

Basic Research on Indicator Model of Minority Vocational College Students' Psychological Crisis Stress

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Abstract: This paper adopts the empirical research method of sample investigation and analysis, and investigates and analyses the indicators of psychological stress response, the relationship between stressors and stress response, and the triggering factors of psychological crisis of ethnic minority vocational students, so as to establish the early warning of psychological crisis of ethnic minority vocational students.

1. Introduction

With the expansion of universities and the reform of higher education fees in recent years, ethnic minority higher vocational students are facing more and more pressures in learning, employment, growth confusion, interpersonal competition, economy and emotion. Faced with these pressures, some minority higher vocational students with weak psychological quality are apt to fall into psychological crisis, which leads to excessive behavior and adverse consequences. Therefore, it is an inevitable trend to strengthen the research on psychological crisis of minority vocational students. However, from the content of our scholars' research on the psychological crisis of ethnic minority Vocational College students, they tend to focus on the investigation of the psychological crisis of ethnic minority vocational college students and crisis management research; from the research methods and research models, most of them adopt literature research method, speculative research is the main body, and empirical research is few. Generally speaking, the psychological crisis intervention of minority vocational college students in China is still in the exploratory stage, both in theory and in practice. Based on this, this paper adopts the empirical research method of sample investigation and analysis, and investigates and analyses the indicators of psychological stress response, the relationship between stressors and stress response, as well as the triggering factors of psychological crisis of ethnic minority higher vocational students, so as to provide comprehensive empirical data for the establishment of early warning indicators model of psychological crisis of ethnic minority higher vocational students.

2. Development of Psychological Stress Response Questionnaire

2.1 Research purposes

By compiling the psychological crisis stress response questionnaire, the stress response indicators in the early warning system of psychological crisis intervention for ethnic minority vocational students are determined.

2.2 Research Tools

Foundation Project: Research Project of Humanities and Social Sciences in Colleges and Universities of Jiangxi Province (Approval No. XL17101); Social Sciences Planning Project of Fuzhou City, Jiangxi Province (Approval No. 18sk034)] Based on the author's experience in psychological crisis intervention in Colleges and universities, psychological experts' suggestions

and clinical data of professional mental health institutions, this paper explores the high-frequency manifestations of psychological crisis response, refers to the presupposition of this study, and compiles psychological crisis stress response preview on this basis.

Questionnaire. The questionnaire includes two parts: individual data and the main body of the questionnaire. The subjects of the questionnaire consisted of 40 items, each of which contained stress reaction.

The severity and duration of self-assessment should be two indicators, taking five grades, including “no” score 1, “mild” score 2, “moderate” score 3, “heavier” score 4, and “serious” score 5; duration of “less than three days” score 1, 3, 2, 3, 4, and 5. On the basis of predicting the results of the questionnaire, exploratory factor analysis was carried out to screen the adjustment items and form a second questionnaire. Through the second survey, a psychological crisis stress response questionnaire for ethnic minority vocational students was finally formed. There were 32 items in the questionnaire, and the scoring method was as follows.

2.3 Research subjects

Predictors: Based on the consideration of manpower, material and financial resources, 300 ethnic minority vocational college students were selected as subjects by random sampling method in the forecasting stage, and 276 valid questionnaires were collected.

Secondary subjects: In order to ensure that the sample accurately reflects the overall characteristics of ethnic minority higher vocational students, 450 ethnic minority higher vocational students from Jiujiang, Nanchang, Fuzhou and Xi'an undergraduate colleges were selected as subjects according to the principle of random sampling. A total of 422 valid questionnaires were collected.

2.4 Statistical Tools

SPSS 13.0 Statistical Software Package

2.5 Result Analysis

2.5.1 Discrimination analysis

Differentiation is one of the main indicators to measure the quality of projects, and it is an important basis for screening topics in the preparation of tests. In this study, correlation coefficient method was used to analyze the discriminatory degree of the predictive questionnaire. The D values were between 0.32 and 0.77, and the T values of all items reached a significant level, indicating that the discriminatory degree of the items was good.

2.5.2 Factor Analysis

In this study, exploratory factor analysis (EFA) was used to screen out the related and homogeneous items of the predictive questionnaire and reduce meaningful duplicate items, so as to make the questionnaire structure more reasonable and further enhance the validity of the questionnaire structure. The statistical results show that the KMO coefficient is 0.749 and the chi-square coefficient of spherical test is 1467.33 ($P < 0.05$), which indicates that it is suitable for factor analysis. According to the presupposition of this study, factors of emotional response, physical response and cognitive evaluation were selected to analyze 40 items of the predictive questionnaire.

In exploratory factor analysis, according to the criteria of screening items: 1) project load value is less than 0.4; 2) commonality is less than 0.2; 3) the difference between the two largest “generalization” loads of each item is less than 0.25, 9 items are screened out, and the item composition of the second questionnaire is finally determined. The results are shown in table 1 below.

Table 1 Factor Load Matrix of Minority Vocational College Students' Psychological Stress Response Questionnaire

project	Emotional response	The body reaction	Cognitive evaluation
15	.457		
26	.534		
9	.567		
2	.523		
27	.544		
7	.478		
16	.476		
35	.567		
6	.587		
40	.671		
11	.685		
17	.678		
28	.432		
1		.668	
34		.750	
8		.563	
18		.654	
4		.541	
36		.477	
12		.487	
19		.574	
5		.612	
13		.677	
20		.546	
3			.489
14			.687
39			.568
10			.622
24			.578
33			.579
37			.497
21			.513
38			.601
25			.724
32			.698
30			.596
Project	Emotional response	The body reaction	Cognitive evaluation
22			.477
31			.684
29			.587
23			.497

Table 2 Characteristic value and contribution rate of psychological stress response questionnaire for vocational college students of ethnic minorities

Factors	The eigenvalue	Contribution rate (%)	Cumulative contribution rate (%)
Emotional response	5.134	17.751	17.751
The body reaction	3.865	12.896	30.647
Cognitive evaluation	5.668	18.932	49.279

The study also named the psychological stress response factors of minority vocational college

students according to the load value of each factor, namely emotional response factors, physical response factors and cognitive evaluation factors.

2.5.3 Reliability Test

In this study, homogeneity alpha reliability coefficient method was used to test three factors of psychological stress response questionnaire for minority Vocational College students. The results are as follows:

Table 3 psychological stress response questionnaire

The reliability coefficient of psychological stress response questionnaire Variable factors	α Reliability coefficient
Emotional response	.821
The body reaction	.735
Cognitive evaluation	.797
Total questionnaire	.922

The results show that the homogeneity reliability coefficients of each factor in the questionnaire are between 0.735 and 0.821, and the total questionnaire is 0.922, which shows that the questionnaire has good reliability.

Validity test in this study, three factors of the psychological stress response questionnaire for vocational college students of ethnic minorities were analyzed and tested from two aspects of structural validity and content validity. The results of structural validity test are as follows:

Table 4 among the factors of psychological stress response questionnaire and the correlation coefficient between each factor and the total score

Factors	Emotional response	Thebody reaction	Cognitive evaluation	Total score
Emotional response				
The body reaction	.633*			
Cognitive evaluation	.687*	.764*		
Total score	.902*	.896*	.911*	

Note: “*” indicates a significance level of 0.05

The research data showed that the correlation coefficient between each factor and the total score of the psychological stress response questionnaire of higher vocational students of ethnic minorities was between 0.633 and 0.911, showing a significant correlation. This indicates that the validity of the questionnaire is good.

Invite relevant experts, this study psychology teacher, a psychology graduate student and part of the ethnic minorities of ethnic minority students of higher vocational students in school psychological stress reaction factors were discussed, this questionnaire content validity were analyzed, and finally determine the formal questionnaire including emotional reactions, physical reaction, three factors of cognitive appraisal and 31 projects.

3. Study on stressor index and stress response

3.1 research objective

Based on the investigation and study of the stress factors that cause the psychological crisis stress response of vocational college students in ethnic minorities, the regression analysis is made on the psychological crisis caused by the stress source and psychological stress response.

3.2 research tools

In this study, “adolescent life events scale” compiled by Holme and Rahe was adopted for investigation, which was composed of 27 negative sexual events that may bring psychological

responses to adolescents. It is applicable to evaluate the frequency and stress intensity of adolescent life events. Answer to each event way should first determine the incident occurred in the limited time or not, if not happened only in row “√” has not occurred, if happened according to event occurs psychological experience points 5 evaluation, namely no effect (1), light (2), medium (3), severe (4) or severe (5). The factors of interpersonal relationship stress, learning stress, punishment, loss, health adjustment stress and other stress were counted.

3.3 Result analysis

Relationships in this study psychological crisis pressure source pressure, study pressure, punishment, to adapt to the pressure loss, health and other pressure six factors and stress reaction in the mood, the body reaction, cognitive evaluation of three stress reaction as the independent variable, psychological crisis as the dependent variable, do regression analysis, selection has the statistical significance of the independent variable as the minority students psychological crisis early warning model of main index.

3.3.1 Research on the predictive power of psychological crisis stressors

According to the statistical analysis of Beta coefficient, the predictors of psychological crisis stressors on the occurrence of psychological crisis are interpersonal stress, learning stress, punishment, health adjustment stress, loss, and other stress. The four factors of interpersonal relationship stress, learning stress, punishment and health adaptation stress showed significant predictive power at the level of 0.05. Through stepwise regression analysis, interpersonal relationship stress, learning stress and punishment three stressors enter into the regression equation (warning model) of the psychological crisis warning model for minority vocational college students. The multivariate correlation coefficient of the three factors was 0.798, and the comprehensive interpretation rate of psychological crisis was 50.12%. The interpersonal relationship stress factor is the most predictive factor, and the single interpretation rate is 47.45%. All the factors of psychological stress response had significant predictive power, and all of them entered the regression equation (early warning model) of the mental crisis warning model for vocational college students of ethnic minorities. The predictive power of the occurrence of psychological crisis was, in turn, body reaction, cognitive evaluation and emotional response. The multivariate correlation coefficient of the three factors was 0.823, and the comprehensive interpretation rate of psychological crisis was 59.76%. Among them, the somatic response factor was the most predictive factor, with a separate explanatory rate of 50.91 %. The above two regression equations (warning model) had a high degree of goodness of fit at the level of 0.05.

Therefore, the interpersonal pressure, learning pressure and punishment in this study are included in the stress source indicators of the early warning model of the psychological crisis of minority vocational college students. One or more of the factors may cause the psychological crisis of minority vocational college students. Physical reaction, cognitive evaluation and emotional reaction are included in the psychological stress response indicators of the early warning model of psychological crisis of higher vocational students of ethnic minorities, and one or more of the factors may cause the psychological crisis of higher vocational students of ethnic minorities.

4. Determination of indicators of psychological crisis inducing factors

4.1 Research objective

Through the analysis of the significant differences, the individual factors indexes with significant differences were screened out from the personal data of the questionnaire on the psychological stress response of the vocational college students of ethnic minorities, and then entered into the early warning model of the psychological crisis of the vocational college students of ethnic minorities.

4.2 Research tools

The formal questionnaire on the psychological crisis stress response of vocational college students of ethnic minorities contains 8 items of individual data, including gender, nationality, grade, professional type, family economic status, family member relationship and physical disease.

4.3 Research results

(1) The total score of psychological crisis stress response of male ethnic minority higher vocational students (N=203) was 47.72 48.658, while that of female ethnic minority higher vocational students (N=219) was 44.78 49.195, with no significant difference at the level of 0.05. However, in terms of emotional response index, the score of female ethnic minority higher vocational students is higher than that of male ethnic minority higher vocational students.

The total score of higher vocational students of han nationality (N=398) in psychological crisis stress response was 45.38 47.336, while the total score of higher vocational students of ethnic minorities (N=24) in psychological crisis stress response was 53.19 65.87, with no significant difference at the level of 0.05.

(3) College students (N = 129) psychological crisis stress score = 41.32 and 45.33, a sophomore (N = 104) psychological crisis stress score = 56.95 and 55.637, a junior at stress reaction psychological crisis (N = 101) total score = 43.87 and 46.29, senior students (N = 88) psychological crisis stress score = 53.56 57.125, show significant difference at the 0.05 level, and with the increase of grade are distributed in psychological stress reaction type "N". In terms of cognitive evaluation and physical response indexes, the students of sophomore and junior years are higher than that of freshmen and seniors. Seniors scored highest on measures of emotional response.

(4) liberal arts higher vocational students (N=170) psychological crisis stress response total score = 44.46 47.246, science and engineering higher vocational students (N=189) psychological crisis stress response total score = 46.64 48.878, physical arts higher vocational students (N=63) psychological crisis stress response total score = 57.16 70.078, no significant difference at the level of 0.05.

(5) Low-income families (annual family income of less than 30000 RMB) minority students (N = 170) psychological crisis stress score = 43.42 and 53.179, middle-income families (100000 yuan annual family income of 3 -) minority students (N = 189) psychological crisis stress score = 44.34 and 44.283, high-income households (families earning more than \$100000) national minority students (N = 63) psychological crisis stress score = 69.60 69.621, show significant difference at 0.05 level. The middle income family national minority higher vocational students in each index and the total score is obviously higher than other two kinds of family national minority higher vocational students.

(6) Family relations harmonious minority students (N = 211) psychological crisis stress score = 43.48 and 48.330, family relationship between general minority students (N = 124) psychological crisis stress score = 51.00 and 46.526, family relations not harmonious, divorce, separation, etc.) of ethnic minority students (N = 87) psychological crisis stress score = 52.30 + / - 56.207, show significant difference at 0.05 level. The higher vocational students of ethnic minorities with disharmonious family relationship are obviously higher than the other two kinds of higher vocational students in terms of various indexes and total scores.

(7) Physical health higher vocational students of ethnic minorities (N=371) psychological crisis stress response total score = 44.34 students 46.701, suffering from physiological diseases higher vocational students of ethnic minorities (N=51) psychological crisis stress response total score = 77.73 students 75.536, showed significant difference at the level of 0.05. The score of higher vocational college students suffering from physical diseases was significantly higher than that of the healthy ones.

According to the above results, grade, family economic status, family member relationship and physical diseases were selected as indicators of crisis inducing factors in the early warning model of psychological crisis due to significant differences.

4.4 Determinations of indicators of other crisis inducing factors

This study using literature analysis method, through the jiangxi agricultural university library CNKI academic journals library retrieval, and combined with the authors previous research (higher vocational college students psychological crisis early warning indicators research, education and career, in 2011 12 months), self-efficacy, crisis handling, social support, mediation is also psychological crisis stress factors, on the basis of the above factors will be included in the psychological crisis early warning model of inducing factors.

Determination of comprehensive indicators of the early warning model of psychological crisis for higher vocational students of ethnic minorities.

5. Conclusion

There are internal and external reasons for the psychological crisis of higher vocational students. The external causes are mainly psychological crisis sources, and the internal causes mainly include the crisis coping methods of higher vocational students of ethnic minorities, their own personality characteristics, outlook on life and values, and social support. To control and reduce the psychological stress, to improve the correct understanding of the psychological stress and to cultivate a scientific way of coping should be the breakthrough point of the intervention. At the same time, higher vocational students of ethnic minorities may face natural stressors, social and cultural stressors, personal life events and internal stressors, etc. Empirical research shows that the stress of future, learning and economic pressure is relatively common stressors among higher vocational students of ethnic minorities. In addition, personality traits, life values, cognitive style, coping mechanism, and social support system are important dimensions for the study of individual susceptibility factors. Contemporary higher vocational students of ethnic minorities generally have such vulnerable factors as immature emotional and cognitive development, excessive attention to ego, and weak willpower. Therefore, reducing stressors and reducing susceptibility has become the focus of the prevention and treatment of psychological crisis among vocational college students of ethnic minorities. It is imperative to prevent and cure the psychological crisis of higher vocational students.

The realistic predicament of the current domestic crisis intervention hinders the development of the intervention work and the exertion of the intervention effect. The early warning mechanism of the psychological crisis of the minority vocational college students has become the primary choice for the prevention and treatment of the psychological crisis. It is necessary, practical and feasible to prevent the psychological crisis by carrying out thematic education for higher vocational students of ethnic minorities. Guided by this idea, this paper constructs three levels of the early warning mechanism of the psychological crisis of the minority vocational college students, which are to contain the crisis in the bud, reduce the incidence of psychological crisis, and promote the individual growth and development of the minority vocational college students. Through strengthening the psychological education of the minority higher vocational students, strengthen their own ability to resist setbacks, interpersonal skills, ability to adapt to the environment and so on. At the same time, it is imperative to strengthen the construction of campus environment. A harmonious and healthy campus environment is very important to improve the crisis situation of minority vocational students.

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