

# Relationship between College Students' "Savoring", Personal Growth Initiative and Subjective Well-being: A Different Perspective of "Anticipating"

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**Abstract:** Background: The issue of psychological crisis among college students is becoming increasingly prominent. "Savoring" can effectively increase the level of subjective well-being of college students and is an important protective factor against psychological crisis. However, its mechanism of action is still unclear and requires further exploration. Objective: To explore the mediating role of personal growth initiative in the relationship between "Savoring" and subjective well-being, and to provide reference for improving the mechanism of "Savoring" enhancing subjective well-being. Methods: The Savoring Brief Inventory (SBI), The Chinese Version of Personal Growth Initiative Scale-II (C-PGIS- II) and General Subjective Well-being Scale (GWB) were used to investigate 200 college students in China, and the mediating effect model was constructed and tested to explore the role of personal growth initiative in the process of "Savoring" in improving college students' subjective well-being. Results: There was significant correlation between personal growth initiative and its four dimensions, "Savoring (anticipating)" and subjective well-being ( $P < 0.01$ ); The level of "Savoring (anticipating)" had significant positive effects on subjective well-being and personal growth initiative ( $\beta=0.167, p < 0.05$ ;  $\beta=0.537, p < 0.001$ ), and at the same time, personal growth initiative has a significant positive effect on subjective well-being, with a standardized coefficient of 0.316 ( $p < 0.001$ ). Conclusion: In the perspective of "Anticipating", Personal growth initiative plays a partial mediating role between the level of "Savoring" and subjective well-being of college students, in which the direct effect is 0.167, and the indirect effect size is 0.17, with the latter accounting for 50.4% of the total effect size.

**Keywords:** Personal growth initiative, Anticipating, Subjective well-being, Mediation model.

## 1. Introduction

With the continuous intensification of social competition, psychological crises of college students occur frequently, resulting in many negative social consequences, and how to improve the mental health of college students has become an important issue in society and academia [1].

"Savoring" means the ability to pay attention to, appreciate, and enhance positive experiences in one's life, which is the "magnifying glass" of positive experiences [2], and its structure includes savoring experience, savoring process, and savoring strategy (see Figure 1). Specifically, "savoring" is a comprehensive ability involving cognition and behavior, which requires individuals to take the focus of attention as a starting point, actively capture experience materials through external perception and internal introspection, and regulate the length and depth of positive experiences through four savoring processes: thanksgiving, basking, marveling, and luxuriating, so as to prolong and magnify positive emotions [3]. A large body of research suggests that "Savoring" may act on both mental illness and health models. On the one hand, "Savoring" may be effective in alleviating depression and anxiety, reducing pain, and buffering the negative effects of illness [4-7]; On the other hand, "savoring" plays an important role in coping with stress, reducing conflict, and fostering healthy attachment relationships. Overall, "savoring" is effective in bettering an individual's mental health and enhancing the level of subjective well-being, and can be considered an important protective factor in coping with psychological crises [8-10].

It is worth noting that Bryant emphasizes that "Savoring" does not correspond to a passive "stimulus-response" process, but rather to "active conscious enjoyment" [11]. Therefore, he believes that the conceptual structure of "Savoring" is missing a part that characterizes its dynamism, i.e., "Savoring" should be quite proactive and dynamic. Personal Growth Initiative (PGI) refers to an individual's initiative in the process of self-growth, which involves a set of synergistic self-improvement skills, both cognitive and behavioral, and can be divided into four specific dimensions: a. Readiness for Change (RC), i.e., the ability to seize the time to prepare for change; b. Planfulness (PL), i.e., the ability to make specific plans for change; c. Using Resources (UR), i.e., proactively searching for and utilizing external resources to promote one's own growth; d. Intentional Behavior (IB), i.e., putting into active behavior in order to grow [12]. The level of personal growth initiative points to an individual's evolving growth path, a continuous spectrum from low to high that fully characterizes the individual's agency. Previous studies have found that college students' personal growth initiative and its dimensions are significantly and positively related to subjective well-being and its dimensions [13]. However, the relationship between personal growth initiative and "Savoring" is not clear, and it remains to be explored whether it can act as a motivational characteristic in the process of "Savoring" to enhance subjective well-being.

In addition, depending on the time dimension, "Savoring" can be divided into three dimensions: anticipation, savoring the moment, and reminiscence [11]. Research has shown that

Oriental and Westerners differ in their performance on these three dimensions. Specifically, individuals from Eastern cultures tend to derive pleasure from "future" oriented activities such as personal growth and social achievement, whereas individuals from Western cultures prefer to derive pleasure from activities that are perceived as "present" activities such as interpersonal interactions and recreation [14,15]. Researchers have emphasized that differences in collectivist and individualist motivations, dialectical thinking, and differences in traditional Asian (Confucian) and Western values may limit the applicability of Western-based savoring interventions in Eastern cultures, and therefore the cultural background of the participants should be adequately considered prior to the implementation of savoring interventions [16,17]. Given that oriental positive experiences are more future-oriented, this study incorporates personal growth initiative as a motivational characteristic into the process of "Savoring" to enhance subjective well-being under the differential perspective of "Savoring (Anticipating)" and proposes the following hypotheses: (1) there is a significant correlation between "Savoring (Anticipating)", personal growth initiative, and subjective well-being among college students; (2) Personal growth initiative mediates the relationship between "Savoring (Anticipating)" and subjective well-being, and is a motivational feature that characterizes the savoring process.

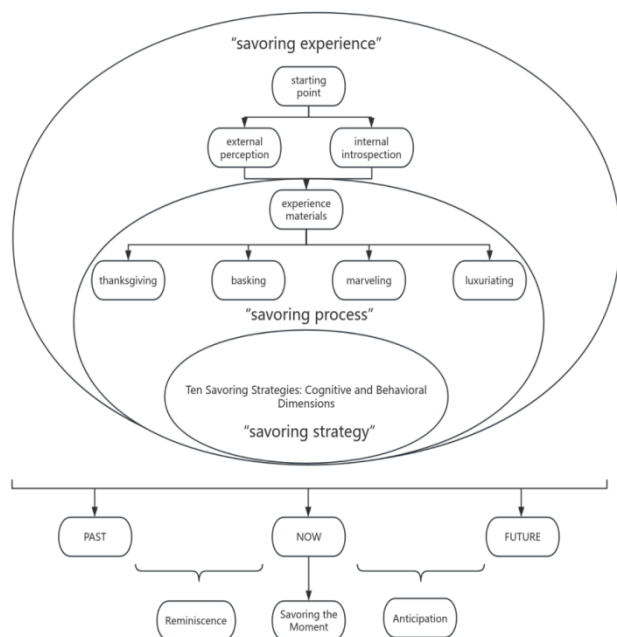


Figure 1: Conceptual structure of "Savoring"

## 2. Methods

### 2.1 Participants

An online questionnaire was used to collect data from college students at universities in China.

### 2.2 Survey Tools

**Demographic questionnaire:** a self-administered questionnaire was used to collect general demographic information about college students, including information on gender, educational background, type of place of origin, and professional categories.

**The Savoring Brief Inventory (SBI):** Guo Tianman's version of the Savoring Belief inventory's subscale was used to assess the level of "Savoring (Anticipating)" of college students [18]. The scale was revised from Bryant's Savoring Belief Inventory, and the revised scale has good reliability and validity. The subscale contains four items, using a seven-point scale, the higher the total score of the subscale, the better the ability of Savoring in this dimension, of which the fourth item is reverse scored.

**Chinese Version of Personal Growth Initiative Scale-II (C-PGIS-II):** The Chinese version of Personal Growth Initiative Scale (C-PGIS) was used to assess the level of personal growth initiative of college students [12]. The scale was revised based on the more mature Personal Growth Initiative Scale-II (PGIS-II), and the authors used back-translation method and cognitive interviews to revise the original scale into a Chinese scale that conformed to the Chinese expression habits, and the reliability and validity of the revised scale was good. The dimensional structure of the scale is consistent with the English version, consisting of 16 items, with four dimensions: Planfulness (1, 3, 5, 10, 13), Readiness for Change (2, 8, 11, 16), Intentional Behavior (4, 7, 9, 15), and Using Resources (6, 12, 14).

**General Subjective Well-being Scale (GWB):** The scale, revised by Duan in 1996, was used to assess the subjects' statements of well-being [19]. It consists of 18 items, and a higher total score means that the participant has a higher level of subjective well-being. The scale has high reliability and validity, with a test-retest reliability of 0.85, the correlation between the subscales and the total scale is 0.56-0.88, and the normative mean scores show a difference between the sexes, with 75 for males and 71 for females.

### 2.3 Statistical Analysis

The data were collated using SPSS 27.0 to exclude incompletely completed responses and those with obvious logical errors.

Common method bias test was performed using Harman's single-factor test. Correlations between scale scores were examined using SPSS 27.0 Pearson's correlation analysis. Mediated effects models with latent variables were created in Amos Graphics and mediated effects model tests were performed.

## 3. Result

### 3.1 Overall Status

A total of 216 questionnaire data were collected in this survey, 4 invalid data and 12 duplicated data were excluded after organizing the data, and 200 data were retained in the end, with a questionnaire validity rate of 92.6%. Among them, there were 72 males (36% of the total number), 128 females (64% of the total number), 89 college students of urban origin, 111 college students of rural origin, 8 college students, 147 undergraduates and 45 graduate students, and the professional categories were related to the categories of science, engineering, agriculture, medicine, humanities, and social sciences. The results revealed that the differences in the levels

of subjective well-being, "Savoring (Anticipating)", and personal growth initiative of college students were not statistically significant between the comparison groups for each demographic indicator.

The results of the questionnaire showed that the mean score of subjective well-being level of college students was (72.23±11.79), which is a medium level. Among them, the average score of male university students was 71.99, lower than the average score of 75 in China's male norms, and the average score of female university students was 72.36, higher than the average score of 71 in China's female norms. The mean score of "Savoring (Anticipating)" was (18.63±3.79), the mean score of personal growth initiative and its four dimensions (Planfulness, Readiness for Change, Intentional Behavior, Using Resources) were (68.31±11.83, 21.11±3.95, 16.92±3.23, 17.28±3.38, and 13.01±2.63) respectively.

### 3.2 Harman's Single-factor Test

Using the Harman's single-factor test, all the question items used in this study were subjected to an unrotated principal component factor analysis, which showed that a total of eight factors with eigenvalues greater than 1 were resolved, and the first factor explained 29.744% of the variance, which is less than the critical value of 40%, which leads to the inference that there is no significant common method bias in the data used in this study.

### 3.3 Correlation Analysis Among the Study Variables

The results of the Pearson's correlation (see Table 1) indicated that there was a significant correlation between personal growth initiative and its four dimensions (Planfulness, Readiness for Change, Intentional Behavior and Using Resources), "Savoring (Anticipating)" and subjective well-being ( $p < 0.01$ ), and that Hypothesis 1 was valid. This provides a basis for subsequent structural equation modeling with mediation.

**Table 1: Correlation analysis**

	Planfulness	Readiness for Change	Intentional Behavior	Using Resources	Subjective Well-being	Personal Growth Initiative	Anticipating
Planfulness	--						
Readiness for Change	.785**	--					
Intentional Behavior	.785**	.743**	--				
Using Resources	.667**	.680**	.721**	--			
Subjective Well-being	.382**	.358**	.321**	.333**	--		
Personal Growth Initiative	.921**	.899**	.911**	.837**	.391**	--	
Anticipating	.474**	.419**	.521**	.404**	.337**	.512**	--

\*\* The correlation is significant at the 0.01 level (two-tailed).

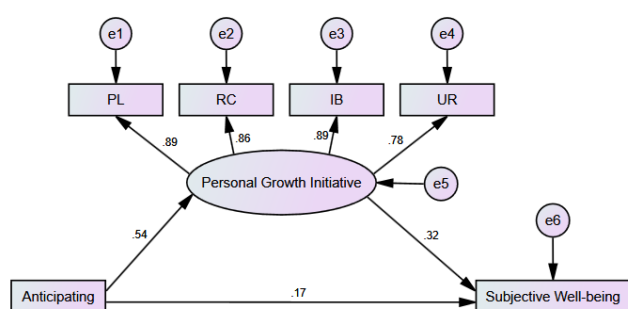
### 3.4 Mediation Effect Modeling and Testing

Based on the research hypotheses and the correlation analysis among variables, structural equation modeling (SEM) was constructed with "Savoring (Anticipating)" as an exogenous observational variable (independent variable), subjective well-being as an endogenous observational variable (dependent variable), and personal growth initiative as an endogenous latent variable (mediator variable), as shown in Figure 2.

(GFI/AGFI) = 0.975/0.936 > 0.9, normed-fit index (NFI) = 0.978 > 0.9, and Incremental Fit Index (IFI) = 0.989 > 0.9, relative fit index (RFI) = 0.958 > 0.9, all of which indicate that the model is an excellent fit and the model can be accepted, as shown in Table 2.

**Table 2: Fitting result**

	CMIN/DF	RMSEA	SRMR	GFI /AGFI	NFI	IFI	RFI
Default model	1.894 p>.05	.067	.021	.975 /.936	.978	.989	.958



**Figure 2: The mediating model of "Anticipating" affecting college students' subjective well-being**

PL refers to "Planfulness", RC refers to "Readiness for Change", IB refers to "Intentional Behavior", UR refers to "Using Resources". Same as below.

The model was fitted using Amos 24.0 and the results showed a good fit (see Table 2): chi-square/degrees of freedom (CMIN/DF) = 1.894 < 2,  $p > 0.05$ , root mean square error of approximation (RMSEA) = 0.067 < 0.08, standardized root mean square residual value (SRMR) = 0.021 < 0.05, goodness-of-fit index and adjusted goodness-of-fit index

The results of the structural equation modeling path analysis show that college students' "Savoring (Anticipating)" has a significant positive effect on subjective well-being and personal growth initiative ( $\beta=0.167$ ,  $p<0.05$ ;  $\beta=0.537$ ,  $p<0.001$ ), and at the same time, personal growth initiative has a significant positive effect on subjective well-being, with a standardized coefficient of 0.316 ( $p < 0.001$ ). Personal growth initiative plays a partial mediating role between the level of "Savoring (Anticipating)" and subjective well-being of college students, in which the direct effect is 0.167, and the indirect effect size is 0.17, with the latter accounting for 50.4% of the total effect size. The factor loading values for all four dimensions of personal growth initiative were greater than 0.7, as detailed in Table 3.

**Table 3: Path coefficient estimation for SEM**

	Estimate	Standardized Estimate	S.E.	P
PGI<---Anticipating	.498	.537	.061	<0.001
PL<---PGI	1.000	.890		
RC<---PGI	.790	.859	.048	<0.001
IB<---PGI	.851	.885	.049	<0.001
UR<---PGI	.586	.784	.042	<0.001
SWB<---Anticipating	.519	.167	.241	<0.05
SWB<---PGI	1.058	.316	.273	<0.001

The Bootstrap method was used to repeat the test with 5,000 samples (95% CI), and the results of the upper and lower bounds of the bias-corrected confidence intervals showed that the lower bound of the indirect effect of "Savoring (Anticipating)" on subjective well-being was 0.215, and the upper bound was 0.903, and the confidence interval did not include 0. Thus The mediating effect of "Savoring (Anticipating)" on subjective well-being through personal growth initiative is significant.

## 4. Discussion

### 4.1 "Savoring (Anticipating)" Can Effectively Enhance the Level of Subjective Well-being and Personal Growth Initiative of College Students

The results of the structural equation modeling path analysis show that the level of college students' "Savoring (Anticipating)" has a significant positive effect on subjective well-being and personal growth initiative ( $\beta=0.167$ ,  $p<0.05$ ;  $\beta=0.537$ ,  $p<0.001$ ), which confirms the "Savoring (Anticipating)" is essential to college students' personal growth and psychological health. Broaden-and-Build Theory believes that the specific positive emotions brought about by "savoring", such as pleasure, pride, etc., have the function of expanding people's capacity for instantaneous knowledge and action, and constructing and enhancing people's personal resources [20]. In developmental psychology, the university stage is regarded as an essential stage for college students to pursue self-growth, self-exploration and self-identity through the development of internal and external resources. It can be stated that "Savoring (Anticipating)" fulfills the needs of this special growth stage, can contribute to the cultivation of a healthy psychological ecology of college students, access to more growth resources, enhance the subjective well-being of college students, and is an essential protective factor in the psychological crisis of college students [21-23].

### 4.2 Personal Growth Initiative as a Mediator of "Savoring (Anticipating)" Influencing Subjective Well-Being in College Students

Meanwhile, personal growth initiative partially mediates the relationship between "Savoring (Anticipating)" and subjective well-being, suggesting that personal growth initiative is an effective motivating factor in improving the process of "Savoring (Anticipating)" affecting the level of subjective well-being. It is foreseeable that under the perspective of "Anticipating", individuals with high personal growth initiative are more likely to consciously seek positive experiences as psychological resources for self-growth, and to be willing to train and promote their own "savoring" abilities in actions, thus possessing higher subjective well-being. Analysis of the results of the factor loadings for each dimension revealed that Planfulness (PL) and Intentional Behavior (IB) are critical strategies for the personal growth, reflecting the visionary and pragmatic growth principles of college students, i.e., they are good at making development plans for the future and putting them into practice. In contrast, however, university students lacked the ability to actively seek and utilize external resources, which may be due to the fact that in the traditional Chinese educational context, relying on and utilizing external resources is often misinterpreted as

an opportunistic behavior, which could potentially damage their self-esteem [24]. Research on frustration coping and psychological help-seeking has illustrated that individuals with higher coping efficacy are better at proactively seeking social support in the face of psychological crises, which results in a virtuous cycle towards problem solving [25]; whereas individuals with less coping ability and lower self-confidence are instead ashamed or afraid of seeking support in the face of crisis, which may further worsen their situation. Therefore, how to lead students to effectively utilize external resources in the education system, and at the same time reduce the negative experiences they may encounter when seeking help, is an important aspect of the development of "savoring", and an important path to enhance the subjective well-being of college students. In fact, social support is highly correlated with psychological health, and college kids who realize more and better social support tend to show higher psychological resilience and coping ability [26-28]. Only by improving the trinity social support system of colleges, society and families, opening up the channels for young people to seek external support and resources, and giving them the necessary psychological identity and development resources, can we really help college students grow up and become successful.

### 4.3 Gender Differences in Subjective Well-being Levels of College Students

The results of the General Subjective Well-being Scale (GWB) show that the well-being of male college students in China is lower than the normative level, while female students is higher than the normative level. This may be due to the higher expected employment stress among male college students as a result of stricter social role expectations for men in terms of career and family financial responsibilities [29]. The more likely reason is that in a society where men tend to pursue competition and dominance within a group, while women are relationship-oriented and tend to develop intimate relationships characterized by caring and nurturing, female college students have a better chance of deriving more positive experiences and well-being from campus peer relationships [30,31]. The results in terms of gender differences point to the need to promote the concept of gender equality and to reduce stereotypes and unequal expectations of males and females through educational and social activities, as well as to address the provision of personalized mental health support and resources for students of different genders.

## 5. Conclusion

Taking the unique perspective of "Anticipating", this study reveals the positive impact of "savoring" in enhancing the subjective well-being of college students and promoting their psychological health. This finding highlights the importance of incorporating "savoring" as a protective technique into mental health education and crisis intervention systems in colleges and universities. Personal growth initiative is a key motivating factor that affects the process of "Savoring", and college students should be encouraged to manage and optimize their positive experiences consciously with the goal of personal growth, and to play the role of "Savoring" on positive experiences as a "magnifying glass", which could significantly improves their subjective sense of well-being.

The study focuses on the perspective of "savoring (Anticipating)" and explores the mediating role of personal growth initiatives in the process of "savoring" influencing college students' subjective well-being. However, there is a lack of evidence to support whether this effect can be extended to the other two dimensions of savoring—namely savoring the moment, and reminiscence. Future research should consider taking these dimensions into account and further validate the overall structure of "Savoring". In addition, the correspondence between the four dimensions of personal growth initiative and the "Savoring" strategy is also a topic worthy of in-depth study, and how to effectively combine the goals of personal growth with the "Savoring" strategy is a critical point for future research.

## Acknowledgements

The project funded by the Special Task Project of Humanities and Social Sciences Research of the Ministry of Education in 2023 (Research on College Counselors) "Research on the Early Warning and Guidance Mechanism for College Students' Psychological Crisis in Cyberspace Based on Big Data Analysis" (Grant 23JDSZ3094).

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