

# Mindfulness Level, Subjective Well Being, and Psychological Resilience among College Students

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**Abstract:** A total of 816 college students in Shandong Province of China were investigated with the five factor mindfulness scale (FFMQ), the Resilience Scale (CD-RISC) and the subjective well-being scale (SWB) to explore the influence mechanism of mindfulness on subjective well-being. Spss26.0 was used to analyze the collected data, the results were as follows: Chinese college students' mindfulness level can positively predict subjective well-being, psychological resilience can positively predict subjective well-being, mindfulness level can positively predict psychological resilience, and mindfulness level can affect subjective well-being through psychological resilience, and constructed an intervention plan to enhance the subjective well-being of college students.

**Keywords:** College students, Mindfulness level, Subjective well-being, Psychological resilience.

## 1. Introduction

Subjective well-being (SWB), as an important content of positive psychology, is a hot topic in the field of psychology. Subjective well-being refers to an individual's overall evaluation of their own quality of life, and the resulting psychological state in which positive emotional experience is dominant [1]. Well-being has an important impact on College Students' life development and the realization of self-worth [2]. Resilience refers to the individual characteristics that can provide coping styles or protection in the face of adversity. Mindfulness refers to a psychological state of being fully aware of the current experience [2].

At present, the research on college students' subjective well-being in China is still in its infancy. From the perspective of college students, it can make them pay more attention to their psychological resilience, improve their mindfulness level, better understand and deal with adversity and setbacks, and improve their subjective well-being. From the perspective of medical education, it is helpful for educators to understand students' mental health level, and provide basis and reference for colleges and universities to improve students' mental health level.

## 2. Methods

### 2.1. Participants

The participants of the study were college students in Shandong Province of China, and a total of 816 college students from different majors were selected by random sampling. The participants of the study who came from the eight schools located within the Shandong Province. They are the college students whose age ranges from 17 to 23 years of age. There were 389 male and 427 female students.

### 2.2. Measures

Five Factor Mindfulness Scale (FFMQ). This study used the five factor mindfulness scale, which was translated and

revised by penguin, liuxinghua and others in 2009 [4]. This scale can be used as a psychological measurement index for college students. The scale has 39 questions, including five dimensions: observation, description, conscious action, unresponsiveness and non-judgment. The scale adopts a five-level scoring system. The scale can be scored by using sub-dimension and calculating the total score. The higher the score, the higher the individual's mindfulness level. The internal consistency coefficient of the scale in this study was 0.852.

Subjective Well-being Questionnaire. The subjective well-being questionnaire developed by Diner et al. (1985) includes three subscales: overall life satisfaction (5 items), positive emotion frequency (6 items), and negative emotion frequency (8 items). Overall life satisfaction 1-5 questions, positive emotions 1, 3, 4, 7, 8, 9; Negative emotions 2, 5, 6, 10, 11, 12, 12, 14. Dini et al.'s research on multinational participants has shown that the scale has high reliability and validity. And this scale was used by Zheng Xue et al. among people with different educational levels. The consistency reliability coefficients (Alpha) of the three subscales are 0.789, 0.771, and 0.815, respectively. All three subscales use a 7-point scoring method. The 7-point scoring of the life satisfaction subscale is: 1 indicates strong opposition, 2 indicates opposition; 3 indicates some opposition; 4 indicates neither approval nor opposition; 5 indicates some approval, 6 indicates approval, and 7 indicates strong approval. The frequency words of positive and negative emotions experienced in the past week on the 7-point scale are: 1 represents no experience at all; 4 represents half the time experience; 7 represents all the time experience (trend: from no to have, from weak to strong).

CD-RISC Resilience Scale. The scale was compiled by American psychologists Connor and Davidson in 2003. The Chinese version of CD-RISC translated and revised by domestic scholars Yu and Zhang was used in this study. The scale includes self-improvement, tenacity, optimism and other three dimensions, with a total of 25 questions. Each item adopts Likert 5-level scoring method: 0 = never; 1 point = "very few";

2 points = "sometimes"; 3 points = "often"; 4 points = "almost always", the total score is (0-100). The hardiness dimension has 13 items, ranging from 11 to 23, and the score range is (0-52); There are 8 items in the self-improvement dimension, which are 1, 5, 7, 8, 9, 10, 24, 25 questions, and the score range is (0-32); There are 4 items in the optimism dimension, which are 2, 3, 4 and 6 questions, and the score range is (0-16). The higher the score, the better the level of psychological resilience.

### 2.3. Date Statistics

This study used SPSS26.0 to analyze the data results. Using descriptive statistics, independent sample t-test, correlation analysis, regression analysis and other statistical analysis methods to analyze and process the data.

## 3. Results

Data statistics show that the observation, description and total score dimensions of College Students' mindfulness level are at the medium level, which shows that they have a certain understanding of self observation and introspection. However, the dimensions of conscious action and non judgment are at a low level, which indicates that they may face challenges in practicing mindfulness[5,6]. Mindfulness is a psychological concept that emphasizes paying attention to current experience, accepting and reflecting without judgment. Therefore, improving the level of college students in these two dimensions needs to further help them understand and practice the core principles of mindfulness. Encourage college students to regularly reflect on themselves and learn to observe their emotions, thoughts and behaviors. Teach them how to face difficulties and challenges with a positive attitude instead of avoiding or resisting. Encourage college students to learn to treat their thinking and behavior with an objective and neutral attitude, rather than evaluate or criticize them[7].

**Table 1.** Respondents Level of Mindfulness  
N= 816

Subscales	Weighted Mean	Std Dev	Interpretation
Observing	26.7745	9.10555	Moderate
Describing	24.7990	3.47913	Moderate
Acting with awareness	20.5319	9.01554	Low
Nonjudging	21.2610	8.99485	Low
Nonreactivity	23.7047	8.00229	Moderate
<b>TOTAL Mindfulness</b>	<b>117.0711</b>	<b>13.34865</b>	<b>Moderate</b>

The life satisfaction dimension of College Students' subjective well-being is at the medium level, which indicates that their overall satisfaction with life is general. Positive and negative emotions are moderately high, which indicates that they have both positive and negative emotional experiences. The full score of subjective well-being is at the general level, which indicates that their feelings of happiness are relatively stable. We should encourage college students to actively face the challenges and difficulties in life[8]., learn how to reduce the impact of negative emotions through cognitive reconstruction and emotion regulation, and express and regulate emotions through social interaction, sports, art and other ways, so as to maintain a positive emotional state[9,10].

**Table 2.** Respondents Subjective-Well-Being  
N = 816

Subscales	Weighted Mean	Std Dev	Interpretation
Life Satisfaction	21.7169	7.38342	moderate
Positive Emotions	21.8995	7.54908	Moderate to high
Negative Emotions	29.3885	12.10201	Moderate to high
Total SWB	73.0049	27.03451	Moderate range

The resilience dimension of College Students' psychological resilience is the first level, which shows that they have certain adaptability and recovery ability in the face of setbacks and difficulties. The strength dimension is secondary, which indicates that they have certain coping ability and self-confidence in the face of pressure and challenges. The optimistic dimension is three levels, which shows that they have a certain positive attitude and optimistic expectations in the face of difficulties and challenges. The total score is high, which indicates that their overall level of resilience is high. Encourage college students to improve their resilience by accepting challenges and overcoming difficulties, so as to better deal with setbacks and difficulties[11]. Teach college students to improve their coping ability and self-confidence by learning skills and accumulating experience, so as to better cope with pressure and challenges[12]. Encourage college students to maintain an optimistic attitude and expectations through positive thinking and looking for opportunities, so as to better cope with difficulties and challenges[13].

**Table 3.** Respondents Resilience  
N = 816

Variables	Weighted Mean	Std Dev	Rank/ Interpretation
Tenacity	33.0625	14.83727	1
Strength	20.3652	9.14687	2
Optimism	10.4191	4.68998	3
Total Resilience	63.8468	24.25766	High

**Table 4.** Regression Analysis of FFMQ and CD RISC (predictor) on Subjective Well-being (Dependent)  
N=816, alpha = 0.05

Independent Variable/ Predictor Variable	r	p-value	Interpretation
DESCRIBING	.207**	0.574	Non-Significant
ACTING WITH AWARENESS	-.291**	0.002	Highly Significant
NONJUDGING	-.270**	0.011	Significant
NONREACTIVITY	.297**	0.874	Non Significant
STRENGTH	.356**	0.022	Significant
OPTIMISM	.218**	0.075	Non Significant
CD RISC TOTAL	.372**	0.001	Highly Significant

Legend: Significant at p-value < 0.05 High Significant at p-value < 0.01

From the statistical data, there is a high correlation between conscious action and psychological resilience in mindfulness level and subjective well-being. This means that those college students who can maintain conscious action and have

psychological resilience are more able to feel subjective well-being. Conscious action means that individuals are alert in daily life, aware of their behaviors and emotions, and able to respond to their behaviors and emotions. This ability is related to individual self-consciousness and self-control. Therefore, keeping conscious action can help individuals better manage their emotions and behaviors, so as to better cope with stress and adversity[14].

The statistical data showed that the variables of mindfulness and resilience were significantly correlated with positive emotions. Non judgment and total score of resilience in mindfulness level have significant influence on positive emotions, and conscious action has different influence on positive emotions. The descriptive, unresponsive, total mindfulness score in mindfulness level, optimism and strength in resilience have no significant impact on positive emotions

According to the data provided, we can see that mindfulness level and resilience are significantly correlated with positive emotions. This shows that individuals who maintain mindfulness and have resilience are more able to experience positive emotions.

First, let's explore the relationship between mindfulness and positive emotions. Non judgmental and conscious actions have a significant impact on positive emotions in mindfulness level. This shows that when individuals can reduce the evaluation of themselves and the surrounding environment, and remain aware of their own behavior, they can maintain a positive emotional state[15]. On the contrary, descriptive and unresponsive dimensions have no significant effect on positive emotions. This may mean that only describing the external environment or lack of response does not directly affect the individual's emotional state[16].

Next, let's look at the relationship between resilience and positive emotions. The total score of resilience has a significant impact on positive emotions, which shows that resilience, as a whole factor, is very important for maintaining a positive emotional state. However, the impact of specific dimensions such as optimism and strength on positive emotions is not significant. This may mean that just having an optimistic attitude or feeling powerful is not enough to directly affect an individual's emotional state[17]. In addition, it is worth noting that conscious action has different effects on positive emotions. This may be because conscious action involves not only the individual's self-consciousness, but also the positive response to self-behavior. Therefore, conscious action may be a key factor, which can affect the emotional state of individuals either directly or by interacting with other factors (such as resilience ) [18].

To sum up, mindfulness level and resilience are important factors affecting positive emotions. Among them, non judgment and conscious action may be particularly critical factors. These findings have important implications for understanding and improving individual mental health.

In order to verify the predictive effect of mindfulness level and resilience on negative emotions, this study used six factors of mindfulness level and four factors of resilience as independent variables and negative emotions score as dependent variable for multiple linear regression analysis. The stepwise regression method was used to analyze whether the six factors of mindfulness level and the four factors of resilience can predict positive emotions. The results show that the five factors of mindfulness level and the three factors of psychological resilience enter the regression model, so the

established regression equation is effective. Describing, acting with awareness and nonjudging had a positive predictive effect on negative emotions, while nonreactivity, total ffmq, CD RISC total, optimization and strength had a negative predictive effect on negative emotions.

**Table 5.** Regression Analysis of FFMQ and CD RISC (predictor) on Positive Emotions (Dependent)  
N=816, alpha = 0.05

Independent Variable/ Predictor Variable	r	P value	Interpretation
DESCRIBING	.174**	0.919	Non-Significant
ACTING WITH AWARENESS	-.288**	0.023	Significant
NONJUDGING	-.307**	0.006	Highly Significant
NONREACTIVITY	.308**	0.642	Non-Significant
TOTAL FFMQ	.0036	0.226	Non-Significant
STRENGTH	.339**	0.422	Non-Significant
OPTIMISM	.310**	0.638	Non-Significant
CD RISC TOTAL	.421**	0.000	Highly Significant

*Legend: Significant at p-value < 0.05 High Significant at p-value < 0.01*

According to the statistical results, we can see that mindfulness and resilience are significantly correlated with negative emotions. This shows that individuals who maintain mindfulness and have resilience are more able to resist the influence of negative emotions.

First, let's explore the relationship between mindfulness and negative emotions. Non judgment, total mindfulness score and total resilience score have significant effects on negative emotions, which shows that in all dimensions of mindfulness, not judging one's own thoughts, behaviors and emotions, and having a high total mindfulness score and total resilience score can effectively reduce individuals' negative emotions (brown, K. W., 2018). These results show that mindfulness and resilience play an important role in dealing with negative emotions.

The reason why the non judgment dimension has a significant impact on negative emotions may be that when we can reduce the evaluation of ourselves and the surrounding environment, we can better accept and deal with negative emotions, rather than over criticize or resist them [16]. The significant impact of mindfulness level on the total score may be because a higher mindfulness level represents a higher degree of awareness and acceptance of oneself and the surrounding environment, so that individuals can better cope with negative emotions. The significant impact of the total score of resilience may be due to the fact that resilience is the ability to adapt and recover when facing pressure and challenges[19]. A higher total score of resilience means that individuals can better deal with negative emotions.

Next, let's look at the relationship between resilience and negative emotions. Although the specific dimensions such as optimism and strength have no significant impact on negative emotions, the total score of resilience has a significant impact on negative emotions. This shows that although specific resilience factors may not have a significant impact on negative emotions, the overall level of resilience can

effectively resist negative emotions [20].

To sum up, mindfulness level and resilience are important factors to resist negative emotions. Among them, non judgment, mindfulness and resilience may be the key factors. These findings have important implications for understanding and improving individual mental health.

**Table 6.** Regression Analysis of FFMQ and CD RISC (predictor) on Negative Emotions (Dependent)  
N=816, alpha = 0.05

Independent Variable/ Predictor Variable	r	P value	Interpretation
DESCRIBING	-.202**	0.897	Non-Significant
ACTING WITH AWARENESS	.239**	0.025	Significant
NONJUDGING	.260**	0.003	High Significant
NONREACTIVITY	-.318**	0.935	Non-Significant
TOTAL FFMQ	-.126**	0.004	High Significant
STRENGTH	-.312**	0.587	Non-Significant
OPTIMISM	-.277**	0.386	Non-Significant
CD RISC TOTAL	.421**	0.001	High Significant

Legend: Significant at  $p$ -value < 0.05 High Significant at  $p$ -value < 0.01

## 4. Conclusion

The largest proportion of respondents were female, between the ages of 17 and 19, pursuing science or engineering degrees, and residing in urban centers” which suggests that there is growing interest in Science, Technology, Engineering and Mathematics (STEM) fields among young women.

College students, on average, exhibit moderate mindfulness, subjective well-being, and high resilience which implies that they were generally able to cope with stress and maintain a positive outlook on life and able to adept at bouncing back from adversity.

Mindfulness was significantly influenced by place of origin, age, and grade, while resilience was significantly influenced by place of origin, and subjective well-being is significantly influenced by age and place of origin.

The correlation between mindfulness, resilience, and subjective well-being among college students indicated that these three psychological constructs were interdependent and influence each other in a meaningful way.

The mindfulness level, resilience and subjective well-being of college students were significantly correlated in pairs.

Resilience had a partial mediating effect between mindfulness and subjective well-being which meant that mindfulness can enhance subjective well-being indirectly by fostering resilience. However, mindfulness may also directly influence subjective well-being through other mechanisms.

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