

Life Purpose Perceptions and Their Influencing Factors among University Students in Hunan Province

Cheng Zhang^{1,*}, Zhiwei Jiang², Jingjing Yang², Mingcan Zhang², Qiong Fang²

¹School of Marxism, Changde Vocational Technical College, 4253 Renmin Road, Wuling District, Changde, Hunan Province, 415000, China

²School of Life and Environmental Sciences, Hunan University of Arts and Sciences, 3150 Dongting Avenue, Changde, Hunan Province, 415000, China

*Corresponding author

Abstract: In the context of globalization and social changes, the life purpose cognition of university students has garnered significant attention. This study targets university students in Hunan Province, employing quantitative research methods to examine the influencing factors from four dimensions: family background, socio-cultural factors, academic major and educational environment, and psychological development and self-identity. Additionally, background information such as gender and grade level is incorporated for analysis. Based on data from 307 questionnaires, descriptive statistics, difference analysis, correlation analysis, and multiple regression methods were utilized. The results indicate that the overall cognitive level of life purpose among university students is positive; psychological development and self-identity, as well as socio-cultural factors, have significant influences. The place of origin plays a notable role, whereas variables like gender and grade level exhibit weaker effects. This study provides empirical references for higher education and psychological counseling.

Keywords: University Students, Life Purpose Cognition, Influencing Factors

1. Introduction

1.1. Research Background

In the backdrop of globalization and rapid social transformation, university students, as the driving force of societal development, have their values and life orientations under significant scrutiny. It has been emphasized that young people should establish correct worldviews, outlooks on life, and values, reflecting societal concern for the exploration of life's meaning among the youth. Contemporary university students face diverse choices and uncertainties, making the clarity of life purpose a critical factor influencing their academic performance, mental health, and social adaptation. A clear life purpose can enhance psychological resilience, happiness, and social responsibility, thereby alleviating psychological stress and promoting academic engagement.

1.2. Research Significance

Theoretically, this study provides empirical support for researching the life purpose of university students within the context of Hunan Province, addressing the existing literature's shortcomings in multi-dimensional quantitative analysis and enriching the relevant theoretical framework. Practically, this research offers a basis for higher education's ideological and political education, mental health education, and career planning counseling, aiding universities in formulating targeted intervention strategies to enhance students' self-planning abilities and social adaptability.

1.3. Research Objectives and Questions

This study examines the current status of life purpose cognition among university students in Hunan Province, exploring the influence mechanisms of factors such as personal information, family background, socio-cultural factors, academic major and educational environment, and psychological

development and self-identity. The study focuses on the following questions: What is the level of life purpose cognition among university students? What relationships exist between the influencing factors and life purpose cognition? Can these factors significantly predict university students' life purpose cognition?

The research findings aim to provide targeted recommendations for higher education practices.

2. Literature Review

Life purpose cognition among university students, as a significant factor influencing their mental health, happiness, and social adaptation, has gradually become a research hotspot. Existing literature offers multi-dimensional perspectives for understanding the construction of life meaning among university students.

2.1. Definition and Connotation of Life Purpose

Life purpose originates from existential psychology's exploration of life's meaning and has been further developed in positive psychology^{[1],[2]}. Ryff regards it as the core of psychological well-being, emphasizing the importance of goals and a sense of direction^[3]. Damon and colleagues proposed that life purpose should possess stability and the characteristic of "transcending the self," encompassing personal growth and social responsibility^[4].

2.2. Current Status and Orientations of University Students' Life Purpose

Contemporary university students value the meaning of life, but amid competition and uncertainty, some exhibit blurred or wavering goals^{[5],[6]}. Research indicates that university students' life purpose includes both self-oriented dimensions (such as self-actualization) and socially-oriented dimensions (such as contributing to society), aligning with Damon et al.'s theoretical framework.

2.3. Influencing Factors

The formation of university students' life purpose is influenced by individual factors like personality traits and value orientations, as well as external environmental factors such as family support and socio-cultural values^[7]. In the Chinese context, collectivist values, traditional culture, and patriotism play significant roles in setting life goals for university students^{[8]-[10]}. However, comprehensive quantitative analyses integrating these factors remain limited.

2.4. Role and Mechanism in Positive Development

A clear life purpose can enhance academic achievement, mental health, and social adaptation while reducing anxiety and depression^{[7],[8]}. Life purpose with "transcendence" characteristics can also increase happiness and a sense of responsibility^[11]. Life purpose not only provides direction for individual actions but also endows actions with motivation, promoting positive development.

2.5. Measurement Tools and Methodological Reflections

Existing studies often use foreign scales (such as PIL) or their revisions, which may lack cultural adaptability and structural integrity^[6]. This study will revise these scales within the context of Hunan Province to optimize their reliability and validity, providing reliable tools for subsequent empirical analysis.

2.6. Educational Practice Implications and Future Directions

Given the ambiguity in some university students' life purpose cognition, universities should strengthen ideological and political education, provide psychological counseling, and promote social practice activities. Future research can develop localized scales and explore the interaction mechanisms among more influencing factors to better understand university students' social responsibility and positive development.

2.7. Summary and Research Hypotheses

In summary, the literature provides important references for understanding university students' life purpose but lacks quantitative validation of multi-dimensional factors. Based on the literature, this study proposes the following hypotheses:

H1: Family background and socio-cultural factors are significantly positively correlated with university students' life purpose cognition scores.

H2: Academic major and educational environment factors are significantly positively correlated with university students' life purpose cognition scores.

H3: Psychological development and self-identity factors are significantly positively correlated with university students' life purpose cognition scores.

H4: Personal background information (such as gender, family economic status, place of origin, academic performance) has significant relationships or differences with life purpose cognition.

H5: Incorporating the above factors into the regression model can significantly predict university students' life purpose cognition.

This study employs multi-dimensional empirical analysis to verify these hypotheses, providing reference for higher education practices.

3. Research Methods

This chapter introduces the research design, sample and data collection, research tools, data collection procedures, and analysis methods, providing statistical support for testing the research hypotheses.

3.1. Research Design

This study adopts a quantitative research method, collecting data through questionnaires to objectively assess university students' life purpose cognition levels. Statistical inferences are made based on a large sample to verify the relationships among variables.

3.2. Sample and Sampling Process

The research subjects are university students from various types of higher education institutions in Hunan Province. A stratified random sampling method is used to select samples from comprehensive universities, research universities, application-oriented undergraduate institutions, and higher vocational colleges. Questionnaires are distributed via online survey platforms and promoted through official university channels and student communities. Approximately 550 questionnaires are planned for collection, ultimately obtaining 307 valid samples. Sample characteristics will be presented through descriptive statistics to ensure representativeness.

3.3. Research Tools

The questionnaire in this study consists of three parts:

3.3.1. Basic Information

Collects background information of the respondents, including gender, institution level, major, grade, place of origin, academic performance, and family economic status, providing a basis for subsequent correlation analysis.

3.3.2. Life Purpose Cognition Scale

Includes 20 items, using a 5-point Likert scale to assess university students' clarity of life purpose, meaning of life, future expectations, and value orientations.

3.3.3. Influencing Factors Dimension Scale

Covers four dimensions: family background, socio-cultural factors, academic major and educational environment, and psychological development and self-identity. Each dimension includes 5 items, all

using a 5-point Likert scale to measure family support, cultural influence, educational environment, and psychological maturity.

Prior to formal use, a pretest is conducted with 50 university students to evaluate the questionnaire's comprehensibility and operability, making necessary adjustments based on feedback.

3.4. Data Collection Procedure

Questionnaires are collected online over two months, emphasizing voluntary participation and confidentiality principles. Invalid questionnaires are excluded to ensure data quality.

3.5. Data Analysis Methods

This study employs various statistical methods to explore the formation mechanisms of university students' life purpose cognition. Cronbach's Alpha and exploratory factor analysis are used to verify the reliability and validity of the scales. Descriptive statistics analyze sample characteristics and overall distribution. Independent samples t-test or ANOVA compares group differences for categorical variables (such as gender and grade). Pearson correlation analysis examines the relationships between each dimension and life purpose cognition, and the correlations of background variables. Finally, a multiple linear regression model is constructed to systematically test the predictive effects of each factor on life purpose cognition, providing scientific evidence for educational practices.

4. Research Results

4.1. Data Cleaning and Sample Characteristics

A total of 558 questionnaires were collected, with 307 valid questionnaires remaining after excluding invalid ones. Among the valid respondents, males accounted for 31.6%, and females accounted for 68.4%. Institution levels were primarily public junior colleges (45.28%) and private undergraduate institutions (46.91%). Undergraduates constituted 51.79%, and junior college students constituted 47.23%. Grades were predominantly freshmen (48.53%) and sophomores (38.11%), with the majority originating from rural areas (62.87%). Academic performance was concentrated in the 10%-30% (35.83%) and 30%-50% (27.69%) ranges, and family economic status was generally medium (76.87%). Overall, the sample is diverse and representative.

4.2. Reliability and Validity Testing

4.2.1. Reliability Testing

The Cronbach's alpha for the Life Purpose Cognition Scale was 0.896, for Family Factors was 0.792, for Socio-Cultural Factors was 0.814, for Academic Major and Educational Environment was 0.890, and for Psychological Development and Self-Identity was 0.852, all ≥ 0.7 , indicating good internal consistency.

4.2.2. Validity Testing

Table 1: Reliability and Validity Analysis Results.

Scale	Number of Items	α Value	KMO	Variance Explained (%)
Life Purpose Cognition	20	0.896	0.906	65.082 (5 factors)
Family Factors	5	0.792	0.808	56.690 (1 factor)
Socio-Cultural Factors	6	0.814	0.810	51.889 (1 factor)
Academic Major & Educational Env	5	0.890	0.868	69.548 (1 factor)
Psychological Development & Self-Identity	5	0.852	0.854	63.758 (1 factor)

Note: KMO = Kaiser-Meyer-Olkin Measure of Sampling Adequacy. All Cronbach's alpha values ≥ 0.7 indicate good internal consistency. All variance explanation rates $>50\%$ indicate good construct validity.

The KMO value for the Life Purpose Cognition Scale was 0.906, with a variance explanation rate of 65.082%. For Family Factors, KMO=0.808, variance explanation rate=56.690%; Socio-Cultural Factors, KMO=0.810, variance explanation rate=51.889%; Academic Major and Educational Environment, KMO=0.868, variance explanation rate=69.548%; Psychological Development and Self-Identity, KMO=0.854, variance explanation rate=63.758%. All scales had KMO \geq 0.8 and variance explanation rates $>$ 50%, indicating good validity. As shown in Table1.

4.3. Descriptive Statistical Analysis

The average score for life purpose cognition was 3.645 (SD=0.513), slightly above the midpoint of 3, indicating that students generally possess a relatively positive and clear life purpose. Among the influencing factors, family background had the highest average score (M=3.82, SD=0.669), followed by socio-cultural factors (M=3.636, SD=0.572), academic major and educational environment (M=3.578, SD=0.682), and psychological development and self-identity (M=3.706, SD=0.646). All dimension scores ranged between 3.5 and 3.8, overall maintaining an above-average level. As shown in Table2.

Table 2: Descriptive Statistics of Each Dimension.

Dimension	Sample Size (n)	Minimum	Maximum	Mean (M)	Standard Deviation (SD)
Life Purpose Cognition	307	2	5	3.645	0.513
Family Factors	307	1.8	5	3.820	0.669
Socio-Cultural Factors	307	2	5	3.636	0.572
Academic Major & Educational Env	307	1.2	5	3.578	0.682
Psychological Development & Self-Identity	307	1.8	5	3.706	0.646

Note: M = Mean; SD = Standard Deviation.

4.4. Difference Analysis Results

Gender Differences.

An independent samples t-test revealed that males scored 3.71 (SD=0.52) and females scored 3.61 ($p=0.102 > 0.05$) on life purpose cognition, with no significant difference. As shown in Table 3.

Table 3: Independent Samples t-Test Results for Gender Differences.

Gender	Sample Size (n)	Mean (M)	Standard Deviation (SD)	t-value	p-value
Male	97	3.71	0.52	1.638	0.102
Female	210	3.61	0.51		

Note: $p > .05$, difference not significant.

Grade and Place of Origin Differences.

ANOVA results showed that place of origin had a significant effect on life purpose cognition ($p=0.016 < 0.05$), whereas institution level ($p=0.104$), grade ($p=0.615$), family economic status, and high school entrance exam score ranges were not significant. As shown in Table 4.

Table 4: Multivariate ANOVA Results.

Independent Variable	Sum of Squares (SS)	Degrees of Freedom (df)	Mean Square (MS)	F-value	p-value	Description
Intercept (Constant)	233.782	1	233.782	975.122	0.000**	Significant
Institution Level	1.093	2	0.546	2.279	0.104	Not significant
Grade	0.432	3	0.144	0.601	0.615	Not significant
Place of Origin	2.993	4	0.748	3.121	0.016*	Significant (p < 0.05)
Academic Performance (Class Rank)	2.257	4	0.564	2.354	0.054	Approaching significance
High School Entrance Exam Scores	3.016	8	0.377	1.573	0.133	Not significant
Family Economic Status (Self-rated)	1.279	3	0.426	1.778	0.152	Not significant
Residual	67.608	282	0.240			
Total						R ² =0.159

Note: * p < 0.05, ** p < 0.01.

4.5. Correlation Analysis Results

Pearson correlation analysis showed that life purpose cognition was significantly positively correlated with family background (r=0.487**), socio-cultural factors (r=0.556**), academic major and educational environment (r=0.576**), and psychological development and self-identity (r=0.646**). Among personal background variables, family economic status was correlated with life purpose cognition (r=0.137*), and academic performance (r=0.152**) also showed a positive correlation.

4.6. Regression Analysis Results

Using life purpose cognition as the dependent variable, multiple regression results indicated that the model had a goodness-of-fit of R²=0.511, F=28.048 (p=0.000), with the model being overall significant. Socio-cultural factors (B=0.186, p<0.01), psychological development and self-identity (B=0.303, p<0.01), and place of origin (B=0.084, p<0.01) had the strongest influences. After controlling for other factors, family background and academic major and educational environment did not reach significance. Psychological development and self-identity emerged as the strongest predictive factors. As shown in Table5.

Table 5: Linear Regression Analysis Results (n=307).

Variable	Unstandardized Coefficient (B)	Standard Error (SE)	Standardized Coefficient (Beta)	t-value	p-value	VIF	Tolerance
Constant	1.125	0.177		6.341	0.000**		
Family Background Score	0.07	0.041	0.091	1.727	0.085	1.691	0.591
Socio-Cultural Factors Score	0.186	0.051	0.207	3.648	0.000**	1.952	0.512
Academic Major & Educational Env Score	0.078	0.049	0.103	1.592	0.113	2.541	0.394

Psychological Development & Self-Identity Score	0.303	0.049	0.382	6.168	0.000**	2.316	0.432
Family Economic Status (Self-rated)	0.019	0.046	0.018	0.420	0.675	1.15	0.87
Academic Performance (Class Rank)	-0.01	0.022	-0.02	-0.458	0.647	1.197	0.835
High School Entrance Exam Scores	-0.019	0.017	-0.062	-1.098	0.273	1.93	0.518
Current Study Stage	-0.055	0.077	-0.057	-0.708	0.479	3.865	0.259
Grade	0.059	0.027	0.091	2.158	0.032*	1.072	0.933
Place of Origin	0.084	0.025	0.146	3.343	0.001**	1.154	0.866
Institution Level	0.042	0.043	0.08	0.981	0.328	3.987	0.251
R ²	0.511						

Note: Dependent Variable = Life Purpose Cognition Score. * $p < 0.05$, ** $p < 0.01$.

Standardized Regression Equation (Beta):

$$Y = 0.207 \cdot X_1 + 0.103 \cdot X_2 + 0.382 \cdot X_3 + 0.091 \cdot X_4 + 0.146 \cdot X_5 + 0.08 \cdot X_6 + \varepsilon$$

Unstandardized Regression Equation (B):

$$Y = 1.125 + 0.186 \cdot X_1 + 0.078 \cdot X_2 + 0.303 \cdot X_3 + 0.07 \cdot X_4 + 0.084 \cdot X_5 - 0.055 \cdot X_6 + \varepsilon$$

Where Y is the life purpose cognition score; X_1 is the socio-cultural dimension score; X_2 is the academic major and educational environment dimension score; X_3 is the psychological development and self-identity dimension score; X_4 is the family background dimension score; X_5 is the place of origin; X_6 is the current study stage; and ε is the error term.

5. Discussion

5.1. Research Results and Hypothesis Testing

This study examined factors influencing university students' life purpose cognition from four dimensions: family background, socio-cultural factors, academic major and educational environment, and psychological development and self-identity, as well as personal background information. The research results generally support all hypotheses.

H1: Family background and socio-cultural factors are significantly positively correlated with life purpose cognition ($p < 0.01$). Socio-cultural factors, in particular, exhibited prominent effects in the regression analysis, validating H1.

H2: Academic major and educational environment factors were significantly positively correlated with life purpose cognition in the correlation analysis ($p < 0.01$). However, in the multiple regression analysis, after controlling for other influencing factors, the effects of these factors did not reach a significant level ($p = 0.113$). This suggests that the influence of academic major and educational environment factors on life purpose cognition may be mediated or moderated by other variables. Therefore, H2 is partially supported in the univariate analysis, but its independent impact requires further investigation in the multivariate analysis.

H3: Psychological development and self-identity factors had the highest correlation with life purpose cognition and the strongest influence in the regression analysis ($p < 0.01$), fully validating H3.

H4: Among personal background factors, place of origin significantly affected life purpose cognition ($p < 0.05$), while family economic status and academic performance showed weak correlations. Gender differences were not significant, partially supporting H4.

H5: Multiple regression showed that the model incorporating all dimensions and background variables had a high explanatory power ($R^2 > 0.4$). Socio-cultural factors, psychological development

and self-identity, and place of origin significantly predicted life purpose cognition, supporting H5.

Overall, psychological development and self-identity, along with socio-cultural factors, have the most significant impact on life purpose cognition. Academic major and educational environment and family background positively contribute at the relevant levels, while place of origin stands out among personal background factors.

5.2. Theoretical Significance and Practical Implications

This study constructs a multi-dimensional framework to reveal the formation mechanisms of university students' life purpose cognition, enriching the theory of life meaning construction by highlighting the interaction between intrinsic psychological factors and external socio-cultural environments.

Practically, universities should emphasize psychological counseling and the cultivation of self-identity, integrating ideological and political education with social practice to guide students in clarifying their life purpose. For students from different backgrounds (such as those from rural areas or economically disadvantaged groups), personalized support like career planning counseling and financial assistance should be provided to ensure they receive necessary support in pursuing their life purposes.

5.3. Research Limitations and Future Directions

The limitations of this study include insufficient sample representativeness, the need for further optimization of questionnaire measurements, and the cross-sectional design's inability to reveal dynamic changes. Future research should expand the sample scope, adopt longitudinal or mixed-methods approaches, and explore more mediating and moderating factors to gain a deeper understanding of the developmental trajectories and mechanisms of university students' life purpose cognition.

6. Conclusion and Recommendations

6.1. Research Conclusions

This study indicates that university students in Hunan Province have a relatively positive overall cognition of life purpose, with psychological development and self-identity being the core influencing factors. Socio-cultural and family background provide macro and micro support, while the educational environment creates practical and academic resources. Personal background variables (such as place of origin) have a certain impact on the clarity and stability of life purpose, whereas factors like gender and grade level have limited effects. These findings construct a multi-dimensional influence mechanism framework, providing empirical evidence for understanding the construction of university students' life meaning.

6.2. Educational Recommendations

Universities should enhance university students' life purpose cognition through multiple approaches. Specific recommendations include:

6.2.1. Psychological Counseling and Self-Identity Cultivation

Universities should utilize psychological counseling and related courses to help students establish a solid value system and enhance their sense of self-identity.

6.2.2. Ideological and Political Education and Social Practice

Universities should deepen ideological and political education, combined with social practice activities, to guide students to expand their life purpose from the perspectives of social responsibility and culture.

6.2.3. Optimizing Academic Teaching and Campus Environment

Universities should provide diversified learning activities and abundant campus resources, encourage faculty involvement in students' career planning, and promote comprehensive development.

6.2.4. Personalized Support

Universities should offer targeted career planning counseling and financial assistance for students from different backgrounds (such as rural origin or economically disadvantaged groups) to ensure they receive necessary support in pursuing their life purposes.

These strategies will help comprehensively clarify and achieve students' life purposes, promoting their personal growth and social adaptation.

6.3. Future Outlook

This study reveals the comprehensive impact of multi-dimensional factors on university students' life purpose cognition, providing important references for theory and practice. Future research can further deepen through the following directions.

6.3.1. Longitudinal Design

Researchers should adopt longitudinal research methods to track changes in university students' life purpose cognition, revealing their developmental trajectories.

6.3.2. Multi-Method Approaches

Researchers should combine qualitative and quantitative research methods to explore the intrinsic mechanisms of influencing factors in depth.

6.3.3. Cross-Regional Comparisons

Researchers should conduct large-scale cross-regional comparative studies to analyze the similarities and differences in life purpose cognition among university students from different regions, enhancing the research's universality and applicability.

These efforts will provide more robust scientific foundations for higher education policy formulation and talent cultivation strategies.

References

- [1] Wong, P. T. P. (2014). Viktor Frankl's meaning-seeking model and positive psychology. In A. Batthyany & P. Russo-Netzer (Eds.), *Meaning in Positive and Existential Psychology* (pp. 149–184). Springer.
- [2] Seligman, M. E. P. (2002). *Authentic Happiness: Using the New Positive Psychology to Realize Your Potential for Lasting Fulfillment*. Free Press.
- [3] Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of personality and social psychology*, 57(6), 1069.
- [4] Damon, W., Menon, J., & Cotton Bronk, K. (2003). The development of purpose during adolescence. *Applied Developmental Science*, 7(3), 119–128.
- [5] Li, Y. (2021). *Analysis of the current situation and educational strategies of contemporary college students' worldview*. *Ideological and Theoretical Education*, (12), 96–101.
- [6] Wang, T. (2018). *A Psychological Study on the Life Pursuits of Contemporary Chinese College Students* (Doctoral dissertation). Southwest University.
- [7] Liu, L. (2022). *The Impact of Life Purpose on Positive Development of Adolescents* (Doctoral dissertation). Qingdao University.
- [8] Lan, G., Li, H., & Gai, X. (2017). Life purpose: A psychological structure that predicts positive development. *Advances in Psychological Science*, 25(12), 2192.
- [9] Wang, X., & Sun, Y. (2024). The impact of perceived social support on adolescents' career adaptability: The chain mediating role of life purpose and personal growth initiative. *Educational Measurement and Evaluation*, (4), 84–97.
- [10] Hai, R. (2024). *Research on Cultivating Correct Life Views among College Students in the New Era* (Doctoral dissertation). Inner Mongolia Minzu University, Tongliao.
- [11] Hill, P. L., Burrow, A. L., O'Dell, A. C., et al. (2010). Classifying adolescents' conceptions of purpose in life. *The Journal of Positive Psychology*, 5(6), 466–473.