

The Impact of the Risk Perception of COVID-19 PANDEMIC on College Students' Occupational Anxiety: The Moderating Effect of Career Adaptability

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Abstract: In order to understand the changes in college students' risk perception and occupational emotion under major public health events and to explore the influencing factors of college graduates' employment guidance, 578 college students were surveyed by questionnaire to explore the impact of the risk perception of COVID-19 pandemic on college students' occupational anxiety and its internal mechanisms, and to analyze the mediating role of psychological resilience in the impact and the moderating role of career adaptability. The results showed that: (1) there is a significant positive correlation between the risk perception of COVID-19 pandemic and occupational anxiety; there is a significant negative correlation between risk perception and psychological resilience; there is a significant negative correlation between the psychological resilience and occupational anxiety. (2) Psychological resilience plays a mediating role between risk perception and occupational anxiety. (3) Career adaptability plays a negative moderating role between the risk perception of COVID-19 pandemic and occupational anxiety. These results showed that the risk perception of COVID-19 pandemic not only directly aggravates college students' occupational anxiety, but also indirectly affects occupational anxiety through psychological resilience; Career adaptability significantly alleviates the incremental effect of the risk perception of COVID-19 pandemic on college students' occupational anxiety. This paper has positive enlightenment on how to improve the employability of college students and alleviate their employment anxiety during major public health events.

Keywords: COVID-19 pandemic, risk perception, occupational anxiety, psychological resilience, career adaptability, college students.

1. INTRODUCTION

As a rare human crisis, the COVID-19 pandemic has been rampant all over the world since 2020. In three years, it has attacked almost all countries and regions in the world, dividing the era into "the world before the COVID-19 pandemic" and "the world after the COVID-19 pandemic", becoming a new watershed in the historical process of human development [1]. Kissinger believes that the situation faced by the international community under the COVID-19 pandemic disease is the same as that at the end of 1944. "There is a dangerous sign. This danger is not aimed at any specific person, but with amazing randomness and destructiveness [2]". The impact of the COVID-19 pandemic on human beings is not only limited to property losses, but also poses a serious threat to personal safety, and even has a significant and in-depth impact on the international order, international pattern, economic development and other aspects [3]. The wide scope and depth of its influence force the state, society and individuals to deconstruct and restate the practical logic of action at the macro and micro levels.

From a macro perspective, the COVID-19 pandemic is the fastest spreading, most infected and most difficult to prevent and control sudden international public health event in the past century [4]. Governments around the world have taken strict quarantine measures to ensure the personal safety of residents to the greatest extent possible, curb the continued significant expansion and endless spread of the epidemic, and prevent crowds from gathering and moving. Since February 2020, many countries have successively closed their borders, some global industrial chains and supply chains have been interrupted, and the production network has changed, which has had a negative impact on consumer spending, industrial production, export and investment [5]. The obstacles and uncertainties facing the development of global trade have surged, and the world's major economies have generally experienced negative effects, such as a sharp decline in economic growth, a reduction in trade and cross-border investment, a volatile decline in financial markets, and a sharp rise in unemployment [6]. The "great blockade" caused by the COVID-19 pandemic and the severe economic recession characterized by high unemployment have exceeded the global financial crisis in 2008 and even approached the great depression in 1929-1933 [5].

From a micro perspective, all walks of life have suffered serious trauma during the epidemic prevention

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and control period. Some enterprises are even facing shutdown, forcing enterprises to maintain their survival through stop loss measures such as reducing wages and layoffs [7]. Accordingly, affected by the general environment, a series of problems such as reduced income, relatively increased cost of living, and employment difficulties are gradually emerging [4]. For college students who have changed from student identity to practitioner identity, their professional experience, professional skills and thinking mode have not improved, and their employment challenges are more severe [1]. As far as the employment situation of college students in Hebei Province is concerned, due to the impact of the COVID-19, they need to deal with more problems in the process of job hunting, such as obtaining job hunting information, changing job hunting methods, career planning, etc. Especially for graduates studying in different places, they can not return to school in time during the epidemic period, and can only search for jobs online, which further increases the difficulty of employment, undoubtedly leading to the increasingly serious occupational anxiety of college students. Therefore, it is very important to explore the factors that cause college students' occupational anxiety and their mechanisms to alleviate college students' anxiety. Based on this, this paper conducted a questionnaire survey on college students from several undergraduate colleges in Hebei Province, aiming to explore the impact of risk perception of COVID-19 epidemic on college students' occupational anxiety and its internal mechanism, and analyze the mediating role of psychological resilience in this impact and the role of career adaptability. This paper enriches the research on the economic consequences of the risk perception of COVID-19 pandemic and the influencing factors of college students' occupational anxiety, and provides positive enlightenment on how to improve college students' employability and alleviate their employment anxiety during major public health events.

2. RESEARCH ASSUMPTIONS

Occupational anxiety refers to a long-lasting and strong psychological state of anxiety, tension, etc. that individuals show when facing employment problems, which will produce a series of physiological and behavioral changes. It belongs to a state of anxiety, which mainly includes four factors: lack of employment competitiveness, lack of employment support, lack of self-confidence, and worry about employment prospects [8]. The study found that occupational anxiety is more significant in college students, and

some students can strongly feel the fidgety and restless physiological reactions caused by occupational anxiety. They will worry that they can not grasp the rare opportunities in the process of finding employment. This worry often leads to a sustained sense of anxiety, which can only disappear completely after successful employment. With the popularization of national higher education in China, the employment situation of college students is becoming more and more serious. It is common for dozens, hundreds, or even thousands of people to compete for a job. The employment of college students has become a topic of great concern for the country, society, schools and families. According to the statistics of the Ministry of Education, the number of graduates from colleges and universities in China reached a new high in 2023, which is expected to reach 11.58 million, an increase of 820 000 over the same period last year. With the number of unemployed graduates in the past, this data is even larger. At the same time, affected by the persistence and repetition of the COVID-19 pandemic, the recovery process of social production and economic development continued to be blocked, and the employment problem was overstocked. In addition, the epidemic situation overlapped with the Spring Festival holiday, resulting in difficulties in rework and shutdown of enterprises. The recruitment demand for college graduates in various cities decreased significantly, but the number of jobseekers increased significantly [9-11]. In order to ensure the survival and development of enterprises to the greatest extent, primary and secondary school enterprises and individual businesses that used to attract a large number of graduates have adopted the strategy of salary reduction and layoffs. The phenomenon of "slow employment" and "no employment" has been spreading. The employment situation faced by college graduates after leaving the campus is not optimistic, and the employment mentality of college students has been affected to varying degrees [12,13]. Excessive occupational anxiety will lead to self-cognition bias and a decline in self-confidence in the process of employment, which has a negative impact on the physical and mental health and career development of college students [14].

Risk perception refers to an individual's perception and understanding of risks that exist objectively in the outside world, including the whole process of perception, understanding, memory, evaluation and response to risks [15, 16]. The lower the individual's level of risk cognition, the more rationally they will

adopt positive coping behaviors. On the contrary, the higher the individual's level of risk cognition, the greater the perceived risk, and the more likely it is to cause bad psychological states such as fear, depression, and anxiety [17-19]. Risk perception comes from people's subjective judgment, which is influenced by external information reports, relevant crisis memories and the judgment of relevant experts, and often has a certain gap with objective reality. For example, at the early stage of the outbreak of the COVID-19 pandemic, the protective and therapeutic measures were not yet perfect, and the awareness of all sectors of society about the epidemic was not sufficient. The media's reports on the surge of confirmed cases and deaths and a large number of related rumors spread in cyberspace, causing a huge impact on the public's psychology and behavior. Individuals' judgments on the probability and severity of the consequences of the disaster were enhanced, and they paid too much attention to the possible physical harm to themselves and their families caused by the epidemic, resulting in excessive risk awareness. Some groups even have a deviation in their awareness of the risk of the epidemic. They have a stronger perception of the risk of COVID-19 pandemic and are more likely to fall into panic negative and other negative emotions. If these negative emotions are not reasonably handled in the short term, they will lead to a relatively bad psychological state, making their anxiety level much higher than before [20]. College students are in the late adolescence, and great changes have taken place in cognition and social function. They are more sensitive to changes in the external environment and have a higher level of awareness of the epidemic risk. The stress events caused by the epidemic, such as changes in study and lifestyle, employment environments, access restrictions and isolation policies, have an impact on the career problems faced by college students after graduation, resulting in widespread anxiety among college students. Therefore, the level of risk perception of COVID-19 pandemic may be closely related to college students' occupational anxiety. Based on this, this study proposes hypothesis 1.

H1: The risk perception of COVID-19 is positively correlated with college students' occupational anxiety.

Psychological resilience refers to the dynamic process of positive responses of individuals in the face of adversity, trauma, tragedy and major pressure. Individuals with good psychological resilience re-evaluate and adjust their career planning after being

impacted and seek new ways of adaptation over time, thus forming a series of flexible and smart coping skills [21-23]. The sudden outbreak of COVID-19 pandemic and the adjustment of epidemic prevention policies have made the social and psychological problems faced by college students more prominent. The lifestyle change, material shortage, run on medical resources and the living conditions that may be isolated at any time caused by COVID-19 pandemic make people full of uncertainty about their current lives and reduce their sense of active control. The lack of control will lead to a series of psychological problems such as anxiety and depression, resulting in irreversible negative consequences. In the face of these sudden changes, individuals who have a positive and optimistic attitude towards the epidemic will choose to face the epidemic directly, adapt to changes, rebuild confidence and embrace the future, showing high psychological resilience. On the contrary, individuals who show negative and pessimistic emotions about COVID-19 pandemic will escape from the status quo, have occupational anxiety, lose confidence, and be confused about the future, showing low psychological resilience [24]. Previous studies have shown that psychological resilience is significantly related to occupational anxiety. For individuals, the lower the level of psychological resilience, the more likely they are to feel the anxiety caused by external pressure [19]. It can be seen that a series of pressures brought about by the risk perception of COVID-19 pandemic may reduce the psychological resilience of college students, which in turn will further affect the individual's occupational anxiety. Based on this, this study proposed hypothesis 2.

H2: Psychological resilience plays a mediating role between the risk perception of COVID-19 pandemic and occupational anxiety.

The university stage is the final preparation stage for individuals to enter the workplace. They are about to face the transition from school to the workplace. In the process of this transition, they will inevitably encounter unfamiliar, complex and adverse environments and problems. At this time, it is particularly important for individuals to make timely adjustments and correct responses to the new environment and problems. Career adaptability is a multiple ability that can help individuals successfully adapt to all aspects of the workplace. The so-called career adaptability refers to a kind of psychological resource that can have an important impact on individual career changes and career development. It is

the preparation and coping ability of individuals for predictable career positions, roles and unforeseen career problems and plays an active role in individual career expectations [25]. Previous studies have shown that college students, affected by COVID-19 pandemic, are afraid to pay positive attention to and understand their future career development, which leads to their dissatisfaction with their current situation and lack of confidence in their career and exacerbates college students' career anxiety [26]. However, no matter how the external environment changes in the process of individual career development, career adaptability can help individuals actively deal with setbacks and difficulties [27]. In addition, previous empirical studies have found that individuals with different career adaptability have different attentional biases in mastering career information when choosing jobs. Individuals with high career adaptability show attentional bias towards positive events and will make positive explanations and attributions, which can reduce occupational anxiety [28]. Accordingly, this study proposes hypothesis 3.

H3: Career adaptability can adjust the impact of the risk perception of COVID-19 pandemic on college students' occupational anxiety.

To sum up, there is a correlation between risk perception, resilience and occupational anxiety, but the relationship between the three and the role of career adaptability in it lacks research. At the same time, the current domestic research on the relationship between the risk perception of COVID-19 pandemic and college students' occupational anxiety is insufficient, and there is a lack of research on the impact mechanism of the risk perception of COVID-19 pandemic on occupational anxiety. Therefore, based on the above assumptions,

the hypothetical model diagram of this study is proposed, as shown in Figure 1.

3. METHOD

3.1. Research Subjects

This study uses the convenient sampling method to test the college students of several undergraduate colleges in Hebei Province through the network questionnaire platform. A total of 630 questionnaires were sent out, and 578 valid questionnaires were collected (91.75%). Among them, 293 were female (50.69%), 285 were male (49.31%), 139 were freshmen (24.05%), 159 were sophomores (27.51%), 147 were juniors (25.43%), and 133 were seniors (23.01%). The subjects' ages ranged from 18 to 24 years.

3.2. Research Tools

3.2.1. COVID-19 Pandemic Risk Perception Scale

The COVID-19 pandemic risk perception scale cites the research of Yan and Wen (2020) [29]. The scale has two dimensions and eight questions that examine the epidemic risk perception at the individual and social levels, including four questions on individual risk perception and four questions on social risk perception. This table uses the 5-level Likert scale, 1=very disagree, 5=very agree. The higher the score, the higher the college students' awareness level of COVID-19 pandemic risk.

3.2.2. College Students' Employment Anxiety Scale

This research adopts the college graduates' job selection anxiety questionnaire revised by Zhang (2009) [30]. The questionnaire includes a total of 26

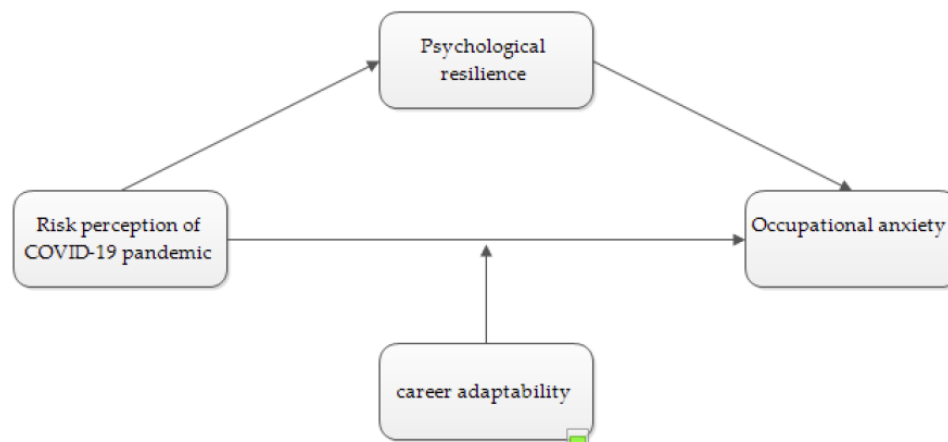


Figure 1: Hypothetical model of the risk perception of COVID-19 pandemic, psychological resilience, career adaptability and occupational anxiety.

questions, covering four dimensions: lack of self-confidence, employment competition pressure, lack of employment support and worry about employment prospects. The Likert-5 point scoring method (from completely disagree to completely agree) was used to score. The higher the score, the higher the degree of career anxiety of college students.

3.2.3. Chinese Version of Resilience Scale

This study mainly uses the Chinese version of the psychological resilience scale compiled by Xiao and Zhang in 2007 [31], which includes three dimensions: resilience (13 items), optimism (4 items) and strength (8 items). There are 25 questions in total. This scale uses a Likert 5-level rating, where 1 represents never and 5 represents consistently doing so. The higher the score, the higher the level of psychological resilience among college students.

3.2.4. Career Adaptation Scale

The career adaptation scale was prepared by Savickas and Porfeli (2012) [32]. The scale has 24 questions involving four aspects, including career confidence, career curiosity, career control and career concern, and each aspect contains six questions. The Likert-5 point scoring method was used for all questions.

3.2.5. Control Variable

The influencing factors of career anxiety among college students are complex and intricate. According to existing research results, the anxiety level of female students facing employment is significantly higher than that of male students [33], the employment anxiety level of senior students facing graduation is significantly higher than that of junior students [34], and the anxiety level of older students is significantly higher than that of younger students [35]. Therefore, in order to accurately estimate the impact of risk perception of COVID-19, this study takes other possible influencing factors as control variables, such as age, gender, grade, etc. of the subjects.

3.3. STATISTICAL PROCESSING

SPSS and Stata software were used for data statistical analysis.

3.4. Model Building

3.4.1. Basic Model Construction

This paper explores the impact of risk perception of COVID-19 pandemic on occupational anxiety by

constructing a multiple linear regression model. The specific model is as follows:

$$\text{Occupational anxiety}_i = \alpha_0 + \alpha_1 \text{Risk perception of COVID-19 pandemic}_i + \sum \text{Controls}_i + \varepsilon_i \quad (1)$$

In Model (1), the dependent variable is Occupational anxiety, and the core explanatory variable is Risk perception of COVID-19 pandemic. Controls represents a series of control variables, where i represents the student, ε is a random interference term. In the model α_1 is the core of this article. If the coefficient is significantly positive, it means that the risk perception of COVID-19 pandemic is significantly positively correlated with occupational anxiety; On the contrary, the opposite is true.

3.4.2. Construction of Mediation Effect Model

In order to test hypothesis 2, that is, risk perception of COVID-19 pandemic may affect occupational anxiety through reducing psychological resilience, this paper uses the three-step method proposed by Baron and Kenny [36] for reference. The specific models are shown in equations (1), (2), and (3):

$$\text{Psychological resilience}_i = \beta_0 + \beta_1 \text{Risk perception of COVID-19 pandemic}_i + \sum \text{Controls}_i + \varepsilon_i \quad (2)$$

$$\text{Occupational anxiety}_i = \gamma_0 + \gamma_1 \text{Risk perception of COVID-19 pandemic}_i + \gamma_2 \text{Psychological resilience}_i + \sum \text{Controls}_i + \varepsilon_i \quad (3)$$

In formula (2) and (3), Psychological resilience is the mediating variable, and the test principle of the mediating effect is: first, test whether the positive effect of risk perception of COVID-19 pandemic on occupational anxiety exists, that is, in formula (1) α_1 is significantly positive. The second step is to test whether the negative effect of risk perception of COVID-19 pandemic on mediating variables exists after equation (1) is verified, that is, to test the β_1 Is significantly negative. Step 3, after equation (2) is verified, the risk perception of COVID-19 pandemic and the mediating variables are included in the same model (3) to test whether the mediating effect of the mediating variables exists.

3.4.3. Construction of Regulatory Effect Model

In order to test hypothesis 3, this paper uses the Risk perception of COVID-19 pandemic * Career adaptability to measure the moderating effect of career adaptability on risk perception of COVID-19 pandemic and occupational anxiety. Build a regulatory effect model, as follows:

Occupational anxiety_i=η₀+η₁Risk perception of COVID-19 pandemic_i+η₂Career adaptability_i+η₃(Risk perception of COVID-19 pandemic_i*Career adaptability_i)+ ΣControls+ε_i (4)

4. RESULTS

4.1. Common Method Deviation Inspection

In this study, the Harman single factor test was used to test the common method deviation of all items in the 578 questionnaires in this study. The results showed that three common factors with eigenvalues greater than 1 were extracted from the seven items, and the first common factor explained 26.75% of the total variation, which was less than 40% of the critical value of the standard. Therefore, there is no serious common method deviation in the data of this study.

4.2. Descriptive Statistics and Correlation Analysis among Variables

Table 1 presents the descriptive statistical results and related analysis results. The relationship between the main research variables (gender, age, and grade as control variables) generally conforms to the hypothesis of this study. Among them, age is negatively correlated with risk perception of COVID-19 pandemic. This may be because older students have more life experience than younger students, can more objectively analyze and calmly face public health emergencies, and have lower risk perception of COVID-19 pandemic [37]. In addition, there is a positive correlation between age and occupational anxiety. Older students are more likely to face employment difficulties, and may face various setbacks during recruitment, making them more prone to anxiety

both physically and psychologically. The correlation coefficient between risk perception of COVID-19 pandemic and occupational anxiety is 0.1, which is significant at the 10% significance level. This shows that the risk perception of COVID-19 pandemic is significantly and positively related to occupational anxiety, and H1 is verified.

4.3. Mediating Effect Test

The mediating effect of psychological resilience between risk perception of COVID-19 pandemic and occupational anxiety was tested under the condition of controlling gender, age and grade. The results are shown in Table 2. The regression results of model (1) are listed in (1). There is a significant positive correlation between risk perception of COVID-19 pandemic and occupational anxiety at the level of 5%, indicating that risk perception of COVID-19 pandemic significantly positively predicts occupational anxiety, which is consistent with the previous research conclusions. The regression results of model (2) are listed in (2). The coefficient of risk perception of COVID-19 pandemic is significantly negative at the level of 5%, indicating that the risk perception of COVID-19 pandemic is significantly negative in predicting psychological resilience. The regression results of model (3) are listed in (3). The risk perception of COVID-19 pandemic is significantly positively correlated with occupational anxiety at the level of 5%, and the regression coefficient of psychological resilience is significantly negative at the level of 1%. The results of the mediating effect test show that psychological resilience plays a mediating role in the prediction of risk perception of COVID-19 pandemic on occupational anxiety, which verifies H2.

Table 1: Descriptive Statistics and Correlation Analysis of Variables

	M	SD	1	2	3	4	5	6
1 gender	-	-						
2 Age	21.01	2.02	0.01					
3 Grade	2.47	1.09	-0.026	-0.003				
4 Risk perception of COVID-19 pandemic	23.86	3.96	0.045	-0.053	-0.046			
5 Occupational anxiety	77.65	5.98	-0.007	0.015	0.012	0.100*		
6 Psychological resilience	71.94	6.29	0.009	0.019	-0.052	-0.102*	-0.122**	
7 Career adaptability	75.14	9.59	0.001	0.043	0.039	-0.579**	-0.524**	0.088*

Note: This table is compiled by all authors based on the calculation results. gender is a dummy variable (1=male, 0=female)* At 0.05 level (two tailed), the correlation was significant** At 0.01 level (two tailed), the correlation was significant.

Table 2: Regression Analysis of Mediating Effect of Resilience

variable	(1)	(2)	(3)
	Occupational anxiety	Psychological resilience	Occupational anxiety
Risk perception of COVID-19 pandemic	0.1547** (2.46)	-0.1659** (-2.51)	0.1369** (2.18)
Psychological resilience			-0.1073*** (-2.71)
Gender	-0.1321 (-0.27)	0.1520 (0.29)	-0.1158 (-0.23)
Age	0.0621 (0.50)	0.0417 (0.32)	0.0665 (0.54)
Grade	0.0910 (0.40)	-0.3257 (-1.36)	0.0561 (0.25)
_cons	72.4925*** (23.08)	75.7489*** (22.95)	80.6170*** (18.63)
N	578	578	578
adj. R2	0.004	0.007	0.015
r2	0.0109	0.0140	0.0234
F	1.5718	2.0273	2.7430
p	0.1803	0.0892	0.0184

Note: This table is compiled by all authors based on the calculation results. all variables in the regression model have been standardized. The lower and upper CI limits refer to the lower and upper limits of the 95% confidence interval, respectively. ** At 0.01 level (two- tailed), the correlation was significant.*. At 0.05 level (two - tailed), the correlation was significant.

4.4. Moderating Effect Test

Test the moderating effect of career adaptability under the control of gender, age, and grade. The regression results of model (4) are shown in Table 3. The correlation coefficient between risk perception of COVID-19 pandemic and career adaptability is -0.0162,

which is significantly negative at the 1% level. This indicates that the prediction of risk perception of COVID-19 pandemic on occupational anxiety is moderated by college students' career adaptability, and H3 is supported.

Table 3: Regression Analysis of the Moderating Effect of Career Adaptability

variable	Occupational anxiety
Risk perception of COVID-19 pandemic	0.7293** (2.04)
Career adaptability	-0.0527 (-0.45)
Risk perception of COVID-19 pandemic*Career adaptability	-0.0162*** (-3.37)
Gender	0.1311 (0.32)
Age	0.0901 (0.90)
Grade	0.1264 (0.68)
_cons	90.6222*** (9.76)
N	578
adj. R2	0.344
r2	0.3507
F	51.4054
p	0.0000

5. DISCUSSION

This study focuses on the relationship between risk perception and occupational anxiety and the mediating and moderating roles of psychological resilience and career adaptability in this relationship. The results show that the risk perception of COVID-19 pandemic can affect college students' occupational anxiety through the mediation of psychological resilience, and the direct effect of the risk perception of COVID-19 pandemic on college students' occupational anxiety is regulated by career adaptability. The research results provide a new theoretical idea for reducing the occurrence of college students' occupational anxiety.

5.1. The Relationship between Risk Perception of COVID-19 Pandemic and College Students' Occupational Anxiety

This study found that there was a significant positive correlation between the risk perception of COVID-19 pandemic and college students' occupational anxiety, that is, when college students made a primary assessment of the risk of the epidemic, if individuals felt it was difficult to deal with the difficulties brought by the external environment, they would have a series of negative emotions, which would eventually lead to occupational anxiety. This also further confirms the research result that positive judgment and coping styles on the potential impact of the epidemic can help reduce college students' occupational anxiety. The COVID-19 pandemic is a life experience that contemporary college students have never had. Since the outbreak, people have paid close attention to the current situation, development, treatment, epidemic prevention and other information about the epidemic, especially the negative information related to themselves [38]. A large number of rumors and false information about the epidemic on the Internet further exacerbated the crowd panic [39]. Therefore, the cognitive bias of the epidemic situation generally exists in different groups. Many students said that during the epidemic period, they experienced relatively strong negative emotions, such as tension, fear, anger, sadness, fear, worry, etc [40]. In addition, the outbreak of COVID-19 pandemic has also had a continuous impact on the employment market, exacerbated the contradiction between supply and demand in the employment market, raised the requirements for talents, and caused the phenomenon of involution, which is extremely serious. The group of college students is in the critical period of the development of

professional socialization. The fierce employment competition makes individuals face severe employment challenges and bear heavy employment pressure, which is easy leads to negative employment prospects and serious employment anxiety. On January 20, 2020, the Ministry of Education issued a notice requiring that the spring semester in 2020 be postponed and that students should not go out, have parties, or hold or participate in centralized activities at home. The extension of holidays and long-term home life may aggravate the anxiety and depression of young students. After the long-term online teaching in the spring, college students returned to school in succession in the autumn semester. Universities in China generally adopt closed or semi closed management measures. In most cases, college students are required not to leave campus when it is unnecessary. Whether it is the change of job search methods or the acquisition of job search information, it has greatly increased the difficulty of employment, had a greater impact on the psychology of college students, and increased the risk of occupational anxiety. In theory, the COVID-19 pandemic has a wide range of impacts on college graduates, which not only reduces their employment opportunities and hinders their job search channels but also prolongs their job search time, increases their psychological pressure, and causes college students to have more occupational anxiety [41, 42]. Therefore, it is of guiding significance to help college students correctly assess risks and deal with threats to reduce their occupational anxiety.

5.2. Mediating Role of Psychological Resilience

The mediating effect analysis showed that psychological resilience played a mediating role between the risk perception of COVID-19 pandemic and college students' occupational anxiety. First, the risk perception of COVID-19 pandemic negatively predicts college students' psychological resilience. Because the outbreak of the new type of coronary pneumonia is unpredictable, at the initial stage of the outbreak, people from all walks of life were not aware of the epidemic. When faced with unknown public events with strong infection and mortality rates, individuals with high risk perceptions were more likely to search for negative information related to the epidemic. They realized the horror of the epidemic and fell into panic. When individuals are unable to deal with panic, It is easy to reduce the individual's psychological toughness [19]. For college students, the multiple

pressures of epidemic prevention, study, employment and the sudden change in the pace of life make many students extremely uncomfortable and prone to negative emotions and psychological problems such as tension, anxiety, irritability, helplessness and depression. The survey shows that the common psychological problems of college students during the epidemic period are generally high anxiety and worrying about themselves and their families [24]. The long-term superposition and accumulation of these negative emotions can easily lead to the reduction in college students' psychological resilience. Secondly, as an important psychological resource in the body, psychological resilience can effectively reduce inner anxiety. Individuals with high resilience can show resilience, self-improvement and optimism to face setbacks and adapt to the environment, thus helping individuals alleviate the impact of negative emotions such as anxiety. The results of this study show that psychological resilience negatively predicts college students' occupational anxiety. The occupational anxiety of college students is not only affected by the changes in the external epidemic environment but also by whether the individual has the ability and characteristics to deal with the corresponding pressure, that is, psychological resilience. Individuals with high psychological resilience have optimistic, yearning and enthusiastic attitudes towards life and often have highly positive emotions to help them resist the negative effects of negative experiences [43]. The lower the degree of anxiety in the face of employment pressure, the less likely it is that it will be accompanied by higher occupational anxiety [44]. This intermediary model enlightens that when major emergencies lead to changes in the external environment, college students should conduct a comprehensive assessment and analysis of things, avoid risk perception bias, and actively use the internal psychological toughness resources to deal with practical difficulties, pressures and setbacks. The mechanism of psychological resilience is to make use of the positive qualities and external environmental resources of individuals to passivate adverse stress reactions so that individuals are more able to face setbacks and overcome adversity. Facing the increasingly fierce pressure of employment competition, college students must constantly improve their career maturity and career self-efficacy, and at the same time, they must also improve the level of individual psychological resilience. Only in this way can they maintain a positive attitude, form and develop positive qualities and abilities,

effectively reduce the level of occupational anxiety, promote the healthy development of individuals, and obtain employment smoothly.

5.3. Moderating Role of Career Adaptability

This study also found that career adaptability can play a moderating role in the relationship between risk perception and occupational anxiety. That is, compared with college students with high career adaptability, among college students with low career adaptability, the risk perception of COVID-19 pandemic has a more significant positive predictive effect on occupational anxiety. The development of career adaptability includes four aspects: career focus, career curiosity, career confidence and career control. Career focus can help individuals establish the future; career curiosity can encourage individuals to explore their career and themselves; career confidence can encourage individuals to overcome difficulties and build a perfect future; and career control can enable individuals to have the right to choose the future. Career adaptability emphasizes that individuals can explore and build their own values and abilities through specific activities and experiences by establishing positive connections with the subjective and objective worlds. Previous studies have shown that the improvement of career adaptability can increase the opportunities of graduates to find suitable jobs, effectively reduce the generation of problem behaviors, alleviate anxiety, and even improve their career well-being, and promote the successful transformation of college students from school to the workplace. Specifically, individuals with high career adaptability can better deal with the employment problems caused by complex and uncertain external factors, have stronger adaptability to the environment, are more willing to try and challenge, and maintain high attention, curiosity and confidence in their career, so they can play a "buffer" effect to help individuals reduce the occupational anxiety caused by the risk perception of COVID-19 pandemic [45]. However, students with low career adaptability can not adjust the way they achieve their goals in time according to the actual situation and can not accept and deal with various external difficulties flexibly. This makes their willpower and resilience after adversity weak and their emotional state unstable and unable to recover quickly, so they are more likely to cause occupational anxiety [46]. This study further shows that college students' career adaptability can buffer the negative impact of the risk perception of COVID-19 pandemic on college students'

occupational anxiety, and improving career adaptability may be an effective way to help college students with high risk perception alleviate occupational anxiety.

6. CONCLUSION

As a far-reaching social change, the epidemic not only has multiple impacts on international politics, trade, the social economy and other macro levels, but also deconstructs or reshapes the career development process of each micro individual to varying degrees. Among them, the career dilemma and psychological status faced by college students at this stage of life exploration have become one of the key issues in higher education research. Based on this, this study revealed the mediating process of the risk perception of COVID-19 pandemic affecting college students' occupational anxiety from the perspective of psychological resilience and verified the moderating role of career adaptability in it. The conclusions are as follows: first, there is a significant positive correlation between the risk perception of COVID-19 pandemic and college students' occupational anxiety; there was a significant negative correlation between risk perception and psychological resilience; there was a significant negative correlation between psychological resilience and occupational anxiety. Second, psychological resilience plays a mediating role between the risk perception of COVID-19 pandemic and occupational anxiety. Third, career adaptability plays a negative moderating role between the risk perception of COVID-19 pandemic and occupational anxiety. This not only enriches the research on the economic consequences of the risk perception of COVID-19 pandemic but also expands the research perspective of college students' occupational anxiety.

The main findings of this study are as follows: on the one hand, it clarifies the action path and explanation mechanism leading to college students' occupational anxiety and provides important theoretical guidance for reducing college graduates' occupational anxiety. On the other hand, it is of great significance to formulate policies to intervene college students' occupational anxiety. First of all, the risk perception of COVID-19 pandemic has a significant impact on the change in college graduates' employment mentality. In the actual mental health education and counseling work, college student management workers should take the initiative to learn more about students' daily lives, learning and employment status, pay attention to guiding students to adjust their attention bias to external information, pay more attention to positive and

positive information, and give students enough care and support. They should also pay attention to the cultivation of students' career adaptability, in order to reduce the risk of anxiety and depression among college students and promote the healthy development of students' mind and body. Secondly, most graduates have insufficient social practice experience before choosing a job, and they have little understanding of the upcoming competitive employment process. Therefore, they are not confident and calm in the face of the level by level selection of employers. They often miss their ideal jobs and waste a lot of employment opportunities because their textbook knowledge is out of touch with the actual work and can not show their real strength and professionalism. In this regard, the school should strengthen the employment practice of graduates, actively carry out the "simulated employment competition" exercise of graduates, enhance the graduates' grasp of job selection skills, let them fully understand the employment methods and basic process, and be able to calmly answer the questions of interviewers, give full play to their actual level and ability, and overcome the anxiety that may occur during the employment process through practical exercises, show your personal charm to the employers to the greatest extent and to win the favor and employment of the employers. Finally, government departments should improve and implement the special assistance policies for college graduates' employment and entrepreneurship and employment in remote areas; Increase support for private small and medium-sized enterprises, promote the development of social organizations, third-party institutions, live broadcasting and other emerging industries, so as to create more jobs; Further optimize the entrepreneurial environment, provide preferential policies in terms of funds, venues and equipment for college students' entrepreneurship, and encourage college graduates to start their own businesses; In response to the call of the state to return home for employment and entrepreneurship, graduates who participate in rural revitalization, border support, etc. build a development platform, give long-term support, and solve their worries. Integrate the resources of education management departments, human resources departments, universities, enterprises, etc., study and judge the changes in talent demand in the labor market, drive talent training with market demand, adjust the enrollment and specialty settings according to market orientation, update the course content, strengthen the connection with the market, and cultivate "customized" talents.

The main limitations of this study are as follows: first, this study uses a cross-sectional study design, which can not determine the causal relationship between the risk perception of COVID-19 pandemic and occupational anxiety. In the future, it can be proved by longitudinal research. Secondly, the sample selection of this study has limitations, and whether the results can be extrapolated to other college students remains to be further tested. Finally, the data of this study were collected by questionnaire survey. The main variables of this study can be measured by a variety of methods such as peer nomination and teacher evaluation. In general, the impact of risk perception of COVID-19 pandemic on college students' occupational anxiety needs to be further studied. To build a more systematic and accurate psychological scale of risk perception according to the characteristics of college students, to discuss whether the risk perception of COVID-19 pandemic has an impact on the occupational anxiety of college students through a long-term follow-up study, and how to improve the employability of college students and alleviate their employment anxiety are important topics for future research.

Digital technologies such as big data artificial intelligence can be fully used to manage student status during the epidemic.

AUTHOR CONTRIBUTIONS

Conceptualization, Jinhui Ning; methodology, Ruonan Tang and Jinhui Ning; software, Ruonan Tang; validation, Shi Yin and Jinhui Ning; formal analysis, Shi Yin; investigation, Jinhui Ning; resources, Ruonan Tang; data curation, Ruonan Tang; writing—original draft preparation, Jinhui Ning; writing—review and editing, Jinhui Ning and Ruonan Tang; supervision, Jinhui Ning; funding acquisition, Shi Yin. All authors have read and agreed to the published version of the manuscript.

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DATA AVAILABILITY STATEMENT

The data presented in this study are available on request from the corresponding author.

CONFLICTS OF INTEREST

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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