

The Relationship between Death Anxiety and Personality Traits in College Students: Mediating Effect of Negative Coping

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Abstract. To study the characteristics of death anxiety, coping strategies and personality traits in college students, and analyze the relationship among the 3 variables. 553 college students were randomly selected from Guangdong Medical University, Dongguan College of Technology, and Guangdong Polytechnic Normal University. They were assessed with Chinese Version of Templer - Death Anxiety Scale (CT-DAS), Simplified Coping Strategy Questionnaire (SCSQ), and Eysenck Personality Questionnaire-Revised Short Scale in Chinese (EPQ-RSC). (1) The scores of CT-DAS, positive coping, negative coping, psychoticism, neuroticism, extroversion, and honesty were (45.32 ± 5.76) , (22.09 ± 5.92) , (10.47 ± 4.35) , (19.75 ± 3.30) , (17.73 ± 3.37) , (16.73 ± 3.41) , (17.07 ± 2.18) , respectively. (2) There was a pairwise correlation among the score of CT-DAS, negative coping and neuroticism ($r = 0.290, 0.084, 0.280, P < 0.05$), as well as a pairwise correlation among the score of CT-DAS, negative coping and extroversion ($r = 0.290, -0.126, -0.149, P < 0.01$). (3) The score of negative coping had a partly mediating effect in the relationship between the score of neuroticism and CT-DAS in college students, with the mediation effect accounting for 7.5% of the total effect. Also, the score of negative coping had a complete mediating effect in the relationship between the score of extroversion and CT-DAS in the college students, with the mediation effect accounting for 29.7% of the total effect. Personality traits not only have direct roles on the death anxiety in the undergraduates but also indirectly affect it through negative coping.

1. Introduction

Death anxiety (DA) is a basic source of anxiety, referring to a conscious or unconscious psychological state created by the initiation of defense mechanisms in the face of death threats [1]. The reason is lack of a sense of control and meaning for life. Everyone is more or less afraid of death, which makes the individual have a wide sense of inadaptability. Therefore, people take various psychological defense measures to suppress or reduce their psychological pressure [1]. However, it can never be eliminated. Death anxiety has been lurking in unconsciousness, with a lifetime [1-2], which has a profound impact on people's emotions, behaviors and social functions [3]. Moderate death anxiety has the value of survival adaptation [4], is the core source of motivation and the most powerful power of social emotion, which makes people more eager to pursue the meaning for life [5-6]. Excessive death anxiety is the inducement and core element of mental disease, psychosomatic disease and behavior problems [7-9].

Personality is a relatively stable and specific mode of integration that individuals exhibit in terms of thinking, emotion and behavior, etc. Coping style is the will effort to regulate one's emotion, cognition and behavior in the face of stress events and stress situations. It is the intermediary mechanism between stress and mental health, and has buffer effect [10].

According to the concepts of death anxiety, personality and coping style, there is a close relationship among them. Death anxiety is a form of anxiety, which is bound to be regulated by the psychological integration model of personality. Coping style is the expression of behavior, cognition and emotion when dealing with difficult or stressful events, which can be said to be the personality characteristics in predicament. Death anxiety is caused by the lack of control for life (i.e., the lack of effective coping methods for death). It is the performance of coping style on the

issue in life and death [11]. On the other hand, a large number of empirical studies show that there is a significant pairwise correlation between personality traits, coping styles and death anxiety [12-17]. We can assume that there is a mediating effect between personality traits, coping styles and death anxiety. Specifically, death anxiety is an individual's response to behavior and emotion, which belongs to the result variable. Personality traits are deep, distal psychological quality (antecedent variables). Coping style is the individual to deal with life events, is the surface, proximal psychological quality (antecedent variables). Personality traits are more mediated by coping styles.

Based on the above analysis, we can assume that coping style plays an intermediary role between personality traits and death anxiety.

2. Object and Method

2.1. Object

A total of 650 undergraduates from Guangdong Medical University, Guangdong Polytechnic Normal University and Dongguan University of Technology were randomly selected. 553 valid questionnaires were collected, and the effective rate was 85.1%. Among them, 305 were male and 248 were female. There were 208, 142, 101 and 102 freshmen, sophomores, juniors and seniors respectively.

2.2. Tool

2.2.1. Chinese version of templer - death anxiety scale (CT-DAS)

The table is compiled by Templer (1967) [18] and modified by Yang Hong (2012) [19]. There are 15 items in total, with a single dimension, which are scored by liketer 5 points. They are divided into five grades: "very agree", "comparatively agree", "uncertain", "disagree" and "very disagree", which are rated as 1-5 points respectively. The higher the total score, the more serious the death anxiety. The total score of more than 35 points is high death anxiety. In this work, Cronbach's coefficient of the questionnaire is 0.794.

2.2.2. Simplified Coping Strategy Questionnaire (SCSQ)

The questionnaire is compiled by Xie Yaning (1990) [20]. There are 20 items in total, which are divided into two subscales: positive coping and negative coping. Liketer's 4-point score is adopted, which is divided into four options: "do not use", "occasionally use", "sometimes use" and "often use", with 0-3 points respectively. The higher the score of a certain dimension, the stronger its tendency. In this work, the Cronbach's α coefficient of the total scale is 0.903. The Cronbach's α coefficients of positive coping subscale and negative coping subscale are 0.874 and 0.823, respectively.

2.2.3. Eysenck personality questionnaire - revised short scale in Chinese (EPQ- R SCSCSQ)

The table is compiled by Eisenke et al. (1996) [21] and revised by Qian Mingyi et al. (2000) [22]. There are 48 items in total, including 4 subscales: extroversion (E), neuroticism (n), psychoticism (P) and validity (L). The Cronbach's α coefficients of P, E, N and L are 0.690, 0.762, 0.782 and 0.804, respectively.

2.3. Data handling

Spss20.0 is used to process valid data. The main statistical methods are descriptive statistics, Pearson correlation analysis, linear regression analysis, etc.

3. Result

3.1. Overall situation of death anxiety for college students

The score of CT-DAS was 45.32 ± 5.76 , and 508 (91.9%) had more than 35 points.

3.2. Correlation analysis on research variables

According to Table 1, there was a significant pairwise correlation between CT-DAS score, negative coping and neuroticism ($r \leq .290, .084, .280$, mean $P < 0.05$). There was a significant pairwise correlation among CT-DAS score, negative coping and extroversion ($r \leq .290, -.126, -.149$, mean $P < 0.01$).

Table 1. Correlation analysis on research variables

M	SD	Death anxiety	Positive coping	Negative coping	Psychoticism	Nervosity	Extroversion Honesty
Death anxiety	45.32 5.76	1					
Positive coping	22.09 5.92	-.187**	1				
Negative coping	10.47 4.35	.290**	-.127**	1			
Psychoticism	19.75 3.30	-.062	.198**	-.210**	1		
Nervosity	17.73 3.37	.084*	-.181**	.280**	-.108*	1	
Extroversion	16.73 3.41	-.126**	.262**	-.149**	-.115**	-.231**	1
Honesty	17.07 2.18	.044	.010	.046	-.164**	.243**	.287** 1

Note: * $p < 0.05$, ** $p < 0.01$

3.3. Mediating effect test

3.3.1 Mediating effect of negative coping on neuroticism and death anxiety

Due to the significant correlation between CT-DAS, negative coping and neuroticism scores, it meets the conditions of the mediating effect test. Firstly, the scores of CT-DAS, negative coping and neuroticism are decentralized, and then the mediating effects of the above three variables are tested according to the method proposed by Wen Zhonglin [23]. The results are shown in Table 2.

Table 2. Mediating effect of negative coping on neuroticism and death anxiety

Step	Argument	Dependent variable	Standard coefficient	Adjust R ²
First step	Nervosity	CT-DAS score	.326***	.105
Second step	Nervosity	Negative coping	.152***	.077
Third step	Nervosity	CT-DAS score	.281***	.127
	Negative coping		.160***	

Note: ** $p < 0.01$, *** $p < 0.001$

It can be seen from Table 2 that a, b, c, c' are all significant. Therefore, the mediating effect of negative coping between neuroticism and CT-DAS score is partial mediating effect. The ratio of mediating effect to total effect is: effect $m = ab/c = 0.152 \times 0.160 / 0.326 \times 100\% = 7.5\%$.

3.3.2. Mediating effect of negative coping on extroversion and death anxiety

Due to the significant correlation between CT-DAS, negative coping and extroversion scores, it meets the conditions of the mediating effect test. Firstly, the scores of CT-DAS, negative coping and extroversion are decentralized, and then the mediating effects of the above three variables are tested according to the method proposed by Wen Zhonglin [23]. The results are shown in Table 3.

Table 3. Mediating effect test of negative coping on extroversion and death anxiety

Step	Argument	Dependent variable	Standard coefficient	Adjust R ²
First step	Extroversion	CT-DAS score	-.114**	.011
Second step	Extroversion	Negative coping	-.149***	.020
Third step	Extroversion	CT-DAS score	-.081	.060
	Negative coping		.227***	

Note: ** $p < 0.01$, *** $p < 0.001$

It can be seen from Table 3 that a, b, c are significant, but c' is not significant. Therefore, the mediating effect of negative coping between neuroticism and CT-DAS score is complete mediating effect. The ratio of mediating effect to total effect is: effect $m = ab/c = (-0.149) \times 0.227 / (-0.114) \times 100\% = 29.7\%$.

3 Discussion

The results showed that the college students' CT-DAS was divided into 45.32 ± 5.76 , and 508 students (91.9%) scored above 35 (high death anxiety). Consistent with the results of previous studies [15, 19, 24-25], it suggests that college students generally have higher death anxiety. Based on fear management theory [3], individuals mainly fight death anxiety caused by the consciousness of death through three defense mechanisms: world outlook, self-esteem and intimate relationship. College students have problems in all three aspects, so their death anxiety buffer mechanism is also very fragile. First of all, the cultural worldview in Chinese current society is in a period of

alternation and adjustment. In such a period, people have many explanations for the meaning of death, and some people even have doubts about any explanation. College students are in the period of forming the world outlook. They are curious about any kind of cultural worldview, but most of them do not believe in any of them. In this way, it is difficult for them to obtain corresponding respect from their recognition of a cultural worldview. Secondly, due to the fact that self-identity has not been established yet, and "employment difficulty" has been increasing year by year and life pressure is increasing day by day, they are not easy to make achievements in their career, entrepreneurship or family and marriage life, so self-esteem is difficult to establish [26]. Thirdly, due to the influence of psychological closeness [27], college students are neither happy nor good at self-disclosure. They are alienated by lack of communication, making it difficult for them to establish close relationships (including same-sex close friends and heterosexual partners).

There are direct and indirect effects between neuroticism and death anxiety for college students.

On the one hand, the neuroticism and death anxiety for college students are significantly positively correlated, which is the direct effect between them, consistent with the results of previous studies [14-15]. People with high neuroticism often lack the ability of emotion regulation, and are prone to stress and anxiety due to life pressure, resulting in more serious self-accusation and even pessimism and leading to more intense death anxiety.

On the other hand, there is an indirect effect between neuroticism and death. It is manifested in the following ways: neuroticism - negative coping - death anxiety (i.e., negative coping plays a part of the intermediary role between neuroticism and death anxiety). Neuroticism is more likely to take a negative response [12-15], leading to problem accumulation and excessive pressure, further hindering problem solving, damaging self-esteem and aggravating death anxiety.

This work found that there is an indirect effect between extraversion and death anxiety. In other words, extraversion does not directly lead to death anxiety. Only when the extraverts take a negative response, leading to accumulated problems and excessive stress, will they blame themselves for inferiority and generate or aggravate death anxiety.

4 Conclusion

This work preliminarily revealed the relationship between personality traits and death anxiety for college students, and verified the following assumptions. College students generally have high death anxiety. Extroversion indirectly affects the death anxiety for college students through negative coping. There is a direct positive correlation between neuroticism and death anxiety for college students, and it can indirectly affect the death anxiety for college students through negative coping. Based on this result, the following recommendations are made for family and school education: the death anxiety for college students should be properly regulated. We can start from strengthening the mental health education and mental quality training for college students. On the one hand, it helps them to establish correct values, improve personality traits, and form a scientific outlook on life and death. On the other hand, it improves college students' positive coping ability, so that they can effectively solve various life events, protect and strengthen their sense of self-esteem. In the future, we can further verify the relationship between personality characteristics and death anxiety for college students.

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