

Examining the Mediating Role of Mindfulness in the Relationship Between Components of Resilience and Self-Efficacy with Psychological Well-Being and Emotion Regulation

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Objective: The present study aimed to examine a structural model explaining psychological well-being and emotion regulation based on resilience and self-efficacy, with the mediating role of mindfulness.

Methods and Materials: This applied study employed a descriptive-correlational design using structural equation modeling. The statistical population consisted of individuals diagnosed with multiple sclerosis (MS) who referred to medical centers in Tehran in 2021. Using purposive convenience sampling and considering model requirements, 170 participants were initially recruited, of whom 152 provided complete and analyzable questionnaires. Data were collected using Ryff's Psychological Well-Being Questionnaire (long form), the Cognitive Emotion Regulation Questionnaire, the Connor-Davidson Resilience Scale, the General Self-Efficacy Scale, and the Mindful Attention Awareness Scale (MAAS). Data analysis was conducted using AMOS software, and model fit was evaluated through multiple goodness-of-fit indices, including CMIN/DF, GFI, AGFI, CFI, IFI, TLI, and RMSEA.

Findings: Pearson correlation analyses indicated significant positive associations among mindfulness, resilience, self-efficacy, psychological well-being, and emotion regulation ($p < .01$). Structural equation modeling revealed that resilience and self-efficacy had significant direct effects on psychological well-being and emotion regulation. Mindfulness also showed significant direct effects on both outcome variables. Moreover, indirect path analyses and Sobel test results confirmed that mindfulness significantly mediated the relationships between resilience and psychological well-being, resilience and emotion regulation, self-efficacy and psychological well-being, and self-efficacy and emotion regulation.

Conclusion: The findings support the central role of mindfulness as a key psychological mechanism through which resilience and self-efficacy contribute to enhanced psychological well-being and adaptive emotion regulation, highlighting the importance of integrative models in mental health research and intervention design.

Keywords: mindfulness; resilience; self-efficacy; psychological well-being; emotion regulation.

1. Introduction

Psychological well-being has increasingly been recognized as a core indicator of mental health and adaptive functioning, extending beyond the mere absence of psychological disorders to encompass positive psychological states, effective emotional functioning, and meaningful engagement with life. Contemporary psychological models conceptualize psychological well-being as a multidimensional construct that includes self-acceptance, positive relations with others, autonomy, purpose in life, personal growth, and environmental mastery. These dimensions collectively reflect individuals' capacity to manage life demands, regulate emotions, and maintain psychological balance when confronted with stressors and adversity. In recent years, empirical research has highlighted the growing importance of identifying protective psychological factors that promote well-being, particularly in populations exposed to chronic stress, health challenges, or social vulnerability (Aboudi & Abedi, 2019; Namani & Khodadadi, 2019).

Among the psychological resources most frequently associated with well-being, resilience has received considerable scholarly attention. Resilience refers to the dynamic process through which individuals effectively adapt to adversity, trauma, or significant life stressors, while maintaining or restoring psychological equilibrium. Rather than being a fixed trait, resilience is understood as a modifiable capacity shaped by cognitive, emotional, and social resources. Previous studies have consistently demonstrated that higher levels of resilience are associated with greater psychological well-being, reduced psychological distress, and improved emotional adjustment across diverse populations (Behrami & Zahedi, 2018; Ranjbar et al., 2021; Sajjad & Thakur, 2025). These findings suggest that resilience plays a central role in enabling individuals to cope with internal and external stressors and to sustain positive psychological functioning.

Self-efficacy represents another key psychological construct closely linked to psychological well-being. Defined as individuals' beliefs in their ability to organize and execute actions required to manage prospective situations, self-efficacy influences motivation, perseverance, emotional responses, and behavioral choices. High self-efficacy has been shown to predict better coping strategies, lower vulnerability to stress, and enhanced psychological well-being. Empirical evidence indicates that individuals with strong self-efficacy beliefs are more likely to perceive

challenges as manageable and to engage in adaptive emotional regulation strategies (Rostami et al., 2017; Schwarzer et al., 2024). Consequently, self-efficacy is increasingly viewed as a foundational mechanism through which individuals translate psychological resources into effective emotional and behavioral outcomes.

Emotion regulation constitutes a fundamental psychological process that underpins mental health and well-being. It refers to individuals' ability to monitor, evaluate, and modify emotional reactions in ways that facilitate adaptive functioning and goal attainment. Maladaptive emotion regulation strategies, such as rumination or catastrophizing, have been linked to psychological distress, whereas adaptive strategies are associated with higher levels of psychological well-being and emotional stability. Recent studies emphasize that emotion regulation does not operate in isolation but is embedded within broader psychological systems involving resilience, self-efficacy, and cognitive-emotional awareness (Fooladchang & Davoud, 2025; Rezagholiyan et al., 2025). Understanding how these constructs interact is therefore essential for developing comprehensive models of psychological well-being.

Within this integrative framework, mindfulness has emerged as a pivotal construct that may explain how resilience and self-efficacy influence psychological well-being and emotion regulation. Mindfulness is commonly defined as purposeful, present-moment awareness characterized by openness, acceptance, and nonjudgment toward internal experiences such as thoughts, emotions, and bodily sensations. Unlike cognitive control strategies that aim to suppress or change internal experiences, mindfulness emphasizes acceptance and awareness, thereby fostering psychological flexibility. Accumulating evidence suggests that mindfulness enhances emotional awareness, reduces emotional reactivity, and supports adaptive emotion regulation processes (Gu et al., 2022; Zamani & Zolfaghari, 2022).

A growing body of research indicates that mindfulness is positively associated with psychological well-being across clinical and non-clinical populations. Studies have demonstrated that mindfulness contributes to increased life satisfaction, emotional balance, and mental health by promoting adaptive cognitive and emotional processes. For example, mindfulness-based interventions have been shown to reduce symptoms of anxiety, depression, and stress while simultaneously enhancing well-being and emotional regulation capacities (Amiri Majd et al., 2019; Matiz et al., 2025; Zheng et al., 2025). These findings underscore the

relevance of mindfulness not only as an intervention target but also as a psychological mechanism linking individual resources to well-being outcomes.

Importantly, mindfulness has been increasingly examined as a mediating variable in the relationship between psychological resources and well-being. Empirical studies suggest that mindfulness may serve as a pathway through which resilience exerts its positive effects on mental health and emotional functioning. Pangngay (2024) reported that mindfulness partially mediated the relationship between resilience and psychological well-being, indicating that resilient individuals may benefit from heightened mindful awareness that facilitates emotional balance and stress management (Pangngay, 2024). Similarly, Paleari et al. (2022) demonstrated that mindfulness mediated the relationship between self-forgiveness and psychological well-being, highlighting its role in translating adaptive psychological traits into well-being outcomes (Paleari et al., 2022).

The mediating role of mindfulness has also been explored in relation to self-efficacy. Individuals with high self-efficacy are more likely to engage in purposeful self-regulation and adaptive coping, which may foster greater mindfulness in daily life. In turn, mindfulness may enhance individuals' ability to regulate emotions effectively and maintain psychological well-being. Prior research supports this indirect pathway, suggesting that mindfulness strengthens the impact of self-efficacy on emotional and psychological outcomes by promoting present-centered awareness and reducing maladaptive cognitive patterns (Mohammad & Quoquab, 2024; Wang, 2025). These findings point to mindfulness as a crucial psychological process that integrates cognitive beliefs and emotional functioning.

Recent international research has further emphasized the multidimensional role of mindfulness in psychological models of well-being. Bitar et al. (2023) found that mindfulness indirectly influenced well-being through its association with mental health indicators, reinforcing its function as an intermediary mechanism rather than a standalone predictor (Bitar et al., 2023). Similarly, Villegas (2025) demonstrated that emotional competencies predicted psychological well-being through resilience and self-esteem, constructs that are closely aligned with mindful awareness and emotion regulation processes (Villegas, 2025). These studies collectively highlight the necessity of examining mindfulness within comprehensive structural models that account for multiple psychological pathways.

Despite the expanding literature, several gaps remain. First, many studies have examined mindfulness, resilience, self-efficacy, and emotion regulation independently, without integrating them into a unified structural framework. Second, limited research has simultaneously investigated both psychological well-being and emotion regulation as outcome variables within a single model. Third, there is a scarcity of studies that test the mediating role of mindfulness in culturally specific contexts, particularly within non-Western populations, where sociocultural factors may shape emotional processes and psychological resources differently (Namani & Khodadadi, 2019; Ranjbar et al., 2021). Addressing these gaps is essential for advancing theoretical understanding and informing culturally sensitive psychological interventions.

Moreover, recent advances in positive psychology and applied mental health research emphasize the importance of developing explanatory models that move beyond direct effects and explore underlying mechanisms. Structural equation modeling offers a robust methodological approach for testing complex relationships among latent psychological constructs and for evaluating mediating processes within comprehensive theoretical frameworks. By employing such models, researchers can gain deeper insights into how resilience and self-efficacy contribute to well-being and emotional functioning through mindfulness-related processes (Kyriazos & Poga, 2024; Rezagholiyan et al., 2025).

In light of the theoretical and empirical considerations outlined above, there is a clear need for research that integrates resilience, self-efficacy, mindfulness, psychological well-being, and emotion regulation within a single structural model. Such an approach can enhance understanding of the dynamic interplay among these constructs and provide evidence-based guidance for psychological interventions aimed at strengthening well-being and emotional resilience. Therefore, the present study aims to develop and test a structural model in which mindfulness mediates the relationships between resilience and self-efficacy with psychological well-being and emotion regulation.

2. Methods and Materials

2.1. Study Design and Participants

The present study, with respect to its objective, is an applied research project, and with regard to the method of data collection, it is descriptive in nature; in terms of data

gathering, it is a survey study and, more specifically, employs a structural equation modeling (SEM) approach.

The theoretical foundations and previous studies related to this research were reviewed using a library-based method, while the data required for hypothesis testing were collected through a field method using questionnaires. The theoretical studies of this research were gathered from articles, books, journals, and reputable websites. Questionnaires were used to collect data related to hypothesis testing.

The statistical population of this study included all individuals diagnosed with multiple sclerosis (MS) who referred to medical centers in the city of Tehran in 2021. According to recommendations by researchers in structural equation modeling, the sample size should be at least ten times the number of variables plus 50. In the present study, a total of 10 variables were included; therefore, a minimum sample size of 150 participants was required. The sampling method used was purposive convenience sampling, such that individuals with multiple sclerosis were selected based on the study's inclusion and exclusion criteria.

For sample selection, the city of Tehran was first divided into five regions: north, south, east, west, and center, and two districts were selected from each region. For the purposes of the study, hospitals and private medical centers were selected as follows: in the northern region, Districts 1 and 3; in the central region, Districts 6 and 2; in the western region, Districts 5 and 22; in the southern region, Districts 15 and 17; and in the eastern region, Districts 3 and 4. From each district, 24 participants were randomly selected. Accordingly, the total selected sample comprised 240 individuals.

The inclusion criteria for this study consisted of having a confirmed medical record of multiple sclerosis, being between 25 and 50 years of age, possessing basic literacy skills (reading and writing), and having at least six months elapsed since the confirmation of MS diagnosis. The exclusion criteria included the presence of other psychiatric disorders, other physical illnesses, or additional physical disabilities. The procedural flowchart of the research process is presented below.

2.2. Measures

Ryff's Psychological Well-Being Questionnaire (long form): This scale was developed by Carol Ryff in 1989. It consists of 84 items and measures six factors. Participants respond to the items on a 6-point Likert scale ranging from "strongly disagree" to "strongly agree." Forty-seven items

are scored directly and thirty-seven items are reverse-scored. To examine the validity of the instrument and its relationship with measures assessing personality traits that were also considered indicators of psychological well-being, Ryff used measures such as Bradburn's Affective Balance Scale (1969), Neugarten's Life Satisfaction Scale (1965), and Rosenberg's Self-Esteem Scale (1965). This instrument comprises six subscales: environmental mastery (19 items), purpose in life/spirituality (13 items), happiness and optimism (19 items), personal growth (8 items), positive relations with others (8 items), and self-acceptance/autonomy (10 items). In Iran, in a study conducted on a student sample, internal consistency was assessed using Cronbach's alpha. The results were 0.77 for environmental mastery, 0.78 for personal growth, 0.77 for positive relations with others, 0.70 for purpose in life, 0.71 for self-acceptance, 0.78 for autonomy, and 0.82 for the total score. The validity of this scale was also reported to be acceptable.

Cognitive Emotion Regulation Questionnaire (CERQ) by Garnefski et al. (2001): The Cognitive Emotion Regulation Questionnaire is a self-report instrument designed by Garnefski, Kraaij, and Spinhoven (2001). The original version of this questionnaire consists of nine components, five of which (acceptance, refocus on planning, positive refocusing, positive reappraisal, and putting into perspective) represent positive emotion regulation strategies, and four of which (self-blame, other-blame, rumination, and catastrophizing) represent negative emotion regulation strategies (Sanaei, Alaghband, & Hooman, 2015). A total score is obtained from the sum of the 36 items, representing the use of cognitive emotion regulation strategies, with scores ranging from 36 to 180. This questionnaire is applicable to both normal and clinical groups aged 12 years and older. Responses are recorded on a 5-point Likert scale (always, often, usually, sometimes, never). The validity and reliability of this questionnaire were confirmed by Omidi-Far et al. (2016), with reliability reported as 0.70 using Cronbach's alpha.

Connor-Davidson Resilience Scale (2003): This questionnaire consists of 25 items rated on a 5-point scale, with response options scored from 0 to 4. Specifically, "completely false" is scored as 0, "rarely true" as 1, "sometimes true" as 2, "often true" as 3, and "always true" as 4. The sum of the item scores yields the total scale score. In a study conducted by Samani et al., the reliability of this scale was reported as 0.87 using Cronbach's alpha. Mohammadi reported a reliability coefficient of 0.89 using

Cronbach's alpha, and item-total correlation coefficients ranging from 0.41 to 0.64, indicating acceptable validity.

General Self-Efficacy Scale by Schwarzer and Jerusalem (1996): This questionnaire consists of 10 items designed to assess individual self-efficacy. Responses are rated on a 5-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). Foladchang (2003) reported a Cronbach's alpha coefficient of 0.83 for this scale, while Tajalli and Ardalan (2010) reported a Cronbach's alpha of 0.84.

Mindful Attention Awareness Scale (MAAS): This questionnaire was developed by Brown and Ryan (2003) to measure mindfulness or present-moment attention and awareness. It consists of 15 items rated on a 6-point Likert scale ranging from "almost always" (1) to "almost never" (6), with total scores ranging from 15 to 90. Higher scores indicate greater mindfulness. Brown and Ryan (2003) reported test-retest reliability of 0.81 and Cronbach's alpha of 0.82 for this scale, and also reported satisfactory convergent and divergent validity. In a study by Manavipour, Baghdarsarians, and Khodaei-Sakhlo (2013), the validity of the scale was confirmed using confirmatory factor analysis, and reliability was reported as 0.85 using Cronbach's alpha.

2.3. Data Analysis

To analyze the data, structural equation modeling was conducted using AMOS software. Initially, the assumptions underlying structural equation modeling were examined. In the literature on structural equation modeling, there is no complete consensus regarding these assumptions. Malone and Laviansky (2012) argue that structural equation modeling is a generalized case of regression analysis and therefore shares similar assumptions. In general, the most important assumptions of structural equation modeling include the continuity of dependent variables, independence of observations, absence of severe multicollinearity among independent variables, absence of univariate and multivariate outliers, and normality of the distribution (Kline, 2016). To evaluate overall model fit, the following indices were used: the chi-square to degrees of freedom ratio (CMIN/DF), the root mean square error of approximation (RMSEA), the goodness-of-fit index (GFI), the adjusted goodness-of-fit index (AGFI), the incremental fit index (IFI), and the comparative fit index (CFI). A model is considered to have acceptable fit when the RMSEA value is

less than 0.05, the GFI, AGFI, IFI, and CFI values are greater than 0.90, and the CMIN/DF value falls between 2 and 3.

3. Findings and Results

Table 1 presents the descriptive statistics for all study variables and their respective components. As shown, the mean scores of psychological well-being components ranged from 3.76 to 3.91, indicating a generally moderate to high level of psychological well-being among participants. Among these components, personality aspects and responsibility in daily life showed the highest mean values, suggesting relatively positive self-perceptions and effective daily functioning in individuals with multiple sclerosis.

Regarding resilience, all components demonstrated relatively high mean scores, ranging from 3.79 to 3.94. The highest mean was observed for seeking help from self, close friends, and God, reflecting the prominent role of personal and social-spiritual coping resources in this population. The relatively low standard deviations across resilience components indicate a homogeneous distribution of resilience-related characteristics among participants.

Self-efficacy components also exhibited moderate to high mean levels (3.81–3.92), with reliance on oneself to accomplish tasks showing the highest mean score. This finding suggests that, despite the chronic nature of MS, participants generally perceived themselves as capable of managing tasks and confronting challenges. The variability of scores across self-efficacy dimensions was limited, as reflected in relatively small standard deviations.

In terms of mindfulness, mean scores ranged from 3.65 to 3.72, indicating a moderate level of present-moment awareness and nonjudgmental attention. Purposeful awareness of thoughts and performing tasks with awareness showed slightly higher means compared to nonjudgment and nonreactivity, suggesting that attentional aspects of mindfulness may be more prominent than attitudinal components in this sample.

Finally, the overall mean score for emotion regulation was 3.74, reflecting a moderate level of cognitive and emotional regulation strategies among participants. Collectively, the descriptive findings indicate that the study sample demonstrates generally moderate to high levels of psychological resources, supporting the suitability of further inferential and structural analyses examining the relationships among these constructs.

Table 1
Descriptive Statistics (Means and Standard Deviations) for the Study Variables and Their Components

Variable	Component	Mean (M)	Standard Deviation (SD)
Psychological well-being	Managing and responsibility in daily life	3.87	0.62
	Personality aspects	3.91	0.58
	Positive relations with others	3.76	0.65
Resilience	Continuous life process (personal growth)	3.82	0.60
	Seeking help from self, close friends, and God	3.94	0.57
	Ability to cope with challenges	3.88	0.59
	Coping with and accepting stress	3.85	0.61
Self-efficacy	Thinking clearly in difficult decisions	3.79	0.63
	Sense of purpose and strength	3.90	0.56
	Reliance on oneself to accomplish tasks	3.92	0.55
	Responsibility and acceptance of duties	3.86	0.60
Mindfulness	Ability to perform tasks	3.89	0.58
	Facing problems	3.81	0.62
	Attention to sensations and emotions	3.68	0.64
	Purposeful awareness of thoughts	3.72	0.61
Emotion regulation	Performing tasks with awareness	3.70	0.63
	Nonjudgment and nonreactivity to thoughts	3.65	0.66
	Overall score	3.74	0.59

Pearson's correlation coefficient was used to examine the associations among the study variables. The correlation matrix is presented below.

Table 2
Pearson Correlation Test Results

Variable	Psychological well-being	Emotion regulation	Resilience	Self-efficacy	Mindfulness
Mindfulness	.754**	.716**	.458**	.450**	1.00

Note. ** Correlation is significant at the .01 level (two-tailed). * Correlation is significant at the .05 level (two-tailed).

According to Table 2, the correlation coefficient between "mindfulness" and psychological well-being ($r = .754$), resilience ($r = .458$), self-efficacy ($r = .450$), and emotion

regulation ($r = .716$) is statistically significant at the .01 level.

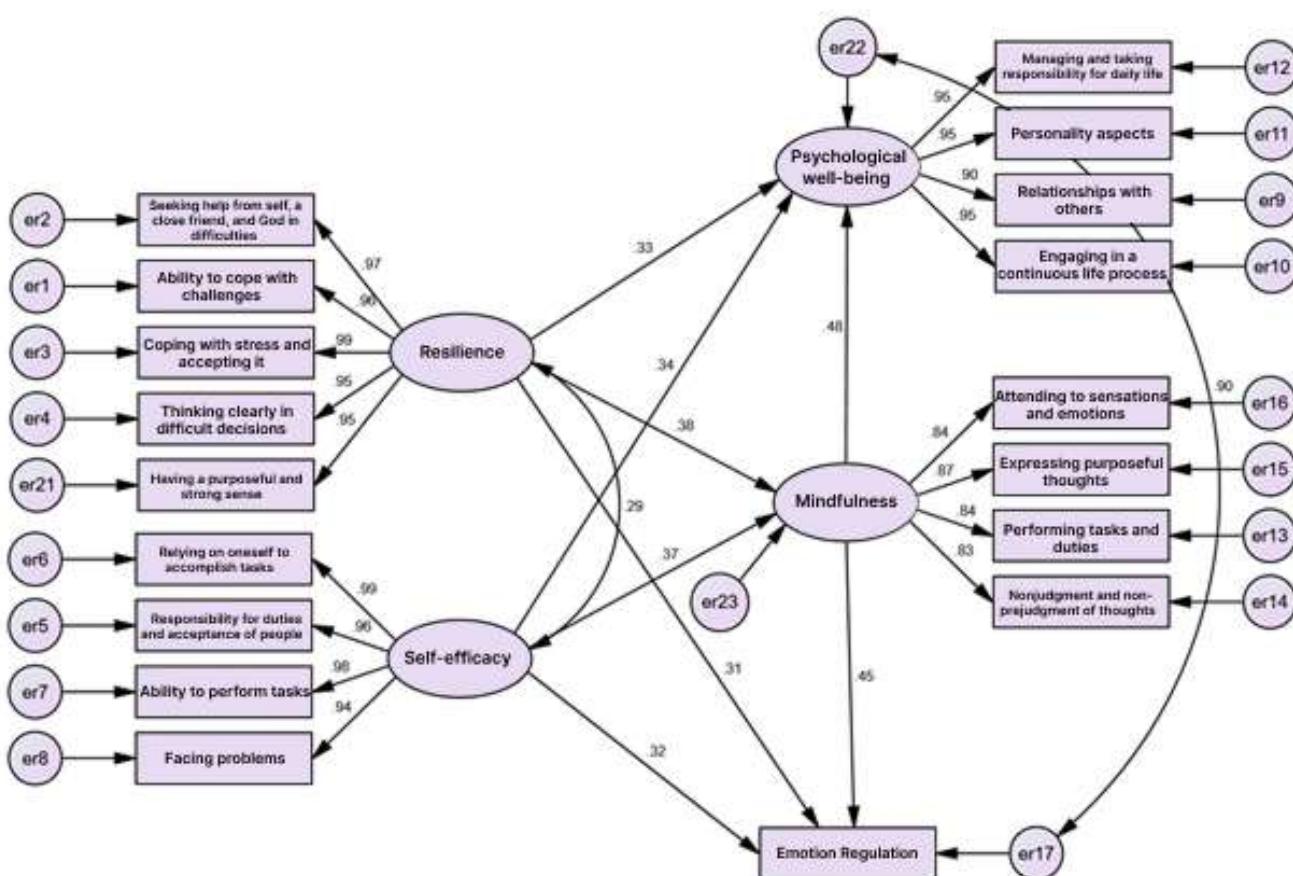
Table 3
Estimates of Standardized Coefficients for the Overall Model

Latent variable	Indicator	Standardized estimate	SE	CR	p	Cronbach's α	Composite reliability	AVE
Psychological well-being	Managing and taking responsibility for daily life	.949	.121	23.772	< .001	.971	.967	.879
	Personality aspects	.952	.098	24.007	< .001			
	Relationships with others	.900	—	—	—			
	Engaging in a continuous life process	.949	.106	23.803	< .001			
Resilience	Seeking help from self, a close friend, and God in difficulties	.966	.028	35.743	< .001	.983	.984	.926
	Ability to cope with challenges	.961	—	—	—			
	Coping with stress and accepting it	.989	.052	43.302	< .001			

	Thinking clearly in difficult decisions	.947	.059	31.605	< .001			
	Having a purposeful and strong sense	.948	.059	31.834	< .001			
Self-efficacy	Relying on oneself to accomplish tasks	.993	.030	45.059	< .001	.981	.983	.935
	Responsibility for duties and acceptance of people	.962	—	—	—			
	Ability to perform tasks	.976	.025	38.678	< .001			
	Facing problems	.936	.051	29.742	< .001			
Mindfulness	Attending to sensations and emotions	.842	.096	14.419	< .001	.991	.908	.711
	Expressing purposeful thoughts	.866	.072	15.043	< .001			
	Performing tasks and duties	.837	—	—	—			
	Nonjudgment and non-prejudgment of thoughts	.827	.064	14.022	< .001			

Figure 1

Standardized Coefficients Model—Overall Model



As shown in Table 3, all standardized coefficients associated with the indicators of the latent variables are greater than .40. Therefore, it can be concluded that the measurement model demonstrates adequate reliability with respect to the indicators of the latent constructs. Table 2 also

reports critical ratio (CR) values for the indicators, which are typically introduced as validity-related parameters for the structural model. As observed, all values fall outside the range of -1.96 to 1.96 and are statistically significant; Cronbach's alpha and composite reliability values are

greater than .70, and AVE values are greater than .50. Accordingly, the research instrument demonstrates acceptable validity and reliability.

After examining construct indicators and ensuring that the model was identifiable, model fit was evaluated. As can be seen, the fit indices for the evaluated models reached acceptable levels.

Table 4

Fit Indices for the Study Models

Index	Description	Acceptable values	Psychological well-being	Resilience	Self-efficacy	Mindfulness	Overall model
Relative chi-square	χ^2/df	Good: < 3; Acceptable: < 5	1.256	1.090	1.275	1.396	1.970
RMR	Root mean square residual	< .10	.058	.042	.042	.014	1.421
GFI	Goodness-of-fit index	> .90	.926	.900	.888	.827	.887
AGFI	Adjusted goodness-of-fit index	> .90	.901	.875	.860	.803	.846
NFI	Normed fit index	> .90	.954	.961	.963	.969	.958
RFI	Relative fit index	> .90	.946	.955	.958	.966	.949
IFI	Incremental fit index	> .90	.990	.997	.992	.991	.979
TLI	Tucker–Lewis index	> .90	.988	.996	.991	.990	.974
CFI	Comparative fit index	> .90	.990	.997	.992	.991	.979
RMSEA	Root mean square error of approximation	Good: < .08; Poor: > .10	.036	.021	.037	.045	.070

According to Table 4, the goodness-of-fit indices for the study models are acceptable. In general, when at least three indices fall within acceptable ranges, it can be argued that model fit is good and acceptable.

Overall, considering the results obtained in the previous section and the procedures used to confirm the measurement model and compute convergent and discriminant validity, the model proposed by the researcher is supported. The relationships among the study variables were then examined. To evaluate direct relationships among variables, standardized coefficients and critical ratio (CR) values were used. If the CR value for a relationship is greater than 1.96, it indicates a statistically significant relationship between the two variables. To test the effect of a mediating variable, a commonly used test known as the Sobel test is applied to evaluate the significance of the mediating effect of a variable in the relationship between two other variables. In this test,

for indirect relationships among the study variables, after computing the indirect standardized coefficient and the CR value, if the CR value for a relationship is greater than 1.96, the indirect relationship between the two variables and the mediating role of the mediator variable are confirmed.

In the Sobel test, a critical ratio (CR) value is obtained using the following parameters; if this value exceeds 1.96, the significance of the effect can be confirmed at a 99% confidence level.

a: Path coefficient between the independent variable and the mediator

b: Path coefficient between the mediator and the dependent variable

Sa: Standard error of the path between the independent variable and the mediator

Sb: Standard error of the path between the mediator and the dependent variable

Table 5

Regression Coefficients for Relationships Among the Study Variables

Path	Standardized estimate	SE	CR	p	Result
Direct effects					
Self-efficacy → Mindfulness	.372	.061	5.604	.003	Supported
Self-efficacy → Psychological well-being	.343	.040	8.288	.004	Supported
Self-efficacy → Emotion regulation	.322	.045	7.112	.003	Supported
Resilience → Mindfulness	.379	.062	5.704	.007	Supported
Resilience → Psychological well-being	.332	.041	8.017	.005	Supported
Resilience → Emotion regulation	.306	.046	6.739	.004	Supported
Mindfulness → Psychological well-being	.476	.044	9.038	.005	Supported

Mindfulness → Emotion regulation	.449	.050	8.033	.005	Supported
Indirect effects (Sobel test)					
Self-efficacy → Mindfulness → Psychological well-being	.177	—	5.295	—	Supported
Self-efficacy → Mindfulness → Emotion regulation	.167	—	5.024	—	Supported
Resilience → Mindfulness → Psychological well-being	.180	—	5.305	—	Supported
Resilience → Mindfulness → Emotion regulation	.170	—	5.032	—	Supported

4. Discussion

The present study aimed to examine a structural model in which mindfulness mediates the relationships between resilience and self-efficacy with psychological well-being and emotion regulation. Overall, the findings provided strong empirical support for the proposed model and confirmed both the direct and indirect pathways among the study variables. The results demonstrated that resilience and self-efficacy were positively and significantly associated with psychological well-being and emotion regulation, and that mindfulness played a significant mediating role in these relationships. These findings contribute to the growing body of literature emphasizing the central role of mindfulness as a psychological mechanism through which personal resources are translated into adaptive emotional and psychological outcomes.

Consistent with expectations, the results showed a strong positive association between resilience and psychological well-being. This finding aligns with previous research indicating that resilient individuals are better equipped to cope with stressors, maintain emotional balance, and preserve a sense of meaning and purpose in life (Behrami & Zahedi, 2018; Sajjad & Thakur, 2025). Resilience has been conceptualized as a dynamic capacity that enables individuals to adapt successfully to adversity, and the present findings reinforce its role as a foundational predictor of well-being. Similarly, the significant relationship between resilience and emotion regulation supports earlier evidence suggesting that resilient individuals are more capable of managing emotional responses and employing adaptive regulation strategies in the face of challenges (Ranjbar et al., 2021). These results underscore the importance of resilience as a protective psychological resource that enhances both emotional functioning and overall well-being.

The findings also confirmed a significant positive relationship between self-efficacy and psychological well-being. Individuals with higher self-efficacy reported greater well-being, suggesting that confidence in one's ability to manage tasks and challenges contributes to positive psychological functioning. This result is consistent with prior studies indicating that self-efficacy influences

motivation, coping behaviors, and emotional responses, thereby enhancing psychological well-being (Rostami et al., 2017; Schwarzer et al., 2024). Furthermore, the significant association between self-efficacy and emotion regulation indicates that individuals who believe in their competence are more likely to engage in effective emotional regulation strategies, which in turn supports emotional stability and mental health. These findings align with contemporary models that emphasize self-efficacy as a key cognitive factor underlying adaptive emotional regulation and psychological adjustment (Kyriazos & Poga, 2024).

A central contribution of this study lies in demonstrating the mediating role of mindfulness in the relationships between resilience and self-efficacy with psychological well-being and emotion regulation. The results revealed that mindfulness partially mediated these relationships, indicating that resilience and self-efficacy influence well-being and emotional regulation not only directly but also indirectly through increased mindful awareness. This finding supports theoretical perspectives suggesting that mindfulness serves as a mechanism that enhances individuals' capacity to observe internal experiences without judgment, thereby reducing emotional reactivity and facilitating adaptive coping. Previous research has similarly highlighted mindfulness as a key mediator linking personal resources to mental health outcomes (Gu et al., 2022; Paleari et al., 2022).

The mediating role of mindfulness in the relationship between resilience and well-being is particularly noteworthy. Resilient individuals may be more inclined to adopt a mindful stance toward their experiences, characterized by acceptance and present-moment awareness, which in turn fosters psychological well-being. This interpretation is consistent with findings reported by Pangngay (2024), who showed that mindfulness mediated the association between resilience and well-being by enhancing adaptive coping and reducing psychological distress (Pangngay, 2024). Similarly, the indirect effect of resilience on emotion regulation through mindfulness suggests that mindful awareness may help resilient individuals regulate emotions more effectively by increasing

emotional clarity and decreasing maladaptive cognitive patterns such as rumination or catastrophizing.

The mediating role of mindfulness in the relationship between self-efficacy and psychological outcomes further extends existing literature. Individuals with high self-efficacy may be more capable of engaging in mindful awareness because they perceive themselves as competent in managing internal and external demands. In turn, mindfulness enhances their ability to regulate emotions and maintain psychological well-being. This indirect pathway aligns with previous studies indicating that mindfulness strengthens the effects of cognitive beliefs on well-being by fostering emotional awareness and reducing automatic, maladaptive reactions (Mohammad & Quoquab, 2024; Wang, 2025). The present findings thus support integrative models that position mindfulness as a bridge between cognitive resources and emotional outcomes.

The strong direct effects of mindfulness on psychological well-being and emotion regulation observed in this study are consistent with extensive empirical evidence demonstrating the benefits of mindfulness for mental health. Mindfulness has been shown to enhance well-being by promoting acceptance, emotional balance, and psychological flexibility, while also reducing symptoms of anxiety, depression, and stress (Amiri Majd et al., 2019; Matiz et al., 2025; Zheng et al., 2025). Moreover, mindfulness-based interventions have been found to improve emotion regulation by increasing awareness of emotional states and decreasing impulsive or avoidant responses (Zamani & Zolfaghari, 2022). The present study extends these findings by demonstrating that mindfulness not only directly predicts well-being and emotion regulation but also functions as a key mediating mechanism within a broader structural model.

5. Conclusion

Collectively, the results of this study are consistent with contemporary positive psychology and mental health frameworks that emphasize the interaction of cognitive, emotional, and attentional processes in promoting well-being. The integration of resilience, self-efficacy, mindfulness, psychological well-being, and emotion regulation into a single structural model provides a more comprehensive understanding of how personal resources contribute to adaptive functioning. These findings also align with recent international research highlighting the importance of examining indirect pathways and mediating mechanisms rather than focusing solely on direct effects

(Bitar et al., 2023; Rezagholiyan et al., 2025; Villegas, 2025). By elucidating the role of mindfulness as a mediator, the present study advances theoretical models of psychological well-being and offers valuable insights for intervention development.

6. Limitations & Suggestions

Despite its contributions, the present study has several limitations that should be considered when interpreting the findings. First, the cross-sectional design limits the ability to draw causal conclusions regarding the relationships among resilience, self-efficacy, mindfulness, psychological well-being, and emotion regulation. Second, the reliance on self-report measures may have introduced response biases, such as social desirability or common method variance. Third, the study sample was drawn from a specific cultural and geographical context, which may limit the generalizability of the findings to other populations. Finally, although the structural model demonstrated good fit, other potentially relevant variables, such as social support or personality traits, were not included in the model.

Future studies are encouraged to employ longitudinal or experimental designs to better examine causal relationships and changes over time among the study variables. Expanding the model to include additional psychological and contextual factors, such as social support, coping styles, or personality characteristics, may provide a more comprehensive understanding of well-being processes. Researchers may also consider testing the proposed model in diverse cultural and clinical populations to enhance external validity. Furthermore, future research could compare different dimensions of mindfulness to determine which aspects are most influential in mediating the effects of resilience and self-efficacy on psychological outcomes.

The findings of this study have important practical implications for psychological intervention and mental health promotion. Programs aimed at enhancing psychological well-being and emotion regulation may benefit from simultaneously strengthening resilience and self-efficacy while incorporating mindfulness-based components. Mental health practitioners can design integrated interventions that foster mindful awareness alongside cognitive and emotional skills training. Additionally, educational and counseling settings may implement mindfulness-based programs to support individuals in developing adaptive coping strategies and improving overall psychological functioning.

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Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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Authors' Contributions

R.J. was responsible for the conceptualization of the study, formulation of the research questions, and coordination of data collection. M.B. contributed to the methodological design, selection of measurement instruments, and supervision of the statistical analyses using structural equation modeling. S.R. performed data analysis, interpreted the results, and drafted the initial version of the manuscript. All authors contributed to the critical revision of the manuscript, approved the final version, and agree to be accountable for all aspects of the work, ensuring the accuracy and integrity of the research.

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