

# Research on University Students' Self-concept Clarity and Meaning in Life

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**Abstract.** This study explored the predictive effect of self-concept clarity (SCC) on meaning in life (MIL) among university students and examined the potential influence of demographic variables. A cross-sectional design was used to survey 150 Chinese college students (35% male; 57% humanities and social sciences majors). Data were collected using the Chinese Self-concept Clarity Scale and the Chinese Meaning in Life Scale. Descriptive statistics and correlation analysis revealed a robust positive correlation between SCC and MIL ( $r = 0.680$ ,  $p < 0.01$ ), and demographic variables (gender and major) had no significant effect on SCC and MIL. The results showed that SCC was a significant predictor of MIL ( $\beta = 0.684$ ,  $p < 0.001$ ). This study provides a theoretical basis for mental health education in universities. The findings show a strong relationship between university students' pursuit and experience of life and how clear their self-concept is, suggesting that SCC is a key predictor of MIL. The results show that there is no substantial correlation between MIL and SCC and demographic factors, particularly gender and major.

**Keywords:** Self-concept clarity, meaning in life, cross-sectional survey.

## 1. Introduction

### 1.1. Research Background

The psychological well-being of university students has received considerable attention in recent years from both the public and academics. The shift from adolescence to adulthood is crucial during the university years, marked by various interconnected psychological issues. Students' increased prevalence of sadness, anxiety, and other mood disorders is frequently linked to their struggles to find a sense of life. This indicates that mental health issues are more common among university students. Therefore, it is crucial to enhance targeted efforts to assist these students in their pursuit of purpose and in managing the obstacles they encounter.

### 1.2. Meaning of Life

A sense of meaning in life is typically characterised as an individual's understanding and pursuit of life's purpose and value. It serves as a fundamental psychological impetus that influences human behaviour, often resulting in existential emptiness and anxiety when one lacks purpose and meaning, alongside an awareness of life's significance and wholeness [1, 2]. The presence of meaning in life has been shown to positively predict the state of mental wellness in university students in numerous studies [3, 4]. Additionally, it has an indirect impact on psychological states, behaviour, and creativity through mediating variables such as positive emotions [5, 6].

### 1.3. Self-concept Clarity

Self-concept is a fundamental element of personality structure. Most psychologists contend that self-concept is associated with the manner in which people perceive and assess their own selves, which encompasses a variety of characteristics, including beliefs, emotions, and attitudes [7-9]. It plays a vital role in influencing human behaviour [5]. Research with university students has revealed that self-concept clarity positively affects subjective condition and is significant in predicting achievements and managing psychological well-being [10]. Self-concept clarity refers to how clearly and consistently an individual perceives themselves, along with the conviction they have in that

perception. It also reflects stability over time and provides a clear indicator of self-certainty [11,12]. Formulating a distinct self-concept is essential for deriving significance in daily existence [13].

#### **1.4. Recent Research**

In recent years, certain academics have begun utilising self-concept as an independent variable to investigate its association with the sense of meaning of life. A well-defined self-concept offers a more stable framework for interaction and integration with the external environment compared to an ambiguous self-concept [14]. A diary study demonstrated that daily SCC exerted a beneficial lagged influence on daily meaningfulness [13].

#### **1.5. Purpose of the Research**

Recent research utilizing knowledge graphs indicates that contemporary research on the meaning of life has expanded to encompass the investigation of factors that affect its significance [15]. Currently, there is a lack of empirical studies regarding the correlation between self-concept and the meaning of life among Chinese university students, and its underlying psychological mechanisms require further investigation. This study suggests that the clarity of a college student's self-concept directly affects their sense of meaning in life, positioning this clarity as a potential predictor of life's significance.

## **2. Methodology**

### **2.1. Participants**

This study examines undergraduate students from first-year to final-year at a comprehensive university in Xi'an as the research subjects. Questionnaires were distributed to gather data. Women tend to have a more "relational self" and may strengthen the connection between their SCC and MIL through activities such as nurturing and caring; men tend to have a more "independent self" and may establish a connection through "instrumental meaning" such as career achievements [16]. Students pursuing humanities and social sciences prioritise macro-level issues such as social justice and human welfare, deriving meaning from philosophical contemplation. Students majoring in natural sciences depend on problem-solving and knowledge acquisition, potentially diminishing introspective self-exploration [17]. To ensure that the sample accurately reflects the experiences of university students at different stages, the study employed stratified sampling based on majors for selecting survey participants. At the participants' and program leaders' desire, any sensitive information regarding participant privacy, the university's name, and the exact department will remain confidential. A total of 152 questionnaires were distributed in the study, and 2 invalid questionnaires (due to incomplete or irregular responses) were eliminated, resulting in a final valid sample of 150 university students. There are 52 male students and 98 female students; 64 students majoring in natural sciences and 86 students majoring in humanities and social sciences.

### **2.2. Instruments**

#### **2.2.1. Chinese Meaning in Life Questionnaire (CMLQ)**

The Chinese version of the scale employed in this study to assess the subjects' MIL was CMLQ. Sisi Liu and Yiqun Gan (2010) revised the original scale developed by Steger et al. [3]. CMLQ has 9 questions, measuring MIL into two parts: the experience of meaning of life (question 2, 4, 7, 8, and 9) and the search for meaning of life (question 1, 3, 5, and 6). The Likert 7-point scale is used for scoring, with scores ranging from 1 to 7 from "completely inconsistent" to "completely consistent". Question 2 is reverse-scored. The reliability of the questionnaire measured in this study is acceptable (Cronbach's  $\alpha = 0.766$ ).

### 2.2.2. Chinese Self-concept Clarity Scale (CSCC)

The original scale used in this study to measure SCC was developed by Campbell in 1990 and revised in 1996. It contains 12 questions. The Chinese version of the scale was translated by Hailin Xu (2007). All questions were evaluated with a 5-point Likert scale. The reliability of the questionnaire measured in this study is acceptable (Cronbach’s  $\alpha = 0.818$ ).

### 2.3. Procedure

This study’s questionnaire comprises three sections. The first section gathers fundamental data regarding students’ gender and major; the second section examines personal perceptions, experiences, and reflections on the meaning of life, using CMLQ for evaluation; the final section examines the level of self-concept through CSCC. After presenting the study to the four program leaders, they expressed their willingness to assist in distributing the questionnaires to students; nevertheless, the university’s name and students’ personal information, including names and student identification numbers, must not be included on the questionnaires. The questionnaires were disseminated online.

### 2.4. Data Analysis

The data processing tool used in this study is IBM SPSS 23. After entering the data, reliability analysis was first performed to measure the consistency between the items in the questionnaire. Then descriptive statistics were performed regarding the foundational information about the subjects, including frequency analysis of gender and professional categories, to describe the overall distribution of the sample. The interrelationship of SCC and MIL among university students was statistically examined through correlation testing. Additionally, regression analysis was implemented to evaluate the predictive impact of SCC on MIL.

## 3. Results

### 3.1. Descriptive Statistics and Correlation Analysis

The variables’ descriptive statistics and intercorrelations (Pearson’s  $r$ ) are summarized in Table 1.

**Table 1.** Descriptive Statistics and Correlations Among Variables ( $n = 150$ )

Variable	M	SD	1	2	3
Gender	1.65	0.478	-		
Major	1.57	0.496	0.165*	-	
MIL	4.92	0.707	-0.026	-0.065	-
SCC	3.51	0.524	-0.063	-0.131	0.680**

*Note.* Gender: 1 = male, 2 = female; Major: 1 = Natural Science, 2 = Humanities; SCC = Self-concept clarity; MIL = Meaning in life. \* $p < 0.05$ , \*\* $p < 0.01$ .

As shown in Table 1, both MIL ( $M = 4.92$ ,  $SD = 0.707$ ) and SCC ( $M = 3.51$ ,  $SD = 0.524$ ) showed moderate to high levels in the sample. No statistically significant gender-based disparities in MIL ( $t = 0.313$ ,  $p = 0.754$ ) or SCC ( $t = 0.767$ ,  $p = 0.445$ ) were detected via independent samples t-tests. This result is consistent with previous studies [3,16,18]. Correlation analysis indicated a strong positive association between MIL and SCC ( $r = 0.680$ ,  $p < 0.01$ ).

### 3.2. Regression Analysis

Table 2 presents findings from a hierarchical regression model developed to assess SCC’s predictive capacity regarding MIL.

**Table 2.** Hierarchical Regression Analysis Predicting MIL

Predictor	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>
Step 1: Controls				
Gender	-0.023	0.124	-0.015	-0.185
Major	-0.090	0.119	-0.063	-0.753
Step 2: SCC				
Self-concept clarity	0.923	0.083	0.684	11.172***

Note.  $R^2=0.005$  for Step 1,  $\Delta R^2=0.459$  for Step 2 ( $p<0.001$ ).

In Step 1, demographic variables (gender and major) explained 0.5% of the variance in MIL, which was not statistically significant ( $R^2 = 0.005$ ). Adding SCC in Step 2 significantly improved the model ( $\Delta R^2 = 0.459, p < 0.001$ ), with the final model explaining 46.3% of the variance ( $R^2 = 0.463, p < 0.001$ ). SCC showed a strong positive effect on MIL ( $\beta = 0.684, p < 0.001$ ), suggesting that increased SCC correlates with enhanced MIL.

#### 4. Discussion

The findings show that MIL is significantly predicted by SCC ( $\beta = 0.683, p<0.001$ ), while the moderating effects of gender and professional background are not significant. This outcome is in accordance with the SCC theoretical framework that Campbell et al. proposed: Individuals with coherent and stable self-cognition are more inclined to develop a sense of motive in their life goals and value systems [19]. There were no discernible gender disparities in the study’s sample. This may potentially be attributed to the convergence of gender role perceptions among students or could be associated with the cultural context of the sample population. The strong predictive effect of SCC on MIL can be explained from the perspective of self-cognition structure. A high level of SCC provides a clear and stable self-cognitive structure, which helps individuals integrate life experience and sense of purpose. SCC can help individuals respond to challenges more effectively and enhance their sense of presence and worth. For example, when faced with academic setbacks, individuals with clear self-concepts are more likely to view them as a “temporary challenge” rather than an “identity crisis”, thereby maintaining the stability of their meaning systems.

Intervention strategies should be implemented to improve SCC in the education on mental health issues of undergraduates, as indicated by the research findings. Self-exploration-oriented group counselling may be carried out by colleges and universities. Additionally, they might consider incorporating seminars to improve self-concept clarity within their general education curricula. Existing intervention studies have shown that an 8-week SCC intensive course can improve MIL scores [20].

There are still areas in which this study can be improved: Firstly, the cross-sectional design cannot exclude reverse causality (e.g., high MIL may promote the development of SCC); secondly, the sample is concentrated in colleges and universities in a single region, which restricts the generalizability of the conclusions; and lastly, the self-report method may result in common method bias. Future research can concentrate on the moderating effect of major life events, such as employment and the establishment of intimate relationships, and test the dynamic interaction effect of SCC and MIL through a cross-lagged model by adopting a longitudinal tracking design. In addition, cross-cultural comparative studies can be conducted to investigate the variations in the path of SCC’s impact on MIL in the context of collectivist cultures and individualistic cultures. This will assist in the clarification of the mechanism by which cultural scripts influence self-construction.

#### 5. Conclusion

The correlation between SCC and MIL was investigated by employing a questionnaire survey method among 150 undergraduates in Xi’an. Results reveal a significant correlation between the clarity of university students’ self-concept and their pursuit and experience of life, indicating that

SCC is an important predictor of MIL. The findings indicate that demographic variables, specifically gender and major, are not significantly associated with MIL or SCC. Undergraduates' sense of meaning in life and self-concept may be influenced more by individual psychological characteristics, including personality and cognitive style. These results provide a development direction for mental health intervention in universities. Mental health education in universities can enhance students' sense of meaning in life by improving their clarity of self-concept, such as through narrative therapy and career planning counselling, thereby promoting psychological resilience and happiness. This conclusion enriches the exploration and research on MIL of Chinese university students. Furthermore, it offers localised research assistance for the advancement of lifetime education and mental health initiatives in educational institutions.

## References

- [1] Frankl VE. *Man's search for meaning: An introduction to logotherapy*. New York: Washington Square Press, 1963.
- [2] King, L. A., & Hicks, J. A. The science of meaning in life. *Annual Review of Psychology*, 2021, 72 (1), 561 - 584.
- [3] Steger, M. F., Oishi, S., & Kashdan, T. B. Meaning in life across the life span: Levels and correlates of meaning in life from emerging adulthood to older adulthood. *The journal of positive psychology*, 2009, 4 (1), 43 - 52.
- [4] Wang, Y., Wu, X., & Gan, Y. Effect of search for meaning and perspective change on depression in college students: A mediated moderation model. *Chinese Mental Health Journal*, 2015, 29 (11), 858 - 863.
- [5] Pang, C., Zhuang, S., Wang, Y., & Gan, Y. Cognitive Appraisal and Meaning in Life in Recalling of Past Events: The Emotion as a Mediator. *Acta Scientiarum Naturalium Universitatis Pekinensis*, 2019, 55 (05), 977 - 986.
- [6] Han, J., Qian, J., Zhang, J., & Pang, W. The Relationship between Creativity and Meaning in Life among College Students: The Role of Positive Emotion and Creative Self-efficacy. *Psychological Development and Education*, 2024, 40 (02), 187 - 195.
- [7] Jin, S., Self-concept and its development. *Journal of Beijing Normal University (Social Science)*, 1996, (01), 30 - 36.
- [8] Liu, F., & Huang, X. A review of the research on the multidimensional and multilevel model of self-concept. *Advances in Psychological Science*, 2001, (02), 136 - 140.
- [9] Nie, H., & Gan, Y. Relationship between Self-concept Clarity and Meaning in Life and Subjective Well-being. *Chinese Journal of Clinical Psychology*, 2017, 25 (05), 923 - 927.
- [10] Çebi, E., Demir, A. A Path Model of Meaning in Life among University Students: The Roles of Gratitude, Self-Concept Clarity and Self-Construal. *Applied Research Quality Life*, 2022, 17 (1), 3091 - 3113.
- [11] Du, X., Jiang, J., Jiang, W., Wang, J., Wang, W., & Yang K. Antecedents and intervention strategies of self-concept clarity: A new perspective from three facets of self-concept structural integration. *Journal of Psychological Science*, 2023, 46 (1), 170.
- [12] Lodi-Smith, J., & Crocetti, E. Self-concept clarity development across the lifespan. *Self-concept clarity: Perspectives on assessment, research, and applications*, 2017, 67 - 84.
- [13] Chen, S., Li, X., & Ye, S. Self-concept Clarity and Meaning in Life: A Daily Diary Study in a Collectivistic Culture. *Journal of Happiness Studies*, 2024, 25 (6), 59.
- [14] Shin, J. Y., Steger, M. F., & Henry, K. L. Self-concept clarity's role in meaning in life among American college students: A latent growth approach. *Self and Identity*, 2016, 15 (2), 206 - 223.
- [15] Qin, J., Guo, Y., Shi, Y., & Wang L. Visual analysis of research on the meaning of life based on knowledge graph, *Journal of Nurses Training*, 2024, 1 (1), 1 - 15.
- [16] Cross, S. E., & Madson, L. Models of the self: Self-construals and gender. *Psychological Bulletin*, 1997, 122 (1), 5 - 37.
- [17] King, L. A., & Hicks, J. A. The Science of Meaning in Life. *Annual Review of Psychology*, 2021, 72 (1), 561 - 584.

- [18] Cicero, D.C. Measurement Invariance of the Self-Concept Clarity Scale across Race and Sex. *J Psychopathol Behav Assess*, 2020, 42, 296 – 305.
- [19] Campbell, J. D., Trapnell, P. D., Heine, S. J., Katz, I. M., Lavalley, L. F., & Lehman, D. R. Self-concept clarity: Measurement, personality correlates, and cultural boundaries. *Journal of Personality and Social Psychology*, 1996,70, 141 – 156.
- [20] Zeng, J. The relationship between time attitude and sense of Life meaning: the intermediary role of self-concept clarity and curriculum intervention. Fuzhou: Fujian Normal University, 2023.