

The effect of rumination on social anxiety in college students: the mediating role of fear of negative evaluation

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Abstract: 355 college students were selected as subjects to conduct a questionnaire survey using the negative evaluation fear scale, rumination thinking scale and social anxiety scale. The results showed that (1) rumination could positively predict social anxiety ($\beta=0.58$, $t=13.60$, $P < 0.001$); (2) Fear of negative evaluation played a significant mediating role in the relationship between rumination and social anxiety of college students. These results indicate that rumination can not only directly affect college students' social anxiety, but also indirectly affect college students' social anxiety through negative evaluation of fear.

Key words: college students; Fear of negative evaluation; Rumination; Social anxiety

1 Introduction

Social anxiety is a common psychological disorder, mainly refers to the anxiety experienced by individuals in various social situations because of the fear that their words and deeds may cause bad evaluation of others. Individuals often experience a lot of negative emotions in their interactions with others, such as tension, anxiety, fear and anxiety, which can lead to more social avoidance behaviors. People with greater social anxiety are also likely to experience social anxiety disorder, deviant or problematic behaviors (such as cell phone addiction tendencies, substance abuse, etc.), which can not only be detrimental to their mental health, but also have a negative impact on their social resilience. Individuals with high levels of social anxiety can not only affect their learning, but also hinder their interpersonal relationships, make life inconvenient, and even develop social anxiety disorder. Therefore, it is necessary to explore the possible factors affecting college students' social anxiety and its internal mechanism.

In reality, most people discuss the influencing factors of social anxiety from the aspects of physiological factors, cognitive factors, personality factors and social environment factors. In recent years, there are many researches on the relationship between rumination and social anxiety. Research has shown that rumination can contribute to social anxiety to some extent. Rumination refers to a phenomenon in which an individual constantly considers his or her negative emotions and ruminates on the causes and potential negative consequences of the negative emotions, but does not apply positive resolution strategies. Rumination often causes negative emotions such as fear and anger as well as negative self-esteem, which is a particularly representative irrational way of thinking, that is, repeatedly and passively thinking about negative events without taking positive actions. Rumination is mentioned in reaction style theory, which points out that rumination is a non-adaptive coping mechanism, and it is also an important factor in causing, maintaining and accelerating social anxiety. The reasonableness of this theory has been confirmed by many empirical studies. Some studies have shown that rumination can implicitly or explicitly predict negative social emotions. Cross-sectional findings suggest that rumination is an important factor in the formation of individual anxiety, in other words, rumination leads to social anxiety. Rumination will continuously reinforce the negative events of the individual in the social interaction situation, resulting in the individual's negative expectations for future social interaction, resulting in increasing anxiety, and even avoiding interaction with others. Although many studies have shown that rumination can act on social anxiety, how rumination affects social anxiety in the real world and its mechanisms need further research.

In addition, the mechanisms of social anxiety have been a central topic for researchers. In the cognitive-behavioral model of social anxiety, the mechanism of individual social anxiety is pointed out. Among them, the individual's fear of evaluation of threatening information is one of the main causes of social anxiety, and the fear of negative evaluation is considered to be the main feature of social anxiety. The fear of negative evaluation refers to the individual's fear of the potential and possible negative evaluation given by others in social situations, which actually reflects the worry, distress and expectation of the negative evaluation given by others. The mechanism of negative evaluation fear on social anxiety has been paid more and more attention by many scholars. Some studies have found that negative evaluation fear can significantly and positively predict social anxiety, which confirms that negative evaluation anxiety is an important factor in generating individual social fear. Previous studies have also found a certain correlation between rumination and fear of negative evaluation. Rumination is a cognitive susceptibility factor and an important inducer of negative emotion, and fear of negative evaluation, as a negative emotional experience, is closely related to the two. Nolen-Hoeksema's reaction style theory further supports the role of rumination in predicting negative emotions, which solves the relationship between rumination and negative influence and posits that

rumination is a vulnerable factor in the occurrence and maintenance of psychological distress. Furthermore, in rumination response style theory, individuals continually focus their attention on depressed states and their own negative emotions after encountering life events. The typical manifestation is to force oneself to constantly think about the negative emotions and causes of the events at that time. This reaction is negative, and it not only hinders the resolution of the problem, but damages the individual's mental health. Based on this theory, ruminative thinking has a predictive effect on the negative emotion of high negative evaluation fear. In addition, studies have shown that rumination interacts with fear of negative evaluation and can significantly predict social anxiety.

The purpose of this study was to examine the relationship between rumination and social anxiety, and to explore the mechanism of rumination's influence on social anxiety. This paper proposes the following hypothesis: rumination can positively predict social anxiety, and negative evaluation fear plays a mediating role in the relationship between rumination and social anxiety.

2 Object and method

2.1 Objects

By convenient sampling method and combining online and offline methods, a total of 408 questionnaires were distributed to college students in Zhaoqing, Guangzhou, Foshan and other prefecture-level cities in Guangdong Province. After 53 invalid questionnaires were eliminated, 355 valid questionnaires were obtained, with an effective rate of 87%, which met the statistical standard. Among them, there were 108 male students (30.99%) and 245 female students (69.01%). There were 109 freshmen (30.70 percent), 63 sophomores (17.74 percent), 111 juniors (31.27 percent) and 72 seniors (20.28 percent). Survey participants ranged in age from 17-26, with an average age of 20.24 ± 1.69 years.

2.2 Tools

2.2.1 Negative evaluation fear scale

The short version of the Negative Evaluation Fear Scale by Peng Shun and Wang Xia was selected. A total of 12 items were scored from 1 (completely inconsistent) to 4 (completely consistent). The higher the score, the higher the individual's fear of negative evaluation. In this study, the Cronbach's α coefficient of the scale as a whole was 0.89.

2.2.2 Rumination Thinking Scale

Use the rumination Thinking Scale revised by Han Xiu et al. A total of 22 items were scored using "1" (never) to "4" (always). The scale contains three dimensions: symptomatic rumination, compulsive thinking and introspective rumination. The Cronbach's α coefficient of this scale in this study was 0.95.

2.2.3 Social Anxiety Scale

The social anxiety scale[19] compiled by Mattick et[18] al and revised by Ye Dongmei was selected. There were 19 items in total, with scores ranging from "1" (very inconsistent) to "4" (very consistent). The higher the score, the more serious the degree of social anxiety. The Cronbach's α coefficient of this scale in this study was 0.92.

2.3 Statistical Methods

SPSS22.0 was used for data entry and processing; And the PROCESS macro program plug-in written by Hays is used in the mediation effect test.

3 Research results

3.1 Descriptive statistics and correlation analysis among variables

The data results of descriptive statistics and correlation analysis among variables show (Table 1) that there is a significant positive correlation between negative evaluation fear, rumination and social anxiety, which is suitable for further mediation effect analysis.

Table 1 Descriptive statistics and correlation analysis of each variable

Variables	M	SD	1	2	3	4	5
1. Social anxiety	2.42	0.53	-				
2. Evaluate fears negatively	2.61	0.54	599.	-			
3. Ruminare	2.24	0.59	587.	468.	-		
4 Regurgitate symptoms	2.14	0.62	609.	457.	960.	-	
5. Force your mind	2.45	0.66	517.	487.	905.	792.	-
6. Reflect	2.28	0.63	416.	321.	864.	724.	776.

3.2 Analysis of the mediating role of negative evaluation fear in the influence of rumination on college students' social anxiety

After controlling for gender and age variables, rumination thinking was taken as the independent variable, fear of negative evaluation as the intermediate variable, and social anxiety as the dependent variable. Stepped-regression method was used to examine the mediating role of fear of negative evaluation between rumination thinking and social anxiety. The results showed that rumination had a significant positive predictive effect on social anxiety of college students ($\beta=0.58, P < 0.001$), which verified the hypothesis. After the inclusion of the negative evaluation fear variable, it was found that rumination thought could still significantly positively predict the negative evaluation fear ($\beta=0.46, P < 0.001$), and the negative evaluation fear had a significant positive prediction effect on the social anxiety of college students ($\beta=0.42, P < 0.001$). At this time, rumination still significantly predicted social anxiety of college students ($\beta=0.39, P < 0.001$). It can be concluded that fear of negative evaluation plays a part in mediating the effect of rumination on college students' social anxiety. The deviation-correcting Bootstrap method also verified the above mediation model (the results are shown in Table 2).

Table 2: Total effect, direct effect and mediation effect breakdown table

	Effect	BootSE	BootLLCI	BootULCI
Total Effect	0.531	0.039	0.453	0.607
Direct effect	0.355	0.041	0.274	0.433
Mediating effects of negative evaluation of fear	0.176	0.030	0.120	0.237

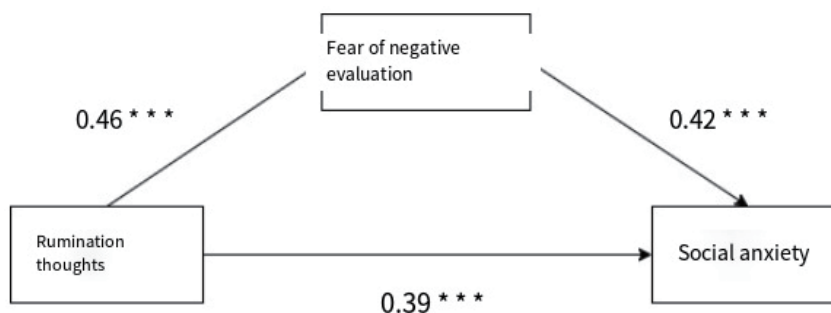


FIG. 1 Diagram of the mediated effect path model

4 Discussion

First, rumination can significantly positively predict social anxiety of college students, indicating that the higher the degree of rumination, the more likely an individual is to have social anxiety. Rumination will cause people to repeatedly remember negative experiences and feelings in the process of interpersonal communication, causing personal fear, anger and other negative emotions, resulting in negative self-esteem, thereby increasing social anxiety. At the same time, previous studies have found that individuals with high rumination thoughts generally show higher social anxiety. When confronted with an unpleasant social event, individuals with high rumination will amplify the unpleasant feelings, leading to the reinforcement of the negative event. This will cause the individual to set certain negative expectations for future social activities, leading to increased anxiety about social activities, and even to avoid interpersonal interaction thoughts and behaviors.

Secondly, fear of negative evaluation plays a partial mediating role in the relationship between rumination and social anxiety, indicating that the internal mechanism of the formation of social anxiety in college students is not only directly influenced by rumination, but also influenced by rumination through individuals' fear of negative evaluation.

Rumination thinking can positively predict the fear of negative evaluation, enrich the existing theories, and further expand the research on the relationship between rumination thinking and negative evaluation anxiety. College students with a high degree of rumination thinking are prone to rumination and recall the potential and possible negative evaluation given by others, and then produce negative emotions such as worry, fear and distress. And accompanied by more fear of negative evaluation. In addition, the results show that the fear of negative evaluation can also positively affect social anxiety, that is, the behavior of negative evaluation of oneself can also cause social anxiety. Based on the cognitive behavioral model of social anxiety, people with social anxiety are usually accompanied by a high level of attention to negative information, a high level of sensitivity to interpersonal relationships, but they are often not confident in their own social skills. The higher the level of fear of negative evaluation, the higher the college students' negative emotions, such as worry, anxiety and other negative

emotions, in the face of others' evaluation in interpersonal communication. The more sensitively they paid attention to the evaluations of others, the more likely they were to experience anxiety, and the more likely they were to worry, fear, and avoid social situations. Therefore, rumination can act on social anxiety through the individual's fear of negative evaluation, in which the individual's fear of negative evaluation acts as a mediator.

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