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Non-attachment, Meaning in Life, and Self-Efficacy among Chinese Undergraduate and Graduate Students

Zijian Zhao[1,2,3,4,5,7,8], Elna R. Lopez[5*], Dongling Zhang[5,6*], Javier Garcia-Campayo[7], Qun Pu[8], Hector M. Perez[9]

[1]Yonsei University, Seoul, Republic of Korea
[2]The Catholic University of Korea, Bucheon-si, Republic of Korea
[3]University of Chinese Academy of Social Sciences, Beijing, China
[4]The International Institute of Computing and Societal Education University, Wilmington, U.S.A.
[5]Lyceum of the Philippines University - Batangas, Batangas City, Philippines
[6]Qilu Normal University, Jinan,China
[7]University of Zaragoza, Zaragoza,Spain
[8]Akademia Jagiellońska, Toruń, Poland
[9]Republic of the Philippines Professional Regulation Commission, Manila, Philippines
[*]Corresponding author E-mail: elna_lopez1967@yahoo.com;zhangdongling6506@gmail.com

Abstract

This study examined the relationship between non-attachment, meaning of life, and self-efficacy in 823 Chinese college students, using the Non-Attachment Scale (NAS-7), Meaning of Life Questionnaire (MLQ), and General Self-Efficacy Inventory (GSE). Findings showed positive correlations, with non-attachment significantly predicting both meaning of life and self-efficacy, indicating that higher non-attachment leads to greater confidence and goal achievement in life challenges. The meaning of life was a significant mediator between non-attachment and self-efficacy, suggesting it boosts self-efficacy, psychological well-being, and personal growth. The study also considered participants' demographics to understand the sample's characteristics. Results highlight the role of non-attachment, meaning of life, and self-efficacy in enhancing psychological health, providing insights for mental health education and counseling in higher education, and advocating for psychological interventions that promote these attributes in university students.

Keywords

Non-Attachment, Meaning in Life, Self-Efficacy, Mental Health

1.Introduction

Chinese undergraduate and graduate students are representatives of social change and the modernization process, navigating a dynamic and complex social environment. China, as one of the world's most populous coun-

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tries, has been increasingly prominent on the global stage amidst the waves of globalization and technological revolution, offering unprecedented opportunities for university students. However, simultaneously, they face unparalleled challenges. The rapid economic and social development in China has led to fiercer competition in the job market, placing enormous pressure on university students both during their academic years and after graduation. They must excel in intense competition while meeting the expectations of their families, which may include expectations regarding financial status and social standing. These familial expectations not only symbolize individual responsibilities but also carry the honor and future of their families.

Furthermore, societal pressures are continuously mounting. Urbanization, information proliferation, and the widespread use of social media have introduced new societal pressures for university students, such as social comparisons, privacy breaches, and virtual social pressures. These pressures are not merely psychological burdens but can also have adverse effects on their physical health and interpersonal relationships.

These pressures and challenges have far-reaching implications for the psychological well-being of university students. Research indicates that psychological health issues, such as anxiety, depression, and emotional distress, are prevalent among chinese undergraduate and graduate students. Academic stress and uncertainty about the future can lead to a decline in their psychological well-being, potentially further affecting their academic performance, social relationships, and overall quality of life. Additionally, psychological health issues may interfere with their life satisfaction and pursuit of life meaning, potentially hindering their career and personal achievements. In this context, this study will focus on three crucial psychological concepts: Non-attachment, meaning in life, and self-efficacy.

"Non-attachment" is a notable psychological concept that emphasizes the avoidance of excessive attachment and clinging to both material possessions and emotions.(Maddock, 2023) In Buddhist philosophy, non-attachment is considered a key element in achieving mental tranquility and happiness. This study adopts the definition of "Non-attachment" provided by Sahdra et al. (2010), which integrates the Non-attachment philosophy of Buddhist culture with Western attachment theory. Non-attachment is viewed as a psychological state characterized by mental flexibility and resilience.(Gao & Sik, 2024) This state enables individuals to focus their attention on the present moment without being disturbed by external circumstances, while remaining open to the impermanence of life. It signifies the conscious possession of self-recovery capabilities without fixating on any particular thoughts, images, or perceptual objects (Sahdra et al., 2010). Highly nonattached individuals gain a deeper understanding of interpersonal relationships, things, and events. They make decisions autonomously, are not influenced by external relationships, things, or events, and do not seek to satisfy their inner needs through external objects. Their happiness stems from their inner essence rather than being bound by external conditions (Sahdra et al., 2016).

Some studies suggest that individuals with higher levels of Non-attachment also have higher self-efficacy. Those who adopt a nonattached attitude tend to cope better with setbacks, reduce anxiety, and possess greater self-confidence and self-efficacy (Yang et al., 2020). However, despite being an important psychological concept in the Chinese cultural context, research on Non-attachment is relatively scarce, especially among university students.

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"Meaning of life" is another important psychological concept that involves contemplating life goals and values, as well as the perception of meaning and direction in an individual's life. When defining the concept of the meaning of life, this study delved into relevant literature, reading research on the significance and impact of meaning in life for individuals. According to Steger, Frazier, Oishi, and Kaler (2006), the meaning of life can be divided into two key dimensions, providing a clearer definition and understanding. (Martela &Steger, 2023)These two dimensions are the "presence of meaning" and the "search for meaning."

Firstly, the "presence of meaning" represents the individual's perception of the presence of meaning in their life. This dimension focuses on whether or not there is a sense of meaning in life and how individuals perceive and experience meaning in their lives. It reflects the essence and related characteristics of meaning in life, helping us understand how strongly individuals feel about the goals, values, and purposes in their lives in different contexts.

Secondly, the "search for meaning" suggests that the meaning of life is not fixed but evolves over time and with life experiences. This dimension focuses on an individual's ongoing search and exploration of the meaning of life. Individuals may engage in deeper reflections on the goals and meaning of life as they grow and accumulate experiences. This helps us gain a deeper understanding of how meaning in life plays a significant role in an individual's life.

Therefore, Steger et al.'s (2006) dual-dimensional concept of the meaning of life provides a more comprehensive perspective, aiding our better understanding of the diversity and complexity of meaning in life and how it impacts individuals' lives.(Seidel, Daniels, & Ostafin, 2023) Some studies suggest a close relationship between the sense of meaning in life and self-efficacy (Bueno-Pacheco, Satorres, Delhom, & Melén-dez, 2023).

This study will apply this concept to explore the level of meaning in life among chinese undergraduate and graduate students and gain insight into how different dimensions of meaning in life interact with non-attachment and self-efficacy, as well as their influence on individuals' happiness and psychological well-being. This will contribute to better support the psychological development and life satisfaction of university students, providing a strong foundation for mental health intervention and support.

Individuals with a sense of meaning in life often have more confidence and motivation to achieve personal goals and are more likely to overcome adversity (Zhao, Zhang, Li, & Wang, 2023). Despite the profound influence of Confucian and Daoist philosophy on Chinese culture, emphasizing the meaning and goals of life, research on the meaning of life among chinese undergraduate and graduate students is relatively limited.
The concept of self-efficacy, first introduced by psychologist Bandura in 1977, relates to an individual's level of confidence in his or her ability to successfully complete a particular task or cope with a particular event. This belief shapes people's behavioral choices and action decisions to a large extent. According to Bandura, individuals' motivation is closely related to their level of self-efficacy, and higher self-efficacy is usually accompanied by higher levels of motivation (Schunk, & DiBenedetto, 2021). Thus, self-efficacy can be seen as a key factor in driving individual behavior and decision-making.

Self-efficacy is a core belief in an individual's cognition, which is formed in the cognitive process that pre-

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cedes the actual occurrence of behavior. This cognitive process includes two important aspects: efficacy expectations and outcome expectancies(Bradshaw, 2023). First, efficacy expectations indicate the individual's belief that he or she will be able to successfully perform a particular behavior and that the behavior will result in a desired outcome. This implies the individual's level of confidence in his or her ability to perform a specific task. (Lorig & Holman, 1998) When individuals have high efficacy expectancies, they are more likely to take action because they believe they can succeed. Secondly, outcome expectancy involves an individual's assessment and judgment of the outcomes that may result from a particular behavior. (Fuentes-Tauber, 2018) This involves the individual's perception of the correlation between the behavior and a particular outcome. Individuals are more likely to perform a specific behavior when they believe it will produce their desired outcome. (Betz & Klein, 1996)

Self-efficacy beliefs are therefore an encompassing cognitive concept that encompasses not only an individual's confidence in their own abilities, but also their perceptions of the relationship between behaviors and outcomes. The concept of self-efficacy seeks to understand people's beliefs about their own abilities, and the concept is widely used in specific situations or contexts such as business behavior, medical, and education-related areas. Self-efficacy beliefs play an important role in shaping people's behavioral choices, motivation levels, and ability to cope with challenges. This concept has a wide range of applications in psychology and education for explaining people's behavior and decision-making, as well as for developing interventions to enhance self-efficacy beliefs. (Pignault, Rastoder, & Houssemand, 2023) Understanding the relationship between self-efficacy and Non-attachment and meaning in life can provide a more holistic perspective on the mental health and well-being of chinese undergraduate and graduate students. (Pedigo, Tuskenis, & Hakenjos, 2023) How self-efficacy beliefs affect their perceptions of life, decision-making, and coping strategies, as well as its interactions with other psychological concepts, are important aspects to explore.

By examining these concepts in depth, this study hope to provide a more comprehensive perspective for understanding chinese undergraduate and graduate students' sense of mental health level, and to explore possible psychological interventions and support strategies to help them better cope with various pressures from academics, family, and society, as well as to improve their quality of life and life satisfaction. In addition, by studying these psychological concepts in the context of Chinese culture, we have the opportunity to contribute new insights to cross-cultural psychological research. This will help to better understand and support the mental health of individuals in different cultural contexts.

2.Objectives of the Study

Using self-efficacy as the dependent variable and non-attachment and meaning of life as the independent variables, this study focused on exploring the possible relationship between non-attachment, meaning of life and self-efficacy among Chinese chinese undergraduate and graduate students in order to develop a psychological intervention and support program. Specifically, it aimed to describe the profile of the respondents in terms of their sex, educational level, professional category, state of physical and mental health and location of residence; determined respondents non-attachment, meaning of life and self-efficacy; tested difference of the variables when grouped based on their profile; explored the possible correlations among the three variables; tested if the significant predictor of the three variables; investigated mediating effect of non-at-

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tachment and self-efficacy on respondents meaning of life; and proposed a development of psychological support program for the enhancement of psychological health and well-being of Chinese students.

3.Methods

3.1 Research Design

In this study, the researcher used a combination of descriptive research to determine the relationship among non-attachment meaning in life and self-efficacy. Descriptive quantitative research focuses on describing certain characteristics or the overall picture of the research object in its natural state, and describing the patterns and characteristics of the object or thing under investigation based on the collected information, data, situations or information. The purpose of quantitative correlational research is to examine the relationship between two or more variables, but it is not possible to determine cause-and-effect relationships between variables. The quantitative study of correlation in this study used correlation analysis and regression analysis to explore the correlation between two independent variables (non-attachment, meaning in life) and one dependent variable (self-efficacy). Correlation analysis only gives an idea of the degree of linear correlation between the independent and dependent variables, while regression equations allow predicting and controlling the effects between variables but still do not allow inference of causal relationships.

3.2 Participants

Using a convenience sampling, 836 current undergraduate and graduate students were recruited from many universities in China, from representative cities such as Beijing, Shanghai, Chengdu, Hangzhou, Nanjing, Xinjiang, Xian, Taiyuan, Harbin, Jinan, Wuhan, Xiamen, Hong Kong, Guangzhou and Shenzhen. Thirteen of them who finished with invalid data were excluded from this study, the invalid data showed regular changes. Thus, 823 participants were included in data analysis, who were students from different disciplines from different categories of universities.

3.3 Measures

Non-attachment Scale (NAS-7). This was the tool used in measuring respondents nponattachment. It was authored by Sahdra, B., 2014 which is a valuable psychological measurement tool designed to assess Non-attachment—a concept rooted in Buddhist philosophy. Non-attachment is characterized by an individual's ability to let go of clinging or excessive attachment to material possessions, relationships, or circumstances, which can lead to inner peace and emotional well-being (Sahdra et al., 2010). The present study adopted the definition of Sahdra et al. (2010) to encompass the non-attachment traits included in this scale, which include preliminary psychological characteristics in the following areas: "psychological resilience", "not being influenced by external people, things, or events", "not dependent on external objects to satisfy internal needs" and "able to accept the transience and constant change of life". The scale was subjected to a validated factor analysis, and the results showed that the entire scale was a one-factor structure with good basic fit and reliability. The Cronbach's alpha coefficient was 0.93, which indicated that the scale used had acceptable construct, discriminant, and criterion-association validity. The development of the NAS-7 was influenced by the broader field of mindfulness and Buddhist psychology. Researchers recognized the need for a concise and psychometrically sound scale to measure Non-attachment, which plays a crucial role in promoting mental health, resilience, and overall life satisfaction. The NAS-7 is an abbreviated version of the original Non-attachment Scale (NAS), which had a more extensive set of items. The NAS-7 aims

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to capture the essence of Non-attachment while minimizing respondent burden. It comprises seven items that assess an individual's ability to let go, release attachments, and maintain emotional balance in various life situations. The scale items are designed to evaluate both Non-attachment to material possessions and Non-attachment in interpersonal relationships. Respondents rate each item on a Likert-type scale, indicating the extent to which they identify with statements related to Non-attachment. (Wnuk, 2022) To ensure the NAS-7's validity and reliability, researchers have conducted extensive psychometric evaluations. These evaluations involve assessing the scale's consistency, stability over time, and correlations with other relevant constructs, such as mindfulness, well-being, and psychological distress. The NAS-7 has consistently demonstrated good psychometric properties, making it a reliable tool for researchers and practitioners interested in exploring Non-attachment and its psychological implications. In summary, The 7-Item Non-attachment Scale (NAS-7) is a concise yet robust measurement tool developed to assess Non-attachment—a concept deeply rooted in Buddhist philosophy. This scale provides researchers and practitioners with a means to investigate the role of Non-attachment in promoting psychological well-being and resilience in various populations and contexts. Its brevity and psychometric soundness make it a valuable addition to the field of mindfulness and positive psychology.

Meaning in Life Questionnaire (MLQ). This was the standardized test used in determining respondents meaning in life. The test was developed by Steger, M. F., Frazier, P., Oishi, S., & Kaler, M., 2006 which is an instrument designed to delve into the profound and intricate exploration of the concept of life's meaning. In its essence, the MLQ serves as a valuable tool for assessing and quantifying an individual's sense of purpose, fulfillment, and significance in life. It provides a structured framework to gauge the various dimensions of meaning, allowing researchers and psychologists to gain insights into the existential and philosophical aspects of human existence. It is instrumental in providing researchers and practitioners with a means to investigate and quantify a person's sense of purpose and significance in the world. The Life Meaning Questionnaire (LMQ) is a self-report inventory consisting of 10 items, specifically designed for the assessment of life's inherent meaning. When it comes to internal consistency, the LMQ exhibits robust reliability, with coefficient alphas falling within the range of low to high .80s for the Presence subscale and from the mid .80s to low .90s for the Search subscale. Logotherapy places a central emphasis on the exploration of life's purpose. In line with this, logotherapy asserts the following: (1) life inherently holds meaning, (2) individuals are driven by the Will to Meaning, and (3) individuals possess the freedom to discover their unique meaning. Given that the LMQ is a relatively new instrument primarily developed using samples of female, Caucasian, undergraduate students, further investigation is warranted to assess the psychometric properties of the questionnaire among diverse populations.

General Self-Efficacy Scale (GSE). This was the scale utilized in measuring respondents self-efficacy. It was authored by Schwarzer, R., & Jerusalem, M., 1995 which is a 10-question psychometric instrument designed to assess the degree of optimism and self-confidence of an individual in the face of life's challenges and demands. Originally developed in German by Matthias Israel and Ralf Schwarzer in 1981, the scale has been translated into 32 different languages and has been widely used in numerous research projects covering hundreds of thousands of research participants. Unlike other measurement tools designed to assess positive emotions, this scale focuses on measuring individuals' proactivity, i.e., their belief that their behavior and efforts can influence successful outcomes. In past research, the General Self-Efficacy Scale has demonstrated good validity, correlating with a range of psychological and emotional factors. Positive cor-

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relations have been found to be associated with favorable emotional states, optimistic personality traits, and job satisfaction, suggesting that individuals with high self-efficacy are more inclined to maintain positive emotions and higher job satisfaction in their lives. On the other hand, negative correlations were associated with depression, anxiety, stress, fatigue, and health problems. This suggests that low self-efficacy may have some association with mental health problems, including aspects of anxiety and depression. In some studies, researchers have found that an individual's self-efficacy is strongly associated with meaning in life. The scale has been rigorously tested in factor analysis and the results show that it exhibits a unidimensional measurement characteristic. The emergence of this one-factor solution suggests that the GSE) is effectively assessing an independent psychological concept. This result is important for understanding the measurement properties of the GSE. It clearly demonstrates that the individual question items of this scale are measuring the same core concept without the presence of other confounding factors or dimensional influences. This means that participants' responses can be viewed as reflections of a single psychological trait without interference from multiple unrelated factors. This single-dimensionality provides a solid foundation for the use of the GSE. Researchers can confidently use this scale in different research projects without worrying that it will confound or misrepresent their measurements. This also enhances the credibility and validity of the GSE, making it an important tool for assessing an individual's self-efficacy. Overall, the single-factor solution obtained through factor analysis provides clear evidence of the measurement properties of the GSE, emphasizing its reliability and consistency in measuring individual self-efficacy.

3.4 Procedure

Before commencing this research, extensive groundwork was laid by the researcher. This groundwork involved a comprehensive review of existing research materials and the accumulation of clinical practice experience, which contributed to shaping the research topic and its objectives. The researcher, through substantial observations and interviews conducted in various regions of China, identified that issues related to Non-attachment, meaning in life, and self-efficacy among college students, especially in the context of Chinese culture, presented a significant area of study. (Garcia, 2016)

The researcher began with a comprehensive review of the existing literature related to Non-attachment, meaning in life, and self-efficacy, with a particular focus on their interrelationships and their impact on the mental health of college students. This literature review formed the basis for the research questions and hypotheses. Based on the insights gained from the literature review, the research questions and objectives were formulated. The study aimed to explore the relationship between non-attachment, meaning in life and self-efficacy among Chinese college students. (Wang et al., 2021) In addition, the researcher decided on the research methodology, which was a quantitative survey using questionnaires. Prior to data collection, ethical approval was sought from the relevant institutional review board to ensure that all participants involved in the study were protected and gave informed consent. (Garcia, 2016) Confidentiality and anonymity of respondents was strictly maintained. To measure the variables of non-attachment, meaning in life and self-efficacy, established and validated scales were selected. (Trzebiński et al., 2020) The researcher chose the seven-item Non-Attachment Scale (NAS-7), Meaning of Life Questionnaire (MLQ), and General Self-Efficacy Scale (GSE). Considering the language and cultural nuances, the Chinese versions of these scales were chosen to be used to ensure comprehension and relevance to the participants. The primary data collection phase involved recruiting a sample of at least 300 Chinese college students from various universities and

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colleges in representative areas of China, including Beijing, Shanghai, Chengdu, Hangzhou, Nanjing, Hong Kong, Guangzhou, and Shenzhen. Convenience sampling was used to recruit a sufficient number of participants to ensure that the sample was diverse in terms of gender, age, and discipline. Participants were invited to fill out the questionnaire online according to their convenience. The collected data were analyzed using statistical software such as SPSS or other relevant statistical tools. Descriptive statistics, correlation analysis, regression analysis and other appropriate statistical tests were performed to examine the relationships and associations between variables. Interpret the results obtained from data analysis to address the research questions and test the hypotheses. Finally, the conclusions of the study are summarized, highlighting the main findings, implications, and contributions to the existing body of knowledge, and providing recommendations for future research and practical implications and support programs for college students' mental health.

4.Results and Discussion

4.1 Profile of the Respondents

Table 1. Profile of the Respondents

Profile		Frequency	Percentage
Sex			
	Male	404	49.1
	Female	419	50.9
Educational Level			
	Undergraduate Student	428	52
	Master's Students	330	40.1
	Doctoral Students	65	7.9
Professional Category			
	Social Sciences	503	61.1
	Natural Sciences	320	38.9
State of Physical and Mental Health			
	Good Physical and Mental Health	766	93.1
	Suffering from Chronic Diseases	25	3
	Physical and Mental Disorders	9	1.1
	Psychiatric Disorders	23	2.8
Location of Residence			
	Northeast China	132	16
	North China	149	18.1
	East China	157	19.1
	Central and South China	149	18.1
	Northwest China	99	12
	Southwest China	137	16.6

Table 1 present the characteristics of the sample for this study which included gender, education level, professional category, state of physical and mental Health and place of residence, for a total of 5 dimensions.
In terms of gender, 49.1% are male and 50.9% are female.The gender distribution is basically balanced. This means that in terms of gender, the sample is well represented and can more fairly reflect the differences or similarities between genders in terms of non-attachment, meaning of life and self-efficacy.

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In terms of educational attainment, 52% were undergraduate student, 40.1% master's students and 7.9% doctoral students.While this distribution may reflect the general structure of students in higher education, it may also affect the breadth and depth of the study, as people with different levels of education may have different feelings and experiences of meaning in life and self-efficacy.

In terms of specialization categories, 61.1% were in the social sciences and 38.9% in the natural sciences. This proportion reflects the higher number of students from social science backgrounds in the sample and may have some impact on the results of the study, as there may be differences in non-attachment attitudes, feelings of meaning in life, and self-efficacy among students from different professional backgrounds.

In terms of physical and mental health, 93.1% were in good physical and mental health, 3% were suffering from chronic diseases, 1.1% from physical and mental disorders, and 2.8% from psychiatric disorders.This may indicate that the study sample was biased towards groups with good health status and may not be sensitive enough to the specific needs and experiences of groups with particular health conditions.

In terms of place of residence, 16% in Northeast China, 18.1% in North China, 19.1% in East China, 18.1% in Central and South China, 12% in Northwest China, and 16.6% in Southwest China.The sample covered several regions of China, with the largest number of participants in East China (19.1%) and the smallest in Northwest China (12%). This geographic diversity contributes to the generalizability of the findings, although there may be regional cultural differences that are themselves an important part of the study.

The sample of this study includes 823 college students from different regions of China, with a relatively balanced gender distribution, with slightly more women than men, reflecting a gender-balanced situation. In terms of educational background, undergraduates occupy the vast majority of students, and a significant proportion of master's degree students, while doctoral students are relatively few, a distribution that reflects a common proportion in higher education. In terms of professional background, students majoring in social sciences accounted for a large proportion of the students, while students majoring in natural sciences also accounted for a significant proportion of the students, demonstrating the diversity of academic fields. In terms of physical and mental health status, the majority of students reported good physical and mental health, with only a few reporting chronic diseases, physical and mental disorders, or mental illnesses, which may reflect the health tendencies of the sample. The place of residence covered several regions in China, with the largest number of students in East China and the smallest number of students in Northwest China, showing a certain geographical distribution. Overall, this demographic portrait presents a group of Chinese college students with diverse educational backgrounds, good health, and wide geographic distribution, providing a rich and balanced sample base for the subsequent analysis of variables such as non-attachment, meaning of life and self-efficacy.

4.2 Correlation analysis

Table 2. Correlation Analysis

	Non-Attachment	The Meaning of Life	Self-Efficacy
Non-Attachment	1		
The Meaning of Life	0.597**	1	
Self-Efficacy	0.616**	0.683**	1

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Note: ** $p < 0.01$.

Table 2 shows the correlation analysis of the three variables. The results show that the correlation coefficients of non-attachment, meaning of life and self-efficacy are 0.616, 0.683, respectively, and the corresponding p-values are less than 0.01, which is statistically significant, indicating that non-attachment, meaning of life and self-efficacy all have significant correlation.

Non-attachment and meaning of life: the correlation coefficient is 0.597 and significant at the 0.01 level (two-tailed), which means that there is a moderate positive correlation between non-attachment and meaning of life. In other words, individuals with higher Non-attachment scores also tended to have higher meaning of life scores.

Non-attachment and self-efficacy: the correlation coefficient was 0.616 and significant at the 0.01 level (two-tailed), showing a moderate positive correlation between non-attachment and self-efficacy. This indicates that non-attachment attitudes are to some extent positively correlated with an individual's self-efficacy, i.e., those who score high on the non-attachment scale usually score high on self-efficacy as well.

Meaning of life and self-efficacy: the correlation coefficient was 0.683 and significant at the 0.01 level (two-tailed), indicating a moderate positive correlation between meaning of life and self-efficacy. This finding implies that individuals who perceive higher meaning in life tend to have higher self-efficacy, reflecting the strong correlation between the two.

The results of these correlation analyses revealed significant positive correlations between Non-attachment, meaning of life, and self-efficacy. In particular, the stronger correlation between meaning of life and self-efficacy emphasizes the important influence of how individuals perceive meaning and purpose in life on their self-efficacy. These findings have important implications for understanding individuals' mental health and well-being, suggesting that supporting individuals to develop non-attachment attitudes and deepen their perceptions of the meaning of life may be an effective pathway in promoting their psychological well-being and sense of efficacy.

Further, these results also provide valuable information for mental health professionals, pointing out that when designing interventions and support programs, consideration can be given to how to simultaneously enhance an individual's non-attachment attitudes, sense of meaning in life, and sense of self-efficacy as part of the promotion of mental health and personal growth. In addition, it suggests that focusing on and supporting individuals' development of these psychological constructs in educational and counseling practices may help to enhance their overall psychological well-being.

4.3 Testing of the mediating role model of meaning in life

Table 3. Key Evaluation Indicators and Evaluation Criteria for Overall Model Fitness

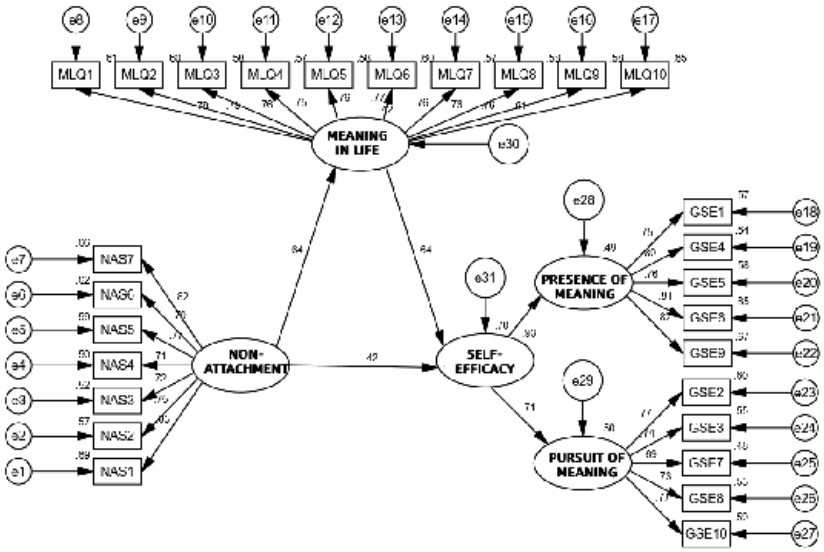
statistical test	Adaptation criteria or thresholds
Charted Degree of Freedom Ratio (NC Value)	$1 < NC < 3$, good fit; $NC > 5$, reasonable fit

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Goodness of Fit Index(GFI)	> 0.8
Adjusted Goodness of Fit Index(AGFI)	> 0.8
Incremental Fit Index(IFI)	> 0.9
Comparative Fit Index(CFI)	> 0.9
Tucker-Lewis Index(TLI)	> 0.9
Parsimonious Normed Fit Index(PNFI)	> 0.5
Root Mean Square Error of Approximation(RMSEA)	<0.05 (good fit) <0.08 (reasonable fit)

The main path results of the model are shown in Fig. According to the fitness test index of the structural equation model: the ratio of the cardinal degrees of freedom NC should be between 1-3; the asymptotic residual mean square error of approximation (RMSEA) value should be between 0.05-0.08, and if it is lower than 0.05 it means that the fitness is very good; fitness degree GFI value should be greater than 0.9, if above



0.8 is acceptable; value-added fitness index CFI value should be greater than 0.9; non-gauge fitness index TLI value should be above 0.9; the sample size should be greater than 200 (Wen, Hou, 2005).

Figure 1. Results of Structural Equation Model Diagram Runs (Normalized)

Table 4. Structural Equation Modeling Fit Indicators

Norm	X^2/df	GFI	AGFI	IFI	TLI	CFI	RMSEA
Statistical Value	1.525	0.959	0.951	0.988	0.986	0.988	0.025
Reference Point	<3	>0.8	>0.8	>0.9	>0.9	>0.9	<0.08
Attainment of Standards	Reach A Set Standard	Reach A Set Standard	Reach A Set Standard	Reach A Set Standard	Reach A Set Standard	Reach A Set Standard	Reach A Set Standard

The mediating model was tested and the standardized path coefficients were presented in Fig. 1. Overall, the results of model fitness revealed that this model fitted the data well， x^2/df=1.525, less than 3. GFI=0.959,

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AGFI=0.951, greater than 0.8, IFI=0.988, TLI=0.986, CFI=0.988, greater than 0.9, RMSEA=0.028, against the table's fitting criteria, the model's fitting indexes all meet the requirements, so the path of the model is analyzed.

In this study, AMOS26.0 software was used for structural equation modeling path analysis, so as to derive the structural equation modeling path coefficient values and C.R. values, path coefficients reflect the relationship and degree of influence between the variables, and the critical ratio C.R. (Critical Ratio) can be used to determine whether the regression coefficients are significant or not, and it is generally considered that a C.R. value of greater than or equal to 1.96 can be indicative of significant effects at the The C.R. value is generally considered to be greater than or equal to 1.96, which means that there is a significant effect at the 0.05 level of significance (Wen, Hou, 2005). The standardized regression coefficients and variance parameter estimates of the structural equation model of this study are shown in table 5.

Table 5. Path Coefficient Tests for Structural Equation Modeling

Pathway relationship			Estimate	Residual Error S.E.	Critical Ratio C.R.	P
The Meaning of life	<---	Non-Attachment	0.644	0.038	16.986	***
Self-Efficacy	<---	Non-Attachment	0.418	0.021	8.677	***
Self-Efficacy	<---	The Meaning of Life	0.639	0.023	11.807	***

Note: *** indicates P<0.001.

5. Conclusions

The majority of respondents were undergraduate social science students in good physical and mental health, and were relatively balanced in terms of gender and place of residence.

In terms of meaning in life, doctoral students have the highest degree of meaning in life, followed by undergraduate students, and master's students are relatively low. Natural science majors had a higher degree of meaning in life than social science majors. In terms of self-efficacy, doctoral students were significantly higher than undergraduate students and undergraduate students were significantly higher than master's students. There were no significant differences in meaning of life and self-efficacy among college students of different genders and different places of residence. In addition, there were no significant differences in all aspects of demographics of non-attachment.

Non-attachment was a significant positive predictor of meaning of life and self-efficacy among college students. Meaning for life was a significant positive predictor of self-efficacy. Meaning of life mediated the relationship between non-attachment and self-efficacy.

6.Recommendation

Students are expected to actively cultivate non-attachment attitudes and enhance self-care and independence through personal growth activities such as meditation and journaling. Meanwhile, they should enhance their sense of meaning in life and self-efficacy through exploring interests and values, engaging in meaningful activities, and learning goal-setting and time management skills.

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Students should take the initiative to make use of the psychological counseling and tutoring services and mental health education resources provided by the school. Participate in school-organized mental health activities and workshops to learn how to effectively manage stress, emotions and relationships.
Parents should provide emotional and psychological support to help their children solve problems independently through listening and encouragement. At the same time, parents should engage in open and honest communication with their children to enhance understanding and trust, and support their interests and goals.

Researchers should further explore the relationship between non-attachment, meaning of life and self-efficacy, especially the effects in different cultural and educational contexts. In addition, interdisciplinary collaboration between the natural and social sciences should be promoted to study the factors influencing the mental health of students from different professional backgrounds.

School administrators should strengthen mental health education and support services by providing targeted resources for students at different academic levels, including psychological counseling, career planning guidance and social activities. Meanwhile, by organizing inter-professional exchange activities, they should promote mutual understanding and support among students, broaden their horizons, and help them discover and pursue diversified meanings in life.

References

[1]Betz, N. E., & Klein, K. L. (1996). Relationships among measures of career self-efficacy, generalized self-efficacy, and global self-esteem. Journal of career Assessment, 4(3), 285-298. https://doi.org/10.1177/106907279600400304
[2]Bradshaw, K. (2023). Self-efficacy and Cognitive Distortion in the Learning Environment. https://doi.org/10.5772/intechopen.113777
[3]Bueno-Pacheco, A., Satorres, E., Delhom, I., & Meléndez, J. C. (2023). Ego-integrity and its relationship with sense of coherence, satisfaction, self-efficacy, and depression. Current Psychology, 42(8), 6439-6446. https://doi.org/10.1007/s12144-021-01978-z
[4]Fuentes-Tauber, Y. (2018). An Investigation of Self-Efficacy and its Relationship to College-Going Self-Efficacy Among Middle School Students. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3303448
[5]Gao, J., & Sik, H. H. (2024). Yoga, Mind-Body Coherence, and Zen. https://doi.org/ 10.5772/intechopen.1003923
[6]Garcia, D. S. (2016). Evaluation of 3 Behavioral Theories for Application in Health Promotion Strategies for Hispanic Women. Advances in Nursing Science, 39(2), 165–180. https://doi.org/10.1097/ans.0000000000000116
[7]Lorig, K., & Holman, H. (1998). Arthritis self-efficacy scales measure self-efficacy. Arthritis Care & Research, 11(3), 155–157. https://doi.org/10.1002/art.1790110302
[8]Maddock, A. (2023). The clinically modified Buddhist psychological model for social work practice and self-care. Clinical Social Work Journal, 51(1), 54-64
[9]Martela, F., & Steger, M. F. (2023). The role of significance relative to the other dimensions of meaning

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in life–an examination utilizing the three dimensional meaning in life scale (3DM). The journal of positive psychology, 18(4), 606-626. https://doi.org/10.1080/17439760.2022.2070528

[10]Pedigo, T., Tuskenis, A., & Hakenjos, A. (2023). A College Course on Mindfulness and Self-Compassion: The Effect of Transformational Learning on Attachment Security, University Belongingness, and Academic Self-Efficacy. Journal of Transformative Learning, 10(1).

[11]Pignault, A., Rastoder, M., & Houssemand, C. (2023). The Relationship between Self-Esteem, Self-Efficacy, and Career Decision-Making Difficulties: Psychological Flourishing as a Mediator. European Journal of Investigation in Health, Psychology and Education, 13(9), 1553-1568. https://doi.org/10.3390/ejihpe13090113

[12]Sahdra, B. K., Shaver, P. R., & Brown, K. W. (2010). A Scale to Measure Nonattachment: A Buddhist Complement to Western Research on Attachment and Adaptive Functioning. Journal of Personality Assessment, 92(2), 116–127. https://doi.org/10.1080/00223890903425960

[13]Sahdra, B., Ciarrochi, J., & Parker, P. (2016). Nonattachment and mindfulness: Related but distinct constructs. Psychological Assessment, 28(7), 819–829. https://doi.org/10.1037/pas0000264

[14]Schunk, D. H., & DiBenedetto, M. K. (2021). Self-efficacy and human motivation. In Advances in motivation science，8, 153-179. https://doi.org/10.1016/bs.adms.2020.10.001

[15]Seidel, L. J., Daniels, J. K., & Ostafin, B. D. (2023). The role of meaning in life in psychological distress during the COVID-19 pandemic. Anxiety, Stress, & Coping, 36(1), 67-82. https://doi.org/10.1007/s12144-021-01523-y

[16]Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: Assessing the presence of and search for meaning in life. Journal of Counseling Psychology, 53(1), 80–93. https://doi.org/10.1037/0022-0167.53.1.80

[17]Trzebiński, J., Cabański, M., & Czarnecka, J. Z. (2020). Reaction to the COVID-19 Pandemic: The Influence of Meaning in Life, Life Satisfaction, and Assumptions on World Orderliness and Positivity. Journal of Loss and Trauma, 25(6-7), 544–557. https://doi.org/10.1080/15325024.2020.1765098

[18]Wang, X., Zhang, J., Wu, S., Xiao, W., Wang, Z., Li, F., Liu, X., & Miao, D. (2021). Effects of meaning in life on subjective well-being: The mediating role of self-efficacy. Social Behavior and Personality: An International Journal, 49(4), 1–11. https://doi.org/10.2224/sbp.9975

[19]Wen, Z. L., Hou, J. T., & Zhang, L. (2005). The contrast and application of moderating and mediating effects. Psychology Journal, 37(2), 268-274.

[20]Wnuk, M. (2022). The Beneficial Role of Involvement in Alcoholics Anonymous for Existential and Subjective Well-Being of Alcohol-Dependent Individuals? The Model Verification. International Journal of Environmental Research and Public Health, 19(9), 5173. https://doi.org/10.3390/ijerph19095173

[21]Yang, Y., Fletcher, K., Michalak, E. E., & Murray, G. (2020). An investigation of self-compassion and nonattachment to self in people with bipolar disorder. Journal of Affective Disorders, 262, 43–48. https://doi.org/10.1016/j.jad.2019.10.042

[22]Zhao, H., Zhang, M., Li, Y., & Wang, Z. (2023). The relationship between a growth mindset and junior high school students' meaning in life: a serial mediation model. Behavioral Sciences, 13(2), 189. https://doi.org/10.3390/bs13020189

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