

The Effects of Personality Traits on Subjective Well-Being among University Students: The Mediating Role of Perceived Employment Stress



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ABSTRACT: Happiness and well-being are the universal goals and common expectations of human life, and the importance and complexity of the issue of happiness drive people to think about it constantly. In the report of the 20th Congress of the Communist Party of China (CPC), it was reiterated that we should always seek the happiness of the people as the fundamental mission and always put the people in the highest position in our hearts. With the progress of the times, the education and learning environments have changed dramatically, and the well-being of university students has been challenged and pressurised both externally and internally. Therefore, this study takes contemporary university students as the research object, from the perspective of personality traits, to explore the role of university students' personality traits on the influence of subjective well-being and perceived employment stress plays a mediating role. It provides countermeasures to improve university students' subjective well-being and reduce their stress. The study found that there is a significant correlation between university students' personality traits, perceived employment stress and subjective well-being. University students' perceived employment stress in personality traits and perceived employment stress as a mediator. Employment stress partially mediates the relationship between personality traits and subjective well-being.

KEYWORDS: university students, personality traits, subjective well-being, perceived employment stress

I. INTRODUCTION

Well-being is a central proposition in the humanities, and mental health has a significant impact on enhancing subjective well-being. In recent years, academics are actively exploring how to increase individuals' subjective well-being by improving their psychological state. By exploring these issues, research results from many western countries have shown the close relationship between mental health and personality traits. Social work and psychology are closely related, and providing suggestions for improving mental health and enhancing subjective well-being of university STUDENTS from the perspective of school social work is a new research approach. The aim of this paper is to explore in depth how contemporary university students' personality traits affect their subjective well-being, and to explore the role of perceived employment stress as a mediator between the two. By analysing these issues in depth, we can better understand which personality traits positively affect subjective well-being and how perceived employment stress plays a direct or indirect role in subjective well-being. Thus, it provides theoretical support for improving the well-being of university students and the quality of campus life. And from the perspective of school social work, it provides feasible solutions to improve the mental health and well-being of university students.

II. LITERATURE REVIEW

A. *subjective well-being*

Subjective well-being is people's self-assessment of their quality of life. In 1967, Wanner Wilson explored the concept of subjective well-being in depth and pointed out that this concept depends on an individual's level of adaptation or expectation level, which is influenced by past experiences, intercomparisons with others, and other factors (Wu, Mingxia, 2000). In recent years, scholars' views on happiness have become richer as the understanding of happiness has become deeper and deeper. According to Ryff, Singer and Love's comprehensive analysis in 2004, there are two major schools of thought on happiness: the 'happiness theory'

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and the 'fulfilment theory'. 'Happiness theory is widely used to explore people's subjective well-being, while realisation theory is used to explore people's psychological well-being as well as comprehensive well-being. Happiness-oriented scholars believe that happiness is a subjective feeling of avoiding pain and pleasure, a pleasurable experience, and a sense of satisfaction with life, which can be expressed through emotions and feelings. Therefore, it is called subjective well-being (Ryff, Singer, & Love, 2004). Researchers have shifted the measurement of subjective well-being from focusing on single charts or questions to single-item questioning and overall summation. Subjective well-being is a complex system of multiple life experiences that cannot be measured by single charts or simple questions. Therefore, Cohenman and Krueger proposed a 'single-item, total-add' approach, in which respondents were asked to fill in a few specific dimensions of quality of life and add them together to obtain a comprehensive perception of subjective well-being (Krueger, & Schkade, 2010). The purpose of this study is to explore how people can maximise subjective well-being by increasing positive, happy emotions, and how they can reduce negative, unpleasant emotions to reduce stress.

B. personality traits

Epicurus once pointed out that the pursuit of true happiness requires human beings to possess good qualities themselves. Good human qualities have become an indispensable part of human civilisation (Yan Yue, 2023). personality traits reflect the stable behavioural patterns of individuals in response to their environment. According to Gray's theory of personality, the differences between individuals mainly originate from two different brain dynamics systems: the behavioural activation system and the behavioural inhibition system (Yang, Xiujun, Kong, 2003). Allport (1937) in his book *Personality: a Psychological Interpretation* proposed that personality is the dynamical organisation of a person's internal psychophysiological system, which determines that person's unique thoughts and behaviours towards his or her environment. behaviour. McCrae et al. (1993) validated the five factors of the Big Five personality and revised the Big Five Personality Questionnaire. Cervone (2005) proposed that personality is the psychological quality of an individual's enduring and distinctive patterns of feeling, thinking, and behaviour. Peng (2012) defined personality as the unique patterns of thoughts, feelings and behaviours that make up a person.

Cui Hong and Wang Dengfeng (2004) delineated a seven-dimensional personality theory (active, straightforward, tough, rigorous, altruistic, affectionate, easy-going) based on the personality characteristics of Chinese people. After a large number of tests, it breaks through the inapplicability of the original Big Five personality, and establishes a seven-factor model based on Chinese cultural characteristics, which is more applicable to the study of Chinese university students. The theory of 'Big Seven Personality' is scientific after a large number of tests and is more applicable to Chinese university students, so this study mainly adopts Cui Hong's and Wang Dengfeng's research on 'Big Seven Personality' as the theoretical basis.

C. perceived employment stress

Stress is a term that is mentioned frequently these days. A combination of definitions suggests that stress is when people put more effort into their work than they can handle, which in turn causes physical and mental changes that can be serious and even life-threatening. All the challenges and uncertainties in life can threaten and even challenge individuals with mental distress. Yang Tingzhong and Huang Hanteng (2003) suggested that psychological stress refers to the psychological threat and confusion to a person caused by negative factors, real-life events, etc., and the external characteristics are mainly manifested as physical and mental discomfort and tension. Under different hypothetical conditions, different personalities and experiences can also have an impact on different perceived employment stress. However, people's perceptions of the stress they feel are more important. As with the idea of rational emotive therapy, it is the perception of the thing that is important rather than the thing itself. Therefore, it is important to distinguish between stress and perceived employment stress, which exists objectively, and perceived employment stress, which is based on an individual's subjective feelings. Domestic and foreign studies have shown that the degree of pressure felt by university students in the process of facing career choices, under the interaction of internal and external environments, is called perceived employment stress (Li Yitong, 2022).

D. A study of the relationship between personality traits, perceived employment stress and subjective well-being

There is a strong link between stress and well-being. The higher the level of stress, the lower the individual's subjective well-being. (Wu Junfang 2023) found that there is a significant negative correlation between stress and subjective well-being among urban residents. This negative correlation is reflected in the past, present and future. And it can be predicted that higher perceived employment stress leads to lower levels of health and well-being. According to Hezomi and Nadrian (2018), there is a significant negative correlation between perceived employment stress and psychological well-being among Iranian females and adolescents, and perceived employment stress can also be considered as a significant predictor. The results of the study showed that the association between perceived employment stress and subjective well-being was strong regardless of the country and population. Although some researchers did not measure the relationship between perceived employment stress and subjective well-being, they included the concept of 'perceived employment stress' in their studies to analyse its relationship with subjective well-being. Individuals with higher levels of subjective well-being experience fewer and less stressful personal and family stressful events. A study using the operationalised measure of stress (RLE) questionnaire also showed that individuals' perceived levels of perceived

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employment stress from the six dimensions of social, cultural, time urgency, social exclusion, innocent victimisation, work stress and financial stress were significantly negatively correlated with life satisfaction (Ritchie, et al., 2011). al., 2011).The mediating role of perceived employment stress in this is mainly manifested in the fact that perceived employment stress negatively moderates the effect of personality traits on subjective well-being, i.e., the lower the perceived employment stress university students' subjective well-being is higher. Perceived employment stress is an important psychological concept. Therefore, we will focus on how it affects our subjective well-being by moderating our psychological states to change our moods and attitudes.

III. RESEARCH HYPOTHESIS

With the advancement of time and the dramatic changes in the educational and learning environment, the well-being of university students has been challenged and pressurised from both external and internal sources. According to the results of a recent survey on the well-being of university students, 39% (N=2780) of the respondents indicated that their well-being has not yet reached the desired level, and 9% of the respondents believed that their well-being is in urgent need of improvement (Hou Zhenhu, Chieh LI & Xu Xiaofang, 2019). This suggests that we must focus on the state of mental health of university students and enhance it. University as a challenging turning point, it is not only an opportunity to construct one's social role and professional norms, but also an opportunity to change the future. It will change everything about a person and even the direction of a society. It is an important mission of today's society to make university students live a better life, to enhance their self-confidence, to increase their social participation and to improve their self-discipline. Therefore, the research of this topic has theoretical support and practical significance for reducing university students' stress and improving their mental health, quality of life and subjective well-being. On the basis of previous research, the following hypotheses are proposed:

- H1: university students' personality traits have a significant negative effect on perceived employment stress;
- H2: university students' personality traits have a significant positive effect on subjective well-being;
- H3: There is a significant negative effect of perceived employment stress on subjective well-being among university students;
- H4: perceived employment stress of university students partially mediates between personality traits and subjective well-being.

IV. RESEARCH DESIGN

A. Research subjects

This study adopts the questionnaire survey method, using a quota sampling method, to take subjects from each grade of Henan Normal University. A total of 300 questionnaires were distributed in this study, 275 questionnaires were recovered, and 255 valid questionnaires had an effective rate of 92.7%.

B. Research tools

Chinese university student's personality scale (CCSPS). The Chinese university students' personality scale (CCSPS) developed by Professor Wang Dengfeng was used in this study. The scale has been extensively researched and is applicable to the university students group. In this study, 22 representative questions were adopted, and the internal consistency coefficient was 0.818, with good reliability. The Affective Scale compiled by Bradburn was used to measure the affective dimensions of subjective well-being, which includes a total of 12 items, including positive and negative emotions, to describe the feelings of the past few weeks. The re-test reliability of the translated scale for both positive affect and negative affect is above 0.80, and the correlation value between the two subscales is less than 0.10. The internal consistency reliability in this study is 0.916, which is good. The Satisfaction with Life Scale compiled by Diener is a valid and reliable measure of satisfaction with life, and the internal consistency reliability in this study is 0.806, which is good. The reliability is good.

The Perceived Stress Scale (PSS) developed by Cohen et al. assesses the perceived employment stress of university students. The scale consists of 10 items and is scored on a 5-point scale, with the higher the score, the greater the perceived stress. The internal consistency coefficient of this study was 0.839, which is a good reliability.

C. Data processing

SPSS27.0 and plug-in PROCESS3.5 were mainly used to collate and analyse the valid information collected in this study, including descriptive statistics, independent samples t-test, and one-way ANOVA, correlation and regression analysis.

V. ANALYSIS OF RESEARCH FINDINGS

A. Descriptive analysis of university students personality traits, perceived employment stress, and subjective well-being

Basic information based on demographic variables:

Table 1 - Basic information of the tested samples (N=255)

Demographic variable	Options	frequency	per cent (%)
sex	male	74	29%
	female	181	71%

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nation	The Han nationality	230	90.2%
	Minority nationality	25	9.8%
grade	First Year Undergraduate	78	30.6%
	Second Year Undergraduate	86	33.7%
	Third year undergraduate	37	14.5%
	Fourth year undergraduate	54	21.2%
Professional category	Humanities and social sciences	116	45.5%
	Science and engineering	102	40.0%
	Art and sports	37	14.5%
Source of students	village	129	50.60%
	City (including county seat)	126	49.40%

The 255 valid questionnaires were analysed by descriptive statistics through SPSS 27.0. The specific data are shown in Table 1, among the 255 subjects, in terms of male to female ratio, the proportion of male university students is 29%, and the proportion of female university students is 71%. In terms of ethnicity, the proportion of Han Chinese is 90.2%, and the proportion of ethnic minorities is 9.8%. In terms of grade, the proportion of freshmen is 30.6%, sophomore is 33.7%, junior is 14.5%, and senior is 21.2%. In terms of the source of students, 49.4 per cent are urban and 50.6 per cent are rural.

University studentspersonality traits, perceived employment stress, subjective well-being and the specifics of each dimension:

Table 2-university studentspersonality traits, perceived employment stress, subjective well-being and descriptive statistics for each dimension (N=255)

	Min	Max	M	SD
personality traits	2.05	4.50	3.33	0.51
Straightforwardness of character	1.00	5.00	2.97	0.88
Toughness of character	1.50	5.00	3.37	0.84
Rigour of character	1.00	5.00	3.09	0.79
Altruistic personality	1.00	5.00	3.11	1.12
Emotional	1.33	5.00	3.61	0.92
Easy-going	1.00	5.00	3.53	0.81
Active Personality	1.25	5.00	3.37	0.69
Emotional Experience	1.60	5.00	3.55	0.82
Positive Emotional Experience	1.50	5.00	3.62	0.82
Negative Emotional Experience	1.17	5.00	3.43	1.00
Life satisfaction	1.20	5.00	3.04	0.84
perceived employment stress	1.71	4.43	2.97	0.61
subjective well-being	1.62	4.70	3.30	0.74

As can be seen from Table 2, the total mean score of university studentspersonality traits is 3.33, comparing with the theoretical median of 3 on Richter's 5-point scale, university students' personality traits are at a medium level, and the mean range of the 7 dimensions is 2.97-3.61. 3.61, and the scores, from highest to lowest, are Emotional (M=3.61), Easy-going (M=3.53), Tough (M=3.37), Active (M=3.37), Altruistic (M=3.11), Rigorous (M=3.09), and Straightforward (M=2.97). The high mean scores of Emotional and Easy-going indicate that university students generally value friendship and good interpersonal relationships.

university students positive emotional experience mean score of 3.62, negative emotional experience mean score of 3.43, life satisfaction mean score of 3.04, and Richter's 5-point scale of the theoretical median of 3, university students positive and negative

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emotional experience and life satisfaction are in the middle of the level, of which the positive emotional experience mean score than negative high, and life satisfaction is low compared to positive affective experience. This indicates that university students positive emotions and negative emotions coexist, positive emotions are more, also indicates that their satisfaction with life in general.

University students perceived employment stress mean score of 2.97, compared with the theoretical median of 3 on Richter's 5-point scale, perceived employment stress is at an intermediate level. This indicates that university students perceived stress is average. university students subjective well-being mean score of 3.3, compared with the theoretical median of 3 on Richter's 5-point scale, subjective well-being is at a medium level. This indicates that the level of well-being of university students is average and needs to be improved.

B. Differential analysis of university students personality traits, perceived employment stress, and subjective well-being

Gender differences:

Table 3- Gender differences in university students personality traits, perceived employment stress and subjective well-being (N male=74, N female=181)

	Male (M±SD)	Female (M±SD)	p
Straightforwardness of character	2.99±0.81	2.96±0.91	0.779
Toughness of character	3.42±0.94	3.35±0.80	0.542
Rigour of character	3.11±0.84	3.08±0.77	0.767
Altruistic personality	3.08±1.16	3.11±1.10	0.847
Emotional	3.31±0.92	3.72±0.90	0.002**
Easy-going	3.34±0.91	3.60±0.76	0.03*
Active Personality	3.32±0.63	3.40±0.72	0.462
Positive Emotional Experience	3.52±0.89	3.66±0.78	0.232
Negative affective experience	3.47±1.03	3.42±1.00	0.739
Life satisfaction	3.15±0.84	3.00±0.84	0.203
perceived employment stress	3.09±0.64	2.93±0.59	0.04*
subjective well-being	3.32±0.79	3.29±0.72	0.731

As can be seen from Table 3, the sub-dimensions of personality traits (affectionate and easy-going) and perceived employment stress of university students showed significant differences ($p < 0.05$, $p < 0.01$) in terms of gender. This indicates that girls have higher mean values relative to boys on the two dimensions of personality traits, affectionate and easy-going, and boys have higher mean values relative to girls on the dimension of perceived employment stress. There were no significant differences between men and women on the other sub-dimensions of personality, positive and negative affective experiences, life satisfaction and subjective well-being.

Grade level differences:

Table 4-Grade level differences in university students personality traits, perceived employment stress and subjective well-being

	First Year Undergraduate (M±SD)	Second Year Undergraduate (M±SD)	Third year undergraduate (M±SD)	Fourth year undergraduate (M±SD)	p
Straightforwardness of character	2.97±0.83	2.94±0.88	2.89±0.83	3.06±1.00	0.83
Toughness of character	3.38±0.87	3.25±0.87	3.49±0.83	3.45±0.76	0.43
Rigour of character	3.24±0.78	2.87±0.88	3.01±0.59	3.24±0.71	0.01**

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Altruistic personality	3.16±1.15	2.94±0.17	3.22±1.11	3.20±0.99	0.46
Emotional	3.57±0.88	3.52±0.92	3.38±1.04	3.92±0.83	0.03*
Easy-going	3.55±0.78	3.35±0.87	3.45±0.92	3.81±0.60	0.01**
Active Personality	3.38±0.70	3.20±0.69	3.30±0.71	3.67±0.58	0.001***
Positive Emotional Experience	3.57±0.82	3.55±0.86	3.54±0.88	3.87±0.67	0.09
Negative affective experience	3.48±0.97	3.21±1.02	3.48±1.04	3.68±0.96	0.05*
Life satisfaction	2.96±0.85	2.89±0.87	3.29±0.82	3.24±0.75	0.03*
perceived employment stress	2.91±0.66	2.92±0.56	3.14±0.63	3.04±0.58	0.22
subjective well-being	3.25±0.73	3.16±0.76	3.39±0.82	3.52±0.62	0.03*

As can be seen from Table 4, university students' PERSONALITY TRAITS sub-dimensions (rigour, affection, easy-going and active), negative affective experiences, life satisfaction and subjective well-being showed significant differences in terms of grade level ($p < 0.01$). On the personality traits sub-dimension, freshmen and seniors were more rigorous, and seniors were more affectionate, easy-going, and active; on the other dimensions, seniors felt more negative emotions as well as happiness, and juniors were the most satisfied with their lives. This suggests that different things experienced in different grades will have more or less influence on one's own personality, emotions and perception of happiness.

Professional differences:

Table 5-Professional differences in university students personality traits, perceived employment stress and subjective well-being

	Professional Category	M±SD	p
Straightforwardness of character	Humanities and Social Sciences	3.00±0.82	0.679
	Science and Technology	2.97±0.93	
	Arts and Sports	2.84±0.93	
Toughness of character	Humanities and Social Sciences	3.33±0.81	0.618
	Science and Engineering	3.43±0.83	
	Arts and Sports	3.30±0.96	
Rigour of character	Humanities and Social Sciences	3.13±0.79	0.298
	Science and Engineering	3.10±0.79	
	Arts and Sports	2.89±0.80	
Altruistic personality	Humanities and Social Sciences	3.08±1.04	0.784
	Science and Engineering	3.09±1.18	
	Arts and Sports	3.23±1.18	
Emotional	Humanities and Social Sciences	3.78±0.86	0.001***
	Science and Engineering	3.57±0.92	
	Arts and Sports	3.09±0.92	
Easy-going	Humanities and Social Sciences	3.56±0.76	0.267
	Science and Engineering	3.56±0.82	
	Arts and Sports	3.31±0.94	
Active Personality	Humanities and Social Sciences	3.40±0.69	0.579
	Science and Engineering	3.38±0.64	

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	Arts and Sports	3.26±0.82	
Positive Emotional Experience	Humanities and Social Sciences	3.62±0.78	0.952
	Science and Engineering	3.64±0.84	
	Arts and Sports	3.59±0.88	
Negative affective experience	Humanities and Social Sciences	3.39±1.01	0.517
	Science and Engineering	3.52±0.98	
	Arts and Sports	3.33±1.08	
Life satisfaction	Humanities and Social Sciences	3.05±0.85	0.358
	Science and Engineering	2.97±0.85	
	Arts and Sports	3.22±0.80	
perceived employment stress	Humanities and Social Sciences	2.96±0.62	0.908
	Science and Engineering	2.97±0.59	
	Arts and Sports	3.02±0.65	
subjective well-being	Humanities and Social Sciences	3.29±0.74	0.925
	Science and Engineering	3.28±0.73	
	Arts and Sports	3.34±0.79	

As can be seen from Table 5, the personality traits sub-dimension of heavy emotion of university students showed significant differences in the professional categories ($p < 0.001$).

The degree of heavy emotion is: humanities and social sciences > science and technology > arts and sports. This indicates that the humanities and social sciences category pays more attention to humanistic care in the learning process and teaching process of different professional categories, and the students who chose humanities and social sciences pay more attention to affection and are more sentimental.

C. Correlation analysis between university students personality traits, perceived employment stress and subjective well-being
Table 6- Correlation analysis of university students personality traits, perceived employment stress and subjective well-being and each dimension

	Straightforward.	Tough	Rigorous	Altruistic	Emotional	Easy-going	Active	Positive emotional experience	Negative emotional experience.	perceived employment stress	Life satisfaction
tenacious	0.092	1.00									
rigour	-0.142*	0.255**	1.00								
altruistic	0.014	0.035	0.137*	1.00							
Emotional	0.131*	0.411**	0.12	0.036	1.00						
easy-going	0.112	0.607**	0.226**	0.116	0.629**	1.00					
Active	0.178**	0.445**	0.052	-0.013	0.431**	0.611**	1.00				
Positive emotional experience	0.086	0.588**	0.166**	0.081	0.504**	0.673**	0.516**	1.00			

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Negative emotional experience	0.073	0.563**	0.328**	0.145*	0.409**	0.608**	0.446**	0.691**	1.00		
perceived employment stress	0.109	0.581**	0.139**	0.016	0.292**	0.503**	0.427**	0.549**	0.558**	1.00	
Life satisfaction	0.119	0.515**	0.05	0.06	0.327**	0.45*	0.43*	0.541**	0.527**	0.697**	1.00
subjective well-being	0.124	0.646**	0.169**	0.099	0.469**	0.647**	0.537**	0.826**	0.799**	0.732**	0.891**

As can be seen from Table 6, in terms of the dimensions of personality traits, the five sub-dimensions of personality traits, namely, toughness, rigour, emotionality, easy-going, and activeness, showed significant positive correlations with subjective well-being, perceived employment stress, positive and negative affective correlations, and altruism showed significant positive correlations with negative affective experiences, while straightforwardness and altruism showed no significant positive correlations with these. In terms of the dimensions of perceived employment stress, both perceived employment stress and subjective well-being showed significant positive correlations. This suggests that people who are straightforward and altruistic feel less stress and less subjective well-being, and that people who are tough, rigorous, affectionate, easy-going, active, and altruistic feel positive emotions as well as negative emotions, and that people who feel more stress feel more well-being, and that stress and well-being coexist.

D. Test for mediating effects of perceived employment stress

The results of correlation analysis showed that university students personality traits, perceived employment stress and subjective well-being were significantly positively correlated, which led to the mediation effect test. In this study, the relationship between university students personality traits, perceived employment stress and subjective well-being was investigated using spss27.0 and process4.1 plug-in. Data were processed using personality traits as independent variable, perceived employment stress as mediator variable, subjective well-being as dependent variable, and gender, grade, major category, and student location as control variables. Bootstrap was used, 95% confidence intervals were set, and the sampling was repeated 5000 times to analyse the mediating values and confidence intervals of perceived employment stress between personality traits and subjective well-being, and the results are shown in Tables 7 and 8:

Table 7 Regression analysis of the relationship of the variables in the mediation model (N=241)

variant	Model 1		Model 2		Model 3	
	β	t	β	t	β	t
personality traits	1.0321	15.5556***	0.6766	10.5857***	0.6342	9.5248***
perceived employment stress					0.588	10.5147
R ²	0.5212		0.3418		0.6748	
F	51.1672***		24.4052***		80.9444***	

Table 8 Analysis of mediating effects of perceived employment stress

	Effect size	Standard error	Bootstrap 95% CI		Ratio of total effect
			Lower limit	Upper limit	
Total effect	1.0321	0.059	0.9014	1.1628	
Direct effect	0.6342	0.07	0.503	0.7654	61.45%
Indirect effect	0.3978	0.0524	0.3039	0.5027	38.54%

The results are shown in Table 7 and 8. Personality traits have a significant positive predictive effect on subjective well-being ($\beta=0.603$, $p<0.001$). When perceived employment stress is included as the mediating variable, the subjective well-being is subjective well-being. Personality traits were still significant in the direct prediction of subjective well-being ($\beta=0.634$, $p<0.001$). At the same time, personality traits could significantly positively predict perceived employment stress ($\beta=0.677$, $p<0.001$).

In addition, the upper and lower bounds of both direct and mediated effects do not contain 0 in the Bootstrap 95% confidence interval, which suggests that: personality traits not only directly predict subjective well-being, but also indirectly influence subjective

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well-being through perceived employment stress; the mediated effect accounts for 38.54%, which means that personality traits partially mediate between the two. Subjective well-being, indicating that perceived employment stress partially mediates between the two; where the mediating effect accounts for 38.54%, which means that when personality traits have an effect on subjective well-being, there is a 38.54% probability is caused by perceived employment stress.

VI. DISCUSSION

The subjective well-being of university students is at a moderate level, with significant differences in grade level and no significant differences in gender and major. This result is consistent with the results of prior studies (Diener, & Ryan, 2009; Kang, Kim, & Shim, 2010). subjective well-being was ranked from highest to lowest grade level as senior, junior, freshman, and sophomore. On the sub-dimensions, juniors felt more negative emotions along with more well-being, and seniors were the most satisfied with their lives. This is closely related to academic stress and experienced life events, the senior students are facing promotion and perceived employment stress, and after four years of university students live, understand the campus and study life, have good relationship with friends, so feel more negative emotions and also feel more happiness; the junior students have the highest life satisfaction because their coursework is relatively easy.

The sub-dimensions of university students' personality traits, namely, rigour, affection, easy-going and active, differed significantly by grade level. The study found that freshmen and seniors are more rigorous, while seniors are more affectionate, easy-going and active, which is closely related to what they have experienced in different grades. Freshmen just entered the campus, have awe and curiosity about the university, and do not know the campus and study life, so they are more rigorous in dealing with others. Fourth-year students are facing promotion and perceived employment stress, and after four years of university students, they understand the campus and learning life, so they are more rigorous; at the same time, fourth-year students are facing the graduation season and going their own way, and they have a lot of fondness for their friends, so they also attach more importance to the friendship and activity in interpersonal interactions.

The personality traits sub-dimensions of university students show significant differences in their professional categories. The study found that the degree of affection from high to low is humanities and social sciences, science and technology, arts and sports, which is closely related to their own characteristics, choice and professional training. Students who choose humanities and social sciences pay more attention to friendship and sensibility, and teachers pay more attention to the cultivation of humanistic qualities in the process of professional teaching; in comparison, students who choose science and engineering pay more attention to logic and thinking, and those who choose art and sports pay more attention to aesthetics, professional skills and physical fitness, and thus there will be a difference.

VII. CONCLUSION

(1) University students' personality traits have a significant negative effect on perceived employment stress; (2) university students' personality traits have a significant positive effect on subjective well-being; (3) university students' perceived employment stress has a significant negative effect on subjective well-being; (4) university students' perceived employment stress has a significant negative effect on subjective well-being. being has a significant positive effect; (3) university students' perceived employment stress has a significant negative effect on subjective well-being; (4) university students' perceived employment stress plays a partial mediating role between personality traits and subjective well-being.

REFERENCES

- 1) Ryff, C. D. , Singer, B. H. , & Love, G. D. . (2004). Positive health: connecting well-being with biology. *Philosophical Transactions of The Royal Society B Biological Sciences*, 359(1449), 1383-1394.
- 2) Yan Yue. (2023). An Ethical Inquiry into Epicurus' View of Happiness (Master's Thesis, Heilongjiang university). Master
- 3) Yang Xiujun, Kong Keqin.(2003). A study on the relationship between subjective well-being and personality. *Psychological Science* (01),116-118.McManus JF, Trifts V, Carvalho SW. The relationship between fixed mindsets, brand-self engagement, and brand favorability. *Personality and Individual Differences*. 2020;166.
- 4) Krueger, A. B. , & Schkade, D. A. . (2010). The reliability of subjective well-being measures. *Warwick Economics Research Paper*, 92(8-9), 1833-1845.
- 5) Allport, G W. (1937). *Personality: A Psychological Interpretation*. New York.
- 6) McCrae, R. R. , Costa, P. T. , & Piedmont, R. L. . (1993). Folk concepts, natural language, and psychological constructs: the california psychological inventory and the five-factor model. *Blackwell Publishing Ltd*, 61(1), 1-26.
- 7) Cervone, Pervin, L. A. , & Daniel, C. . (2005). *Personality: theory and research*. *Personality Theory & Research*, 13(3), 750-751.
- 8) Peng D L. (2012). *General Psychology*. 4th Ed. Beijing Normal university Press.
- 9) Cui H, Wang D F. (2004). Establishment and applicability of the Western "Big Five" personality structure model.

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Psychological Science (03),545-548.

- 10) Yang T Z, Huang H T. (2003). An epidemiological study of urban residents' psychological stress during social transformation. *Chinese Journal of Epidemiology* (09),11-15.
- 11) Li Yitong.(2022). The impact of growth thinking on academic engagement of College students: the mediating role of positive Emotion and the moderating role of stress Perception (Master's Thesis, Jilin university). Master.
- 12) Wu Junfang.(2023). The impact of urban residents' perceived stress on subjective well-being: a moderated mediation Model (Master's Thesis, Guangzhou university). Master.
- 13) Hezomi, H. , & Nadrian, H. . (2018). What determines psychological well-being among iranian female adolescents? perceived stress may overshadow all determinants. *Health Promotion Perspectives*, 8(1), 79-87.
- 14) Ritchie, T. D. , Sedikides, C. , Wildschut, T. , Arndt, J. , & Gidron, Y. . (2011). Self-concept clarity mediates the relation between stress and subjective well-being. *Self & Identity*, 10(4), 493-508.
- 15) Hou Zhenhu,Chieh LI & Xu Xiaofang.(2019). The impact of demographic variables on college students' comprehensive well-being. *Higher Education Development and Evaluation* (01),54-71+91+2.
- 16) Diener, E. , & Ryan, K. . (2009). subjective well-being: a general overview. *South African Journal of Psychology*, 39(4), 391-406.
- 17) Kang, M. W. , Kim, S. A. , & Shim, J. E. . (2010). university life adaptation of student on department security programs in university affects subjective well-being. *Journal of the Korea Contents Association*, 10(12), 318-327.Haddock G, Maio GR. Inter-individual differences in attitude content: Cognition, affect, and attitudes. In: Olson JM, editor. *Advances in Experimental Social Psychology*, Vol 59. *Advances in Experimental Social Psychology*. 592019. p. 53-102.



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