## A Study on the Relationship between Positive Psychological Capital, Life Satisfaction and Perceived Social Support among College Students—A Case Study of Freshmen from Yili Normal University

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Abstract: In this paper, the revised positive psychological Capital Scale, life satisfaction Scale and perceptive social Support Scale were used to study the positive psychological capital, life satisfaction and perceptive social support ability of undergraduates in grade 2022 of Yili Normal University. The results show as follows: 1) There are significant differences in positive psychological capital in many statistical variables such as the place of student origin. The level of positive psychological capital of students from urban places is significantly higher than that of students from rural places. 2) Positive psychological capital has a positive effect on life satisfaction and perceptive social support, and life satisfaction and perceptive social support jointly affect positive psychological capital, and have a significant impact on positive psychological capital.

Keywords: College students; Positive psychological capital; Life satisfaction; Appreciate social support

## 1. Ask questions

Psychological Captical is a positive state of mind exhibited by individuals in the process of growth and development. It has a predictive effect on life, study, work and other aspects. Psychological captical is a kind of core psychological element beyond human capital and social capital, and an important psychological resource to promote personal growth. Psychological Captical (Psychological Captical) was first proposed by the American scholar Luthans in 2004, and is now widely used in various work organization training and performance improvement fields. The emergence of positive psychological capital provides a theoretical basis for individual development. Positive psychological capital is an important indicator to evaluate the processing level of external factors and self-repair ability in the process of personal development, and the mental health level of college students is an important indicator to carry out a good university life. There are few studies on positive psychological capital at the campus and student level. Introducing the study of positive psychological capital into the field of students and schools can effectively observe the scores of students' mental health level. To achieve early prediction, early detection and early response, improve the comprehensive quality of students' psychological level, so as to adapt to college campus life. This study uses the questionnaire method to understand the positive psychological capital level of the undergraduates of grade 2022 of Yili Normal University, adopts positive ways to improve the low level of psychological capital, timely intervention and diagnosis, improves the positive psychological capital level score of the freshmen of Yili Normal University, and quickly ADAPTS to the campus life. Domestic studies on students' positive psychological capital are relatively simple, including the connotation, structure, measurement and mechanism of positive psychological capital, etc. College students are an important force in national construction talent team, and their mental health level and personality integrity directly affect the future development of the country. In order to further understand the positive psychological capital of college students, To provide improvement methods and countermeasures, based on the research on positive psychological capital in China, this paper adopts the revised positive psychological capital questionnaire to investigate the positive psychological capital level, life satisfaction and ability to comprehend social support of undergraduates in grade 2022 of Yili Normal University, and analyzes its characteristics and rules. To further explore the relationship between positive psychological capital, life satisfaction and perceptive social support[1].

The Life Satisfaction Scale (hereinafter referred to as the "Life Satisfaction Questionnaire") is a scale to measure the level of college students' life satisfaction. Life satisfaction refers to the overall evaluation of an individual's quality of life in a certain period, and is a comprehensive index to measure the

individual's living state and quality of life. It mainly consists of emotional satisfaction, somatization satisfaction, interpersonal satisfaction and other dimensions.

Agent-social support refers to the ability of an individual to obtain support and help from society, and is the mediating variable between social support and the level of physical and mental health of an individual. Perceptive social support can be used as both a factor affecting health and a variable predicting health.

#### 2. Research methods

#### 2.1 Subjects

Selected freshmen from Yili Normal University in grade 2022 from 10 provinces including Xinjiang, Henan, Gansu, Hebei and Hunan, and distributed the revised "Positive Psychological Capital and Life Satisfaction Survey Scale for College Students" with 1124 questionnaires, 1124 questionnaires and 1070 valid questionnaires. To examine the scores and summation of college students' positive psychological capital, life satisfaction and understanding social support, and further analyze the college freshmen's ability to adapt to the new life.

#### 2.2 Research Tools

First,Positive psychological capital questionnaire: The questionnaire was compiled by Zhang Kuo et al., with a total of 26 questions, which examined the level of positive psychological capital in four dimensions of self-efficacy, optimism, tenacity and hope. The questionnaire adopted a scoring method of 1-7 points, in which 8,10,12,14,25 were reverse scores, and the rest were positive scores. The higher the overall score, the higher the level of positive psychological capital. The Klonbach  $\alpha$  coefficient of the questionnaire was 0.783, indicating good reliability and suitability for use.

Second,Life Satisfaction Questionnaire (SWLS): This questionnaire was compiled by Diener et al in 1985, and the Chinese version of the Life Satisfaction Questionnaire was revised and translated by Mantak Yuen on November 1, 2002. This questionnaire has good results in domestic life satisfaction surveys and can be put into use.

Third,Perceptive Social Support Scale (PSSS): This questionnaire was compiled by Zimet&Dahlem et al in 1988. The questionnaire consisted of 12 items, including three dimensions of family support, friend support and other support. The 1-7 point scoring method was adopted, and the total score reflected the degree of perceptive social support. The higher the total score, the stronger the perceptive support ability. The Klonbach  $\alpha$  coefficient of this scale is 0.88, which has good reliability and can be used.

## 2.3 Data Processing

spss21.0 was adopted for data analysis

#### 3. Data and analysis

#### 3.1 Overall report of college students' positive psychological capital

Table 1: Descriptive statistics of positive psychological capital, life satisfaction and perceived social support

	N	Min	Max	M	SD	Kurtosis		Skewness	
Positive	1070	34	182	127.500	20.999	0.269	0.075	0.578	0.149
psychological									
capital									
Life	1070	5	35	20.970	5.890	0.037	0.075	0.376	0.149
satisfaction									
Appreciate	1070	14	84	62.750	12.216	0.485	0.075	0.139	0.149
social support									
Valid sample	1070								

Using the revised positive psychological capital, life satisfaction and perceptive social support questionnaire of college students, 7-point integral method was used to describe and statistically analyze

positive psychological capital, life satisfaction and perceptive social support. The results showed that: The average scores of 1070 undergraduates from class of 2022 in the three aspects were higher than the median of all aspects, and the levels of undergraduates from class of 2022 in positive psychological capital, life satisfaction and perceptional social support were relatively good, showing a good level in general. The results are shown in Table 1.

## 3.2 The performance of positive psychological capital in all dimensions

#### 3.2.1 Positive psychological capital and its dimensions in gender independent sample t test

Table 2: Positive psychological capital and its dimensions in gender independent sample T-test

	t	p
Self-efficacy	2.311	0.021 *
Optimistic	1.935	0.053
Toughness	4.623	0.000 * *
Норе	2.810	0.005 * *
Positive Psychological Capital overall score	0.816	0.414

Note: \* means p<0.05,\*\* means p<0.01

Positive psychological capital is divided into four dimensions, of which 1,2,5,5,7,11 is the self-efficacy dimension, 16,18,20,22,24,26 is the optimism dimension, 4,6,8,9,12,13,14 is the tenacity dimension, 15,17,19,21,23,25 is the hope dimension. Each dimension has a strong significance in the total score level, and the four dimensions show a positive correlation in the total score level of positive psychological capital. The better the performance of each dimension, the higher the level of positive psychological capital<sup>[2]</sup>. The results are shown in Table 2.

# 3.2.2 Self-efficacy dimension and tenacity of positive psychological capital are expected to be described and analyzed in terms of gender differences in the three dimensions

Table 3: Descriptive statistical analysis of self-efficacy, tenacity and hope in positive psychological capital in terms of gender

		N	M	SD
Self-efficacy	male	217	33.030	6.481
	female	853	31.930	6.230
Toughness	male	217	33.700	6.700
	female	853	31.320	6.770
Hope	male	217	31.190	6.602
	female	853	32.500	6.003
Positive Psychological Capital	male	217	128.54	22.510
	female	853	127.24	20.602

Independent sample t test was used to describe and statistically analyze the gender differences of self-efficacy, tenacity and hope in positive psychological capital. The results showed that there were significant differences between male and female college students in three dimensions: Self-efficacy (t=0.021 p<0.05), tenacity (t=0.000 p<0.001), hope (t=0.005 p<0.01), and the scores of male students were significantly higher than that of female students, the difference was statistically significant<sup>[3]</sup>. The results are shown in Table 3.

#### 3.2.3 Effects of self-efficacy, optimism and hope degree on life satisfaction of college students

Table 4: Influence of sub-dimension of positive psychological capital on life satisfaction

	10	_	- a.	-2	- 1
	df	F	Sig	$\mathbb{R}^2$	Eta <sup>2</sup>
Self-efficacy * Life satisfaction	37	11.370	$0.000^{**}$	0.264	0.290
Optimism * Life satisfaction	34	15.097	$0.000^{**}$	0.288	0.032
Resilience * Life satisfaction	38	6.248	$0.000^{**}$	0.157	0.187
Hope * Life satisfaction	32	9.217	$0.000^{**}$	0.178	0.221
Total positive psychological	108	5.574	0.000**	0.310	0.385
capital score * Life satisfaction					

Note: \*\* means p<0.01

The general linear model was used to study the influence of three dimensions of self-efficacy, optimism and hope on the satisfaction of college life. The results showed that positive psychological capital and all dimensions had no significant influence on the satisfaction of life. However, the higher the score of positive psychological capital, the better the state of life satisfaction. The results are shown in Table 4.

#### 3.3 Study on gender and student origin differences in ability to comprehend social support

Table 5: Effects of gender and student origin differences on perceptive social support

		N	M	SD	F	Sig
Gender	male	217	61.364	0.871	5.675	$0.017^{*}$
	female	853	63.712	0.462		
Source of student	Rural area	755	61.737	0.565	2.639	0.105
	City	315	63.339	0.808		

Note: \* means p<0.05

Anova was used to analyze the APSS of students with different genders and different places of origin. The results showed that there were significant differences between genders in APSs (F=5.675 P<0.05), and the score of APSs of girls was significantly higher than that of boys. There was no significant difference in students' ability to comprehend social support (F=2.639 p>0.05)<sup>[4]</sup>. The results are shown in Table 5.

# 3.4 Study on the relationship between positive psychological capital, life satisfaction and perceptive social support

The mediating variable model was used to study the relationship between positive psychological capital, life satisfaction and perceptive social support of college students, and the model was constructed with perceptive social support as the mediating variable. The results showed that:

First, Positive psychological capital, life satisfaction and perceptive social support of college students were significantly positively correlated. That is, positive psychological capital is positively correlated with life satisfaction, and life satisfaction is positively correlated with perceptive social support.

Second, The interaction mechanism of positive psychological capital, life satisfaction and perceptive social support among college students is mutual influence and mutual restriction. Among them, positive psychological capital can not only directly affect life satisfaction, but also indirectly affect life satisfaction through its influence on perceptive social support.

Third,College students' positive psychological capital indirectly affects their life satisfaction through its influence on perceptive social support. In order to investigate the mediating effect of perceptive social support on positive psychological capital and life satisfaction of college students at different levels of positive psychological capital, a mediating effect model was introduced.

Fourth, The direct prediction effect of positive psychological capital on life satisfaction of college students is significant, which indicates that the higher the level of positive psychological capital of college students, the greater the impact of positive psychological capital on life satisfaction<sup>[8]</sup>.

Through the effect analysis, it can be seen that college students' positive psychological capital has a positive predictive effect on their life satisfaction. The reasons are as follows: On the one hand, with the improvement of the level of positive psychological capital, college students will pay more attention to the sources of social support and thus obtain more social support from others; On the other hand, with the deepening of their understanding of social support and the improvement of their mastery, college students will be more proactive in seeking help or adapting to environmental changes through self-regulation when facing difficulties<sup>[5]</sup>.

## 4. Results

In this survey, positive psychological capital questionnaire, life satisfaction questionnaire and perceptive social support questionnaire were used to investigate and analyze the relationship between the freshmen of Yili Normal University in 2022 and their influence on positive psychological capital. The results are as follows: Each dimension of positive psychological capital (self-efficacy, optimism, tenacity, hope) has a significant positive correlation with the total score of psychological capital. The higher the score of each dimension, the stronger the level of individual psychological capital. Moreover, the average score of positive psychological capital, life satisfaction and perceptive social support of undergraduates in grade 2022 is above the average level, and the situation is good and stable; There were significant differences in the total score of positive psychological capital, self-efficacy, tenacity and hope between men and women. The scores of male students in each dimension and total score were significantly higher than that of female students, but there was no significant difference in the optimism dimension. The analysis of freshmen from different genders and places of origin shows that freshmen of different genders

have significant differences in their ability to comprehend social support. Girls' ability to comprehend social support is significantly better than boys' ability to comprehend social support, but there is no significant difference in the ability to comprehend social support according to the places of origin. Rural students and urban students have the same ability to comprehend social support.

### 5. Countermeasures and Suggestions

#### 5.1 Strengthen guidance and improve the video memory relationship

The school should strengthen the guidance of lower grade students, high school to university in the way of life and learning there is a significant change, the school should actively guide students to change their personal learning status and lifestyle, more participation in collective activities, teachers should give students the opportunity to show themselves, the use of existing organizational relations, so that group activities into the class, league organization, party organization.

### 5.2 Give full play to their strengths and improve their happiness

We should carry out more targeted activities for senior students, encourage senior students to show their own style and strengths in internship life and community activities, and carry out various professional skills competitions to help students develop their professional strengths.

## 5.3 Improve self-deviation

Guide college students to improve their self-bias, allow themselves to make mistakes, focus on whether they dare to communicate, reduce their importance to others' evaluation, and enhance their sense of trust in others.

#### 5.4 Win-win cooperation—improve life satisfaction

Multi-party cooperation, in the school, family, social system, different roles should play a role, play their strengths, improve the fear state, improve the sense of self-belief, improve life satisfaction.

#### 5.5 Improve your state of mind and be positive

Positive response to emergencies is the basic premise for successful completion of the task, positive and optimistic attitude is conducive to the establishment of a good premise for solving problems, long-term optimism can improve the life satisfaction index, and constantly promote the increase of social support ability. Positive response to emergencies is the basic premise of successful completion of the task, positive and optimistic attitude is conducive to the establishment of a good premise for solving problems, long-term optimism can improve the life satisfaction index, and constantly promote the increase of social support ability. In order to obtain life satisfaction, improving the mentality is the basis. Guided by positive psychological capital, improving the level of social support for understanding should guide college students to constantly improve their mentality and face life with optimism.

First of all, college students should actively carry out self-exploration and cognitive activities, understand their own advantages and disadvantages, and cultivate self-confidence and positive psychological capital; Secondly, they should manage their emotions effectively. We should learn to correctly understand the rules of their own emotional changes, through practicing meditation, listening to music, exercise and other methods to relieve bad emotions; Finally, we should be good at adjusting our mentality when we encounter setbacks. Keep an optimistic attitude in the face of setbacks and learn to face setbacks with a positive attitude, so as to better cope with the difficulties encountered in life.

Secondly, college students should do positive emotion regulation. Positive emotion regulation refers to individual's subjective experience and positive response to their own emotional experience and behavioral response. Be good at controlling your emotions when you encounter difficulties; In addition, we should learn to vent our bad emotions. Bad emotions will affect the individual physical and mental health development, bad emotions will make people lose confidence in life and hope; Therefore, we must learn to vent bad emotions.

Finally, college students should communicate effectively. In interpersonal communication, they should learn to respect, understand and tolerate others. Respect is a prerequisite for communication, and

only by respecting others can we get good interpersonal relationships; Understanding is the basic condition of communication. Understanding others does not mean trying to solve problems by catering to others' ideas and preferences; Tolerance is a good level of communication. The ability to be tolerant will build good interpersonal relationships; Inclusion is also a good way to solve problems<sup>[6]</sup>.

In short, college students should draw positive strength from life, continuously improve their psychological capital level, improve their ability to comprehend social support, enhance their ability to cope with and solve problems, maintain a good attitude to improve their life satisfaction level and comprehend social support level, and constantly improve their positive psychological capital level and life satisfaction level<sup>[7]</sup>.

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#### References

- [1] Yu Xiaolin, Wang Shuxian. The Impact of self-identity on life meaning of high school students: the chain mediating role of positive psychological capital and career resilience [J]. Psychological Techniques and Applications, 2019, 11(05):291-300.
- [2] Wang Xindi, Huang Lufei, Liao Ying, Lu Chunyan, Sui Yue, Wang Siyi, Yang Liu, Tan Xiaohong. The Relationship between Subjective socioeconomic status and Life satisfaction of College students: Using psychological capital as the mediating variable [J]. Journal of Psychology. 2002, 17(21):35-38.
- [3] Jia Yifan, Bai Xuejun, Zhang Zhijie, et al. The impact of social support on college students' life satisfaction: the chain mediating effect of security and positive psychological capital [J]. Chinese Journal of Health Psychology, 2021, 29 (11)
- [4] Lin Xuan, Shan Sishi. A study on the relationship between psychological capital and life satisfaction of college students [J]. Teachers. 2020(27):109-110.
- [5] Cheng Hong, Xie Xiaojuan. Investigation and Analysis of the Psychological Health Status of College Students and Intervention Strategies [J]. Journal of Xinjiang Normal University (Social Science Edition), 2021, 41 (1): 49-54
- [6] Li Xiangyu, Lv Wenchao. Correlation analysis and regression analysis of Social Support and perceptive Social support for college students' Mental health [J]. Journal of Anhui University (Social Sciences Edition), 2019, 36(1):28-31.
- [7] Wang Yunfang. Influencing Factors and Intervention Strategies for Psychological Health of College Students [J]. Education and Career. 2021, 4; 10-16
- [8] Sun Y H. An empirical study on the impact of positive psychological capital on college students' life satisfaction [J]. Modern Educational Science. 2020, 2