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The Mediating Role of Self-Esteem in the Relationship Between Mindfulness and Mental Well-Being

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Abstract

Although the role played by mindfulness in developing mental well-being has received much attention, the mediatory role of self-esteem the realm of positive psychology is discussed rarely, especially in the context of non-state universities of a developing country that has face multiple unprecedented challenges in the recent past. A sample of 329 was collected using a self-administered survey questionnaire from non-state universities in Sri Lanka. Data was analyzed by using SPSS 26 and the mediation effect was computed by using PROCESS Macro. A statistically significant positive relationship was found between mindfulness and mental well-being. A partial mediation of self-esteem was found between mindfulness and wellbeing. The findings suggest academics, administrators, and policy makers to integrate more mindfulness-based interventions in associating with undergraduates to ease their academic burden and life battles whilst paying attention to build self-esteem among non-state university students.

Keywords: Mindfulness, self-esteem, mental well-being, non-state universities, Sri Lanka

Introduction

The COVID-19 pandemic severely disrupted daily life worldwide, leading to lockdowns that affected all aspects of society, including mental health and economic stability (WHO, 2022). Education was one of the severely challenged sectors, with over 1.5 billion students globally impacted by the sudden shift from traditional classrooms to online learning (International Association of Universities, 2020; UNESCO, 2020). In Sri Lankan context, the early closure of schools and universities in March 2020 helped contain the initial spread of COVID-19. As a result, the education system quickly transitioned to online learning, which became the only mode of instruction during lockdowns (Siriyalatha & Kumarasinghe, 2021). This shift marked a significant structural change in the country's education sector ever (Rameez, Fowsar & Lumna, 2020).

The global COVID-19 pandemic, along with Sri Lanka's economic crisis and political instability, severely affected the university students' mental health by isolating them from friends and disrupting

regular university life. Most of the students were confined to homes with limited social interactions while enduring financial hardships and the stress of political uncertainty in the country. These challenges highlight the critical need to examine factors like mindfulness and self-esteem that may support their mental well-being. Although several philosophical and psychological frameworks emphasize self-awareness as key to emotional health (Wilber, 2000), its role is often overlooked, with limited research available (Brown & Ryan, 2003). Thus, mindfulness has been increasingly recognized for enhancing psychological resilience during turbulent times.

Mindfulness can be identified as the conscious awareness of the present moment, characterized by an open, nonjudgmental, and nonreactive attitude toward internal experiences including thoughts, feelings, and physical sensations as well as external inputs like sights, sounds, and smells (Brown & Ryan, 2003; Brown et al., 2007; Kabat-Zinn, 2005). Mindfulness supports individuals in overcoming automatic thinking patterns and impulsive behaviors, while encouraging more self-regulated and intentional actions (Ryan & Deci, 2000).

Self-esteem is a fundamental psychological concept associated with numerous healthy outcomes, such as emotional well-being, effective psychological functioning, and increased prosocial behavior (Orth & Robins, 2022). Randal, Pratt, and Bucci (2015) found a strong connection between mindfulness and self-esteem. This connection might have derived from the fact that individuals with higher mindfulness are less affected by negative thoughts associated with low self-esteem (Pepping et al., 2013). According to Ryan and Deci (2000), being mentally aware and attentive encourages people to act in ways that align with their personal needs and interests, making them less vulnerable to self-critical thoughts. Several researches have highlighted that individuals with low self-esteem tend to experience a wider range of negative emotions more frequently than those with higher self-esteem (Li et al., 2023).

The compounded and escalated effects of COVID-19 and the subsequent economic crisis have significantly challenged the mental well-being of university students in Sri Lanka. Disrupted academic activities, as a result of sudden shifts from on-site to on-line education and vice-versa with no proper training or prior notice burdened students with inconsistencies in learning. Further, with increased financial strain on families caused escalated psychological distress, university students, particularly in non-state universities and higher education institutes, faced limited institutional support (Perera et al., 2023). Although mindfulness has been well-recognized as a protective shield that guards mental well-being by promoting awareness, emotional regulation, and stress reduction globally (Keng, Smoski, & Robins, 2011), the mechanisms through which mindfulness impacts well-being remain underexplored in the Sri Lankan higher education context. Self-esteem, as a core psychological resource, has been shown in prior research to mediate the relationship between mindfulness and mental well-being in similar populations (Bajaj et al., 2016), yet evidence from Sri Lanka, particularly under the dual pressures of a pandemic and economic crisis, is scarce. Therefore, understanding this mediatory relationship is crucial, as it can inform the design of targeted interventions that not only cultivate mindfulness but also strengthen self-esteem, thereby enhancing students' resilience and mental health outcomes. Consequently, this study addresses an important empirical gap by examining how mindfulness relates to mental well-being through self-esteem in non-state universities and higher education institutes in Sri Lanka during the post-pandemic and post-economic crisis period, providing insights that are valuable for theory, institutional policy, and mental health interventions.

Extant literature links mindfulness to higher self-esteem (Brown & Ryan, 2003; Rasmussen & Pidgeon, 2011; Ryan & Deci, 2000) and self-esteem to improved well-being (Kong et al., 2013). This study proposes that self-esteem plays a mediatory role in the relationship between mindfulness and mental well-being. Accordingly, our study proposes two hypotheses; (1) there is a statistically significant relationship between mindfulness and mental well-being, (2) self-esteem mediates the relationship between mindfulness and mental well-being of undergraduates of private universities in Sri Lanka. The conceptual framework is depicted in Figure 1 below.

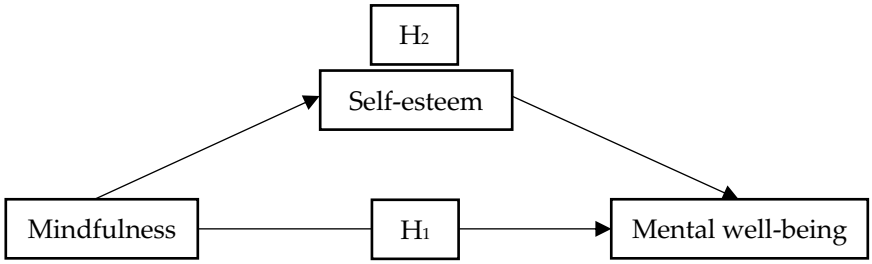

Figure 1: Conceptual framework

Methods

Sample of the study and method of data collection

The Annual Performance Report of Ministry of Education – Higher Education stated that a total of 47,183 students have enrolled to non-state universities and higher education institutes in 2023 (Ministry of Education – Higher Education, 2024). Accordingly, a sample size of 381 was determined using Krejcie and Morgan (1970) to represent this population. By using convenience sampling technique, we collected 329 responses for the analysis. A survey questionnaire was prepared in the English language, which is considered to be the medium of lecture delivery in most of the universities in Sri Lanka. Using the google forms, the survey instrument was shared among non-state universities and higher education institutes by identifying a contact person from each university or institute during a period of three months. Further, proper instructions were given related to the voluntary participation, while assuring anonymity of the participants was assured to ensure issues in evaluation apprehension.

Out of 329, 216 were males and 113 were females ranging from 15 to 25 years of age. The mean age is 20.39 years with a standard deviation of 2.199 years. The ethnicity of the sample comprised 75.08% of Sinhalese, followed by 12.45% Tamils, 11.25% Muslims, and a relatively smaller proportion of 1.22% of Burghers.

The study employed the 15-item Mindful Attention Awareness Scale (MASS) to measure the trait of mindfulness (Brown & Ryan, 2003) using a five-point Likert scale ranging from 1 = almost always to 6 = almost never. Self-esteem was measured by employing the 10-item Rosenberg Self-esteem Scale (Rosenberg, 1965) with a five-point Likert scale ranging from 1 = strongly disagree - 4 = strongly agree. A 7-item, shortened version of Warwick-Edinburgh mental wellbeing scale with a Likert scale ranging from 1 = none of the time - 5 = all of the time was adopted to measure the mental well-being of undergraduates (Stewart-Brown et al., 2009). Although these scales were originally developed in Western contexts, a pilot test was conducted with a small group of students from non-state universities in Sri Lanka to assess clarity, comprehension, and cultural relevance. The results indicated that all scales were understandable and appropriate for the local context, and no adjustments were required. The pilot test also confirmed that the scales were reliable and suitable for measuring mindfulness, self-esteem, and mental well-being among Sri Lankan undergraduates.

Results

First, the common method variance was measured using Harman's single-factor test, and obtained satisfactory results (for the procedure and thresholds, see Hair et al., 2006). The associations between mindfulness, self-esteem, and mental well-being were examined computing Pearson correlation

coefficients. As depicted in Table 1, positive and statistically significant (p=0.01 level) correlation coefficients revealed meaningful associations among all variables of the study. A moderate correlation is found between mindfulness and self-esteem ($r = 0.344$, $p < 0.01$) indicating that the undergraduates who are highly mindful have a tendency to report relatively stable or enduring overall assessments of themselves more. Further, a strong positive correlation between mindfulness and mental well-being ($r = 0.481$, $p < 0.01$) is found. This indicates that mindfulness is essential in gaining a better state of mental well-being. Remarkably, this study shows that self-esteem correlates with mental well-being substantially ($r = 0.500$, $p < 0.01$) demonstrating undergraduates with high levels of self-esteem are more inclined to be psychologically healthy. Building confidence in findings, all latent variables of the study revealed a high level of internal consistency having more than 0.70 Cronbach's alpha values (Nunnally, 1978).

Table 1: Mean, standard deviations (SD), reliabilities, and inter-correlations among study variables

	Variables	Mean	SD	Cronbach Alpha	1	2	3
1	MID	3.58	1.008	0.900			
2	SE	2.78	0.456	0.755	.344**		
3	MW	3.31	0.715	0.786	.481**	.500**	

**. Correlation is significant at the 0.01 level (2-tailed).

In order to investigate the role played by self-esteem (SE) as a mediator and its effect on the relationship between mindfulness (MID) and mental wellbeing (MWB) of undergraduates of non-state universities in Sri Lanka, a mediation analysis was performed using PROCESS macro (Model 4). The results demonstrated a statistically significant total effect between MID and MW ($b = 0.3412$, $t = 9.93$, $p < .001$, 95% CI [0.2736, 0.4089]). A partial mediation was indicated after introducing SE into the model where the direct effect of MID on MW was statistically significant ($b = 0.2487$, $t = 7.42$, $p < .001$, 95% CI [0.1828, 0.3146]). Further, the indirect effect of MID on MW via SE remained significant ($b = 0.0926$, BootSE = 0.0201, 95% BootCI [0.0557, 0.1335]). Furthermore, the model demonstrates a moderate size effect in explaining approximately 35.8% of the variance in mental well-being ($r = .3584$).

Discussion

The findings of the study supported the hypothesis 01. In a world where digital transformation is inevitably and rapidly changing lives, and individuals' decision making by producing an immense overload of information (Phillips-Wren & Adya, 2020), paying attention to momentarily experiences with a non-judgmental attitude, which is also known as mindfulness (Kabat-Zinn, 2003) is an essential requisite for students to ensure their mental well-being. Although there are studies that establish this relationship more studies that capture the shades of contextual differences are needed. According to the statistics, this positive and significant relationship indicates that undergraduate students' mental well-being can be strongly predicted by their level of mindfulness, which in turn would facilitate in regulating emotions and cognitive flexibility as means of fostering mental well-being (Good et al., 2016). Especially, in the context of non-state higher education sector in Sri Lanka, undergraduates are facing multiple socio-economic challenges such as unfair comparisons of talent, burden of student loans, and struggles of managing work-life balances along with academic stress and life transitions. Therefore, practicing mindfulness may serve as a shield of protection inevitably. Accordingly, necessary action can be taken to promote and foster mindfulness among undergraduates of non-state universities in Sri Lanka.

The findings of the study supported the hypothesis 02. Accordingly, it is suggested that undergraduates who are high in mindfulness more inclined to possess greater self-esteem leading to report a higher score in overall mental well-being. Aligning with the existing literature, when undergraduates are encouraged to identify thoughts as mental processes rather than mere facts, they are convinced to be less self-critical in an unduly manner (Bajaj et al., 2016). Eventually, this will help undergraduates to be able to self-regulate their emotions and activities by being in align with their own values and interests in terms of fostering mental well-being with non-judgmental manner. Also, this empowers undergraduates with low self-esteem to reassess their thoughts and feeling as means of pursuing mental well-being. Therefore, it is plausible to predict self-esteem plays a partial mediation between mindfulness and mental well-being of undergraduates of non-state universities.

As per the findings, self-esteem plays a key role in mediating the relationship between mindfulness and mental well-being among non-state university students in Sri Lanka. With mindfulness, students become more aware about their present-moment, reducing rumination by being self-critical. This improves their self-assessments and self-acceptance of internal strengths and weaknesses. Improved self-esteem can act as a barrier assisting students in managing their stressors related to academic activities and social comparisons. Accordingly, their mental well-being is empowered. For instance, Artika et al. (2021) revealed the relationship between mindfulness and student engagement can be mediated by self-esteem. Similarly, Awad et al. (2022) found that self-esteem mediates the relationship between mindfulness and perfectionism. Further, it is found that mindfulness and related positive psychological factors are highly associated with heightened self-esteem levels, improving well-being (Tran et al., 2022). Therefore, it can be plausibly stated that mindfulness enhances students' self-esteem which in turn buffers their stress and negative affect, leading to greater mental well-being.

Implications, limitations, and directions for future research

The findings of the study underscore both theoretical and practical contributions. Despite its direct relationship with mental well-being, mindfulness is an essential trait that any undergraduate should be equipped with. Together with self-esteem, mindfulness can foster a healthy mind space for undergraduates to pursue their academic and life goals effectively. Therefore, it is inevitable that this study contributes to the ever-growing body of knowledge in the field of positive psychology, mental health, and mindfulness-based interventions. By integrating mindfulness training into university curricula, educators can draft proper policies to ensure counseling services as means of gearing students with coping strategies to manage stress, and foster self-acceptance, and establish resilience within. By implementing mindfulness-based workshops, non-state universities can embed practices of developing self-esteem into induction programs as means of supporting them to be strengthened and value themselves to foster well-being. These directions offer a plethora of avenues for organizations to design evidence-based, contextually relevant interventions that enhance both psychological resources and overall student well-being.

This study adopted a quantitative approach leading to limited depth of responses due to its structured closed-ended questions. Although the results indicated otherwise, the findings of survey-based methods can be distorted due to social desirability bias. Cross-section time horizon limits the ability to see the longitudinal impact. Further, the convenience sampling hampers to generalizability of findings. Therefore, future studies can use qualitative, in-depth inquiries to gain more nuanced ideas. By conducting a longitudinal study, more robust findings can be found. Further, this study only used a single mediator, self-esteem. Meanwhile cross-cultural comparisons can be used to clarify whether the mediation effects exert influence across different educational, social, and cultural settings. Future studies can explore other psychological variables such as individual locus of hope, resilience as mediators for grasp a broader understanding of the context of the study.

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