Study on the Relationship Among College Students' Life Satisfaction, Attitudes Toward Death and Sense of Life Meaning*

Mengge Li
Henan University
Kaifeng, China

Wanghua Ji**
Henan University of Chinese Medicine
Zhengzhou, China
**Corresponding Author

Abstract—This paper aims to explore the relationships among college students' life satisfaction, attitudes towards death and sense of life meaning. Life satisfaction scale SWLS, Chinese version of death attitude description scale DAP-R and life sense of meaning scale PIL were used to investigate 445 college students. The results showed that life satisfaction was significantly positively correlated with sense of meaning ($r=0.549$, $p<0.001$), and escape acceptance of death attitude was significantly negatively correlated with sense of meaning ($r=-0.289$, $p=0.003$). The results of the regression analysis showed that life satisfaction ($\beta=0.519$, $P<0.001$) and escape acceptance of death attitudes ($\beta=-0.217$, $p=<0.001$) significantly predicted sense of life meaning. It can be seen that life satisfaction and escape acceptance of death attitude can well predict the sense of meaning of life. Life goal plays an important role in the construction of sense of life meaning.

Keywords: life satisfaction, attitudes towards death, sense of life meaning, college students

I. INTRODUCTION

Suicide has been a serious health and social problem in recent years [1]. A quarter of a million people die by suicide each year in China, with the highest number of suicides occurring between the ages of 15 and 34 [2]. College students are an important part of this group. Death actually becomes a factor in sense of life meaning [3]. According to Frankl's point of view, problems such as emptiness and suicidal behavior are linked to sense of life meaning [4]. The sense of life meaning is a goal that gives the individual a sense of direction and value [5]. In recent years, college students' sense of life meaning is seriously missing or

unclear [1]. Previous studies have shown that sense of life meaning plays an important role in predicting suicide, especially the low sense of life meaning is a predictor of suicide risk [6] [7]. Life is finite, so it is particularly important to explore the meaning of life through understanding death. The attitude towards death is an important embodiment of understanding death [8]. The attitude towards death refers to the stable and internal psychological tendency of individuals when they react to death [9]. Studies have shown that death attitude is a risk factor for suicide and is related to sense of life meaning [10]. Life satisfaction is a cognitive factor independent of emotion and a key indicator of subjective well-being [11]. Previous studies have shown that life satisfaction is negatively correlated with death anxiety [12]. Most studies, both inside and outside China, have shown that life satisfaction is significantly correlated with sense of life meaning [13]. The happier you are, the more satisfied you are with your life, the more positive you are, and the less suicidal you are [14].

College students' life satisfaction, death attitude and sense of life meaning are closely related to suicide, so it is of great significance to study these three variables to prevent suicide and improve college students' sense of life meaning. Previous studies have shown that life satisfaction positively predicts sense of life meaning [15], and college students with higher life satisfaction indicate that they have found a sense of life [16]. Attitudes to death predicted the level of meaning in life [17]. Therefore, it is particularly important to understand how life satisfaction and death attitude affect college students' sense of meaning in life, and to further explore and put forward feasible countermeasures.

II. METHOD

A. Research object

In this paper, 483 students from Henan University of Chinese Medicine were selected by convenient sampling method for questionnaire survey. 445 questionnaires were valid, with an effective rate of 92.13%, including 83 for male students and 361 for female students. (See "Table I")

TABLE I. LIFE SATISFACTION, DEATH ATTITUDE AND SENSE OF LIFE MEANING OF DIFFERENT GENDERS

N		M	SD
life satisfaction	male 83	24.51	4.41
	female 361	23.83	4.14
attitudes towards death	male 83	82.29	14.00
	female 361	83.54	12.95
sense of life meaning	male 83	91.51	15.96
	female 361	89.53	15.22

B. Research tool

1) College students' sense of life meaning scale

Purpose in Life Test (PIL) revised by Dong Wenxiang was adopted. The scale is divided into four dimensions: life goal, life value, life passion and life autonomy. Life goal refers to the degree of personal mastery of life goal, life value refers to an individual's affirmation of his or her life value, life passion refers to a person's feeling of current life, and life autonomy refers to the autonomy of one's life. The 2nd, 5th, 7th, 11th, 14th, 17th, 18th and 19th are entitled reverse scoring. [15] The coefficient of α is used to represent the reliability, and the total reliability is 0.8375.

2) Questionnaire on college students' attitudes towards death

In this paper, the revised "death attitude description scale (revised version)" compiled by Liao Fangjuan, a scholar from Taiwan, was used. The study in Taiwan shows that this scale enjoys high reliability and validity. The scale mainly measures five dimensions of death attitude, namely death fear, death escape, natural acceptance, approaching acceptance and escape acceptance. Death fear refers to people's negative thoughts and emotions such as fear when facing death. Death escape means that people avoid thinking and discussing things related to death. Natural acceptance refers to seeing death as a part of nature in one's life, neither fearing nor welcoming it. Approaching acceptance means seeing death as a gateway to a happy afterlife and believing in life after death. Escape acceptance refers to the acceptance of death as a gateway to paradise in order to escape the pain of life. In the population study in Taiwan, according to Liao Fangjuan's study, the α coefficient value of the five dimensional scale is 0.65-0.88. [19]

3) College students life satisfaction scale

The Chinese version of general life satisfaction scale (SWLS) was employed to measure life satisfaction, with 5 questions and 7 points. The fifth question was titled "reverse scoring". The higher the score, the higher the life satisfaction.

According to Xie Qian et al. [17], the α coefficient of the scale was 0.81.

C. Data analysis and common method biased test

In this study, data were recorded into SPSS24.0 for statistical analysis. The main methods include descriptive statistics, analysis of variance, correlation analysis, post-LSD test, stepwise regression and process for mediation test.

III. RESULT

A. Common method biased test

As the data of the study are all from the questionnaire survey, there may be common method biased. [21] In order to reduce the influence of common method biased, the program control method was used in this study. Before handing out the questionnaire, the subjects were told that the questionnaire was completely anonymous, the results filled out were not right or wrong, and only used for academic research, and the subjects' filling status would not be informed to others. In addition, the time and place of the test were different, some in the morning, some in the afternoon, and some in the evening, others in night class. Finally, Harman's one-factor Test was used for common method biased in data processing. The factor analysis results showed that the characteristic roots of 13 factors were greater than 1, and the variation of the first factor was only 15.75%, far less than the critical value of 40%, indicating that there was no common method biased in the study.

B. Data analysis results

As can be seen from "Table II", natural acceptance has a significant positive correlation with sense of life meaning (p< 0.05), escape acceptance has a significant negative correlation with sense of life meaning (p<0.01), life satisfaction has a significant positive correlation with it (p<0.01), while escape acceptance has a significant negative correlation with life satisfaction (p<0.01). There was a significant negative correlation between life goal and death fear (p < 0.01), and a significant negative correlation between life goal and escape acceptance (p < 0.01). There was a significant positive correlation between life goals and natural acceptance (p<0.05) and life satisfaction (p< 0.01). Natural acceptance was positively correlated with sense of meaning of life (p < 0.01), life goal (p < 0.05), life attitude (p < 0.05) and life autonomy (p < 0.05).

TABLE II. ANALYSIS ON THE CORRELATION BETWEEN COLLEGE STUDENTS' DEATH ATTITUDE AND LIFE SATISFACTION AND SENSE OF LIFE MEANING

		M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1	death fear	16.32	4.78	1											
2	death escape	12.99	4.02	0.526^{**}	1										
3	natural acceptance	19.90	3.09	-0.282^{**}	-0.087	1									
4	approaching acceptance	23.30	6.22	0.354^{**}	0.223^{**}	-0.119^{*}	1								
5	escape acceptance	10.79	3.75	0.253^{**}	0.115^{**}	-0.152^{**}	0.537^{**}	1							

		M	SD	1	2	3	4	5	6	7	8	9	10	11	12
6	life satisfaction	23.96	4.19	-0.017	0.043	0.036	0.026	-0.139**	1						
7	sense of life meaning	89.90	15.36	-0.086	0.060	0.114*	-0.055	-0.289**	0.549**	1					
8	life goal	20.86	3.60	-0.112**	-0.047	0.162*	-0.058	-0.183**	0.417**	0.802**	1				
9	life attitude	24.36	5.17	-0.138**	-0.006	0.106*	-0.069	-0.250**	0.524**	0.872**	0.616**	1			
10	life attitude	25.35	5.39	-0.004	0.078	0.025	0.046	-0.223**	0.480**	0.865**	0.567**	0.683**	1		
11	life passion	20.69	2.92	-0.033	0.005	0.036	-0.026	-0.144**	0.252**	0.362**	0.302**	0.255**	0.315**	1	
12	life autonomy	15.67	3.10	-0.048	0.065	0.095*	-0.02	-0.185**	0.413**	0.783**	0.641**	0.579**	0.576**	0.295**	1

a. means significant at the 0.05 level (bilateral).

b. ** means significant at 0.01 level (bilateral)

C. Regression analysis on sense of life meaning on death attitude and life satisfaction

The results of progressive regression analysis showed that life satisfaction first entered the equation, and the equation as a whole was significant (F=191.550, p<0.001). Life satisfaction could explain 30.2% of the variation. The standardized regression coefficient was significant (score =0.549, p<0.001). Escape acceptance was followed by entry into the equation, which was generally significant (F=118.059, p<0.001); Life satisfaction and escape acceptance jointly explained 34.8% of variation in the sense of life meaning, and escape acceptance explained an additional 4.6% of variation in the sense of life meaning. The standardized regression coefficients of life satisfaction (β=0.519, P<0.001) and sense of life meaning (β=-0.217, P<0.001) were significant. (See "Table III")

TABLE III.   REGRESSION ANALYSIS OF THE INFLUENCE OF SENSE OF LIFE MEANING ON DEATH ATTITUDE AND LIFE SATISFACTION

regression equation		Significance of regression coefficient			overall fitting index		
dependent variable	independent variable	R2	F value	P	β	T value	P
sense of life meaning	life satisfaction	0.302	191.550	0.000	0.549	13.840	0.000
sense of life meaning	life satisfaction	0.348	118.059	0.000	0.519	13.392	0.000
	escape acceptance				-0.217	-5.605	0.000

D. The mediating test of escape acceptance in death attitudes

TABLE IV.   ESCAPE ACCEPTANCE MEDIATES BETWEEN LIFE SATISFACTION AND SENSE OF LIFE MEANING

Direct effect			Indirect effect				
	β	SE		β	SE	95%CI	
						LL	UL
life satisfaction → sense of life meaning	1.90	0.14		0.11	0.04	0.04	0.22

According to "Table IV", the escape acceptance of death attitude, life satisfaction and sense of life meaning are significantly correlated, and the escape acceptance of life satisfaction and death attitude can predict sense of life meaning, which is suitable for mediation test. In order to verify the main hypothesis of this study that the escaping acceptance of death attitude plays a mediating role between life satisfaction and sense of life meaning, this study utilized the PROCESS of statistical software SPSS and adopted the Preacher and Hayes Bootstrap method. The mediating effect data are not required to be normally distributed. The nonparametric percentile method of deviation correction was selected for the random sampling of 5000 times, and the confidence of the confidence interval was 95%. In the mediating effect of life satisfaction and sense of life meaning, the interval of escape acceptance mediating effect (LLCI=0.0350, ULCI=0.2158) is analyzed and illustrated for life satisfaction, escape acceptance and sense of life meaning.

As can be seen from "Fig. 1", escape acceptance plays a part in the relationship between life satisfaction and sense of life meaning.
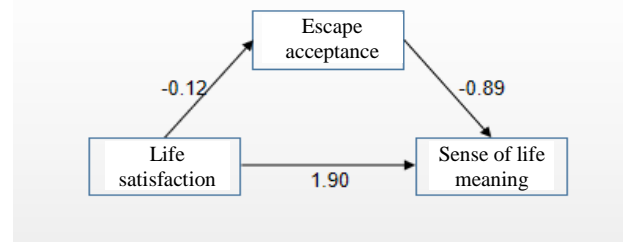

Fig. 1.   Mediation diagram of escape acceptance.

IV. DISCUSSION

This study shows that the sense of life meaning is negatively correlated with escape acceptance of death attitude, and positively correlated with natural acceptance. And escape acceptance can significantly predict sense of life meaning. Previous studies have also shown that death-related cognition can affect the judgment of sense of life meaning, [22] and fear of death and avoidance of death are important independent determinants of the experience of sense of life meaning. [23] The meaning of life is revealed when the reality of inevitable death is accepted [24], and studies of older adults have shown that older adults with a strong sense of meaning are less likely to die during study follow-up [25]. This shows to some extent that it is necessary to guide college students to have a correct understanding of death to enhance the sense of meaning of life.

Life satisfaction was positively correlated with sense of life meaning. This is basically consistent with the existing research results. College students' sense of life meaning is closely related to life satisfaction [26]. The correlation between life satisfaction and life meaning is 0.47 [27]. Life satisfaction plays a predictive role in college students' sense of life meaning, and college students with higher life satisfaction also indicate that they have found the meaning of life [28]. Actively guiding college students to face death with a natural attitude and improving their life satisfaction through mental health education courses will help to improve their sense of meaning in life, thus playing an important role in preventing suicide.

The natural acceptance of death attitude is significantly positively correlated with life goal, life attitude and life autonomy, indicating that the more death can be regarded as an inevitable event and death can be accepted naturally, the higher the life goal, life attitude and life autonomy will be, which is consistent with the results of existing studies. [29]

The results also show that life goals play an important role in the construction of college students' sense of life meaning. Personal goals contribute to life coherence and purpose, which are related to the persistence of the central source of meaning in life by moving toward an important goal [19]. Finding or maintaining a purpose in later life may be an important feature of the desire to prevent death, and the lack of purpose in life may be an important factor associated with the desire to die [30]. When students lack a clear life goal, individuals are more likely to resort to extreme autolesion and suicide when they encounter setbacks [31]. Therefore, the course of career planning for college students should be offered at the beginning of their college years, and counselors and teachers of specialized courses should actively guide students to set up the right goals for college life, which can effectively reduce the emptiness of college students.

V. PEDAGOGICAL IMPLICATIONS

A. Intensive curriculum

College students are the hope of the nation and the motherland and shoulder important responsibilities. Therefore, the promotion of college students' sense of life meaning is particularly important. Studies have shown that enhancing sense of life meaning helps strengthen bodies, improve coping styles, enhance relationships, boost performance at work, and repair psychological wounds to promote psychological growth [32]. Therefore, it is necessary for colleges and universities to take sense of life meaning as part of the curriculum.

B. Standardizing course content

This study shows that college students' sense of life meaning has a significant negative correlation with escape acceptance of death attitude, and a significant positive correlation with natural acceptance of death attitude. This indicates that the guidance of death attitude should be paid attention to in the content of life meaning education for college students. Studies have shown that the intervention of college students' attitudes towards death can significantly improve their correct understanding of the attitude [33]. When college students have a correct attitude towards death, their sense of life meaning will also be improved.

College students' life goal is an important component of college students' life meaning. Positive guidance to college students' life goals can make college students have a clear sense of life direction, and significantly improve their subjective well-being. [88] Therefore, when offering courses, college students should be guided to have a clear life goal, which can significantly improve their sense of life significance. At the same time, it is also necessary to strengthen the positive guidance to college students' life attitude, life autonomy, life purpose and life passion, so that college students can improve their sense of life meaning as a whole.

C. Enriching the curriculum

The course of life education for college students is a practical course that improves their sense of life meaning. Therefore, the guidance for college students should be in various forms, not only in the form of classroom explanation, but also in the form of activities such as watching movies, visiting patients in danger, and group assistance so as to enable college students to enhance their sense of life meaning, and internalized it as a part of their own.

D. Extending the connotation of education

Education should not be limited to the search for knowledge, but should include the exploration and guidance of the meaning of life. The purpose of education is to influence one heart to another, to make life more abundant and rich, to enhance the thickness and width of life, and to enhance the meaning of life. This is part of the meaning of life education curriculum.

VI. CONCLUSION

Natural acceptance, life satisfaction and sense of life meaning were significantly positively correlated, while escape acceptance and sense of life meaning were significantly negatively correlated. Life satisfaction and escape acceptance of death attitudes can significantly predict the sense of life meaning. Life goal plays an important role in constructing sense of life meaning.

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