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Anxiety and its Influencing Factors in Cadets under COVID-19 Epidemic

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Abstract

Objective To explore the anxiety status of cadets and its influencing factors under COVID-19 epidemic.Methods 196 cadets were evaluated and analyzed with the anxiety scale and demographic data questionnaire.Results ① The anxiety standard of military cadets is scored as (40.52±4.29), which is higher than the domestic normal model 37.23±12.59. Mild symptoms of anxiety was reported in 10 cadets, five men and five women, accounting for 5.1% of the total number. Among items of SAS, the score of item 13"difficulty in breathing" was the highest,for about (3.91±0.29) ,of item 12"Feeling of syncope "was the lowest, for about(1.03±0.20). ②The anxiety score of only children cadets is significantly higher than that of non-only children cadets(P<0.05). The anxiety scores of cadets from different family types varied significantly, cadets from single-parent families scored the highest in SAS. ③Set anxiety of cadets as the dependent variable, gender, ethnicity, pre-school rank, age, whether there is an only child, family type, home address, degree, whether it holds a position and relationship status were included as the independent variable to make a multiple progressive linear regression analysis.When α =0.05,only child or not was included into consideration.Conclusion During the epidemic period, the cadres of the cadet team should pay attention to the anxiety of the cadets, and focus on the mental health of cadets from single-parent families and only child cadets.

Keywords

COVID-19; Anxiety; Influencing Factors; Cadets.

1. Introduction

Since the COVID-19 outbreak, the public has experienced a series of psychological problems such as anxiety, depression, post-traumatic stress disorder and sleep disorders.[1] Among these related psychological problems, the incidence of anxiety is the highest. [2]Anxiety refers to the unpleasantness of an individual in anticipation of an adverse consequence or vague threat and its characteristics are stress, anxiety, annoyance, fear and dread. If anxiety is not detected in time and effectively intervened, adolescents will have a series of problems such as school aversion, interpersonal difficulties, avoidance of social interaction, and internet addiction.[3] The study found that students are susceptible to psychological stress response during major public health events.[4] Anxiety is the main symptom of psychological stress. Therefore,this study investigates the anxiety of cadets at a military academy and its influencing factors, so as to provid psychological guidance for the next management.

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2. Objects and Methods

2.1. Objects

205 cadets were selected from a military academy, aged from 21 to 26 years old, with high school education or above, including 47 male cadets and 158 female cadets. A total of 205 questionnaires were sent out, 200 were recovered, and 196 valid questionnaires were obtained, with an effective rate of 95.61%, excluding 4 incomplete questionnaires with basic information.

2.2. Methods

2.2.1. Investigation Tools

①The questionnaire was divided into two parts: The general information questionnaire includes 10 items: gender, ethnicity, pre-school rank, age, whether there is an only child, family type, home address, degree, whether it holds a position, and relationship status ; ②Self-Rating Anxiety Scale (SAS) : SAS is a psychological scale for measuring the severity of anxiety states.[5] The scale has a total of 20 entries, using a four-point likert score to measure the frequency of symptoms. "1" means "little or no time", "2" means "a small part of time", "3" means "considerable time", "4" means "most or all of the time". Positive scores are 1 to 4 points, and negative scores are 4 to 1 points. Items 5, 9, 13, 17 and 19 are reverse scoring. According to the Results of Chinese norm, SAS standard score ≥50 refers to existing anxiety, 50-60 refers to mild anxiety, 61-70 refers to moderate anxiety, and over 70 refers to severe anxiety.

2.2.2. Questionnaire Method

The survey is based on the cadet team, which is the responsibility of the author, and the test is carried out collectively using a unified guiding language. In order to ensure the accuracy of the test, it is carried out by secret mail. After the questionnaires are completed, they are collected on the spot. The data is then entered into a computer and statistically analyzed by SPSS.

3. Results

3.1. Anxiety of Cadets in Military Academies

Table 1. Score of each item of SAS for cadets (x±s)

Item	Points ($\bar{x}\pm s$)
1 Anxiety	1.35±0.51
2 Afraid	1.14±0.39
3 Panic	1.33±0.51
4 Feeling crazy	1.07±0.28
5 Unfortunate premonition	3.66±0.48
6 Hands and feet trembled	1.06±0.23
7 Physical pain	1.28±0.50
8 Weak	1.37±0.54
9 Meditation can't	1.50±0.50
10 Palpitation	1.19±0.45
11 Dizziness	1.11±0.35
12 Feeling of syncope	1.03±0.20
13 Difficulty in breathing	3.91±0.29
14 Tingling of the hands and feet	1.04±0.19
15 Stomach pain or indigestion	1.31±0.56
16 Urinate frequently	1.60±0.80
17 Sweating	1.47±0.50
18 Flushing of the face	1.35±0.56
19 Sleep disorders	3.55±0.50
20 Nightmare	1.39±0.59

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The study results showed that 10 cadets (5.1% of the total number of cadets) had mild anxiety, including 5 male and 5 female cadets. The anxiety standard of military cadets is scored as (40.52±4.29), which is higher than the domestic normal model : 37.23±12.59.[6] The overall average scores of male and female cadets were 41.29±5.71 and 40.31±3.81 respectively. Among the items, the top two scores were item 13 “difficulty in breathing ”(3.91±0.29) and item 14 “unfortunate premonition”(3.66±0.48); item 12“feeling of syncope”and item 14 “tingling of the hands and feet”scored poorly,are (1.03±0.20) and (1.04±0.19) respectively. Score of each item of SAS (See table 1).

3.2. Comparison of Anxiety of Cadets in Different Characteristics

Table 2. Comparison on anxiety scores of cadets with different characteristics (n = 196)

Item	Number of people(n)	Total point ($\bar{x}\pm s$)	t/F	P
Gender				
Male	42	41.29±5.71		
			1.050	0.299
Female	154	40.31±3.81		
Ethnic group				
Ethnic Han	178	40.39±4.21		
			-1.254	0.211
Minority	18	41.72±4.97		
Pre-school rank				
Conscripts	125	40.57±4.28		
			0.228	0.820
sergeancy	71	40.42±4.33		
Age				
<22	13	41.23±3.47		
22-24	143	40.58±4.30	0.430*	0.651
>24	40	40.05±4.53		
Whether or not you are an only child				
Yes	63	41.49±4.16		
			2.215	0.028
No	133	40.05±4.29		
Family category				
Parents	150	40.05±3.93		
Grandparenting	21	41.90±4.45	3.826*	0.023
Single parent	25	42.12±5.60		
Home address				
Countryside	112	40.38±4.27		
			-0.494	0.622
Town	84	40.69±4.34		
Education background				
High School	121	40.80±4.45		
Junior college	43	39.86±4.12	0.802*	0.450
Undergraduate	32	40.30±3.90		
Whether to serve as a backbone				
Yes	40	41.55±5.41		
			1.427	0.160
No	156	40.25±3.93		
Love situations				
Single	150	40.73±4.39		
			1.287	0.200
In love	46	39.80±3.90		

Note:“*” is the value of “F”

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The anxiety scores of only child cadets were significantly higher than those of non-only child cadets (P<0.05); There were statistically significant differences in anxiety scores of cadets of different family categories (P<0.05). There was no statistical difference in other aspects (P>0.05)(see Table 2).

3.3. Multiple Progressive Linear Regression Analysis of Anxiety of Military Cadets

Set anxiety of cadets as the dependent variable, gender, ethnicity, pre-school rank, age, whether there is an only child, family type, home address, degree, whether it holds a position and relationship status were included as the independent variable to make a multiple progressive linear regression analysis.When α =0.05,only child or not was included into consideration. (see Table 3).

Table 3. Multivariate stepwise linear regression analysis of anxiety

Dependent variable	B	SE	β	T	P
Constant	41.492	0.535		77.509	0.000
The one-child	-1.439	0.650	-0.157	-2.215	0.028

4. Discussion

The results of the survey show that, although the proportion of anxious people is not high among military cadets, however, the average score of the cadets is already higher than that of the domestic norm,which indicates that the anxiety symptoms of cadets have increased significantly during the epidemic. Cadets generally felt breathless and had a premonition of misfortune. This may be related to the fact that people wear masks during the epidemic and worry about getting infected with themselves and their families.

The survey results show that the anxiety of only child cadets is significantly higher than that of non-only cadets. This is consistent with the results of former researcher. This may be related to the personality of the only child, and some studies have found that the only child student scores higher than the non-only child in the mental factor. Only children are more stubborn than non-only children and have a relatively poor ability to adapt to the environment. Also, cadets in single-parent families had the highest levels of anxiety, this is consistent with Wang's study findings: the mental health of students in single-parent families is lower than that of students in intact families, and children of single-parent families generally show irritability, longing for friendship, and feelings of inferiority. Therefore, during the epidemic period, the cadres of the cadets should pay attention to the psychological counseling work of the cadets, especially the psychological condition of the cadets from single-parent families and the only child cadets.

References

[1] Z.Z. Feng, X.R. Liu, Z.Y. Chen (2020). Analysis of the characteristics of public psychological problems during the COVID-19 pandemic. Journal of Southwest University(Social Sciences Edition), vol.46, no.4, p.109-115.

[2] X.L. Li, X.L. Li, Q. Zhang (2005). An investigation of response to SARS stress and mental health of nurse students during SARS prevalent period. Chinese Journal of Tissue Engineering Research, vol.9, no.44, p.165-167.

[3] E.C. Cong, H.Y. Chen, Y. Wang (2022). Association between anxiety of adolescents and parental styles. Chinese Journal of Child Health Care, p.23-27.

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[4] X.L. Zhu, D. Liu, F. Yan, et al (2020). Psychological status of school students and employees during the COVID-19 epidemic. Chinese Mental Health Journal, vol.34, no.6, p.549-554.

[5] Z.J. Zhang (2005). Behavioral Medicine Scale Handbook. China Medical Electronic Audio-Visual Publishing House, p.124-125.

[6] X.C. Liu, L.M. Sun, L.Q. Liu, et al (1997). Analysis of the results of the anxiety self-assessment scale of 2462 adolescents. Chinese Mental Health Journal, vol.11, no.2, p.75-77.

[7] S. Cheng and C.X. Jia (2019). Discrimination of anxiety and depression symptoms between only-child and non-only-child college students. Chinese Mental Health Journal, vol.33, no.10, p.783-787.

[8] M.L. Wang and G.H. Chen (2013). Comparative analysis of mental health status of single and two-parent students. Contemporary Sports Technology, vol.3, no.18, p.136-137.