

# The Relationship between University Students' Perceived Social Support and Their Meaning of Life under a Regular Situation of Epidemic Prevention and Control: The Mediating Role of Resilience

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**Abstract:** The perceptive social support scale, the meaning of life scale and the psychological resilience scale were used to measure 414 university students in Henan Province. To investigate the influence of perceived social support on the meaning of life and the role of resilience in the relationship between them in the context of normal epidemic prevention and control among university students. Result display: (1) University students' perceived social support ( $63.22 \pm 15.00$ ), resilience ( $3.59 \pm 0.75$ ) and meaning of life ( $49.39 \pm 10.71$ ) were generally above moderate level. (2) University students' perceived social support and resilience were significantly positively correlated ( $r=0.74$ ,  $p<0.01$ ), and perceived social support significantly and positively predicted resilience ( $\beta=0.771$ ,  $p<0.001$ ); meaning of life and resilience were significantly and positively correlated ( $r=0.76$ ,  $p<0.01$ ), and resilience significantly and positively predicted meaning of life ( $\beta=0.49$ ,  $p<0.001$ ); perceived social support and meaning of life were significantly positively correlated ( $r=0.75$ ,  $p<0.001$ ), and perceived social support significantly and positively predicted meaning of life ( $\beta=0.495$ ,  $p<0.01$ ). (3) Resilience partially mediated the relationship between perceived social support and meaning of life among university students ( $\beta=0.391$ ,  $p<0.001$ ).

**Keywords:** Perceived Social Support; Resilience; Meaning of Life; COVID-19 Epidemic

## 1. Introduction

In the spring of 2020, a new and unprecedented coronavirus (COVID-19) swept through the world in an ever-increasing manner, and a global battle to stop the

epidemic and defend human life and health slowly began and continues to this day, gradually forming a regular situation of epidemic prevention and control. The term COVID-19 is both frightening and familiar to all. This is a time when individuals are challenged to reconcile their work and school lives with the need to keep an eye on the trends in the prevention and control of the epidemic to ensure their own safety. In this context, the COVID-19 epidemic has already had an irreversible impact on the deeper aspects of social life. The new cases have increased the sense of insecurity, the global economic downturn has increased the burden of family life, the anxiety derived from the universal home isolation, the pioneering attempts of online office and teaching have tested the psychological adjustment ability and spatial synergy, and the difficulties in returning to work, employment and further education have increased the sense of uncertainty and confusion about the future. In addition, the phenomenon of "in-rolling", a highly integrated, white-hot competition without an exit mechanism [1], has been affecting everyone, and if individuals are affected by such an environment for a long time, it will inevitably lead to negative emotions and incidents. The university is a microcosm of society, and in such an environment contemporary university students cannot escape it. In recent years, the frequent discovery of depression and suicidal tendencies among university students has aroused a great deal of concern, and at the same time, people have begun to wonder why, given the abundance of material living conditions nowadays and the satisfaction of their basic needs, they have been able to enter the halls of higher education in pursuit of their advanced needs for self-fulfilment, while their

mental capacity has decreased. Socialization occurs throughout human life, and most of an individual's activities serve to successfully achieve socialization, which means that we must actively seek interpersonal interactions with others to build our social support network in order to survive and thrive. Within the individual's resource base, the social support system acts as a benign social developmental resource, this constantly injects new energy into the individual's growth and development. Academics categorise social support as either actual or perceived social support. Individuals who perceive social relationships as supportive tend to have a better experience of life, feel happier and be more responsible, and the level of happiness affects the individual's perception of social support. Appreciating a higher level of social support has a gainful function on an individual's physical and mental health [2-6]. Since the outbreak of the COVID-19 epidemic, social interactions between people have been replaced by online social support, and the anxiety about illness in real life has increased the psychological distance between people. The university period is a critical stage for individuals to build a social support network system to enhance their comprehensive ability, and changes in the general environment also have a significant impact on the social support system of university students, so it is important to explore and understand the mechanism of social support influence on university student groups.

The lack of meaning of life is an important reason for the high incidence of suicide and psychological problems among university students in recent years. Studies have found that there is a significant negative relationship between the meaning of life and suicidal ideation [7,8], and the higher the meaning of life, the lower the suicidal ideation. An individual's lifelong struggle to reach his or her goals is the process of highlighting the value and meaning of life, and meaning of life refers to the process of perceiving, thinking about and valorizing the meaning and purpose of life as individuals develop their cognitive abilities, which is a positive psychological resource [9]. Man's search for meaning of all kinds is the primary motivation for his life journey, rather than the rationalization process that gives meaning to the individual's instinctive drive. Recent research on the meaning of life has

gone deeper, with studies showing that perceived social support is positively related to the experience and search for meaning of life, and that the meaning of life is a moderating variable that can reduce an individual's perception of stress and increase satisfaction with life, allow individuals to have more positive emotions and higher levels of well-being. Internal factors such as family parenting style and parental psychological control can also influence the meaning of life [10-16]. The meaning of life allows us to perceive the good in life and experience how valuable and hard-won life is, especially at this particular time when the COVID-19 epidemic is spreading around the world, it is necessary to enhance the understanding and perception of life.

Resilience refers to an individual's effective coping and adaptive mechanisms in the face of loss, difficulty, or adversity [17]. The individual's search for meaning and self-fulfillment is a process of both challenge and opportunity and from time to time receives adverse signals from the environment. When the individual catches the adverse signals in the environment, this instinctive mechanism of self-protection will come into play and become part of the self-defense mechanism, helping the individual to adjust and recover quickly. In addition, supportive factors from the individual, family and society interact to form a dynamic system to resist adverse environmental influences and strengthen the individual's resilience [17]. The dynamic model of resilience states that resilience is an innate potential, a positive psychological quality that individuals have retained over the course of their evolution. The model suggests that an individual's development is a process in which psychological needs are continuously met, and that the process requires the involvement of a large number of protective and supportive factors and external resources. As the individual's psychological needs are met by external resources, the individual naturally develops a subset of individual traits that constitute internal resources, a dynamic process of psychological development in which internal needs are met by external resources. These internal resources form a psychological barrier that protects the individual from harmful external factors to promote healthy psychological development and self-actualisation. It has been shown that

there is a significant positive correlation between an individual's emotional state and their resilience<sup>[18]</sup>, with good emotional states leading to higher levels of resilience and higher levels of overall satisfaction with themselves. The university years are an important stage in the transition from the "ivory tower" to society, and there are still many difficulties and challenges to be faced in order to become a qualified "socialite" and adapt better to society. Therefore, it is important for the growth and development of university students if we can explore the mechanism of external resources on resilience and provide guidance and suggestions to enhance resilience.

To sum up, this study takes university students as the research object, explores the impact of perceived social support and meaning of life on university students in the context of the regular situation of epidemic, analyses the mediating role of resilience between the perceived social support and meaning of life, and proposes suggestions to enhance resilience in order to improve university students' meaning of life and provide help for their healthy growth.

## 2. Objects and Methods

### 2.1 Object

In March 2022, a convenience sampling method was used to select university students in Henan Province as subjects, and students were asked to respond through the Wenjuanxing platform. 414 valid questionnaires were collected. 414 questionnaires were collected, of which 183 (44.20%) were male and 231 (55.80%) were female; 154 (37.20%) were urban and 260 (62.80%) were rural; 82 (19.81%) were freshmen, 72 (17.40%) were sophomores, 74 (17.87%) were juniors; and 186 (44.93%) were seniors.

### 2.2 Methods

#### 2.2.1 Perceived social support scale

The Perceived Social Support Scale (PSSS)<sup>[19]</sup>, revised by Jiang Qianjin, was used. This scale consists of three dimensions: friends, other and family support, of which 3, 4, 8 and 11 are family support, 6, 7, 9 and 12 are friends support and the remaining items are other support. Each dimension has 4 questions, and

the whole set of the scale consists of 12 items. The scale is scored on a seven-point Likert scale, with the total perceived support score being the sum of the item scores, with higher scores indicating a better perceived level of social support. In this study, the internal consistency coefficient  $\alpha$  for the scale was 0.96.

#### 2.2.2 Meaning of life scale

The Meaning of Life Scale (MLQ)<sup>[20]</sup> developed by Steger et al. (2006), translated and revised by Chinese scholar Wang Xinqiang (2013), was selected, which has two subscales of having meaning (questions 1, 3, 5, 6 and 10) and seeking meaning (questions 2, 4, 7, 8 and 9), with question 2 being reverse scored. The scale is scored on a seven-point Likert scale, with the scores for each subscale being summed, the higher the score, the higher the level of perceived meaning in life. In this study, the internal consistency coefficient  $\alpha$  for the scale was 0.89.

#### 2.2.3 Resilience scale

Using the Resilience Scale (CD-RISC)<sup>[21]</sup>, which was revised by scholars such as Xiao Nan in the context of our cultural background and reality, this scale is composed of 25 items in three dimensions. The resilience dimension has 13 items (11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23); the self-improvement dimension has 8 items (1, 5, 7, 8, 9, 10, 24, 25); and the optimism dimension has 4 items (2, 3, 4, 6). Using a five-point scale, the scale is scored on a 5-point scale for both the total score and the subscales. The total scale score is the average of all 25 items and the subscale scores correspond to the average score of each subscale. In this study, the internal consistency coefficient  $\alpha$  for the scale was 0.97.

### 2.3 Data Processing

The data processing software spss24.0 was selected to use descriptive statistics for general characteristics, independent samples t-test to compare means for comparison of differences between gender and place of origin, test of variance, one-way ANOVA for comparison of differences between grades, and Pearson correlation analysis with linear regression analysis for the relationship between the three variables. Amos 24.0 software was used to develop a structural equation model between perceived social support, meaning of life and resilience among university students to investigate the mediating effect of resilience

between perceived social support and meaning of life.

### 3. Results

#### 3.1 Common Method Deviation Test

In order to enhance the credibility of the study results and to test whether they were contaminated by systematic errors (common method deviation), this study used principal component analysis (Harman) to conduct a validation factor analysis on all items of the three scales. The principal component analysis extracted five principal components with eigenvalues greater than 1. The explained rate of variance by these five principal components were 30.87%, 26.60%, 3.39%, 2.40% and 2.38% respectively, with values less than the 40% threshold, indicating that there was no more serious common deviation problem in this study and that statistical analysis of the data could be conducted.

#### 3.2 Current Status of University Students' Perceived Social Support, Resilience and Meaning of Life and Examination of Differences in Demographic Variables

University students scored  $63.22 \pm 15.00$  for perceived social support,  $21.16 \pm 5.20$  for the friend support dimension,  $20.80 \pm 5.41$  for the family support dimension, and  $21.26 \pm 5.44$  for other support. University students' perceived

social support is at a moderate level. The t-test statistics showed that among the demographic variables, gender and place of origin of university students were not significant ( $p > 0.05$ ) in the scores of perceived social support and its dimensions. The results of the one-way ANOVA showed that the scores on the dimensions of perceived social support, friend support and family support were not significant across the different grades ( $p > 0.05$ ). The scores for the resilience was  $3.59 \pm 0.75$ , the toughness dimension was  $3.60 \pm 0.76$ , the strength dimension was  $3.59 \pm 0.75$ , and the optimism dimension was  $3.60 \pm 0.85$ . The results of independent sample t-test showed that the differences in scores of total resilience, toughness dimension, optimism dimension and strength dimension among college students of different genders were significant; the differences in scores of total resilience and strength and optimism dimensions among college students of different place of origin were significant, and the scores of toughness dimension were not statistically significant. A one-way analysis of variance (ANOVA) was used to test the resilience scores of university students at each grade level, and the results showed that there were no significant differences between the scores on the total resilience, toughness, optimism and strength dimensions (see Table 1).

**Table 1. Comparison of Differences in Resilience over Demographic Variables ( $\bar{x} \pm s$ )**

		Toughness	Strength	Optimism	Resilience
Gender	Male	$3.75 \pm 0.86$	$3.71 \pm 0.89$	$3.73 \pm 0.95$	$3.73 \pm 0.87$
	Female	$3.48 \pm 0.66$	$3.50 \pm 0.61$	$3.50 \pm 0.75$	$3.49 \pm 0.62$
	t	3.61***	2.92**	2.82**	3.28***
Place of origin	Rural	$3.55 \pm 0.75$	$3.54 \pm 0.77$	$3.53 \pm 0.85$	$3.54 \pm 0.75$
	Urban	$3.67 \pm 0.78$	$3.69 \pm 0.71$	$3.72 \pm 0.83$	$3.69 \pm 0.73$
	t	1.57	1.97*	2.28*	2.05*
Grade	Freshman	$3.68 \pm 0.84$	$3.66 \pm 0.84$	$3.77 \pm 0.88$	$3.70 \pm 0.82$
	Sophomore	$3.65 \pm 0.85$	$3.68 \pm 0.89$	$3.67 \pm 0.99$	$3.67 \pm 0.88$
	Junior	$3.63 \pm 0.82$	$3.64 \pm 0.72$	$3.59 \pm 0.85$	$3.62 \pm 0.76$
	Senior	$3.53 \pm 0.66$	$3.51 \pm 0.66$	$3.50 \pm 0.76$	$3.51 \pm 0.65$
	F	1.02	1.51	2.22	1.63

Note: \*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$  (the same below)

The score of the meaning of life of university students was  $49.39 \pm 10.71$ , the score of having meaning dimension was  $26.46 \pm 6.37$ ; the score of seeking meaning dimension was  $22.93 \pm 5.42$ . The results of the t-test showed that there was no statistical difference in the scores of the total meaning of life, the having meaning and

seeking meaning dimensions among university students of different genders; the scores of the total meaning of life and the having meaning dimension were statistically significant among university students of different place of origin, and the scores of the seeking meaning dimension were statistically insignificant. A

one-way analysis of variance (ANOVA) of the differences between freshmen, sophomores, juniors and seniors showed that the total

meaning of life, having meaning and seeking meaning dimensions were not statistically significant (see Table 2).

**Table 2. Comparison of Differences in the Meaning of Life over Demographic Variables ( $\bar{x}\pm s$ )**

		Having meaning	Seeking meaning	Meaning of life
Gender	Male	26.20±7.68	23.12±5.41	49.32±12.30
	Female	26.66±5.12	22.78±5.43	49.44±9.30
	t	-0.72	0.63	-0.11
Place of origin	Rural	25.92±6.16	22.64±5.48	48.56±10.74
	Urban	27.36±6.64	23.42±5.29	50.79±10.56
	t	2.24*	1.42	2.05*
Grade	Freshman	25.71±7.77	23.09±5.28	48.79±12.39
	Sophomore	26.10±7.11	23.03±5.91	49.13±12.03
	Junior	26.45±6.61	22.57±5.57	49.01±10.69
	Senior	26.93±5.21	22.97±5.25	49.90±9.37
	F	0.80	0.14	0.27

**3.3 The Mediating Role of Resilience**

3.3.1 Correlation and linear regression of perceived social support and resilience in university students. The results indicated that

there was a significant positive correlation between the dimensions of resilience and the dimensions of perceived social support among university students (see Table 3).

**Table 3. Correlation Analysis between the Dimensions of Perceived Social Support and Resilience in University Students**

Variables	Total score of resilience	Toughness	Self-improvement	Optimism
Total score of perceived social support	0.74**	0.70*	0.72*	0.70**
Family support	0.69**	0.64**	0.67**	0.66**
Friends support	0.68**	0.64**	0.68**	0.68**
Other support	0.71**	0.67**	0.66**	0.63*

In order to investigate the relationship between perceived social support and resilience among university students, a linear regression equation model was developed using perceived social support and its dimensions as independent variables and the total score on the resilience scale as the dependent variable (see Table 4). When perceived social support was used as the independent variable, the total resilience score entered the model (F=502.065,

p<0.001), and the equation was Y=1.253+0.037X, which explained 54.8% of the total variance; when the dimensions of perceived social support were used as the independent variables, the total resilience score entered the regression model (F=166.873, p<0.001). The equation was Y=1.262-0.004X<sub>1</sub>-0.001X<sub>2</sub>+0.042X<sub>3</sub>, which explained 55% of the total variance. In summary, perceived social support can positively predict resilience.

**Table 4. Results of Regression Analysis of Resilience and Perceived Social Support among University Students**

Dependent variable	Predictive variable	Regression coefficient	Normalized regression coefficient	T	F	R	R <sup>2</sup>
Resilience	Constant term	1.25					
	Perceived social support	0.04	0.002	22.407***	502.065***	0.741	0.548
Resilience	Constant term	1.26		11.638***			
	Family support	-0.004	-0.074	-0.616	166.873***	0.741	0.550
	Friends support	-0.001	-0.029	-0.241			
	Other support	0.042	0.836	4.037***			

3.3.2 Correlation and linear regression of resilience and meaning of life among university students

positive correlation between the dimensions of resilience and meaning of life among university students (p<0.01).

The results after using correlation analysis are shown in Table 5, which shows a significant

**Table 5. Linear Correlations between the Dimensions of Resilience and Meaning of Life Among University Students**

Variable	Total score of resilience	Toughness	Self-improvement	Optimism
Total score of meaning of life	0.76**	0.74**	0.74**	0.70**
Having meaning	0.69**	0.66**	0.69**	0.63**
Seeking meaning	0.69**	0.68**	0.66**	0.64**

In this study, a regression model was developed to further analyses the mechanism of the effect between resilience and meaning of life among university students. The dependent variable of the model was the overall score on the Meaning of Life Scale, and a linear regression model was developed with mental toughness and each of its two dimensions as independent variables (see Table 6). When resilience was the dependent variable, the overall meaning of life score entered the

regression model ( $F=568.146$ ,  $p<0.001$ ), and the equation was  $Y=10.263+10.884X$ , which explained 58% of the total variance; when resilience and its dimensions were used as independent variables, meaning of life entered the regression model ( $F=190.919$ ,  $p<0.001$ ). The equation was  $Y=9.779+4.124X_1+4.062X_2+2.229X_3$ , which explained 58.3% of the total variance. In summary, resilience can positively predict meaning of life.

**Table 6. Regression Analysis of Resilience and Meaning of Life for University Students**

Dependent variable	Predictive variable	Regression coefficient	Normalized regression coefficient	T	F	R	R <sup>2</sup>
Meaning of life	Constant term	10.263					
	Resilience	10.884	0.761	23.836***	568.146***	0.761	0.580
Meaning of life	Constant term	9.779		5.763***			
	Toughness	4.124	0.294	3.859***	190.919***	0.763	0.583
	Self-improvement	4.062	0.323	3.879***			
	Optimism	2.229	0.182	2.920**			

3.3.3 Correlation and linear regression of perceived social support and meaning of life among university students

The results showed a significant positive correlation between the dimensions of perceived social support and meaning of life among university students (see Table 7).

**Table 7. Correlation between Perceived Social Support and Meaning of Life among University Students**

Variable	Total score of perceived social support	Family support	Friends support	Other support
Total score of meaning of life	0.75***	0.69***	0.69***	0.73***
Having meaning	0.73***	0.70***	0.69***	0.70***
Seeking meaning	0.63**	0.55***	0.60***	0.61***

In this study, a regression model was developed to further analyses the mechanism of the relationship between perceived social support and meaning of life among university students, with the overall score on the meaning of life scale as the dependent variable and the independent variables being perceived social support and its dimensions (see Table 8). When perceived social support was used as the independent variable, the overall meaning of life score entered the regression model ( $F=541.096$ ,  $p<0.001$ ) and the regression equation was  $Y=15.355+0.538X$ , which explained 56.8% of the total variance; when the dimensions of perceived social support were selected as the independent variables,

they all entered the regression model ( $F=179.753$ ,  $p<0.001$ ), the regression equation was calculated as  $Y=15.411+0.516X_1+0.479X_2+0.616X_3$ , which explained 56.5% of the total variance. All of these results indicate that meaning of life can be predicted significantly and positively by the perceived social support pair.

3.3.4 The mediating role model of resilience  
The mediating effect of resilience between perceived social support and a meaning of life among university students was analysed with the path coefficients shown in Figure 1. Among the fitted indicators of the model,  $\chi^2/DF=3.430$ ,  $GFI=0.967$ ,  $AGFI=0.931$ ,  $NFI=0.982$ ,  $IFI=0.987$ ,  $CFI=0.987$ ,

RMSEA=0.077. Some of the indicators (e.g.  $\chi^2/df$ ) are easily confounded by the size of the sample when performing the model fit, and too large or too small a sample size can lead to some deviation. When the sample size is large,

the  $\chi^2/DF$  value tends to reject the model. The sample size in this study is 414, so the  $\chi^2/DF$  values fit well and are evaluated with reference to other fit indicators, and the mediation model is good and acceptable.

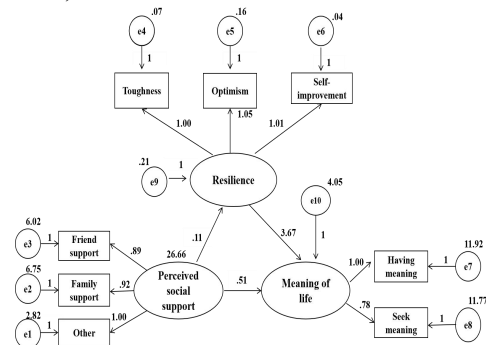
**Table 8. Regression Analysis of Perceived Social Support and Meaning of Life for University Students**

Dependent variable	Predictive variable	Regression coefficient	T	F	R	R <sup>2</sup>
Meaning of life	Constant term	15.355				
	Perceived social support	0.538	23.261***	541.096***	0.753	0.568
Meaning of life	Constant term	15.411	10.15***			
	Friends support	0.516	4.102***	179.753***	0.754	0.565
	Family support	0.479	4.019***			
	Other support	0.616	4.252***			

The results showed that the addition of the mediating variable of resilience resulted in a significant path coefficient between perceived social support and meaning of life ( $\beta=0.495$ ,  $p<0.01$ ), a significant path indicator between perceived social support and resilience ( $\beta=0.771$ ,  $p<0.001$ ), and a significant path indicator between resilience and meaning of life ( $\beta=0.49$ ,  $p<0.001$ ). This indicates that the mediating effect of resilience was significant and partially mediated (see Table 9).

significant, and 43.25% for the mediating effect and 56.75% for the direct effect (see Table 10).

In testing the mediating variables, this study set a 95% confidence level with a random sample size of 2000 and used the Bootstrap method to conduct the test. The results of the study showed that the deviation correction intervals (0.23-0.574) and (0.284-0.731) for both the mediating and direct effects of resilience did not include 0, then both the mediating and direct effects of resilience were



**Figure 1. A Structural Equation Model of Perceived Social Support, Resilience, and Meaning of Life of University Students**

Note: e1 to e8: error variable names for each observed variable; e9 to e10: residual variable names for potential variables

**Table 9. Path Tests for the Mediating Role of Resilience**

Path	Unstandardised coefficient	Normalized coefficient	S.E	C.R	P
Perceived social support → resilience	0.107	0.771	0.005	19.691	0.000
Resilience → meaning of life	3.617	0.49	0.426	8.611	0.000
Perceived social support → meaning of life	0.513	0.495	0.059	8.618	0.000

**Table 10. Analysis of the Total Direct Effect of Intermediation**

Path	Effect value	Bias-corrected 95% CI				Ratio of effect
		SE	Lower	Upper	P	
Resilience mediating effect (IE)	0.391	0.09	0.23	0.574	0.001	43.25%
Direct Effect (DE)	0.513	0.116	0.284	0.731	0.001	56.75%
Total Effect (TE)	0.904	0.058	0.781	1.01	0.001	

#### 4. Discussion

##### 4.1 Current Status of University Students' Perceived Social Support

University students have a moderate level of perceived social support, with no differences in

demographic variables. After the 'stormy' period of secondary school, university students are transitioning to university, developing their personality traits and logical thinking skills, as well as establishing a relatively stable outlook. They no longer want independence and adulthood as much as they did in adolescence,

and seek more affirmation and approval from others (especially peers and parents). At the same time, they have successfully completed the task of constructing self-identity and have gradually developed stable and harmonious intimate relationships and social networks, and stability is the most important characteristic of this group. Secondly, university life is freer and more flexible than that of secondary school. Students have ample time to spread their interpersonal networks, develop their own interests and strengths, and are less affected by the differences between individuals in the process of expanding their social circles. Finally, although the amount of offline contact during the epidemic was relatively low compared to the time before the epidemic, the use of developed internet platforms to communicate online could maintain the more stable interpersonal relationships that had been developed, and during special times like the epidemic the network could not only maintain a general level of interpersonal contact but also develop deeper social support relationships.

#### **4.2 Current Status of University Students' Resilience**

The overall level of resilience of university students is high. Firstly, the improvement in the level of mental health of university students is related to the measures taken by universities. Many universities have set up professional psychological counseling room to identify and solve problems in a timely manner, and regularly carry out mental health themed activities, such as the "525 - I Love Me" campaign, in order to improve the mental health of university students in various ways, cultivate perfect personality qualities. This will improve their ability to cope with stress, frustration and anxiety and enhance their resilience. In addition to the psychological support and assistance given by the outside world, the tendency of university students to actively seek external help and the self-healing function acquired through independent learning will also gradually be internalised as a positive resource in the development process of university students and become a combination of elements to enhance resilience. The level of resilience previously developed by an individual during the regular situation of the epidemic will help the individual to quickly adjust psychologically to the changes brought

about by the epidemic, to find a balance between the regular situation of the epidemic and normal academic life as soon as possible, and to ensure that the level of resilience and the courage and perseverance to resist setbacks and hardships are increased towards their goals. The level of resilience of male students is significantly higher than that of female students, and male students are more optimistic, positive and empowered than female students. This may be due to the fact that male and female students have different perspectives and ways of analysing problems due to the difference in their biological levels, and that male students tend to be more rational when they look at problems, use the resources available to them to analyze all aspects of the problem objectively and make rational decisions. When faced with setbacks and challenges, they are more confident in their own abilities and are more optimistic and positive, and show great independence and persistence in solving problems. This may therefore explain the higher level of resilience in boys compared to girls. Girls are different from boys in their perception of problems, as they are more emotional and are more influenced by mood swings, and when they encounter difficulties, emotion usually prevails and they usually turn to external help to get support from others, and then adjust their emotional state to reach a positive state before successfully solving the problem, the problem solving cycle is relatively long. Therefore, in order to increase the level of resilience of both genders, it is important to work on individualized conditions according to the different characteristics of boys and girls.

There are significant differences in the place of origin of university students, with urban students having significantly higher levels of resilience than rural students, and urban students being more optimistic and energetic than rural students. For university students from urban areas, they are born with various kinds of rich and diverse resources, but the population base in urban areas is huge and the competition pressure they face is relatively higher, which also makes them experience more intense competition from secondary school or even primary school, and they have to learn to regulate their emotional state early to improve their resilience to cope with the fierce competition. They should also gradually



build up their resilience to high-pressure environments and be more optimistic, calm and positive in the face of difficult problems. For students from rural areas, despite the lack of quality resources in rural areas, some of the pressure of competition is relieved by the transfer of students to urban areas, making it easier for students from rural areas to progress to higher education and to withstand the pressure less intensely than urban students. However, this imbalance between urban and rural resources can exacerbate the gap in the quality of talent training between urban and rural areas. Contemporary society needs well-rounded and complex talents, and the difference in the quality of talent training between urban and rural areas can make rural students relatively less competitive before entering university, which is why few rural students are able to enter university.

There were no significant differences in the levels of resilience among college students in different grades, probably because the physical and mental development of individuals plateaued by the time they reached college, and because the differences in sample sizes across grades were not sufficient to reach statistically significant levels. The physical and mental conditions of college students in the general environment of the COVID-19 epidemic are inevitably affected, and although there is some variability in the level of resilience development between grades this variability do not reach a statistically significant level of difference.

#### **4.3 Current Status of University Students' Meaning of Life**

University students have a higher level of perception of the meaning of life, with urban university students having a significantly higher meaning of life than their rural counterparts, and urban university students exploring and possessing meaning to a greater extent than their rural counterparts. The source of the meaning of life for university students from rural areas is mainly the influence of their parents and grandparents in their families of origin and the education they receive from teachers and campus culture after they enter school, which makes the way in which individuals acquire a sense of meaning in the early stages of their lives relatively simple. Coupled with the fact that the current

education system in rural areas is not quite complete, the development of mental health activities such as early life education is not quite adequate, which makes most rural college students still in the stage of searching for meaning of life, and a few are still in the stage of having the meaning of life. On the contrary, university students from urban areas have more diverse ways to acquire a meaning of life. They can receive professional mental health education in advance through the quality educational resources at school, and they can also take interest classes after school to explore multiple perspectives according to their interests, and in the process of exploration, think about the meaning of life and experience the value of life, which is also a process of exploring the meaning of life itself. The variety of ways to acquire a meaning of life allows urban university students to enter the stage of having a meaning of life, rather than just staying in the stage of seeking meaning. These reasons may therefore account for the significant differences between the two. The outbreak of the COVID-19 epidemic threatens the safety of human life, the unpredictability of disease and the smallness of human life. In this special context, individuals will think about the value and meaning of life to an unprecedented degree, and those with a stronger meaning of life will seek a way to realise the value of life in the midst of the chaotic changes, and will also experience the fragility and hardness of life.

#### **4.4 The Relationship among Perceived Social Support, Resilience and Meaning of Life**

The higher the level of perceived social support among university students, the higher the level of resilience. People are social beings and in the process of socialisation they inevitably have to build up their own social support systems, of which family support and friend support are two essential subsystems. The social support that individuals receive from various parties in the course of regular situation of epidemic prevention and control will greatly enhance their self-confidence and interpersonal trust, resulting in positive emotional experiences and a sense of belonging and security, as well as their resilience and fortitude in the face of unexpected epidemic situations, thus increasing their level of resilience.

Resilience is significantly and positively correlated with the meaning of life<sup>[22]</sup>, i.e. the higher the level of resilience of university students, the higher meaning of life. Resilience is a positive psychological quality displayed by individuals in the process of overcoming difficulties. It is mainly manifested as resilience, optimism and perseverance, and is closely related to an individual's self-function. The stronger the individual's resilience, the more adaptable and adjustable they will be in the face of setbacks, and will soon return to a rational and calm state to give countermeasures, rarely showing negative emotions such as self-loathing and negative pessimism. In the pursuit of the meaning of life certainly cannot be smooth, will inevitably encounter setbacks and challenges, which requires a high level of resilience to complete the search for a meaning of life, to experience more "heart flow" and to live a happy and joyful life. When an epidemic comes along and seriously disrupts an individual's rhythm of life and learning, individuals with a high level of resilience will be able to quickly adjust their minds and bodies, finds a balance to overcome all difficulties and continue to explore the meaning and value of life.

Perceived social support is significantly and positively correlated with meaning of life<sup>[23]</sup>, i.e. the higher the level of perceived social support, the greater the meaning of life. The main sources of meaning of life are family, interpersonal relationships, etc. In the process of pursuing meaning of life we need to perceive the information transmitted by the external social support system, and then encode and transmit the information to the information processing area, where the perceived information is subjectively interpreted, and the perceived information is combined with the individualised interpretation in order to generate a sense of meaning, which is a process of combining information from internal and external sources with each other. The higher the level of social support an individual can perceive, the more positive information and psychological energy we can access, the stronger the internal drive to explore and be curious, and the more willing we are to persistently explore the meaning of life. "The epidemic has no mercy, there is love on earth". In an epidemic control situation, changes in the external environment can

increase feelings of alienation and insecurity, and individuals who have a higher level of perceived social support and feel more interpersonal warmth and support, and will develop more positive emotions and cope with the trials and tribulations of the epidemic in a positive and optimistic manner. This will increase the courage and confidence to explore the meaning of life.

#### **4.5 The Mediating Role of Resilience**

Resilience plays a partially mediating role between perceived social support and the meaning of life, and can enhance university students' meaning of life by increasing the perceived social support and the indirect effect of resilience, supporting the dynamic development model of resilience. Social support systems such as family, interpersonal relationships and peer groups can provide a place of psychological refuge for university students, can provide intimate relationships, develop positive emotions such as optimism and perseverance, and provide a way to channel negative emotions such as anxiety and depression when appropriate, all of which are positive psychological resources provided by social support systems, and these positive psychological resources can become capital for individuals to regulate themselves and develop healthily during an epidemic, and form a barrier against external changes. By realizing the power provided by these positive psychological resources, the individual will gradually satisfy various psychological needs. Once these needs are met, the individual gradually strengthens his or her personality traits and accumulates internal psychological resources. These internal resources protect the individual in times of difficulty and frustration, and also provide supportive strength in the search for positive meaning. Individuals with high resilience are sensitive to supportive information from their environment and integrate it into their existing psychological resources to increase resilience and provide positive strength when they act. Individuals with low resilience do not integrate information from their support system into their existing positive psychological resources, and negative forces such as pessimism and depression are stronger than positive forces in the face of setbacks, and do not provide stable and sustained support when they act. This is

the reason why some individuals are devastated and give up on themselves when their life and learning rhythm is disrupted during the epidemic. When individuals have a higher level of perceived social support, they will have a more positive and optimistic attitude towards life, and when faced with negative life events such as the epidemic, they will demonstrate the psychological qualities of resilience, perseverance and reasoning, and will have a more positive and sunny attitude towards life, and will be more willing to explore the meaning of life, thus achieving self-actualization, developing good reality checks and establishing good self-functioning.

### 5. Conclusions

The dimensions of perceived social support, resilience and meaning of life are significantly correlated among university students, specifically: the higher the level of perceived social support, the higher the level of resilience; the higher the level of resilience, the higher the meaning of life; the higher the level of perceived social support, the higher the meaning of life. In conclusion, resilience plays a part in mediating the relationship between the perceived social support and the meaning of life, and can enhance the meaning of life of university students by improving the perceived social support and the indirect effect of resilience. In the general environment of the epidemic, the competition in all walks of life is becoming more and more intense, so university students need to complete the transformation from focusing on others to focusing on themselves, and actively empower themselves for mental health, in order to be determined in their goals, pursue their ideals, gain a sense of value and meaning in life against the backdrop of the "in-rolling" and epidemic, integrate positive psychological resources to cope with the wind and rain on the road of life and the uncertainty of the coming epidemic, and find themselves in the regular situation of prevention and control of the epidemic, and find their place in the world and respond to the changes.

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