

The Influence of Mindfulness on Boredom Proneness: The Mediating Role of Meaning in Life

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Abstract

This study explored the influence of mindfulness on boredom proneness and examined the mediating role of meaning in life in this relationship. Eighty participants were recruited online and surveyed using the Five Facet Mindfulness Questionnaire-Short Form, the Meaning in Life Questionnaire, and the Short Boredom Proneness Scale. Data analysis revealed a significant negative correlation between mindfulness levels and boredom proneness, with meaning in life playing a significant mediating role. The findings support the theoretical hypothesis that mindfulness reduces boredom proneness by enhancing the experience of meaning in life, providing new theoretical evidence and practical guidance for mindfulness interventions targeting boredom.

Keywords

Mindfulness; Boredom Proneness; Meaning in Life; Mediating Effect.

1. Introduction

Boredom, as a common negative emotional state, significantly impacts individuals' mental health and quality of life. Boredom is closely associated with issues such as low mood and distracted attention and may trigger a range of adverse behaviors, including excessive consumption and internet addiction (Weiss, Todma, Maple & Bunn, 2022). Therefore, exploring effective ways to reduce boredom has important theoretical and practical value[1].

Meaning in life, defined as an individual's perception and understanding of the purpose and value of their existence, is a crucial indicator of mental health. Prior research has demonstrated a significant negative correlation between meaning in life and boredom, suggesting that the stronger an individual's perception of meaning in life, the lower their boredom levels (Chao, Chen, Liu, Yang & Hall, 2020). However, the specific mechanisms through which enhancing meaning in life reduces boredom remain unclear[2].

Mindfulness, a training method focused on attention and awareness, is widely recognized for its ability to reduce negative emotions, enhance psychological resilience and well-being (Wang, Xu & Luo, 2016; Wang, et al., 2025). Mindfulness practice emphasizes non-judgmental acceptance and full engagement with present experiences, helping individuals view themselves and their lives from a broader perspective and thereby enhancing their perception of meaning in life (Wang et al., 2021) [3-5].

Although prior studies have explored the independent effects of mindfulness on meaning in life and boredom, research on how mindfulness indirectly reduces boredom through its influence on meaning in life is still lacking. This study aims to fill this research gap by empirically examining the influence of mindfulness on boredom proneness and testing the mediating role of meaning in life in this relationship. We hypothesize that higher levels of mindfulness will be associated with lower boredom proneness, and that this relationship will be partially mediated by enhanced experiences of meaning in life.

2. Method

2.1. Measures

Five Facet Mindfulness Questionnaire-Short Form (FFMQ-SF): The Chinese version of FFMQ-SF was revised by Zhu et al. (2023). It assesses participants' mindfulness levels with 15 items rated on a 5-point scale, divided into five dimensions: observing, describing, acting with awareness, non-judging, and non-reacting. Higher scores indicate higher mindfulness levels.

Meaning in Life Questionnaire (MLQ): Developed by Steger et al. (2006) and revised for Chinese by Wang (2008). It measures two aspects of meaning in life: presence of meaning (individuals' current perception of life as meaningful) and search for meaning (individuals' active pursuit of life meaning or goals). The questionnaire consists of 10 items rated on a 7-point scale.

Short Boredom Proneness Scale (SBPS): Adapted from Vodanovich's scale, consisting of 12 items, with 8 items used in this study to assess internal and external stimuli characteristics of boredom awake. Items are rated on a 7-point scale. Higher scores indicate higher boredom proneness[6-9].

Lie Detection Item: Participants were asked to select a specified option. Responses not following instructions were considered invalid and excluded from analysis.

2.2. Procedure

Participants were recruited online through the Wenjuanxing platform.

2.3. Data Analysis

Data were analyzed using SPSS software. Correlation analyses among variables were conducted using Pearson's correlation method. Independent samples t-tests compared differences in variables across gender and educational levels. Mediation analysis was performed using Process.

3. Results

3.1. Participants

A total of 80 participants completed the questionnaire, with 14 excluded for failing lie detection items, leaving 66 participants (82.5%) for final analysis. The sample included 33 males and 33 females, aged 25-56 years (mean age = 38.76 ± 7.42 years). Regarding educational attainment, 23 participants (34.8%) had high school or lower education, and 43 (65.2%) had university or higher education.

3.2. Correlation Analysis Results

Correlation analyses revealed significant relationships among mindfulness, meaning in life, and boredom proneness. Specifically, mindfulness observation, describing, non-reacting, and total mindfulness scores were significantly positively correlated with presence of meaning, search for meaning, and total meaning in life scores. Mindfulness acting with awareness and non-judging were significantly negatively correlated with these meaning in life indicators.

Mindfulness observation, describing, non-reacting, and total mindfulness scores were significantly positively correlated with external stimuli boredom proneness and significantly negatively correlated with internal stimuli boredom proneness and total boredom proneness. Mindfulness acting with awareness and non-judging were significantly negatively correlated with external stimuli boredom proneness and significantly positively correlated with internal stimuli boredom proneness and total boredom proneness.

Meaning in life total scores and subscale scores were significantly positively correlated with external stimuli boredom proneness and significantly negatively correlated with internal

stimuli boredom proneness and total boredom proneness. Detailed correlation results are presented in Table 1.

Table 1. Correlation Analysis Results Among Variables

	1	2	3	4	5	6	7	8	9	10	11	12
1 Observing	1											
2 Describing	.834	1										
3 Acting with Awareness	-.751	-.792	1									
4 Non-judging	-.803	-.833	.836	1								
5 Non-reacting	.823	.834	-.720	-.758	1							
6 Total Mindfulness	.723	.682	-.282	-.371	.778	1						
7 Presence of Meaning	.795	.780	-.556	-.606	.730	.747	1					
8 Search for Meaning	.841	.888	-.690	-.755	.831	.730	.884	1				
9 Total Meaning in Life	.846	.868	-.652	-.713	.812	.759	.960	.979	1			
10 External Stimuli Boredom	.710	.759	-.770	-.816	.725	.403	.494	.658	.607	1		
11 Internal Stimuli Boredom	-.802	-.809	.822	.856	-.839	-.511	-.605	-.763	-.717	-.897	1	
12 Total Boredom Proneness	-.668	-.617	.629	.638	-.723	-.490	-.557	-.658	-.634	-.478	.817	1

Note. All $p < 0.01$

3.3. Mediation Effect Analysis of Meaning in Life between Mindfulness and Boredom Proneness

A mediation model was constructed to investigate the mediating effect of meaning in life in the relationship between mindfulness and boredom proneness.

The indirect effect from mindfulness to boredom proneness was significant, with an estimate of -0.4696 (95% CI = -0.6819 to -0.3027). Therefore, meaning in life plays a significant mediating role in the relationship between mindfulness and boredom proneness.

3.4. Differences Across Gender and Educational Levels

Independent samples t-tests compared differences in variables across gender and educational levels. No significant differences were found across gender ($ps > 0.05$) or educational levels ($ps > 0.05$).

4. Discussion

This study employed a questionnaire survey to explore the influence of mindfulness on boredom proneness and tested the mediating role of meaning in life in this relationship. The findings revealed a significant negative correlation between mindfulness levels and boredom proneness, with meaning in life playing a significant mediating role.

These results support our research hypothesis and provide new theoretical evidence and practical guidance for mindfulness interventions targeting boredom. Specifically, the mindfulness dimensions of observing, describing, and non-reacting were significantly correlated with both meaning in life experiences and boredom proneness, suggesting that these aspects of mindfulness practice may promote a deeper understanding and experience of meaning in life by enhancing individuals' awareness and non-judgmental acceptance of present experiences, thereby reducing boredom. The relationships between the mindfulness dimensions of acting with awareness and non-judging and boredom proneness were more complex, possibly due to their emphasis on action control and emotion regulation, which may be moderated by other factors in their influence on boredom. Compared to existing research, this study not only verified the direct negative impact of mindfulness on boredom proneness but also revealed the crucial role of meaning in life in this relationship.

This finding expands our understanding of the mechanisms underlying mindfulness and highlights the key role of enhancing meaning in life experiences in mindfulness interventions targeting boredom. Additionally, the lack of significant differences in the indicators across genders and educational levels suggests that the influence of mindfulness on boredom proneness may be universal and not significantly affected by individual background characteristics.

However, this study has several limitations. First, the small sample size may limit the generalizability of the results. Future research should expand the sample size to enhance the stability and reliability of the findings. Second, the cross-sectional design precludes the determination of causal relationships among the variables. Future research could employ longitudinal or experimental designs to further verify the causal relationships among mindfulness, meaning in life, and boredom proneness. Finally, subjective reports may be subject to biases such as social desirability effects. Future research could incorporate objective indicators, such as behavioral experiments or electroencephalogram activity, to validate the findings.

5. Conclusion

In summary, this study empirically investigated the relationship between mindfulness and boredom proneness, with a specific focus on the mediating role of meaning in life. The findings confirm that higher levels of mindfulness are significantly associated with lower levels of boredom proneness. More importantly, the analysis reveals that meaning in life serves as a significant mediator in this relationship, indicating that mindfulness reduces boredom proneness primarily by enhancing individuals' perception of meaning and purpose in their lives. The results contribute to the existing literature by elucidating a potential psychological mechanism—the cultivation of meaning in life—through which mindfulness exerts its beneficial effect on reducing a pervasive negative state like boredom. This underscores that mindfulness interventions aimed at alleviating boredom should not only focus on attention regulation and present-moment awareness but also intentionally foster a deeper sense of life meaning.

Despite its contributions, this study has limitations, including a relatively small sample size, a cross-sectional design that precludes causal inferences, and reliance on self-reported measures. Future research should employ longitudinal or experimental designs with larger and more diverse samples to establish causality and enhance generalizability. Incorporating objective measures, such as behavioral tasks or physiological indicators, would further strengthen the validity of the findings.

Overall, this study provides preliminary evidence supporting the integration of meaning-enhancing components into mindfulness-based practices to mitigate boredom proneness, offering valuable insights for both theoretical development and practical application in promoting mental well-being.

References

- [1] Chao, M., Chen, X., Liu, T., Yang, H. & Hall, B. (2020). Psychological distress and state boredom during the COVID-19 outbreak in China: the role of meaning in life and media use. *European Journal of Psychotraumatology*, 11(1), 1769379.
- [2] Wang, M. & Dai, X. (2008). The applicability of the Chinese Meaning in Life Questionnaire (C-MLQ) among college students. *Chinese Journal of Clinical Psychology*, 16(5), 459-461.
- [3] Steger, M., Frazier, P. & Oishi, S. (2006). The Meaning in Life Questionnaire: Assessing the Presence of and Search for Meaning in Life. *Journal of Counseling Psychology*, 53 (1):80-93.
- [4] Vodanovich, S., Watt, J. & Piotrowski C. (1997). Boredom proneness in African-American college students: A factor analytic perspective. *Education*, 118, 229-336.

- [5] Wang, Y., Liao, L., Lin, X., Sun, Y., Wang, N., Wang, J. & Luo, F. (2022). International Journal of Environmental Research and Public Health, 18(24), 13150.
- [6] Wang, Y., Xu, W. & Luo, F. (2016). Emotional resilience mediates the relationship between mindfulness and emotion. Psychological Reports, 118 (3), 725-736.
- [7] Wang, Y., Wang, S., Lin, J., Chen, S., Chen, J. & Luo, F. (2025). Turning the tide: A randomized controlled trial of a brief digital mindfulness intervention to reduce immediate and delayed negative interpretation bias. Journal of Affective Disorders, 393, 120391.
- [8] Weiss, E., Todman, M., Maple, E., Bunn, R. (2022). Boredom in a time of uncertainty: state and trait boredom's associations with psychological health during COVID-19.
- [9] Zhu, T., Chen, C. & Chen, S. (2023). Validation of a Chinese version of the five facet mindfulness questionnaire and development of a short form based on item response theory. Current Psychology, 42, 4212–4224.