fear of falling, balance, and metabolic process regulation. Findings from these studies consistently demonstrate notable enhancements in flexibility, mental acuity, psycho-motor skills, fear of falling, and balance following yoga interventions. Particularly in older adults, yoga shows promise in reducing fear of falling and enhancing balance, suggesting its potential as an intervention for this demographic. Furthermore, research explores the impact of standard yoga practice on metabolic process regulation and exercise performance, revealing alterations in metabolic process regulation and diminished improvement responses among yoga practitioners. Additionally, the document discusses age-related changes in the cardiovascular system, involuntary functions, and levels of Brain-Derived Neurotrophic Factor (BDNF) in healthy, active males, with a specific emphasis on the role of yoga in ameliorating age-related chronic changes. **(S. Manjappan, 2020).**

The coping strategies utilized by nursing students were investigated, revealing problem-solving behaviour as the most prevalent strategy, followed by optimistic coping, avoidance behaviours, and transference behaviours. Problem-solving behaviour involved actively seeking solutions to stressors, while optimistic coping focused on maintaining a positive mindset. Avoidance behaviours were employed to evade stressful situations, whereas transference behaviours involved shifting stress to other activities. Demographic variables were also examined in relation to stress levels and coping strategies. Female students reported higher stress levels compared to males, while unmarried students exhibited greater employment of problem-solving behaviour. However, no significant differences were observed based on other demographic factors such as education level, smoking habits, residence, family income, sleeping hours, or GPA. The study further explored the correlation between specific stressors and coping strategies, noting positive correlations between problem-solving behaviour and stress from teachers, nursing staff, and task workload. Optimistic coping behaviour was positively associated with stress related to patient care and peer interactions, while avoidance behaviours were negatively correlated with task workload stress and low levels of specialized knowledge and skills. Transference behaviours showed a negative correlation with stress in clinical settings. Overall, the findings underscored the prevalence of stress among nursing students, particularly related to academic workload, patient care, and clinical settings, with coping strategies playing a crucial role in managing stress. Gender and marital status emerged as influential factors, indicating the need for tailored interventions to support the mental health and well-being of nursing students. Further research is warranted to explore additional stress-contributing factors and develop effective support measures. (T. Vijaya, 2020).

2.4 Exploring the Impact of Mindfulness on Academic Achievements and Psychological well-being.

The interplay between critical thinking, mindfulness, and academic achievement in Iranian learners, revealing a negative correlation between critical thinking and reading comprehension, while observing a positive correlation between mindfulness and reading comprehension. Lin and Mai (2017) investigated the influence of mindfulness meditation on academic performance, discovering that students exposed to mindfulness meditation exhibited superior academic performance compared to a control group, particularly those engaging deeply in meditation. Lu, Huang, and Rios (2017) delved into the relationship between mindfulness and

academic performance in Chinese migrant children, unveiling that heightened mindfulness levels correlated with enhanced executive function and improved academic performance. Anila and Dhanalakshmi (2016) explored the effects of Mindfulness-Based Stress Reduction on alleviating anxiety, bolstering self-control, and enhancing academic performance among adolescent students, noting positive outcomes in terms of anxiety reduction, self-control enhancement, and academic advancement. These studies collectively underscore the significance of mindfulness in augmenting academic performance and overall student well-being. **(P.Nivenitha, 2018).**

Numerous studies have examined the impact of stress on medical students and explored potential interventions, particularly focusing on the benefits of yoga, specifically pranayama. A study conducted in Hong Kong revealed high levels of distress, anxiety, and depression among medical students compared to their non-medical counterparts. Factors such as concerns related to the medical school environment, curriculum, and feelings of endurance and success significantly contributed to depression and anxiety levels. Additionally, lower academic performance and the presence of traits like anxiety and optimism were associated with distress. Active coping strategies were linked to lower distress levels, while wishful thinking correlated with higher distress levels. Another study in Hong Kong highlighted that student with lower grades, higher anxiety and depression scores, and avoidant coping strategies were at greater risk of developing depression and anxiety, particularly during the transition from basic science to clinical training. Similarly, research in India emphasized academic factors as major stressors for medical students, varying across different stages of their medical education. Moreover, investigations into yoga and relaxation practices revealed promising outcomes, including reductions in anxiety levels and improvements in physiological responses to stress. Notably, yoga interventions were associated with reduced anxiety levels and enhanced exam performance among medical students. Studies from Turkey and Thailand underscored the increasing stress levels among medical students over time, with academic challenges and tests emerging as significant stressors. These findings collectively underscore the critical importance of addressing stress and promoting psychological well-being among medical students, while also highlighting the potential efficacy of yoga and other coping strategies in stress management.

METHODOLOGY

CHAPTER 3

METHODOLOGY

The study entitled “Mindfulness practices and its impact on stress reduction among college students” is conducted using the following methodology:

3.1 Selection of area

3.2 Selection of sample

3.3 Selection of tool

3.4 Conduct of the study

3.5 Analysis & Interpretation

3.1 Selection of area

In the pursuit of unravelling the intricate relationship between mindfulness practices and stress reduction among the college student’s population, meticulous attention was devoted to the selection of an apt study region. Thus, the Ernakulam districts' colleges were strategically chosen as the focal point for this investigation. Additionally, the socio-cultural context of Ernakulam District provides a rich backdrop for studying mindfulness practices and stress reduction among college students. The regions unique cultural heritage, educational norms and societal dynamics may influence students’ perceptions and experience related to mindfulness and stress.

3.2 Selection of sample

The selection was not arbitrary but rather intentional, driven by the region's diverse array of educational institutions catering to students within the 18 to 24 age range. About 114 students were carefully curated to form the sample cohort, ensuring a robust representation of the target demographic. The decision to concentrate on this specific age group was rooted in the acknowledgment of the unique challenges and stressors encountered during the transitional phase from adolescence to adulthood. A sample serves as a more focused subset of data drawn from a larger population, enabling researchers to draw conclusions and make inferences about the broader group. As articulated by Fleetwood (2018), a sample comprises individual data points, sampling

units, or observations meticulously selected through a predetermined process. In the context of this investigation, the chosen sampling strategy is referred to as "Convenience sampling." Convenience sampling is a qualitative research approach wherein participants are selected based on their accessibility and ease of reach for the researcher. This technique does not entail a rigorous or systematic sampling procedure but rather relies on the practicality and convenience of engaging with available individuals. Despite its inherent limitations, such as potential bias and lack of representativeness, convenience sampling can be a pragmatic choice in studies where quick data collection is essential or when access to specific populations is challenging. Therefore, in this investigation, the utilization of convenience sampling facilitates the acquisition of relevant data within the constraints of practicality and resource availability, enabling the exploration of research questions in a timely and feasible manner.

3.3 Selection of tool

Research tools are essential instruments that aid researchers in various activities associated with their work. These tools facilitate the collection, organization, analysis, visualization, and dissemination of research findings, thereby enhancing the efficiency and effectiveness of the research process. The tools selected for the study are:

a) Perceived Stress Scale (PSS-10)

In 1983, Cohen et al. developed the Perceived Stress Scale (PSS-10), which has since become widely used for assessing individuals' perceptions of stress over the preceding month. This scale effectively captures feelings of unpredictability, loss of control, and being overwhelmed by life's demands, making it particularly popular among adolescents and adults aged 12 and above. (shown in appendix 1).

b) Kessler Psychological Distress Scale (K-10)

Another valuable tool for evaluating psychological well-being is the Kessler Psychological Distress Scale (K10), devised by Kessler. This instrument serves as a quick screening measure, consisting of ten items related to emotional states, each offering a five-level response range. By

quantifying distress levels, the K10 aids in early identification and intervention. (shown in appendix 2).

c) Five Facet Mindfulness Questionnaire (FFMQ)

Additionally, the Five Facet Mindfulness Questionnaire (FFMQ) assesses mindfulness and self-awareness through its examination of five key elements: observation, description, awareness of activities, non-judgmental inner experience, and non-reactivity. With 39 items, the FFMQ offers a comprehensive evaluation of an individual's mindfulness practices, serving as a valuable tool for personal growth and contributing to research in psychology and related fields. (shown in appendix 3).

The study utilizing these measures was distributed via a Google Form, facilitating data collection and analysis. (shown in appendix 4).

3.4 Conduct of the study

The study titled "The Impact of Mindfulness Practices on Stress Reduction Among College Students" employed a mixed-methods approach to explore the effectiveness of mindfulness practices in mitigating stress and enhancing emotional wellbeing among college students aged 18 to 24 years. A Google form was crafted encompassing the tools Perceived Stress Scale, Kessler Psychological Distress Scale and Five Facet Mindfulness Questionnaire. Subsequently, it was distributed among the college students to gather responses regarding stress management techniques, and the perceived impact of emotional well-being on academic performance. The survey responses were automatically collected and analysed.

3.5 Analysis & Interpretation

The responses were collected, organized into an Excel sheet and analysed using SPSS. In SPSS, a statistical method was utilized called the t-test. This test helps determine if there is a

significant difference between the averages of two groups and how they relate to each other. More detailed finding from these analyses is discussed in the result and discussion chapter.

RESEARCH DESIGN

The figure given below depicts the research design of the study entitled “The Impact of Mindfulness Practices on Stress Reduction Among College students”.

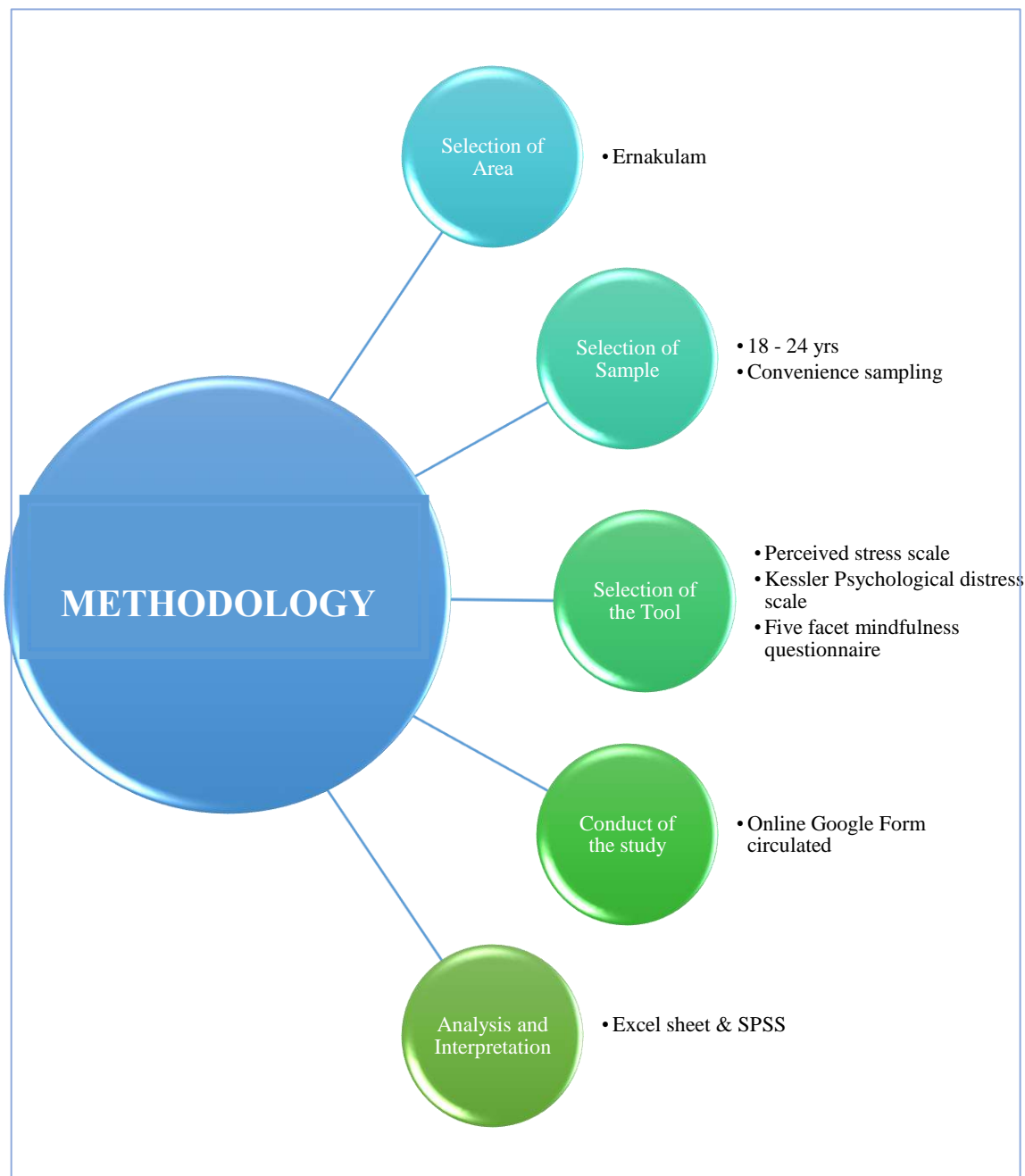


Figure 1

RESULTS AND DISCUSSION

CHAPTER 4

RESULTS AND DISCUSSION

This chapter outlines the findings and discussions resulting from the analysis of data. To enhance clarity and convenience, the results are organized into the following sections:

4.1 General Information of the Respondents

4.2 Correlation between Reducing Stress and Improving Emotional Wellbeing

4.3 Measurement of Emotional Distress Among College Students

4.3.1 Levels of emotional distress experienced by college students.

4.4 Evaluation of Students' Capacity for Mindfulness Living

4.4.1 Assessing student's mindfulness living skills.

4.5 Evaluation of Stress Management Techniques for College Students

4.5.1 Assessment of the effectiveness of different stress management techniques among college students.

4.6 Investigation of Emotional Wellbeing's Impact on Academic Performance

4.6.1 Exploration of the relationship between emotional wellbeing and academic performance among college students.

4.1 General Information of the Respondents

Table 1

General Information of the Respondents

Sl.no	Particulars		Respondents	
			N = 114	%
1	Age	18 years	7	6.1%
		19 years	10	8.8%
		20 years	9	7.9%
		21 years	14	12.3%
		22 years	30	26.3%
		23 years	30	26.3%
		24 years	6	5.3%
2	Gender	Female	94	83.3%
		Male	20	16.7%

Table 1 provides the general information of the respondents. Majority of the respondents were between the age group of 22 to 23 years. The female participants exhibited greater engagement in the survey.

Age of the Respondents

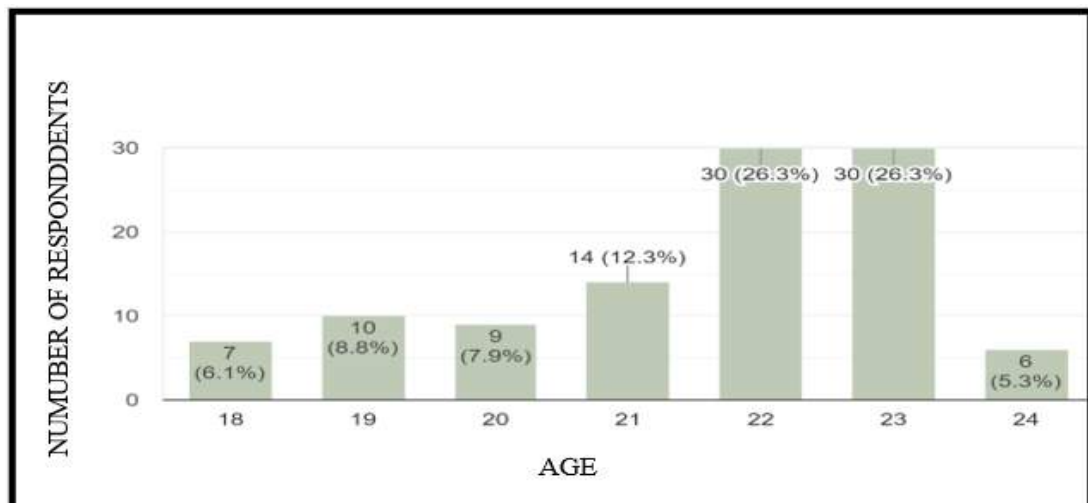


Figure 2

The figure 2 depicts the general information of the selected students taken for the study. The bar chart illustrates the age distribution of the respondents, ranging from 18 to 24 years.

Gender of the Respondents

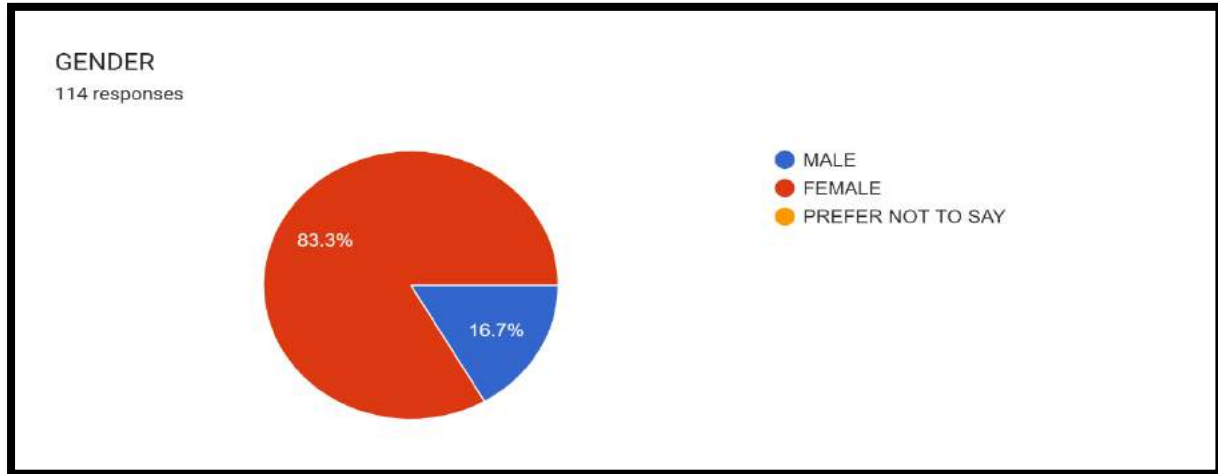


Figure 3

The figure 3 shows the demographic composition of the study participants revealed that a significant gender disparity, with 83.3 % identified as females and 16.3 % as males.

4.2 Correlation between Reducing Stress and Improving Emotional Wellbeing using Perceived Stress scale (PSS-10)

Table 2

Perceived Stress Scale Responses

PSS-10	NUMBER OF RESPONDENTS (N= 114)				
	NEVER	SOMETIMES	MODERATE	FAIRLY OFTEN	VERY OFTEN
Being upset by unexpected events	8	44	40	18	4
Unable to control things	5	41	41	21	6
Felt nervous and stressed	5	31	39	27	12
Felt confident	11	34	34	28	7
Felt things were going in a plan	12	30	33	26	13
Unable to cope	8	31	47	23	5
Manage irritations	4	36	28	37	9
Felt on top of things	8	41	32	24	9
Felt angered	4	32	16	42	20
Felt overwhelmed by mounting difficulties	3	29	28	45	9

The Table 2 shows survey results indicate that a significant portion of the respondents experience moderate to high levels of perceived stress across various situations. Stressors related to unexpected events, lack of control and negative emotions like anger and nervousness appeared to be particularly common.

Correlation between Reducing Stress and Improving Emotional Wellbeing

Correlations			
		reducing	emotionalwell being
reducing	Pearson Correlation	1	.513**
	Sig. (1-tailed)		.000
	N	114	114
emotionalwellbeing	Pearson Correlation	.513**	1
	Sig. (1-tailed)	.000	
	N	114	114

** . Correlation is significant at the 0.01 level (1-tailed).

Figure 4

The figure 4 shows a correlation matrix between two variables: "reducing" and "emotional-wellbeing". The correlations are measured using the Pearson Correlation Coefficient, and the significance levels (p-values) are provided for a one-tailed test.

The Pearson Correlation Coefficient between "reducing" and "emotional wellbeing" is 0.513. This indicates a moderately strong positive correlation between the two variables. The significance level (Sig. 1-tailed) for this correlation is 0.000, which is less than the commonly used significance threshold of 0.01 (or 0.05 for a two-tailed test). This means that the correlation is statistically significant at the 0.01 level. The sample size (N) for both variables is 114. The correlation matrix is symmetrical, as expected, with the correlation coefficient of "emotional wellbeing" with "reducing" being the same as the correlation of "reducing" with "emotional wellbeing" (0.513). The positive correlation suggests that higher values of one variable are associated with higher values of the other variable, and vice versa. Overall, this correlation matrix provides evidence of a statistically significant positive relationship between the two variables.

4.3 Measurement of Emotional Distress Among College Students using Kessler Distress Scale (K-10)

4.3.1 Levels of emotional distress experienced by college students.

Table 3
Kessler Distress Scale Responses

K-10	NUMBER OF RESPONDENTS (N= 114)				
	None of the time	A little of the time	Some of the time	Most of the time	All of the time
Feeling tired out for no good reason	2	23	51	35	3
Feeling nervous	4	33	52	20	5
Feeling so nervous that nothing could calm you down	17	37	42	15	3
Feeling hopeless	17	38	31	17	11
Feeling restless or fidgety	7	30	57	15	5
Feeling so restless you could not sit still	7	30	57	15	5
Feeling depressed	13	34	42	20	5
Feeling that everything was an effort	5	31	52	18	8
Feeling so sad that nothing could cheer you up	13	34	42	20	5
Feeling worthless	26	34	36	11	7

The Table 3 shows feelings of fatigue, anxiety, restlessness and low mood seem to be commonly experienced by many individuals. While hopelessness and worthlessness are less frequent.

Table 4

Emotional Distress Among College Students

Descriptive Statistics							
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
emotionaldistress	114	1.13	4.63	2.7884	.71742	.223	.226
Valid N (listwise)	114						

The above Table 4 provides the analysis of data regarding the levels of emotional distress experienced by college students. The number of valid (non-missing) cases included in the analysis for this variable, which is 114. Minimum: The smallest value observed for the "emotional distress" variable, which is 1.13. Maximum: The largest value observed for the "emotional distress" variable, which is 4.63.

The average value of the "emotional distress" variable across all 114 cases, which is 2.7684. The standard deviation, which measures the spread or dispersion of the data around the mean value. In this case, 0.77742. A measure of the asymmetry or lack of symmetry in the distribution of the data. A value of 0 indicates a perfectly symmetrical distribution. The standard error associated with the skewness statistic.

The descriptive statistics provide an overview of the central tendency (mean), spread (standard deviation), and distribution shape (skewness) of emotional distress levels in the sample of 114 cases. The mean emotional distress level is 2.7684, with scores ranging from 1.13 to 4.63.

Table 5

Analysis of data regarding the levels of emotional distress

Statistics		
emotionaldistress		
N	Valid	114
	Missing	0
Median		2.7500
Std. Deviation		.71742
Skewness		.223
Std. Error of Skewness		.226
Minimum		1.13
Maximum		4.63
Percentiles	25	2.3750
	50	2.7500
	75	3.1250

Table 6

Analysis of data regarding the levels of emotional distress

emotionaldistress					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.13	1	.9	.9	.9
	1.25	1	.9	.9	1.8
	1.38	3	2.6	2.6	4.4
	1.50	1	.9	.9	5.3
	1.63	2	1.8	1.8	7.0
	1.88	3	2.6	2.6	9.6
	2.00	6	5.3	5.3	14.9
	2.13	4	3.5	3.5	18.4
	2.25	6	5.3	5.3	23.7
	2.38	7	6.1	6.1	29.8
	2.50	7	6.1	6.1	36.0
	2.63	8	7.0	7.0	43.0
	2.75	13	11.4	11.4	54.4
	2.88	7	6.1	6.1	60.5
	3.00	10	8.8	8.8	69.3
	3.13	9	7.9	7.9	77.2
	3.25	4	3.5	3.5	80.7
	3.38	3	2.6	2.6	83.3
	3.50	5	4.4	4.4	87.7
	3.63	1	.9	.9	88.6
	3.75	3	2.6	2.6	91.2
	3.88	1	.9	.9	92.1
	4.00	2	1.8	1.8	93.9
	4.13	1	.9	.9	94.7
	4.25	2	1.8	1.8	96.5
	4.38	2	1.8	1.8	98.2
	4.50	1	.9	.9	99.1
	4.63	1	.9	.9	100.0
	Total	114	100.0	100.0	

The above Table 5 and Table 6 provide the analysis of data regarding the levels of emotional distress experienced by college students.

The total number of valid (non-missing) cases is 114, with no missing values. The median value of the "emotionaldistress" variable is 2.7500, which represents the midpoint of the distribution when values are ordered from lowest to highest. The median can provide a better measure of central tendency than the mean when distributions are skewed. This reiterates the standard deviation value of 0.77742, indicating the average amount of dispersion or spread around the mean of the distribution. The value of 0.223 suggests a slight positive skew in the distribution, meaning the tail extends slightly more toward higher "emotionaldistress" values. The standard error associated with the skewness statistic is 0.226.

It reconfirms the minimum value is 1.13 and the maximum value is 4.63 for the "emotional distress" scores. Provides the values at specific percentile points in the distribution. The 25th percentile is 2.3750, 50th percentile (same as median) is 2.7500, 75th percentile is 3.1250. This percentile information gives a sense of how the "emotional distress" values are distributed.

Understanding the emotional distress levels

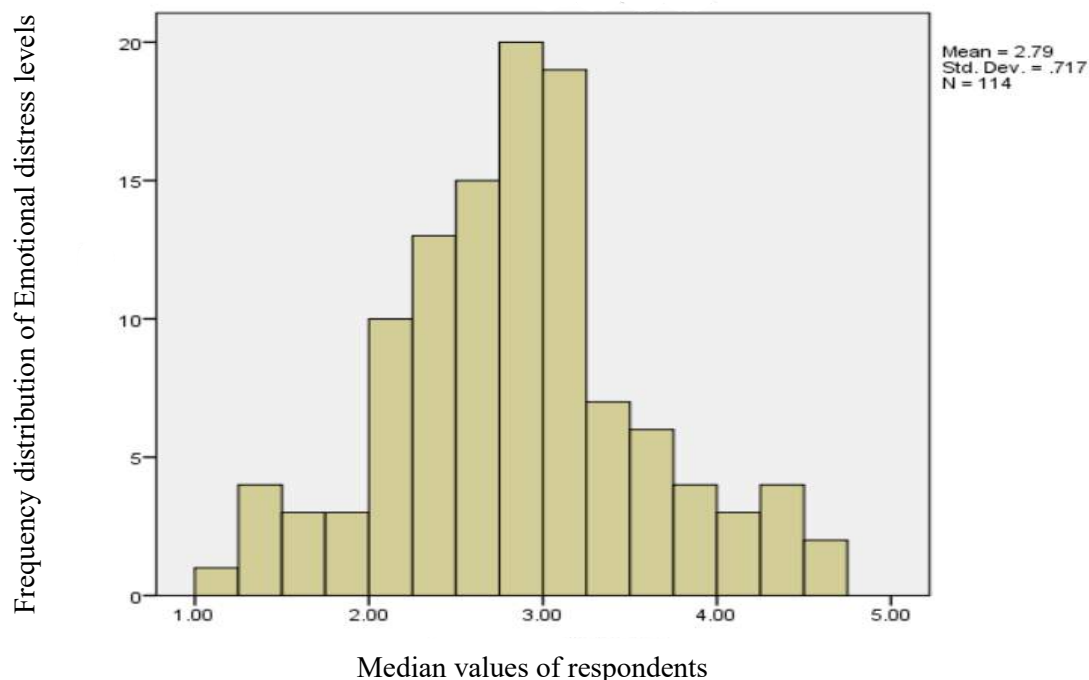


Figure 5

The Figure 5 shows the initial descriptives by providing the median, percentile values, and indicators of the distribution's shape (skewness) for further understanding the emotional distress levels in this sample.

4.4 Evaluation of Student's Capacity for Mindfulness Living.

4.4.1 Assessing students' mindfulness living skills.

Table 7

Assessing Students' Mindfulness Living Skills

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Nonreactivity	114	10.00	24.00	17.2368	2.77569
Acting	114	8.00	30.00	17.3596	3.27805
Observing	114	8.00	30.00	17.4474	3.69427
Nonjudging	114	11.00	25.00	17.6667	2.81484
Describing	114	10.00	27.00	17.7281	3.43404
Valid N (listwise)	114				

Table 8

Statistics						
		Observing	Describing	Nonreactivity	Nonjudging	Acting
N	Valid	114	114	114	114	114
	Missing	0	0	0	0	0
Mean		17.4474	17.7281	17.2368	17.6667	17.3596
Median		18.0000	18.0000	17.0000	18.0000	17.0000
Std. Deviation		3.69427	3.43404	2.77569	2.81484	3.27805
Minimum		8.00	10.00	10.00	11.00	8.00
Maximum		30.00	27.00	24.00	25.00	30.00
Percentiles	25	15.0000	15.0000	16.0000	15.7500	15.7500
	50	18.0000	18.0000	17.0000	18.0000	17.0000
	75	20.0000	20.0000	19.0000	19.2500	19.0000

The Table 7 and Table 8 represent the assessing students' mindfulness living skills. This table shows descriptive statistics for five variables related to aspects of mindfulness or mindfulness capacity among students.

The variables are:

- i. Observing
- ii. Describing
- iii. Nonreactivity
- iv. Nonjudging
- v. Acting

The average score for each variable. For example, the mean score for "Observing" is 17.4474. The midpoint score that separates the top and bottom halves of the distribution. For instance, the median for "Describing" is 18.0000. The measure of spread or dispersion of scores around the mean. "Nonreactivity" has a standard deviation of 2.77569. The lowest and highest scores for each variable. "Nonjudging" has a minimum of 11.00 and a maximum of 25.00. (25th, 50th, 75th): The values at specific percentile points in the distribution. For "Acting", the 25th percentile is 15.00, the 50th percentile (median) is 17.00, and the 75th percentile is 19.00.

These descriptive statistics provide an overview of the central tendency, variability, and distribution shape for each of the five mindfulness-related variables in the sample. This information is been used to understand and interpret the students' mindfulness capacity across different facets or dimensions measured by these variables.

Table 9

Assessment of Mindfulness capacity by Observing					
FFMQ	NUMBER OF RESPONDENTS (N=114)				
	Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true
Notice sensations and body movements	16	36	37	17	8
Alert to sensations	22	42	32	13	5
Effect of foods, thoughts, emotions on stress	13	37	33	24	7
Effect of wind, hair, sun on stress	5	25	50	23	11
Effect of smells, aromas on stress	7	20	37	39	11
Effect of visual, art, nature on stress	5	27	40	30	12
Effect of attention, behaviour on stress	9	20	41	37	7

The Table 9 shows that the effect of bodily sensations and movement on stress were ranged from rarely true to sometimes true which suggest a reasonable level of awareness. The effect of alert sensations on stress were rare indicating varying degrees of attentiveness. The effect of environment, food, thoughts ranged from rare to sometimes suggesting a general inclination towards observing ones themselves and surrounding's. The effect of attention, emotions and behaviour on stress were ranging from sometimes to often which indicates a reasonable level of introspective awareness among the participants.

Table 10

Observing

Observing					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	8.00	1	.9	.9	.9
	10.00	2	1.8	1.8	2.6
	11.00	2	1.8	1.8	4.4
	12.00	5	4.4	4.4	8.8
	13.00	5	4.4	4.4	13.2
	14.00	9	7.9	7.9	21.1
	15.00	11	9.6	9.6	30.7
	16.00	8	7.0	7.0	37.7
	17.00	13	11.4	11.4	49.1
	18.00	16	14.0	14.0	63.2
	19.00	13	11.4	11.4	74.6
	20.00	9	7.9	7.9	82.5
	21.00	6	5.3	5.3	87.7
	22.00	6	5.3	5.3	93.0
	23.00	2	1.8	1.8	94.7
	24.00	4	3.5	3.5	98.2
	29.00	1	.9	.9	99.1
	30.00	1	.9	.9	100.0
	Total	114	100.0	100.0	

This table 10 presents the frequency distribution for the "Observing" variable, which appears to be one of the mindfulness-related measures in the data. The percentage of the total 114 cases that scored each value. The percentage of non-missing cases that scored each value. The cumulative percentage of cases at or below each particular score value.

From the data, the measure is 18.00, with 16 cases (14.0% of the sample). The next most common scores are 17.00 and 19.00, each with 13 cases (11.4%). The cumulative percentages show that 49.1% of cases scored at or below 17.00 on "Observing", and 82.5% scored at or below 20.00. The arrow you placed highlights the row for the score of 17.00, indicating a frequency of 13 cases (11.4%) with this score.

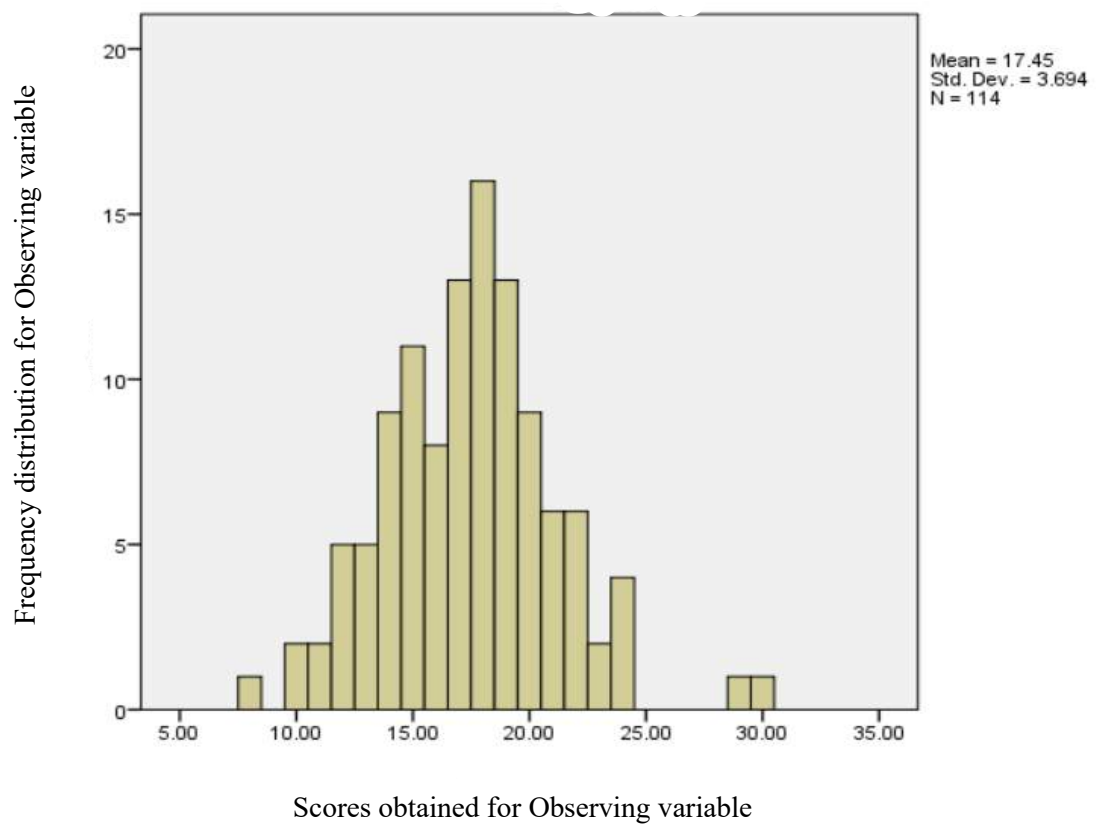


Figure 6

The figure 6 shows frequency distribution which provides a detailed breakdown of how the scores on the "Observing" mindfulness measure are distributed across the range of possible values in this sample. Such information can help identify patterns, outliers, or clustering of scores that were relevant for interpreting students' mindfulness capacity on this specific dimension.

Table 11

Assessment of Mindfulness capacity by Describing					
FFMQ	NUMBER OF RESPONDENTS (N= 114)				
	Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true
Ability to describe feelings	14	41	36	20	3
Ability to describe beliefs, opinions, expectations, in words	3	34	51	25	1
Ability to describe thoughts	8	35	41	18	12
Trouble in expression of feelings	6	27	47	21	13
Express upset into words	5	33	54	17	5
Natural tendency to express emotions in words	11	28	52	20	3
Describe feelings in detail	9	33	50	21	1

The table 11 shows that the effect of ability to describe feelings on stress were rare which suggest a reasonable level of confidence. The effect of ability to express feelings and thoughts on stress were occasionally indicating varying degrees of concern. The individual's natural tendency to experience emotions and its effect on stress were constantly true which indicates a reasonable level of mediative alertness among the participants.

Table 12

Describing

Describing

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 10.00	2	1.8	1.8	1.8
11.00	1	.9	.9	2.6
12.00	7	6.1	6.1	8.8
13.00	3	2.6	2.6	11.4
14.00	7	6.1	6.1	17.5
15.00	11	9.6	9.6	27.2
16.00	8	7.0	7.0	34.2
17.00	14	12.3	12.3	46.5
18.00	14	12.3	12.3	58.8
19.00	11	9.6	9.6	68.4
20.00	14	12.3	12.3	80.7
21.00	6	5.3	5.3	86.0
22.00	6	5.3	5.3	91.2
23.00	5	4.4	4.4	95.6
24.00	3	2.6	2.6	98.2
25.00	1	.9	.9	99.1
27.00	1	.9	.9	100.0
Total	114	100.0	100.0	

The table 12 appears to be a frequency table which shows the frequency counts, percentages, valid percentages, and cumulative percentages for a variable named "Describing" with values ranging from 10.00 to 27.00.

The data suggests there are 114 valid observations in the dataset. The most frequent values are 17.00 and 18.00, each occurring 14 times (12.3% of valid observations). The second most frequent value is 19.00 and 20.00, both occurring 11 times (9.6%). The percentages and cumulative percentages help interpret the distribution, with the lowest value of 10.00 accounting for 1.8% of valid cases, and the highest value of 27.00 occurring only once at 0.9%. The cumulative percentages show that about 80.7% of valid observations fall below or equal to 20.00.

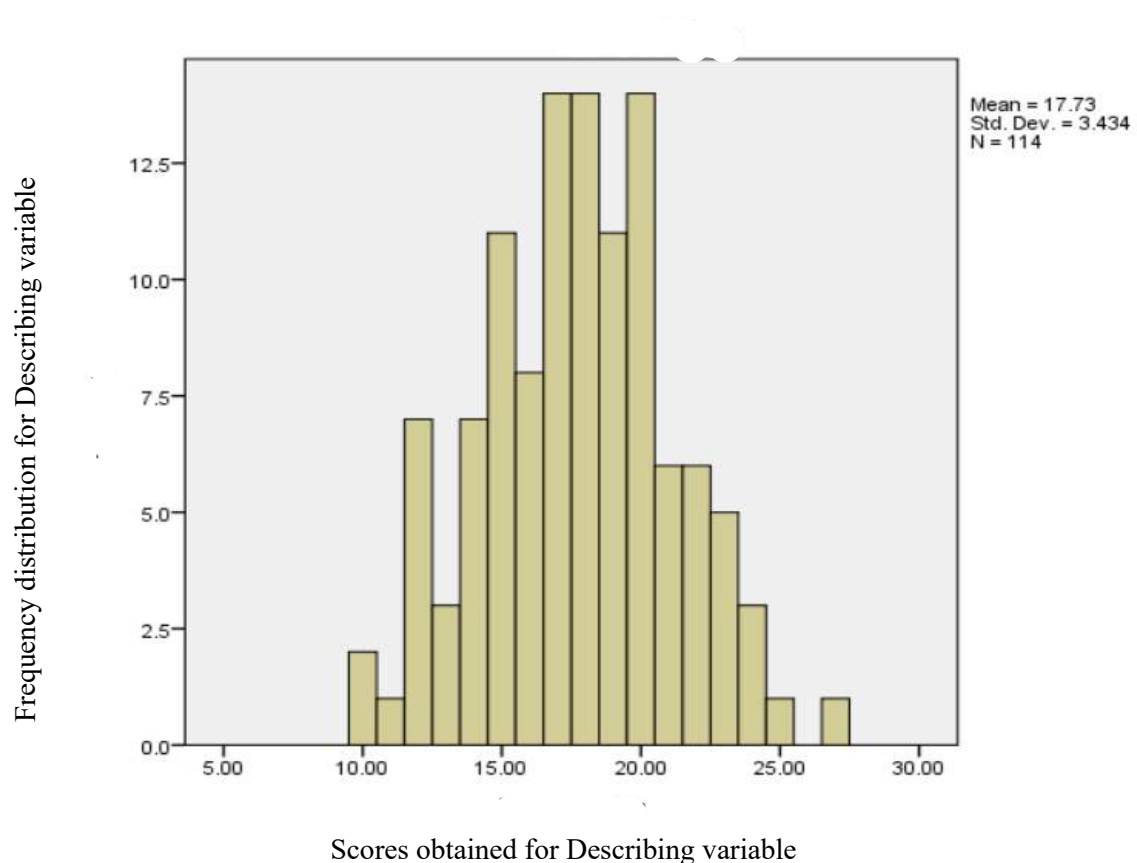


Figure 7

The figure 7 provides a summary of its frequency distribution across the observed values in the data.

Table 13

Assessment of Mindfulness capacity by non-reactivity					
FFMQ	NUMBER OF RESPONDENTS (N= 114)				
	Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true
Ability to perceive feelings and emotions	6	34	54	15	5
Easily gets lost in thoughts	12	36	46	19	1
Being aware of distressing thoughts	5	37	50	17	5
Pauses in difficult situations before reacting	5	24	60	19	6
Notices overwhelming emotions	8	39	46	20	1

The table 13 shows that the effect of perceived emotions and reaction on stress were ranging from occasionally to rarer situations which suggest that the individuals have a control over their emotions. The effect of distressing thoughts on stress are seldom to rare which indicates a mindful awareness about themselves.

Table 14

Nonreactivity

Nonreactivity					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10.00	1	.9	.9	.9
	11.00	2	1.8	1.8	2.6
	12.00	5	4.4	4.4	7.0
	13.00	4	3.5	3.5	10.5
	14.00	8	7.0	7.0	17.5
	15.00	6	5.3	5.3	22.8
	16.00	15	13.2	13.2	36.0
	17.00	17	14.9	14.9	50.9
	18.00	19	16.7	16.7	67.5
	19.00	13	11.4	11.4	78.9
	20.00	11	9.6	9.6	88.6
	21.00	7	6.1	6.1	94.7
	22.00	5	4.4	4.4	99.1
	24.00	1	.9	.9	100.0
	Total	114	100.0	100.0	

The table 14 shows a frequency distribution table for a variable called "Nonreactivity" with values ranging from 10.00 to 24.00. The table provides the frequency count, %age, valid %age, and cumulative %age for each value of the variable. The most frequent value is 17.00, occurring 17 times (14.9% of valid observations). The second most frequent values are 18.00 and 19.00, occurring 19 times (16.7%) and 13 times (11.4%) respectively. The lowest value, 10.00, occurs only once (0.9% of valid observations). Around 50.9% of valid observations fall at or below the value of 17.00, as indicated by the cumulative %age. The highest value, 24.00, occurs once and accounts for the last 0.9% of valid observations (cumulative %age = 100%).

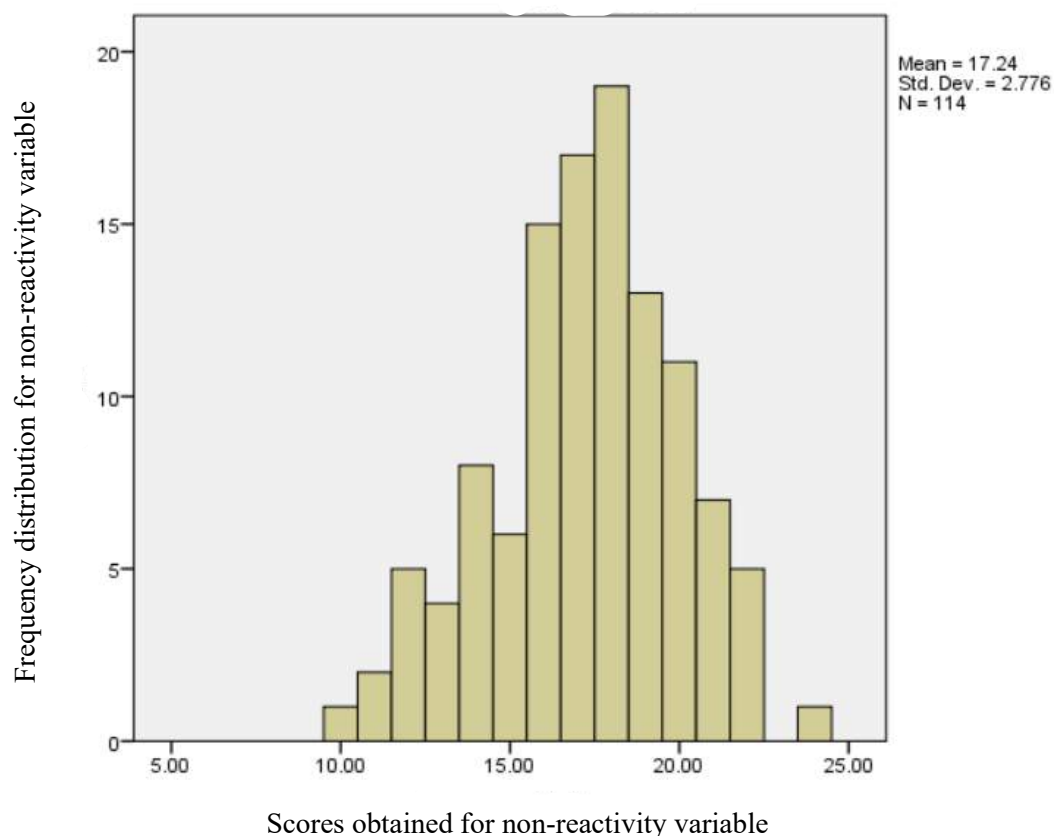


Figure 8

The figure 8 provides a detailed summary of the frequency distribution across the observed values in the data.

Table 15

Assessment of Mindfulness capacity by non-judgement					
FFMQ	NUMBER OF RESPONDENTS (N= 114)				
	Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true
Self-criticize on inappropriate emotions	6	37	35	22	14
Ability to judge on thoughts of good and bad	2	21	47	33	11
Telling self that "I shouldn't be thinking the way I am thinking"	6	21	46	31	10
Telling self, "I shouldn't be feeling the way I am feeling"	11	26	55	13	9
Self-disapproval of irrational ideas	10	26	55	14	9

The table 15 shows that the effect of criticizing and disapproval of inappropriate behaviours on stress were ranging from occasionally to rarer stimulations which suggest that the individuals are quite critical about themselves. The effect of judgements on stress were ranged from often to situational. The effect of restraint behaviour on stress ranged between rare to often indicates the individual's constant awareness to redirect the way they think or feel.

Table 16

Nonjudging

Nonjudging					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	11.00	1	.9	.9	.9
	12.00	3	2.6	2.6	3.5
	13.00	3	2.6	2.6	6.1
	14.00	7	6.1	6.1	12.3
	15.00	14	12.3	12.3	24.6
	16.00	8	7.0	7.0	31.6
	17.00	19	16.7	16.7	48.2
	18.00	20	17.5	17.5	65.8
	19.00	11	9.6	9.6	75.4
	20.00	8	7.0	7.0	82.5
	21.00	9	7.9	7.9	90.4
	22.00	4	3.5	3.5	93.9
	23.00	6	5.3	5.3	99.1
	25.00	1	.9	.9	100.0
	Total	114	100.0	100.0	

The table 16 shows a frequency distribution table for a variable called "Nonjudging" with values ranging from 11.00 to 25.00. The table displays the frequency count, %age, valid %age, and cumulative percentage for each value of the variable across 114 valid observations. The most frequent value is 17.00, occurring 19 times (16.7% of valid observations). The second most frequent value is 18.00, occurring 20 times (17.5% of valid observations). The values 17.00 and 18.00 together account for around 34.2% of the valid observations. The lowest value, 11.00, occurs only once (0.9% of valid observations). Around 48.2% of valid observations fall at or below the value of 17.00, as shown by the cumulative %age. The highest value, 25.00, occurs only once and accounts for the last 0.9% of valid observations (cumulative percentage = 100%).

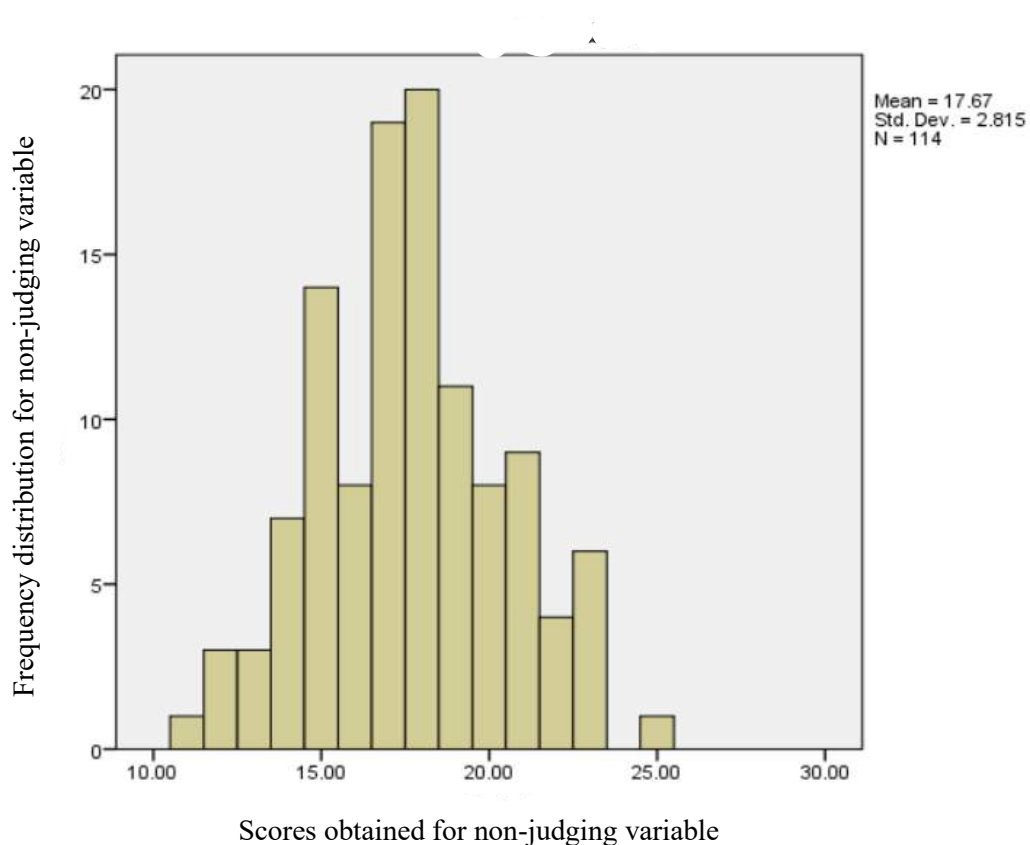


Figure 9

The Figure 9 provides a detailed summary of its frequency distribution across the observed values in the dataset.

Table 17

Assessment of Mindfulness capacity by Awareness					
FFMQ	NUMBER OF RESPONDENTS (N= 114)				
	Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true
Mind wanders easily	7	34	39	22	12
Gets into daydreaming and worrying	21	33	35	19	6
Easily distracted	8	28	34	31	13
Difficulty in focusing	12	24	48	23	7
Being alert and aware	12	27	51	19	5
Rush into activities without thinking	9	34	47	17	7

The table 17 shows that the effect of awareness on stress were ranged rare to often which suggest that the individuals are easily diverted. The effect of attentiveness and focus on stress are occasional which indicate the spontaneous behaviour of the individual.

Table 18

Awareness

Acting					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	8.00	1	.9	.9	.9
	11.00	2	1.8	1.8	2.6
	12.00	5	4.4	4.4	7.0
	13.00	5	4.4	4.4	11.4
	14.00	5	4.4	4.4	15.8
	15.00	10	8.8	8.8	24.6
	16.00	14	12.3	12.3	36.8
	17.00	18	15.8	15.8	52.6
	18.00	20	17.5	17.5	70.2
	19.00	13	11.4	11.4	81.6
	20.00	6	5.3	5.3	86.8
	21.00	3	2.6	2.6	89.5
	22.00	6	5.3	5.3	94.7
	23.00	1	.9	.9	95.6
	24.00	2	1.8	1.8	97.4
	25.00	1	.9	.9	98.2
	26.00	1	.9	.9	99.1
	30.00	1	.9	.9	100.0
	Total	114	100.0	100.0	

The table 18 shows a frequency distribution table for a variable named "Acting". It presents the frequency counts, percentages, valid percentages, and cumulative percentages for different values of this variable. The variable "Acting" ranges from a minimum value of 8.00 to a maximum value of 30.00. The most frequently occurring value is 18.00, with a frequency of 20 (17.5% of the total). The second most frequent value is 17.00, with a frequency of 18 (15.8% of the total). The total number of observations (or cases) is 114. The percentages in the "Valid percent" column sum up to 100%, indicating that there are no missing values for this variable. The cumulative %ages are calculated by adding up the valid %ages in ascending order of the variable values.

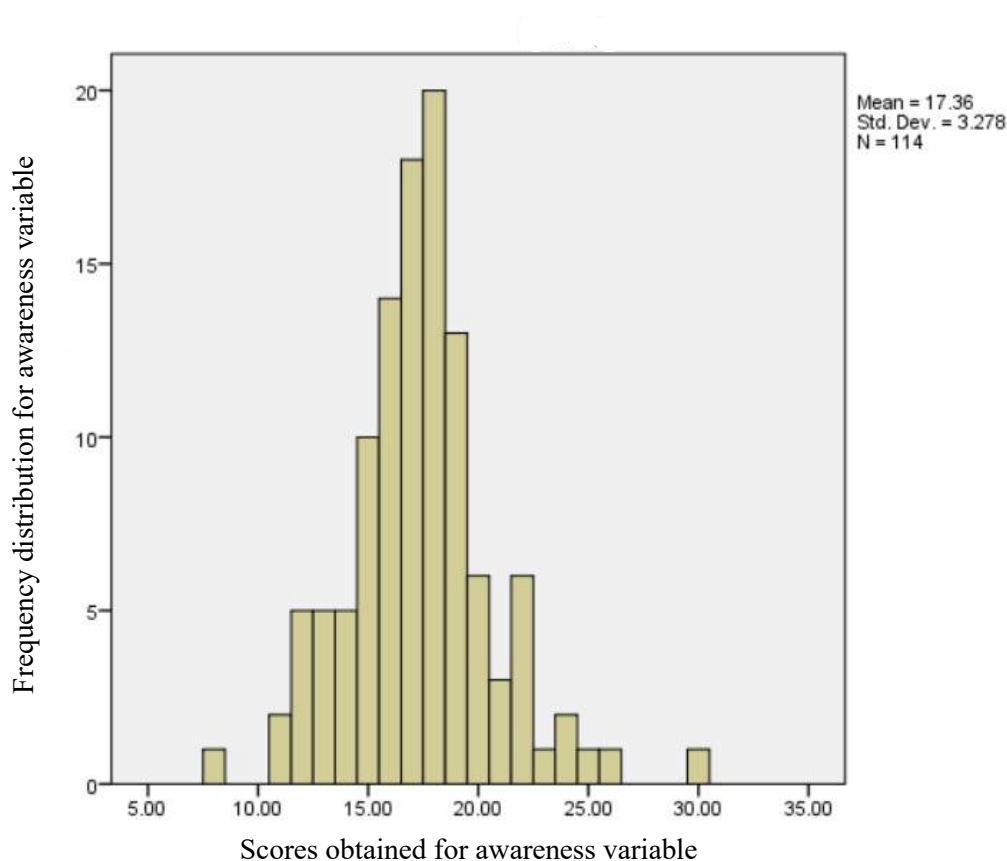


Figure 10

The Figure 10 frequency distribution table provides a concise summary of how the values of this variable are distributed across the observed cases.

4.5 Evaluation of Stress Management Techniques for College Students

4.5.1 Assessment of the effectiveness of different stress management techniques among college students.

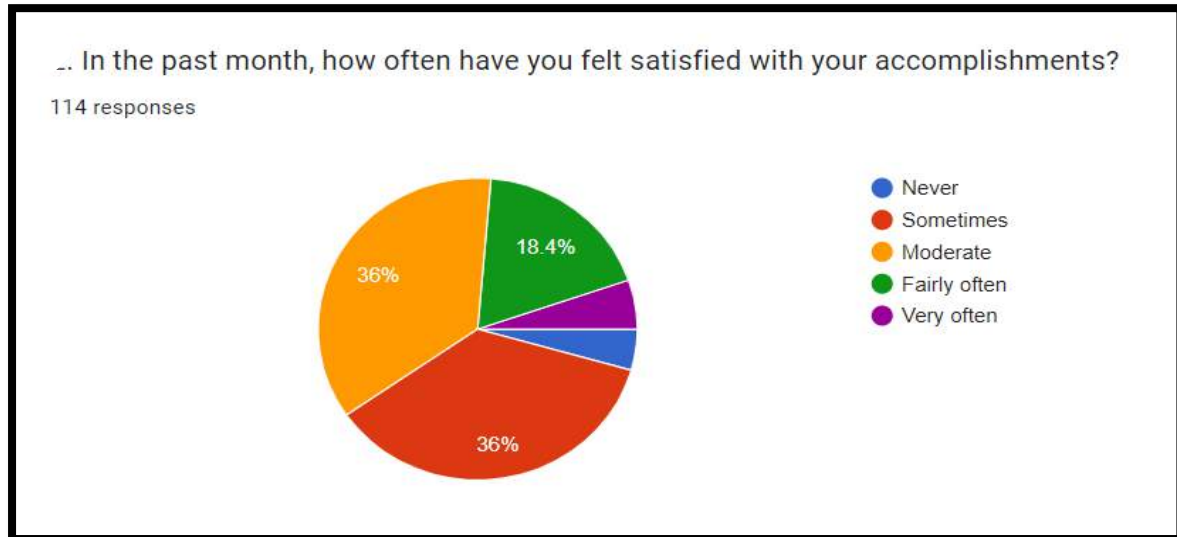


Figure 11

In the figure 11, the majority of the respondents with 36 %, corresponds to those who have moderately and occasionally felt satisfied with their accomplishments in the past month. 18.4% felt fairly satisfied with their accomplishments. There is only 9.6% of the respondents who showed little to no satisfaction. Overall, the data shows a significant portion (72%) expressed highly satisfaction with their recent accomplishments, with only around 28% feeling not satisfied during the past month.

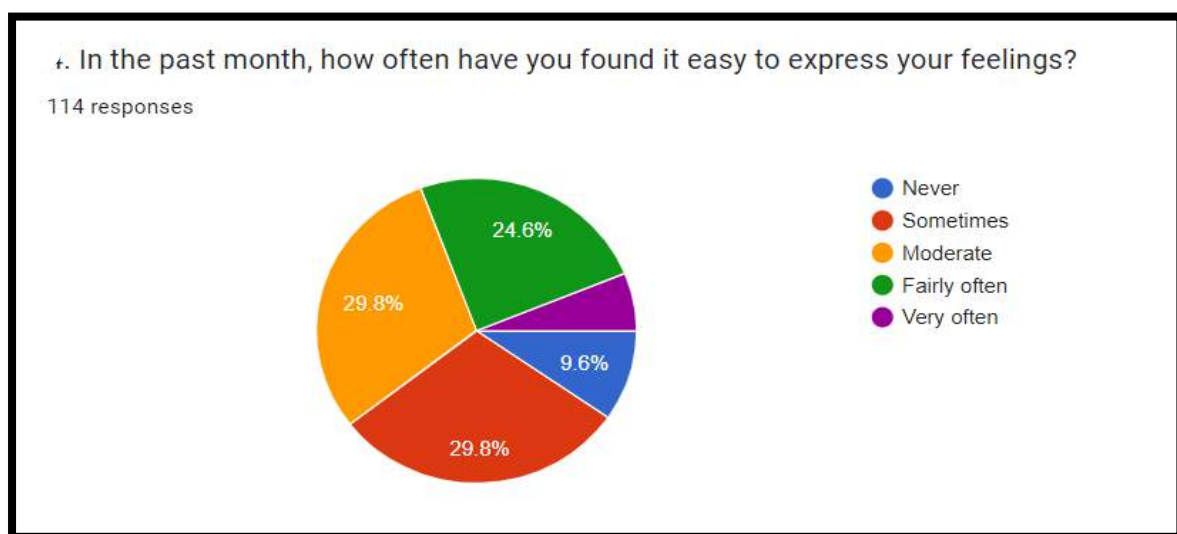


Figure 12

In the figure 12, the majority of the respondents with 29.8 %, corresponds to those who have moderately and occasionally felt easy to express in the past month. 24.6% felt fairly easy to express their feelings. Only a minor percentage (9.6%) were having no ease in expressing their feelings. Overall, the data reveals that a majority of respondents (59.6%) found it somewhat easy to express their feelings.

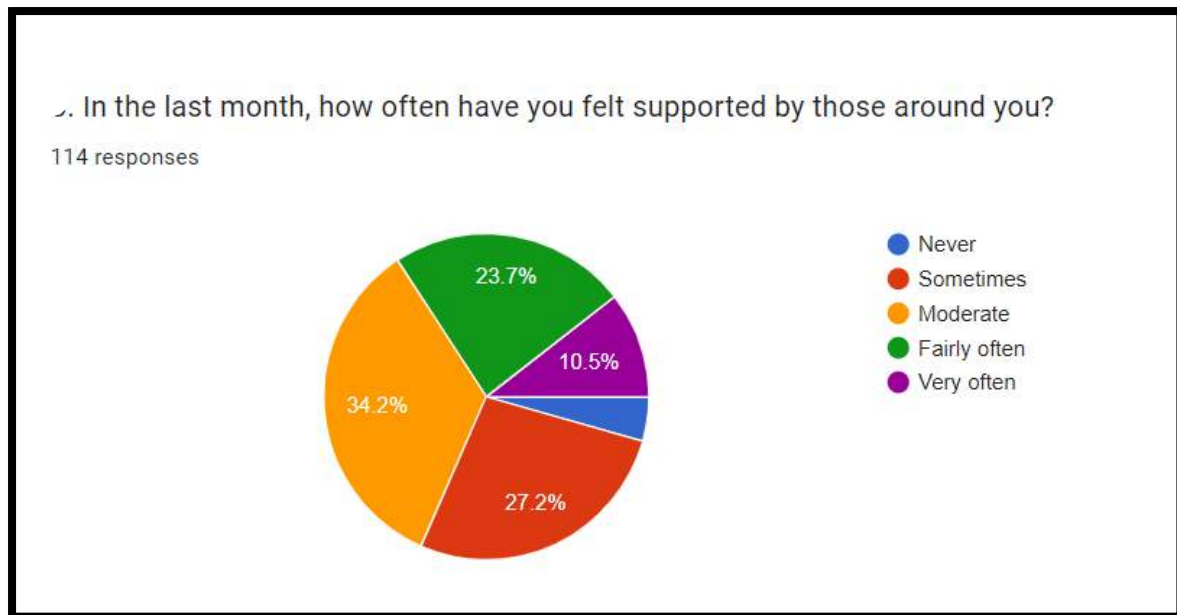


Figure 13

In the figure 13, the majority of the respondents with 34.2 %, corresponds to those who have moderately felt supported by others in the past month. Then 27.2% and 23.7% felt fairly and occasionally supported by others. There is 10.5% of the respondents who showed often supported by others. Overall, the data suggests that a significant portion (61.4%) felt supported to some degree by the people around them during the past month, while a smaller percentage of 4.4 % was not supported at all.

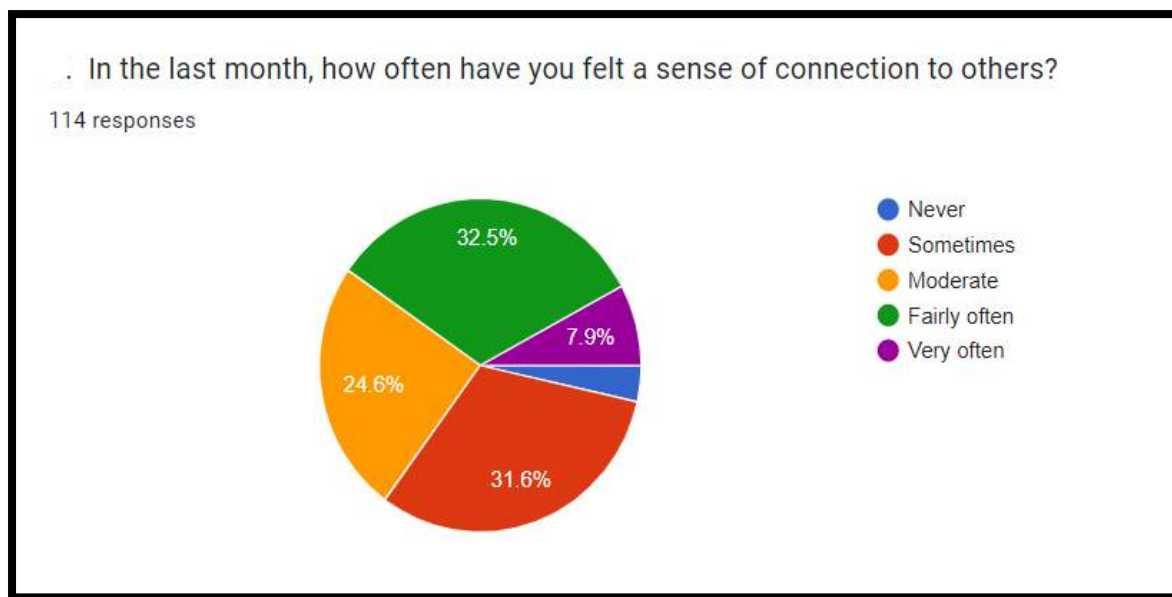


Figure 14

In the figure 14, the majority of the respondents with 32.5 %, corresponds to those who have fairly felt a sense of connection to others in the past month. Then 31.6% felt occasionally and 24.6% felt moderately connected. There is 7.9 % of the respondents who showed often easily connected to others. Overall, the data reveals that a significant portion (64.1%) felt quite moderate sense of connection to others during the past month. However, a very small percentage (3.5%) felt completely disconnected from others.

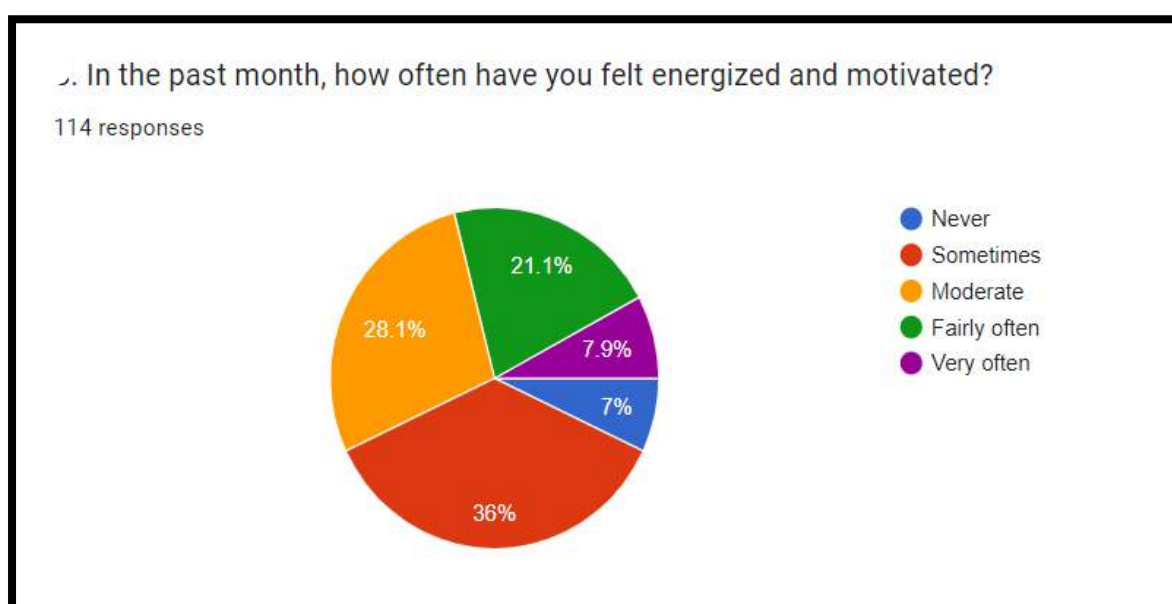


Figure 15

In the figure 15, the majority of the respondents with 36 %, corresponds to those who have occasionally felt organized and motivated in the past month. 28.1% and 21.1% felt moderately to fairly energized and motivated. While a minor group (7%) did not experience any energy or motivation. Overall, the data reveals that a majority (64.1%) felt atmost energized and motivated during the past month.

4.6 Investigation of Emotional Wellbeing's Impact on Academic Performance

4.6.1 Exploration of the relationship between emotional wellbeing and academic performance among college students.

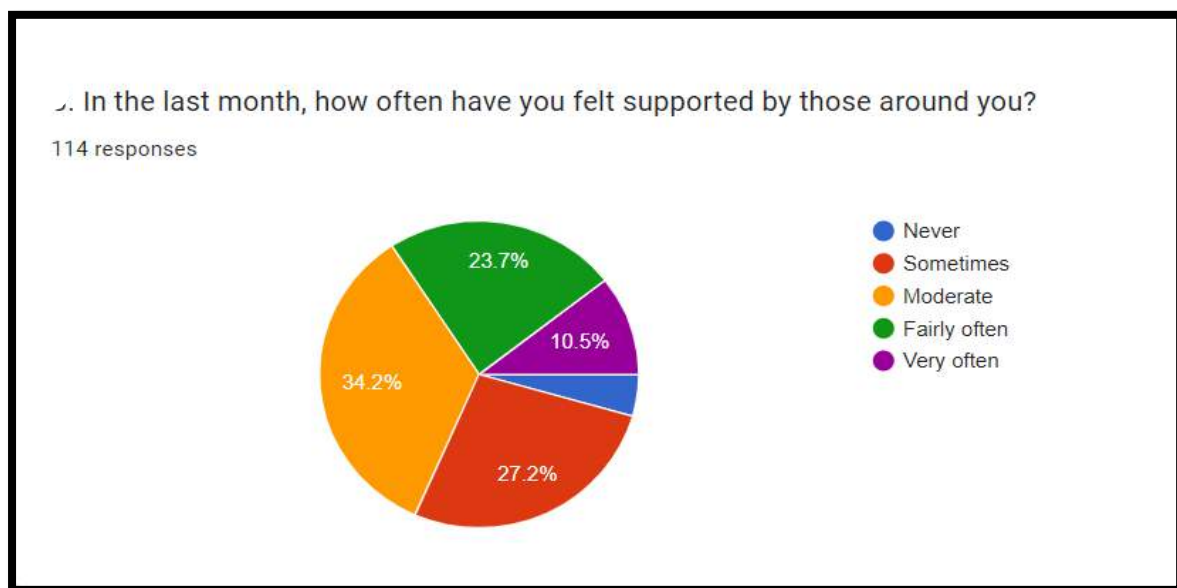


Figure 16

In the figure 16, the majority of the respondents with 34.2 %, corresponds to those who have moderately felt supported by others in the past month. Then 27.2% and 23.7% felt fairly and occasionally supported by others. There is 10.5% of the respondents who showed often supported by others. Overall, the data suggests that a significant portion (61.4%) felt supported to some degree by the people around them during the past month, while a smaller percentage of 4.4 % was not supported at all.

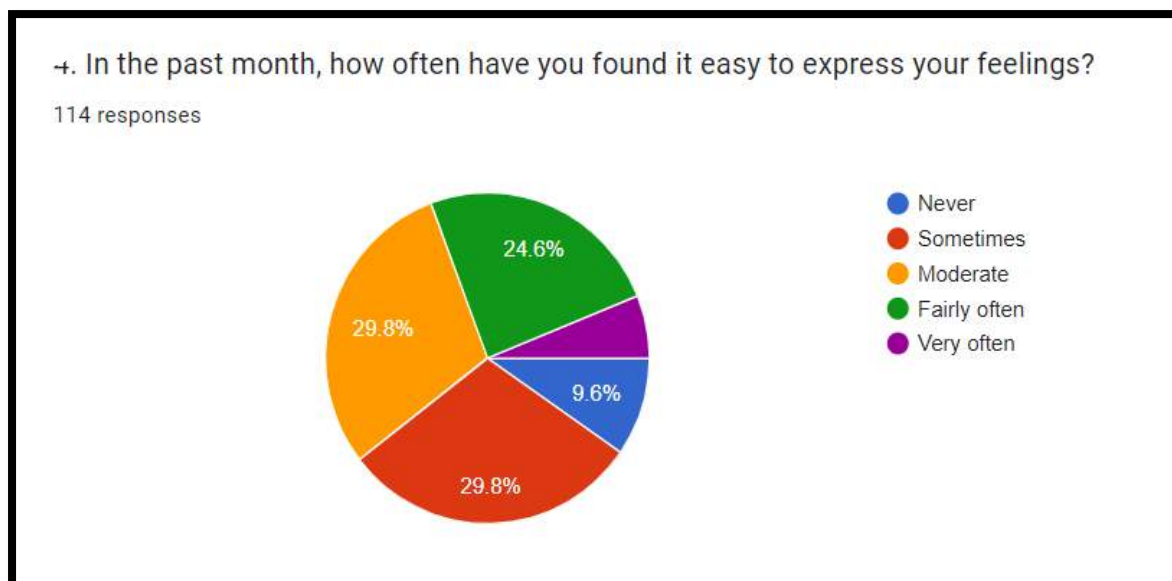


Figure 17

In the figure 17, the majority of the respondents with 29.8 %, corresponds to those who have moderately and occasionally felt easy to express in the past month. 24.6% felt fairly easy to express their feelings. Only a minor percentage (9.6%) were having no ease in expressing their feelings. Overall, the data reveals that a majority of respondents (59.6%) found it somewhat easy to express their feelings.

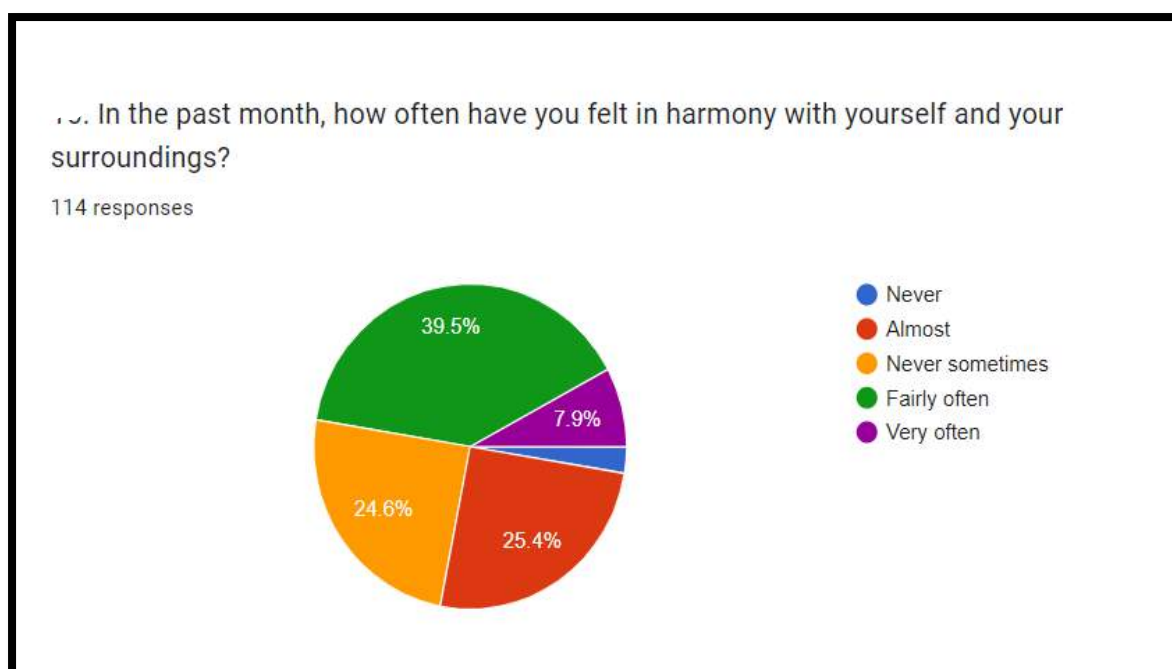


Figure 18

In the figure 18, the majority of the respondents with 39.5 %, corresponds to those who have fairly felt in harmony with self and others in the past month. The total 50% (24.6% and 25.4%) felt occasionally to moderate harmony. Only a minor percentage were having no harmony. Overall, the data reveals that a majority of respondents felt concordance.

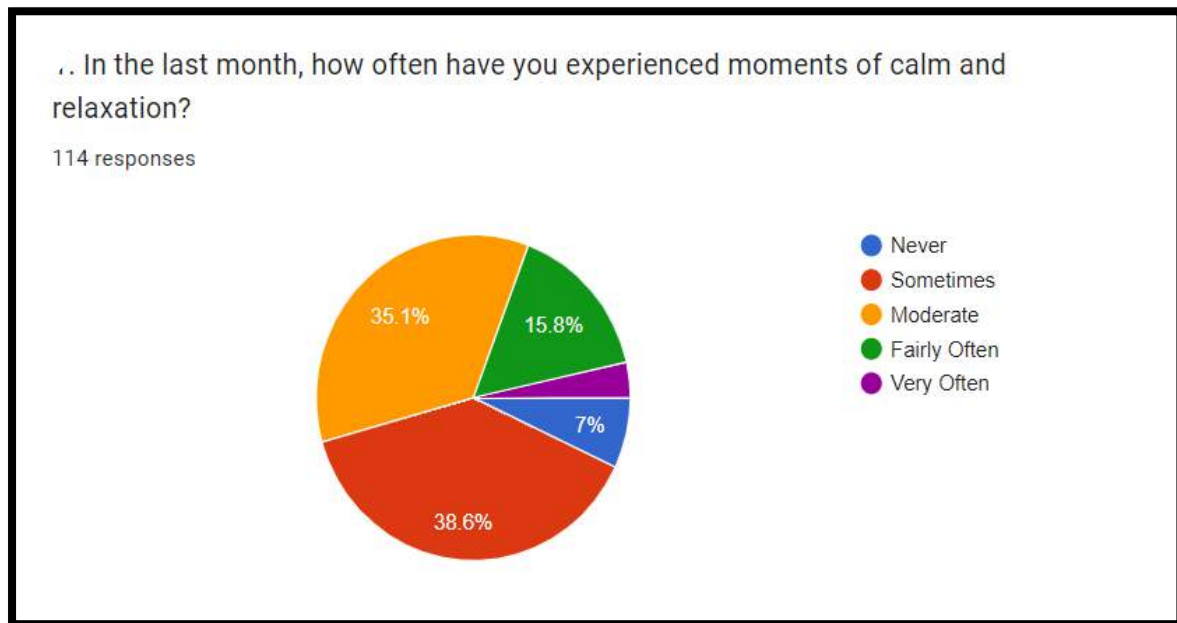


Figure 19

In the figure 19, the majority of the respondents with 73.7 %, corresponds to those who have moderately and occasionally experienced calm and relaxation in the past month. 15.8% felt fairly experienced peace. Only a minor percentage (7%) were not experiencing calm and relaxation.

SUMMARY AND CONCLUSION

CHAPTER 5

SUMMARY AND CONCLUSION

The study titled 'The Impact of Mindfulness Practices on Stress Reduction Among College Students' addresses the pressing concern of rising stress levels among college students aged 18 to 24. In response to this issue, this research investigates the effectiveness of mindfulness practices in alleviating stress. Conducted via convenience sampling and online surveys through Google Forms, the study gathered data from 114 college students. Utilizing instruments such as the Perceived Stress Scale (PSS-10), Kessler Psychological Distress Scale (K10), and Five Facet Mindfulness Questionnaire (FFMQ), the research measured stress levels and mindfulness tendencies. Through descriptive and inferential statistical analyses, the study revealed potential correlations between mindfulness practices and stress reduction. This research contributes valuable insights into mental health interventions within academic settings, highlighting the potential of mindfulness as a tool for stress management among college students. Recommendations for future research include exploring long-term effects and implementation strategies for integrating mindfulness practices into college wellness programs.

Findings

The findings of the study can be summarized as follows:

5.1 General Information of the Respondents:

Understanding the demographic profile of the respondents is crucial for contextualizing the subsequent analyses. The data revealed that the sample primarily consisted of young adults aged 18 to 24, with the majority falling within the 22 to 23 age range. Moreover, the gender distribution indicated a significant majority of female participants. This demographic snapshot provides valuable insight into the characteristics of the population under study, allowing for a more nuanced interpretation of the findings in later sections.

5.2 Correlation between Reducing Stress and Improving Emotional Wellbeing:

The correlation analysis conducted between stress reduction methods and emotional wellbeing shed light on the relationship between these variables. The moderately strong positive correlation suggests that interventions aimed at reducing stress tend to coincide with improvements in emotional wellbeing among college students. The statistical significance of

the correlation underscores the reliability of this finding, highlighting the potential efficacy of stress management strategies in promoting overall mental health. These results underscore the importance of implementing targeted interventions that address stressors to enhance emotional resilience and wellbeing among college students.

5.3 Measurement of Emotional Distress Among College Students:

The detailed examination of emotional distress levels provided valuable insights into the mental health landscape among college students. Descriptive statistics such as the mean, standard deviation, and percentile values offered a comprehensive overview of the distribution and variability of emotional distress within the sample. Additionally, the slight positive skewness indicated a tendency towards higher distress values, suggesting that a significant portion of students may be experiencing elevated levels of emotional distress. These findings underscore the importance of implementing proactive measures to support students' mental health and wellbeing, such as counselling services, stress management programs, and mindfulness interventions.

5.4 Evaluation of Students' Capacity for Mindfulness Living:

The assessment of mindfulness capacity across various dimensions provided a nuanced understanding of students' mindfulness practices. Descriptive statistics elucidated the mean scores, variability, and distribution of mindfulness-related variables within the sample. By examining facets such as observing, describing, nonreactivity, nonjudging, and acting, the analysis offered insights into different aspects of mindfulness among college students. These findings underscore the potential benefits of incorporating mindfulness-based interventions into campus wellness programs to cultivate greater self-awareness, resilience, and overall psychological wellbeing among students.

5.5 Evaluation of Stress Management Techniques for College Students:

The exploration of stress management techniques highlighted students' perceptions and experiences regarding various coping strategies. Pie charts depicted the distribution of responses across different dimensions of stress management, including satisfaction with accomplishments, feelings of support, ease of expressing emotions, sense of connection to others, and levels of energy and motivation. These findings underscore the importance of

implementing multifaceted approaches to stress management that address both individual coping skills and social support networks. By understanding students' preferences and needs in managing stress, educational institutions can tailor interventions and resources to better support student mental health and wellbeing. The varied levels of harmony and relaxation highlight the complexity of emotional states among students. These findings emphasize the need for supportive environments and interventions to enhance emotional well-being and resilience among college students.

Conclusion

The present study summarizes “The Impact of Mindfulness Practices on Stress Reduction Among College Students”. In conclusion, the comprehensive analysis presented in this section provides valuable insights into the emotional wellbeing and stress management strategies among college students. By understanding the demographic characteristics, emotional distress levels, mindfulness capacity, and perceptions of stress management techniques within the student population, educators and policymakers can develop targeted interventions and support services to foster a supportive campus environment conducive to student success and flourishing.

The study sheds light on the intricate dynamics of emotional wellbeing and stress management strategies among college students. Through an analysis of the demographic profile, it becomes apparent that the sample primarily consists of young adults, predominantly females, aged between 18 to 24 years old. Delving deeper, the study uncovers a moderately strong positive correlation between stress reduction methods and emotional wellbeing, suggesting the potential effectiveness of interventions targeting stress management in enhancing students' mental health. Furthermore, the examination of emotional distress levels unveils a concerning trend of elevated distress among a significant portion of students, emphasizing the pressing need for proactive mental health support on college campuses. In addition, the assessment of mindfulness capacity elucidates different facets of mindfulness practice among students, offering insights into avenues for cultivating self-awareness and resilience. Finally, the exploration of students' perceptions of stress management techniques underscores the importance of tailoring interventions to meet the diverse needs and preferences of students, thereby fostering a supportive campus environment conducive to student success and flourishing. Overall, the study highlights the multifaceted nature of student mental health and calls for comprehensive approaches to promote emotional wellbeing and resilience in higher education settings.

Limitations

Geographic Scope: The study's focus was limited to the Ernakulam district, which may limit the generalizability of the findings to other regions or populations. Future research could consider expanding the study to encompass a broader geographical area to enhance the representativeness of the results.

Sample Size: Difficulty in obtaining a large sample of college students practicing mindfulness may have constrained the study's statistical power and the ability to draw robust conclusions. A larger and more diverse sample would provide greater confidence in the study's findings and enable more comprehensive analysis.

Recommendations

The study puts forward the following implications:

Diverse Sampling Methods: Supplement convenience sampling with other methods like stratified or random sampling to ensure a more representative sample of college students.

Longitudinal Study Designs: Incorporate longitudinal designs to track changes in stress levels and mindfulness practices over time, providing deeper insights into the long-term effects of interventions.

Implement Mindfulness Interventions: Develop tailored mindfulness programs for college students and collaborate with university services to integrate mindfulness practices into campus support systems.

Foster a Mindful Campus Environment: Create a culture that prioritizes mental health by offering mindfulness education, promoting campus-wide mindfulness initiatives, and evaluating intervention effectiveness to continuously improve support for students.

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APPENDICES

Appendix 1

PERCEIVED STRESS SCALE

The questions in this scale ask you about your feelings and thoughts during the last month.
In each case, you will be asked to indicate by circling *how often* you felt or thought a certain way.

Name _____ Date _____

Age _____ Gender (Circle): M F Other _____

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often

- | | | | | | |
|--|---|---|---|---|---|
| 1. In the last month, how often have you been upset because of something that happened unexpectedly? | 0 | 1 | 2 | 3 | 4 |
| 2. In the last month, how often have you felt that you were unable to control the important things in your life? | 0 | 1 | 2 | 3 | 4 |
| 3. In the last month, how often have you felt nervous and "stressed"? | 0 | 1 | 2 | 3 | 4 |
| 4. In the last month, how often have you felt confident about your ability to handle your personal problems? | 0 | 1 | 2 | 3 | 4 |
| 5. In the last month, how often have you felt that things were going your way? | 0 | 1 | 2 | 3 | 4 |
| 6. In the last month, how often have you found that you could not cope with all the things that you had to do? | 0 | 1 | 2 | 3 | 4 |
| 7. In the last month, how often have you been able to control irritations in your life? | 0 | 1 | 2 | 3 | 4 |
| 8. In the last month, how often have you felt that you were on top of things? | 0 | 1 | 2 | 3 | 4 |
| 9. In the last month, how often have you been angered because of things that were outside of your control? | 0 | 1 | 2 | 3 | 4 |
| 10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? | 0 | 1 | 2 | 3 | 4 |

Appendix 2

K10 Test

These questions concern how you have been feeling over the past 30 days. Tick a box below each question that best represents how you have been .

1. During the last 30 days, about how often did you feel tired out for no good reason?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

2. During the last 30 days, about how often did you feel nervous?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

3. During the last 30 days, about how often did you feel so nervous that nothing could calm you down?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

4. During the last 30 days, about how often did you feel hopeless?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

5. During the last 30 days, about how often did you feel restless or fidgety?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

6. During the last 30 days, about how often did you feel so restless you could not sit still?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

7. During the last 30 days, about how often did you feel depressed?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

8. During the last 30 days, about how often did you feel that everything was an effort?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

9. During the last 30 days, about how often did you feel so sad that nothing could cheer you up?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

10. During the last 30 days, about how often did you feel worthless?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

Appendix 3

Five Facet Mindfulness Questionnaire (FFMQ)

Please rate each of the following statements with the number that best describes <i>your own opinion</i> of what is <i>generally true for you</i> .		Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true
FFQM 1	When I'm walking, I deliberately notice the sensations of my body moving. (OBS)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FFQM 2	I'm good at finding words to describe my feelings. (D)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FFQM 3	I criticize myself for having irrational or inappropriate emotions. (NJ-R)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
FFQM 4	I perceive my feelings and emotions without having to react to them. (NR)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FFQM 5	When I do things, my mind wanders off and I'm easily distracted. (AA-R)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
FFQM 6	When I take a shower or bath, I stay alert to the sensations of water on my body. (OBS)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FFQM 7	I can easily put my beliefs, opinions, and expectations into words. (D)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FFQM 8	I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted. (AA-R)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
FFQM 9	I watch my feelings without getting lost in them. (NR)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FFQM 10	I tell myself I shouldn't be feeling the way I'm feeling. (NJ-R)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
FFQM 11	I notice how foods and drinks affect my thoughts, bodily sensations, and emotions. (OBS)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FFQM 12	It's hard for me to find the words to describe what I'm thinking. (D-R)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
FFQM 13	I am easily distracted. (AA-R)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
FFQM 14	I believe some of my thoughts are abnormal or bad and I shouldn't think that way. (NJ-R)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
FFQM 15	I pay attention to sensations, such as the wind in my hair or sun on my face. (OBS)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FFQM 16	I have trouble thinking of the right words to express how I feel about things. (D-R)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
FFQM 17	I make judgments about whether my thoughts are good or bad. (NJ-R)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
FFQM 18	I find it difficult to stay focused on what's happening in the present. (AA-R)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1

		Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true
FFQM 19	When I have distressing thoughts or images, I "step back" and am aware of the thought or image without getting taken over by it. (NR)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FFQM 20	I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing. (OBS)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FFQM 21	In difficult situations, I can pause without immediately reacting. (NR)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FFQM 22	When I have a sensation in my body, it's difficult for me to describe it because I can't find the right words. (D-R)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
FFQM 23	It seems I am "running on automatic" without much awareness of what I'm doing. (AA-R)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
FFQM 24	When I have distressing thoughts or images, I feel calm soon after. (NR)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FFQM 25	I tell myself that I shouldn't be thinking the way I'm thinking. (NJ-R)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
FFQM 26	I notice the smells and aromas of things. (OBS)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FFQM 27	Even when I'm feeling terribly upset, I can find a way to put it into words. (D)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FFQM 28	I rush through activities without being really attentive to them. (AA-R)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
FFQM 29	When I have distressing thoughts or images, I am able just to notice them without reacting. (NR)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FFQM 30	I think some of my emotions are bad or inappropriate and I shouldn't feel them. (NJ-R)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
FFQM 31	I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow. (OBS)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FFQM 32	My natural tendency is to put my experiences into words. (D)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FFQM 33	When I have distressing thoughts or images, I just notice them and let them go. (NR)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FFQM 34	I do jobs or tasks automatically without being aware of what I'm doing. (AA-R)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
FFQM 35	When I have distressing thoughts or images, I judge myself as good or bad depending what the thought or image is about. (NJ-R)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
FFQM 36	I pay attention to how my emotions affect my thoughts and behavior. (OBS)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5


		Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true
FFQM 37	I can usually describe how I feel at the moment in considerable detail. (D)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
FFQM 38	I find myself doing things without paying attention. (AA-R)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
FFQM 39	I disapprove of myself when I have irrational ideas. (NJ-R)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1

Appendix 4

Questions



Responses 114

Settings



Section 1 of 5

The Impact of Mindfulness Practices on Stress Reduction Among College Students

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Kindly spare some of your time in filling out this form.

After section 1 Continue to next section

Section 2 of 5

GENERAL INFORMATION

Description (optional)

NAME *

Short-answer text

AGE *

Short-answer text