

Research Article

Mindfulness and Core Socialist Values Predict the Psychological Health of College Students: A Study on the Influence of Self-enhancement

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Abstract

Objective: In the context of rising concerns about the psychological well-being of college students in China, this study explores the predictive effects of mindfulness, core socialist values, and self-enhancement on their psychological health. These factors are of particular interest due to their relevance to emotional regulation, social support, and self-perception, which are critical in a rapidly changing social environment. **Methods:** The study involved 487 college students from colleges in Yunnan Province. Participants completed the Core Socialist Values Scale, Mindfulness Scale, Comprehensive Psychological Health Assessment Questionnaire (including Positive and Negative Affect Schedule, Depression Anxiety Stress Scales, and Satisfaction with Life Scale), and Self-enhancement Strategy Questionnaire. Data were collected through online questionnaires and analyzed using SPSS 27. **Results:** Correlation analysis showed significant positive correlations between mindfulness and psychological health ($r = 0.50, p < 0.01$), and between core socialist values and psychological health ($r = 0.29, p < 0.01$). No significant correlation was found between self-enhancement and psychological health ($r = -0.03, p > 0.05$). Regression analysis indicated that mindfulness significantly predicted psychological health (adjusted $R^2 = 0.24$), and core socialist values also significantly predicted psychological health (adjusted $R^2 = 0.08$). The regression model combining mindfulness and core socialist values predicted psychological health more significantly (adjusted $R^2 = 0.26$). **Conclusion:** The results indicate that both mindfulness and core socialist values significantly predict the psychological health of college students, while self-enhancement does not. Mindfulness promotes psychological health by enhancing self-awareness and emotional regulation, while core socialist values enhance it by strengthening social support and value identification. These findings provide a theoretical basis for psychological health interventions for college students, suggesting the combined use of mindfulness practices and values education to promote psychological health.

Keywords

Mindfulness, Core Socialist Values, Self-Enhancement, Psychological Health

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1. Introduction

In the context of socialism with Chinese characteristics, disseminating core socialist values is highly significant. Core socialist values (CSV) embody the spirit of China, provide a moral standard for contemporary Chinese people, and guide the development of socialism with Chinese characteristics, aiming for the great rejuvenation of the Chinese nation [2]. Disseminating core socialist values promotes comprehensive individual development and societal progress. It plays a crucial role in the ideological and belief-oriented education of college students, enhancing their psychological health [15].

Psychological health (PH) is crucial for the physical and mental development and social adaptation of college students, forming the foundation for their success. With the rise of positive psychology, researchers advocate for a multidimensional understanding of psychological health, including mental health issues, life satisfaction, and positive emotional experiences. According to Liu Xinyi, psychological health is defined as the absence of mental illness symptoms, good psychological functioning, and a positive, happy mental state [7]. Psychological health promotes the development of healthy psychological qualities in college students and is crucial for their social integration, intellectual performance, active participation in social activities, and continual advancement. From an adaptation perspective, psychological health helps college students overcome dependency, enhance independence, and lead fulfilling college lives. Maintaining psychological health helps college students cultivate qualities like self-reliance, self-improvement, and self-discipline, enhance social interaction skills, make sound choices in complex environments, and face challenges, laying a solid foundation for future career success [13].

However, the psychological health issues of college students still need attention. Research shows that from 2009 to 2019, the detection rate of depressive symptoms among college students reached 24.71% [7]. The "China National Mental Health Development Report (2019-2020)" reported a 24.6% detection rate of depression among adolescents, with 7.4% experiencing severe depression [16]. These data indicate that the psychological health issues of college students require ongoing attention. Additionally, self-enhancement strategies like positive beliefs, positive construction, self-affirmation reflection, and self-defense play active roles in maintaining positivity and potentially promoting psychological health [4, 5, 12]. Therefore, it is necessary to explore additional factors that promote the psychological health of college students.

From the perspective of practicing core socialist values, mindfulness therapy can effectively promote their dissemination among college students. Core socialist values include prosperity, democracy, civility, harmony, freedom, equality, justice, rule of law, patriotism, dedication, integrity, and friendliness. These values provide guidance for college students at national, social, and individual levels [15]. And mindfulness (M) therapy, promoting psychological health,

features non-judgment, patience, impartiality, trust, and acceptance, enhancing self-positivity and aligning individuals with societal expectations [9]. Mindfulness therapy, as a systematic approach, has been applied in psychological health promotion research. According to the "resonance effect," the synergy of core socialist values, mindfulness and self-enhancement (SE) can produce a "1+1>2" effect [11], potentially enhancing the psychological health of college students more effectively.

This study, based on Beck's cognitive theory, examines the effects of core socialist values, mindfulness, and self-enhancement on psychological health. According to Beck's cognitive theory, an individual's cognition generates emotions and behaviors. Therefore, initiating psychological intervention and regulation at the cognitive level can influence the stimulus-response process.

Based on the above background, this study proposes the following hypotheses:

H1: College students with higher levels of mindfulness may have better psychological health.

H2: College students with higher recognition of core socialist values may have better psychological health.

H3: The synergistic effect of mindfulness and core socialist values significantly predicts college students' psychological health better than their individual effects.

H4: Self-enhancement may have a significant effect on predicting college students' psychological health.

2. Methods

2.1. Participants

This study randomly selected 500 students from colleges and universities in Yunnan Province. After excluding 13 participants who did not respond seriously, data from 487 participants were included in the statistical analysis. The participants included 238 males and 249 females, with an average age of 20.16 ± 2.27 years. All participants voluntarily joined the study and signed informed consent forms.

2.2. Tools

Core Socialist Values Scale: This scale assesses students' cognitive levels of 12 core socialist values (prosperity, democracy, civility, harmony, freedom, equality, justice, rule of law, patriotism, dedication, integrity, and friendliness) using 24 items [2]. Each aspect is rated on a 1-5 Likert scale, where higher scores indicate greater cognitive levels of core socialist values. The Cronbach's α coefficient of the scale is 0.84.

Mindfulness Scale: Mindfulness is measured using the scale revised by Langer and Pirson [9]. This scale includes three dimensions: Novelty Seeking, Novelty Producing, and Engagement, comprising 14 items. Each item is rated on a 1-7

Likert scale, where higher scores indicate higher levels of mindfulness. The Cronbach's α coefficient of the scale is 0.73.

Psychological Health Questionnaire: According to Liu Xinyi [7], this questionnaire evaluates psychological health through two dimensions: psychological health issues and subjective well-being. It includes the Positive and Negative Affect Scale, Depression Anxiety Stress Scales, and Satisfaction with Life Scale. Items in these questionnaires are rated on a 1-5 Likert scale, where higher scores indicate better psychological health. The Cronbach's α coefficient of these scales is 0.89.

Self-enhancement Strategy Questionnaire: Developed by Hepper et al. [4], this questionnaire measures participants' self-enhancement levels. It includes four major strategies: positive acceptance, favorable interpretation, self-affirmation reflection, and defensive strategies. Each strategy contains several items rated on a 1-6 Likert scale, where higher scores indicate more frequent use of the strategy. The Cronbach's α coefficient of this scale is 0.94.

2.3. Procedure

We enter the aforementioned measurement tools into Wenjuanxing to form an online questionnaire. The questionnaire includes basic demographic information (such as gender, age, etc.) and items from each measurement tool. Invite participants to complete the questionnaire voluntarily

through an online survey. Ensure the anonymity and confidentiality of data during the completion process. After data collection, export the questionnaire data and input it into SPSS 27 for statistical analysis. Data analysis includes descriptive statistics, correlation analysis, and regression analysis to explore the predictive effects of mindfulness, core socialist values, and self-enhancement on psychological health.

3. Results

The study employed descriptive statistics, correlation analysis, and regression analysis to explore the predictive effects of mindfulness and core socialist values on psychological health. First, the study used correlation analysis to examine the relationships among mindfulness, core socialist values, self-enhancement, and psychological health. Then, regression analysis was used to examine the predictive effects of mindfulness on psychological health, the predictive effects of core socialist values on psychological health, and the combined predictive effects of mindfulness and core socialist values on psychological health.

The results of descriptive statistics and correlation analysis revealed significant correlations between mindfulness, core socialist values, self-enhancement, and psychological health, as detailed in Table 1.

Table 1. Descriptive statistics and correlation analysis of mindfulness, core socialist values, self-enhancement, and psychological health.

	Mean	SD	M	CSV	PH	SE
M	44.86	6.53	1			
CSV	86.16	12.48	.28**	1		
PH	152.54	18.29	.50**	.29**	1	
SE	126.42	30.36	-0.05	0.06	-0.03	1

** At level 0.01 (two-tailed), the correlation was significant. M=mindfulness, CSV=core socialist values, PH=psychological health, SE=self-enhancement.

To observe the predictive effect of mindfulness on the psychological health of college students, the study conducted a linear regression analysis with mindfulness as the predictor variable and psychological health as the dependent variable.

The results, shown in Table 2, revealed that the predictive effect of mindfulness on psychological health had an adjusted $R^2=0.24$, reaching the standard for a large effect.

Table 2. Regression analysis of mindfulness on mental health.

Indep.	Dep.	R2	R2change	Coeff	se	β	t	p	LLCI	ULCI
M	PH	0.25	0.24	1.39	0.21	0.5	6.76	***	0.98	1.8

*** At level 0.001 (two-tailed), the correlation was significant. M=mindfulness, PH=psychological health.

Further, to examine the predictive effect of core socialist values on the psychological health of college students, the study conducted a linear regression analysis with core socialist values as the predictor variable and psychological

health as the dependent variable. The results, shown in Table 3, revealed that the predictive effect of core socialist values on psychological health had an adjusted $R^2=0.08$, reaching a moderate effect size.

Table 3. Regression analysis of core socialist values on mental health.

Indep.	Dep.	R2	R2change	Coeff	se	β	t	p	LLCI	ULCI
CSV	PH	0.08	0.08	0.42	0.12	0.29	3.57	***	0.19	0.66

*** At level 0.001 (two-tailed), the correlation was significant. CSV=core socialist values, PH=psychological health.

Finally, to observe the predictive effect of the synergy between mindfulness and core socialist values on college students, the study conducted a linear regression analysis with core socialist values and mindfulness as predictor variables and psychological health as the dependent variable. The results, shown in Table 4, revealed that the predictive model of mindfulness combined with core socialist values on

psychological health is valid. Both mindfulness and core socialist values have significant predictive effects on psychological health, and the confidence intervals do not include 0. The results indicate that mindfulness and core socialist values have a large effect size in predicting the psychological health of college students.

Table 4. Regression analysis of mindfulness and core socialist values on mental health.

Indep.	Dep.	R2	R2change	Coeff	se	β	t	p	LLCI	ULCI
M	PH	0.27	0.26	1.26	0.21	0.45	5.97	***	0.84	1.68
CSV				0.24	0.11	0.16	2.15	*	0.02	0.46

* At level 0.05 (two-tailed), ** At level 0.01 (two-tailed), the correlation was significant. M=mindfulness, CSV=core socialist values, PH=psychological health.

4. Discussion

The study examines the predictive effects of mindfulness, core socialist values, and self-enhancement on psychological health. The results show that both mindfulness and core socialist values positively predict psychological health, while self-enhancement does not significantly correlate with psychological health.

Mindfulness and core socialist values significantly positively impact the psychological health of college students. Correlation analysis reveals a significant positive correlation between mindfulness and psychological health ($r=0.50$, $p < 0.01$), indicating that higher mindfulness levels correspond to better psychological health. Similarly, core socialist values positively correlate with psychological health ($r=0.29$, $p < 0.01$), suggesting that higher recognition of these values associates with better psychological health. Additionally, mindfulness significantly correlates with core socialist values

($r=.28$, $p < 0.01$), meaning higher mindfulness levels align with greater recognition of core socialist values. However, self-enhancement shows no significant correlations with mindfulness, core socialist values, or psychological health ($r = -0.05$, $r = 0.06$, $r = -0.03$, $p > 0.05$), indicating its insignificant role in this study. The role of self-enhancement requires further research.

The significant positive effect of mindfulness on psychological health shows that college students with higher mindfulness levels have better psychological health. Regression analysis reveals an adjusted R^2 of 0.24, indicating that mindfulness explains about 24.1% of the variance in psychological health, meeting the standard for a large effect size [1]. The standardized regression coefficient for mindfulness is 0.50 ($t = 6.76$, $p < 0.01$), and the unstandardized coefficient is 1.39 (standard error = 0.21). Each unit increase in mindfulness score raises the psychological health score by an average of 1.39 units. Previous studies show that mindfulness reduces anxiety and depression and improves life satisfaction by enhancing self-awareness and emotional regulation [10,

14]. Mindfulness practice enables individuals to adopt a more accepting, non-judgmental attitude toward stress, reducing negative emotions and enhancing psychological resilience. Additionally, mindfulness improves attention and cognitive flexibility, helping individuals better adapt to and cope with challenges in complex social environments [18]. Thus, this study supports the crucial role of mindfulness in promoting college students' psychological health, emphasizing its theoretical basis and practical value in psychological interventions.

Core socialist values significantly and moderately predict psychological health. Regression analysis shows an adjusted R^2 of 0.08, indicating that core socialist values explain about 7.7% of the variance in psychological health, meeting the standard for a moderate effect size (Cohen, 1988). The standardized regression coefficient is 0.29 ($t = 3.57$, $p < 0.01$), and the unstandardized coefficient is 0.89 (standard error = 0.25). Each unit increase in core socialist values score increases the psychological health score by an average of 0.89 units. Previous studies show that core socialist values enhance psychological health by providing positive social support and value recognition [15]. Core socialist values, such as integrity, kindness, and dedication, enhance individuals' sense of social responsibility and belonging, helping them feel more supported and understood during social pressures and challenges. Additionally, these core values provide positive life goals and directions, allowing individuals to feel more achievement and happiness in realizing personal value [2]. Therefore, this study supports the role of core socialist values in promoting the psychological health of college students, emphasizing the theoretical basis and practical significance of integrating values education into psychological health education.

The combined predictive effects of mindfulness and core socialist values on psychological health are significant and substantial. Regression analysis shows that the combined model of mindfulness and core socialist values has an adjusted R^2 of 0.26, explaining about 26% of the variance in psychological health. The standardized regression coefficient for mindfulness is 0.45 ($t = 5.97$, $p < 0.01$), and for core socialist values, it is 0.16 ($t = 2.15$, $p < 0.05$). Mindfulness plays a dominant role in predicting psychological health, while core socialist values play a supportive role. The unstandardized regression coefficient is 1.26 (standard error = 0.21) for mindfulness and 0.50 (standard error = 0.23) for core socialist values. These results indicate that combining mindfulness and core socialist values significantly impacts psychological health. Each unit increase in mindfulness and core socialist values scores leads to an average increase of 1.26 and 0.50 units in psychological health scores, respectively.

Cognitive theory explains this synergistic effect. Beck's cognitive theory states that an individual's cognitive style affects their emotions and behaviors [6]. Mindfulness enhances self-awareness and emotional regulation, helping individuals cope with stress and challenges with a more ac-

cepting and non-judgmental attitude, reducing negative emotions and enhancing psychological resilience [11, 13, 17]. Core socialist values enhance social responsibility and belonging by providing positive social support and value recognition, helping individuals feel more supported and understood during social pressure [8, 15, 16]. This value recognition provides clear life goals and directions, increasing individuals' sense of meaning and achievement. Therefore, combining mindfulness and core socialist values significantly impacts psychological health through dual cognitive and emotional pathways.

Although this study revealed significant predictive effects of mindfulness and core socialist values on the psychological health of college students, it still has some limitations and requires further research for improvement. First, the questionnaire survey method used in this study mainly relies on self-reporting, which may have social desirability effects and memory biases. Future research can combine observational methods and multi-source data collection methods to improve the reliability and validity of the data. Secondly, this study found that the correlations between self-enhancement and mindfulness, core socialist values, and psychological health were not significant. This result may be due to the diversity and complexity of self-enhancement strategies and the limitations of the measurement tools in capturing self-enhancement strategies. Future research should further explore the role of self-enhancement in different contexts, possibly needing improved measurement tools or more diverse methods to assess self-enhancement [12]. Finally, the long-term intervention effects of mindfulness and core socialist values remain unclear. Future research can design longitudinal studies to track the long-term impacts of interventions on the psychological health of college students, thus providing more comprehensive theoretical and practical guidance for psychological health education [3, 14].

5. Conclusions

This study aims to explore the predictive effects of mindfulness, core socialist values, and self-enhancement on the psychological health of college students. Statistical analysis revealed significant predictive effects of mindfulness and core socialist values on the psychological health of college students, with mindfulness showing a large effect size and core socialist values showing a moderate effect size. The synergistic effect of mindfulness and core socialist values further enhanced their predictive effects on the psychological health of college students, indicating that their combined effect has a more significant impact on promoting psychological health. The study found no significant correlations between self-enhancement and mindfulness, core socialist values, and psychological health, indicating that the diversity of self-enhancement strategies and the limitations of measurement tools require further exploration. Future research can consider enhancing the understanding and training of

mindfulness and core socialist values to improve the psychological health of college students.

Abbreviations

M	Mindfulness
CSV	Core Socialist Values
PH	Psychological Health
SE	Self-Enhancement

Author Contributions

Jinhua Liu: Conceptualization, Methodology, Writing – original draft, Supervision

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Zhikai Gao: Software, Investigation

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Data Availability Statement

The data is available from the corresponding author upon reasonable request.

Conflicts of Interest

The authors declare no conflicts of interest.

References

- [1] Cohen, J. *Statistical Power Analysis for the Behavioral Sciences*. United States of America: Lawrence Erlbaum Associates, 1988, pp. 75-108.
- [2] Deng, M. *On the Core Socialist Values Scales for University Students and its Compilation*. Master, Guangxi Normal University, 2017, Available from: <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD201801&filename=1017212086.nh> [Assessed 15 May 2024]
- [3] Gruszczyńska, E., Kroemeke, A., Knoll, N., Schwarzer, R., & Warner, L. M. Well-Being Trajectories Following Retirement: A Compensatory Role of Self-Enhancement Values in Disadvantaged Women. *Journal of happiness studies*, 2020, 21(7), 2309-2325. <https://doi.org/10.1007/s10902-019-00102-0>
- [4] Hepper, E. G., Sedikides, C., & Cai, H. Self-Enhancement and Self-Protection Strategies in China: Cultural Expressions of a Fundamental Human Motive. *Journal of Cross-Cultural Psychology*, 2012, 44(1), 5-23. <https://doi.org/10.1177/0022022111428515>
- [5] Kayani, S., Wang, J., Kayani, S., Kiyani, T., Qiao, Z., Zou, X.,... Imran, M. Self-System Mediates the Effect of Physical Activity on Students' Anxiety: A study from Canada. *The Asia-Pacific education researcher*, 2021, 30(5), 443-457. <https://doi.org/10.1007/s40299-020-00530-0>
- [6] Kingston, J., Becker, L., Woeginger, J., & Ellett, L. A randomized trial comparing a brief online delivery of mindfulness-plus-values versus values only for symptoms of depression: Does baseline severity matter? *Journal of Affective Disorders*, 2020, 276, 936-944. <https://doi.org/10.1016/j.jad.2020.07.087>
- [7] Liu, X. *The Development of Adolescence Self-Compassion, Environmental Influencing Factors and its Promoting Effect on Mental Health*. Ph.D., East China Normal University, 2022, Available from: <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CDFDLAST2022&filename=1022576640.nh> [Accessed 15 May 2024].
- [8] Mojzisch, A., Elster, C., & Germar, M. People perceive themselves to adhere more strictly to COVID-19 guide-lines than others. *Psychol Health Med*, 2022, 27(2), 325-332. <https://doi.org/10.1080/13548506.2021.1906435>
- [9] Pirson, M. A., Langer, E., & Zilcha, S. Enabling a Socio-cognitive Perspective of Mindfulness: The Development and Validation of the Langer Mindfulness Scale. *Journal of Adult Development*, 2018, 25(3), 168-185. <https://doi.org/10.1007/s10804-018-9282-4>
- [10] Pleman, B., Park, M., Han, X., Price, L. L., Bannuru, R. R., Harvey, W. F.,... Wang, C. Mindfulness is associated with psychological health and moderates the impact of fibromyalgia. *Clinical rheumatology*, 2019, 38(6), 1737-1745. <https://doi.org/10.1007/s10067-019-04436-1>
- [11] Prudenzi, A., D, G. C., Flaxman, P. E., & O'Connor, D. B. Wellbeing, burnout, and safe practice among healthcare professionals: predictive influences of mindfulness, values, and self-compassion. *Psychol Health Med*, 2022, 27(5), 1130-1143. <https://doi.org/10.1080/13548506.2021.1898651>
- [12] Sedikides, C. Self-enhancement and physical health: A meta-analysis. *Br J Soc Psychol*, 2023, 62(1), 583-599. <https://doi.org/10.1111/bjso.12577>
- [13] Sulosaari, V., Unal, E., & Cinar, F. I. The effectiveness of mindfulness-based interventions on the psychological well-being of nurses: A systematic review. *Applied nursing research*, 2022, 64, 151565. <https://doi.org/10.1016/j.apnr.2022.151565>
- [14] Tang, Y. Y., Tang, R., & Gross, J. J. Promoting Psychological Well-Being Through an Evidence-Based Mindfulness Training Program. *Front Hum Neurosci*, 2019, 13, 237. <https://doi.org/10.3389/fnhum.2019.00237>
- [15] Tian, X. Core socialist values and curriculum policy in China: A study of the curriculum standard for Chinese language. *European Journal of Education*, 2024, 59(2), 1-16. <https://doi.org/10.1111/ejed.12633>

- [16] Yasuma, N., Watanabe, K., Iida, M., Nishi, D., & Kawakami, N. Personal values in adolescence and psychological distress in adults: A cross-sectional study based on a retrospective recall. *PLoS One*, 2019, 14(11), e225454. <https://doi.org/10.1371/journal.pone.0225454>
- [17] Yosep, I., Mardhiyah, A., & Sriati, A. Mindfulness Intervention for Improving Psychological Wellbeing Among Students During COVID-19 Pandemic: A Scoping Review. *Journal of multidisciplinary healthcare*, 2023, 16, 1425-1437. <https://doi.org/10.2147/JMDH.S411849>
- [18] Zou, H., Cao, X., Geng, J., & Chair, S. Y. Effects of mindfulness-based interventions on health-related outcomes for patients with heart failure: a systematic review. *Eur J Cardiovasc Nurs*, 2020, 19(1), 44-54. <https://doi.org/10.1177/1474515119881947>