



A Study on the Psychological Stressors of University Teachers in post-epidemic era and Their Influence

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Abstract. This study focuses on young teachers aged 25-55 from four universities, including two in Xi'an, Shaanxi, one in Zhejiang, and one in Hunan. For this study, only young teachers were selected as the model for analysis. In the study, the SCL-90 Symptom Checklist and questionnaire were used to analyze the psychological stress and its impact on young university teachers. From the analysis, it can be seen that young teachers in universities have differences in somatization, interpersonal relationships, depression, anxiety, gender, marital status, teaching experience, gender, educational background, and professional titles. There is a significant difference between the two groups. In response to this situation, we can start from three aspects: schools, society, and teachers, to alleviate the psychological pressure on young teachers in universities.

Keywords: post-epidemic era; university teachers; psychological stressor; influence

1 Introduction

At the beginning of 2020, COVID-19 broke out with unprecedented severity. In this epidemic, many people have different levels of psychological stress reactions, such as avoidance, intrusion, and high vigilance. For university teachers, the post pandemic era has also brought some stimulation and impact to psychological pressure to varying degrees. Walker R and Stephens RS found that when a person is under high stress and lacks good coping strategies, the risk of psychological problems can reach 43.3%, which is twice that of the general population. In previous studies, there have been few studies on the post-traumatic stress response of university teachers after the pandemic. The purpose of this study is to study the psychological stress reaction and coping style of college teachers after experiencing the COVID-19.

2 Research data and methods

From July 5th to October 5th, 2024, for a period of three months, the author analyzed teachers aged 25-55 in four universities: two in Xi'an, Shaanxi, one in Zhejiang, and one in Hunan. In the specific study, young teachers were mainly selected as the re

search subjects. CL-90 Symptom Checklist and Trait Coping Style Questionnaire were issued and taken back. The Symptom Checklist 90 (SCL-90) and Professor Jiang Ganjin's Trait Coping Style Questionnaire were used in this study. First, delete the incomplete invalid questionnaire, and then code the valid questionnaire and input it into the computer for registration [1-2]. In addition, SPSS17.0 statistical software is used to analyze the data. The statistical methods used are: descriptive statistical analysis, T test, analysis of variance, correlation analysis and regression analysis.

3 Research tools

In this study, the internationally accepted SCL-90 symptom checklist was used to analyze the questionnaire.

The Symptom Checklist 90 (SCL-90) was developed by the Derogatis. L. R. (1975) and consisted of 90 items. It includes a wide range of psychiatric symptoms, such as thinking, emotion, behavior, interpersonal relationship, living habits and so on. The evaluation method is a five-level scale (from 0 to 4), which includes 9 factors. There were somatization, obsessive-compulsive symptoms, interpersonal sensitivity, depression, anxiety, hostility, phobia, paranoia and psychosis.

4 Analysis of research results

(1) The general condition of SCL-90.

Use the Symptom Checklist-90 (SCL-90). Through the analysis of teachers aged 25-55 in four universities, including two in Xi'an, Shaanxi, one in Zhejiang, and one in Hunan, the specific research mainly focuses on young teachers. Through a survey of young teachers, it can be seen that the overall average score of psychological pressure for young teachers in independent colleges is 83.09. According to the SCL-90 0-4 rating scale used in this study, if the total score of the scale exceeds 70 points, it is defined as the presence of psychological stress. SPSS was used to screen subjects with a total score of 70 or above on SCL-90. As a result, 111 young teachers from independent colleges were selected. There were 59 males and 52 females, with a detection rate of 59.36%. Then, the psychological stress scores of young university teachers with different genders, ages, educational backgrounds, professional titles, years of work experience, and marital status were described. The results of descriptive statistical analysis are shown in Table 1.

Table 1. Distribution of psychological stress of university teachers.

Demographic variables	Category	Number of people	Equal distribution of psychological stress	Totally
Gender	Male	93	81.57	83.09
	Female	94	84.59	

Age	25-35 years	7	124	83.09
	35-45 years	140	83.07	
	45-55 years	140	75.97	
Academic qualifications	Specialist and below	0	0	83.09
	Undergraduate	85	104	
	Master	102	65.66	
	Doctor and above	0	0	
Title	Teaching assistant	108	82.98	83.09
	Lecturer	74	83.70	
	Associate professor	3	53.33	
	Professor	2	110.50	
Years of service	0-5 years	115	71.01	83.09
	6-10 years	62	92.87	
	11-15 years	10	62.57	
Marital status	Unmarried	73	73	83.09
	Married	114	114	

Each factor of SCL-90 was tested, as shown in Table 2. The results showed that the scores of young college teachers in the two factors of obsessive-compulsive symptoms and depression were higher than 1. The scores of somatization, interpersonal sensitivity, hostility, phobic anxiety, paranoid ideation and psychoticism were significantly lower than 1. The results showed that the obsessive-compulsive symptoms and psychological stress of depression of young teachers in colleges and universities were significant ($P < 0.01$).

Table 2. Factor analysis

	Mean value	Standard deviation	t	Sig.
Somatization	8710	58831	-2.826	.005
Obsessive-compulsive symptoms	1.2641	63214	5.148	.000
Sensitive to interpersonal relationships	9126	56241	-2.145	.035
Depression	1.0624	57721	2.089	.042
Anxiety	9426	51369	-1.216	.182
Hostile	9011	65284	-2.167	.041
Fear	5361	59321	-10.924	.000
Paranoia	8426	59105	-3.621	.000
Psychotic	7021	54831	-7.264	.000

Note: * stands for $p < 0.05$, ** stands for $p < 0.01$, *** stands for $p < 0.001$

(2) Psychological stress of young college teachers and regression analysis

Table 3. Total score and factor score of psychological stress of young college teachers.

Variables	Total TCSQ score
Total psychological stress score	0.418***
Somatization	0.084
Obsessive-compulsive symptoms	0.487***
Sensitive to interpersonal relationships	0.426***
Depression	0.421***
Anxiety	0.495***
Hostile	0.217***
Fear	0.462***
Paranoia	0.233***
Psychotic	0.355***

Note: * stands for $p < 0.05$, ** stands for $p < 0.01$, *** stands for $p < 0.001$

As can be seen from the statistical results in Table 3, The Total score of TCSQ of young college teachers was significantly positively correlated with the total score of psychological stress ($P < 0.001$). The factor scores of psychological stress were positively correlated with the total score of TCSQ. There was a significant positive correlation between the psychiatric factor and the total score of TCSQ ($P < 0.01$). The total score of TCSQ was significantly positively correlated with 8 factors such as obsessive-compulsive symptoms, interpersonal sensitivity and so on ($P < 0.001$).

Table 4. SCL-90 factor scores of young college teachers and multiple stepwise linear regression scores of stressors on psychological stress Analysis.

Factors entering the regression	Normalized Beta coefficient	Significance of T value
Somatization	0.162	0.000
Obsessive-compulsive symptoms	0.144	0.000
Sensitive to interpersonal relationships	0.177	0.000
Depression	0.172	0.000
Anxiety	0.118	0.000
Hostile	0.090	0.000
Fear	0.095	0.000
Paranoia	0.126	0.000
Psychotic	0.103	0.000

Note: * stands for $p < 0.05$, ** stands for $p < 0.01$, *** stands for $p < 0.001$

It can be seen from Table 4 that the total score of psychological stress is the dependent variable, and each factor of SCL-90 is divided into independent variables. The psychological stress of young teachers in independent colleges was analyzed by mul-

tiple stepwise linear regression. The 10 factor scores of SCL-90 were all entered the regression equation, and the T values were very significant ($P < 0.001$). According to the predictive effect of each factor on the total score of psychological stress, the order from big to small was depression, somatization, obsessive-compulsive symptoms, psychosis and anxiety. Anxiety, interpersonal sensitivity, others, terror, hostility and paranoia.

(3) Comprehensive discussion

From the correlation analysis of psychological stress among young university teachers, it can be seen that the total score of TCSQ is significantly positively correlated with various factors of psychological stress. Under this condition, the higher the degree of psychological stress, the worse the level of psychological health. If young teachers want to improve their mental health, they should first adopt positive coping methods, actively deal with stress problems, and try to avoid problems with negative coping methods as much as possible. Secondly, schools should proactively introduce policies to alleviate the work pressure and various pressures brought by personal life of young teachers in universities.

Using the total score of psychological stress as the dependent variable and the factor scores of SCL-90 as independent variables, a multiple stepwise linear regression analysis was conducted on the psychological stress of young university teachers. This analysis can effectively identify the total score of psychological stress among young university teachers and improve their psychological stress status.

5 Countermeasures to improve the psychological stress of young college teachers

(1) Utilizing the advantage of salary freedom to attract young teachers

Based on the above research, the income level of universities lacks external competitiveness. Therefore, if universities want to achieve sustainable and long-term development, they must increase capital investment, improve salary and benefits, and introduce high-level talents through competitive conditions. On the premise of meeting the material needs of young teachers, other incentive methods should also be used to meet their needs, in order to enhance their sense of identity and belonging to universities, and strive to improve their job satisfaction. In addition, universities can regularly organize teaching experience sharing sessions, inviting senior professors with long tenure and rich teaching experience to share their years of teaching experience with young teachers. Resolve awkward situations with students and create a positive classroom atmosphere.

(2) Strengthening Teacher Ethics Education and Enhancing Educational Responsibility

Strengthening the education of young teachers' professional ethics is the primary prerequisite for promoting effective teaching in universities. In order to enhance their professional height, sense of social mission, and work responsibility in teaching and educating students, teacher ethics education must be included in the pre service and daily training of young teachers in universities, and occupy an important proportion,

and be effectively implemented in the long term [3]. In addition, organizing teacher ethics classes for young teachers, where outstanding teachers lead by example, impart experience, and encourage them to improve their own education and character development requirements [5]. Of course, a sound mechanism for evaluating and supervising teacher ethics should also be strengthened. The content of teacher ethics should be specified and standardized, and a scientific teacher ethics assessment and evaluation system should be established to fully leverage the positive guiding role of evaluation work.

(3) Constructing a psychological stress model for young university teachers

There are two perspectives to address the psychological stress of young teachers: the guidance of national policies and the guidance of school policies towards young teachers [4]. Among them, national departments should propose general guidelines and policies that are conducive to the development of young teachers in universities, while schools should propose policies that are conducive to the development of young teachers from the aspects of salary system, evaluation system, etc. In such a cyclic model, stressors and coping strategies interact with each other, which can enhance the psychological stress of young teachers in universities [5].

6 Conclusion

At present, the overall structure of teachers in colleges and universities is younger, so the situation of young teachers is related to the future development of colleges and universities. There are many researches on the stress of teachers in domestic educational circles, but there are few researches on the stress of young teachers in colleges and universities. In The study, the author strives to make the empirical investigation scientific and objective, and starts from the specific goal of the psychological status of young college teachers. And summed up the practical application of practical countermeasures, so as to effectively contribute to the construction of young teachers in colleges and universities.

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