

The Relationship between Interpersonal Trust and Social Anxiety among College Students: An Analysis of the Mediating Effect of Fear of Negative Evaluation

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Abstract: This study aims to elucidate the mechanism of interpersonal trust in relation to social anxiety (SA) by constructing a mediation model, grounded in the cognitive-behavioral model of social anxiety and the trust regulation model, to identify the mediating role of fear of negative evaluation (FNE) between interpersonal trust and social anxiety. A survey was administered to 561 college students to evaluate their interpersonal trust, fear of unfavorable appraisal, and social anxiety through questionnaires. The findings indicated that: (1) Interpersonal trust exhibited a significant negative correlation with both fear of negative assessment and social anxiety, whereas fear of negative evaluation had a large positive correlation with social anxiety. (2) Fear of negative evaluation partially mediated the relationship between interpersonal trust and social anxiety among college students, indicating that interpersonal trust not only directly affects social anxiety but also indirectly affects it through fear of negative evaluation. These findings not only help alleviate social anxiety in college students but also make mental health education more targeted and effective.

1. Introduction

A survey conducted across seven countries found that the prevalence of social anxiety among young people ranges from 23% to 58%[1](Jefferies & Ungar, 2020). Prior research have confirmed that social anxiety not only accompanies higher levels of stress, depression, and loneliness, but is also closely related to smartphone dependence, substance abuse such as smoking and alcohol consumption[2-3](Hou et al., 2021; Lemyre et al., 2019). Research indicates that social anxiety is a risk factor that threatens college students' well-being, academic performance, and quality of life[4-5](Lochner et al., 2003; Russell & Topham, 2012). Therefore, given the high prevalence of social anxiety with its broad impact, exploring the determinants and developmental processes of social anxiety among college students is particularly important for promoting their mental health.

1.1 The Relationship between Interpersonal Trust and Social Anxiety Among College Students

Social anxiety refers to the negative emotions experienced by individuals during social interactions, leading to a certain degree of distress and functional impairment, and negatively impacting social activities and interpersonal relationships[6](Boehme et al., 2015). Social anxiety functions as an "alarm system," signaling the threat of social rejection and prompting individuals to take feasible actions to gain acceptance from others[7](Xu, 2010). Interpersonal trust, in this context, acts as a moderator of social reconnection; increased levels of interpersonal trust correlate with less social disengagement[8](Rotenberg & Boulton, 2013). Studies have shown that individuals with low levels of interpersonal trust tend to have higher levels of social detachment, and after experiencing neglect or rejection from others, their dissatisfaction with social relationships increases, which ultimately triggers social anxiety[9](Jia et al., 2019). Interpersonal trust refers to the positive expectations and beliefs one holds about others in social interactions[10](Yang & Peng, 1999). Individuals with high levels of interpersonal trust, even when perceiving high levels of social rejection, are more likely to maintain positive expectations about social relationships due to the protective effect of interpersonal trust on mental health. This, in turn, mitigates their intent to socially withdraw and reduces perceived social anxiety. Therefore, this study proposes Hypothesis H1: Interpersonal trust can significantly and negatively predict social anxiety among college students.

1.2 The Mediating Role of Fear of Negative Evaluation

The cognitive-behavioral model of social anxiety suggests that fear of negative evaluation(FNE) is a core feature of social anxiety[11](Rapee & Heimberg, 1997). The perception of others' negative evaluations can trigger social anxiety[12](Ye et al., 2019). Fear of negative evaluation refers to an individual's concern and fear of being judged negatively or critically by others[13](Chen, 2002). On one hand, overestimating the consequences of negative evaluations and holding erroneous beliefs about social anxiety can activate the individual's social anxiety network, leading to a catastrophic fear of social anxiety[14](Capriola-Hall et al., 2018). On the other hand, individuals with a high FNE, when facing interpersonal threats, tend to focus excessively on threatening information in the social environment, which further elevates their anxiety levels[15-16](Russell et al., 2017; Peng et al., 2019). FNE during social encounters may become a substantial risk factor for triggering social anxiety[17](Villarosa-Hurlocker et al., 2018), which can further lead to serious psychological and behavioral issues.

According to the trust regulation model, trust is a core element in understanding an individual's relationships with others[18](Berscheid, 1994). Trust regulates the influence of primary determinants (causal factors) on outcomes by affecting how one evaluates future behaviors or interprets the other party's past actions[19](Dirks & Ferrin, 2001). Individuals with elevated levels of interpersonal trust are more inclined to assume that others will treat them kindly, thus perceiving lower risks, and are therefore more likely to view seeking social support as a necessary action and actively pursue it[20-21](Barbee & Cunningham, 1995; Mortenson, 2009). FNE has long been recognized as a core cognitive bias in social anxiety.[22](Fredrick & Luebbe,2020) .Hence, this study proposes Hypothesis H2: Fear of negative evaluation mediates the association in the relationship between interpersonal trust and social anxiety among college students.

In summary, this study, based on the cognitive-behavioral model of social anxiety and the trust regulation model, aims to explore the relationship between interpersonal trust and social anxiety among college students, along with the mediating role of FNE (see Figure 1). This research seeks to provide theoretical guidance for intervention mechanisms targeting social anxiety among college students.

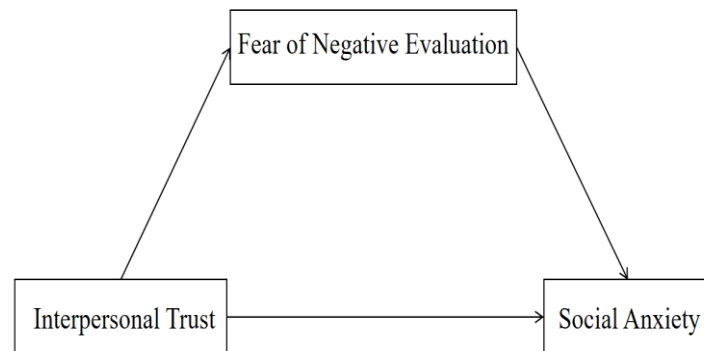


Figure 1: The mediation model of the effect of fear of negative evaluation on interpersonal trust and social anxiety among college students.

2. Method

2.1 Participants

This study distributed an online survey questionnaire at a university in Shanxi Province, China. After excluding invalid responses, a total of 561 valid surveys were obtained. Among the respondents, 236 were male (42.1%) and 325 were female (57.9%); 201 were freshmen (35.8%), 134 were sophomores (23.9%), 90 were juniors (16.0%), and 136 were seniors (24.2%).

2.2 Instruments

2.2.1 Interpersonal Trust Scale

This study used the "College Students' Interpersonal Trust Questionnaire" developed by Zou Ping (2008). The questionnaire consists of two parts: the "Trust in Others Questionnaire" and the "Trust in Myself Questionnaire." Each questionnaire contains 12 items. Both sub-questionnaires consist of two dimensions: trust in character and trust in ability, with 6 items for each dimension. Both questionnaires are scored on a 5-point scale, with all items scored positively. Each item offers five options: Completely Disagree (1), Somewhat Disagree (2), Neutral (3), Somewhat Agree (4), and Completely Agree (5). Higher scores indicate higher levels of interpersonal trust. In this study, the Cronbach's α coefficient for the scale was 0.961.

2.2.2 Fear of Negative Evaluation Scale

This study used the Brief Fear of Negative Evaluation Scale, originally developed by Watson and Friend and revised by Chen Zhiyan. It is a 5-point Likert scale: 1 = "completely untrue," 2 = "somewhat untrue," 3 = "uncertain," 4 = "somewhat true," and 5 = "completely true," comprising 12 items, including 4 reverse-scored items (items 2, 4, 7, and 10). A higher score indicates a higher level of FNE. The Cronbach's α coefficient for this scale in the current study is 0.855.

2.2.3 Social Anxiety Scale

This study used the Interaction Anxiousness Scale developed by Leary (1983), employing the Chinese version published in the *Handbook of Psychological Health Assessment Scales*. This scale is commonly used to measure an individual's subjective tendency toward social anxiety. It

uses a 5-point scoring system: 1 = "completely untrue," 2 = "somewhat untrue," 3 = "uncertain," 4 = "somewhat true," and 5 = "completely true," and includes 4 reverse-scored items (items 3, 6, 10, and 15). The Cronbach's α coefficient for this scale in the present investigation is 0.852.

3. Results

3.1 Management and Assessment of Common Method Bias

This study employed Harman's single-factor test to assess common method bias in the independent and dependent variables. The findings revealed a total of 8 variables with eigenvalues over 1, the most significant component accounting for 26.249% of the variance, which falls short of the essential threshold of 40%. Consequently, this analysis does not demonstrate substantial common method bias.

3.2 Means, Standard Deviations, and Correlations of Variables

Descriptive and correlation analyses were conducted for each variable, as shown in Table 1. Gender was found to be significantly positively correlated with social anxiety ($r = 0.177$, $p < 0.01$). Interpersonal trust was significantly negatively correlated with both fear of negative evaluation and social anxiety ($r = -0.102$, $p < 0.05$; $r = -0.144$, $p < 0.01$). Additionally, fear of negative evaluation was significantly positively correlated with social anxiety ($r = 0.599$, $p < 0.01$).

Table 1: Descriptive Statistics and Correlation Analysis of Variables

	M	SD	1	2	3	4	5
1 Sex			1				
2 Grade			0.261**	1			
3 Interpersonal Trust	90.130	16.077	0.033	0.022	1		
4 Fear of Negative Evaluation	37.426	7.442	0.068	0.024	-0.102*	1	
5 Social Anxiety	48.781	9.145	0.177**	0.027	-0.144**	0.599**	1

* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$; the same applies below.

3.3 The Relationship between Interpersonal Trust and Social Anxiety: Mediating Model Test of Fear of Negative Evaluation

The Bootstrap approach suggested by Hayes was utilized, employing the Process 3.3 plugin in SPSS 22.0 statistical software. This study identified a significant positive correlation between gender and SA, gender was included as a control variable, and Model 4 was selected for a simple mediation model test to examine the mediating effect of FNE in the relationship between interpersonal trust and SA in Figure 2. The findings, as shown in Tables 2 and 3, indicate that interpersonal trust significantly predicts SA ($\beta = -0.086$, $t = -3.651$, $p < 0.001$). When fear of negative evaluation was added as a mediating variable, the direct effect of interpersonal trust on social anxiety remained significant ($\beta = -0.051$, $t = -2.691$, $p < 0.01$). Interpersonal trust significantly predicts fear of negative evaluation ($\beta = -0.048$, $t = -2.48$, $p < 0.05$), and fear of negative evaluation also significantly predicts social anxiety ($\beta = 0.713$, $t = 17.342$, $p < 0.001$).

In addition, as illustrated in Table 3, the 95% bootstrap interval endpoints for the direct effect of interpersonal trust on SA and the mediating effect of FNE do not include 0. This indicates that interpersonal trust can directly forecast SA and also influence it indirectly through the mediating role of FNE. The direct effect (-0.051) and mediating effect (-0.034) account for 59.70% and 40.19% of the total effect (-0.086), respectively.

Table 2: Mediating Model Test of Fear of Negative Evaluation

	Fear of Negative Evaluation		Social Anxiety		Social Anxiety	
	β	t	β	t	β	t
Sex	1.072	1.694	2.605	4.225***	3.37	4.419***
Interpersonal Trust	-0.048	-2.48*	-0.051	-2.691**	-0.086	-3.651***
Fear of Negative Evaluation			0.713	17.342***		
R-squared	0.015		0.386		0.054	
F	4.377*		116.565***		15.919***	

Table 3: Total Effects, Direct Effects, and Mediation Effects Decomposition Table

	Effect	BootSE	BootLLCI	BootULCI	Proportion of Effect
Mediating Effect of Fear of Negative Evaluation	-0.034	0.016	-0.067	-0.006	40.19%
Direct Effect	-0.051	0.022	-0.095	-0.007	59.70%
Total Effect	-0.086	0.028	-0.141	-0.030	

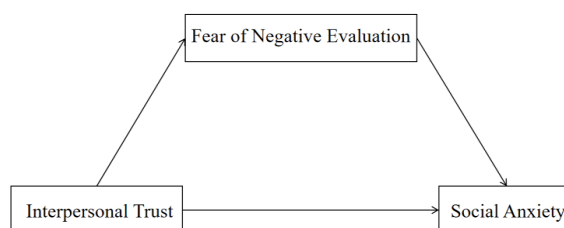


Figure 2: Mediating Effect Model of Fear of Negative Evaluation

4. Discussion

4.1 Discussion on the Direct Effect of Interpersonal Trust on Social Anxiety among College Students

This study found that interpersonal trust among college students can significantly and negatively predict SA, aligning with other research findings [23] (Quan et al., 2024), supporting the research hypothesis H1. Low levels of interpersonal trust lead individuals to focus on negative social information, avoid unfamiliar social relationships, and reduce social frequency, thereby resulting in SA [24] (Yanagisawa et al., 2013). From the perspective of individual resources, the richness of these resources is closely linked to mental health. Interpersonal trust, as a significant part of individual resources, and efforts to foster trust in strangers may positively impact mental health concerns in both men and women [25] (Martínez et al., 2010). From the perspective of social networks, good interpersonal trust facilitates the establishment and expansion of personal social networks, thereby helping individuals establish healthier interpersonal interactions and increasing access to social support, which is beneficial for mental health [26] (Li & Gao, 2020). The finding of this study provide theoretical support for intervening in the negative effects of SA on campus by starting from interpersonal trust. SA is merely a superficial consequence of interpersonal trust; the negative emotions associated with SA may trigger other more severe behavioral outcomes or mental issues, such as aggressive behavior or other mental disorders. Therefore, we should increase the awareness of interpersonal trust phenomena on campus and intervene in the SA caused by interpersonal trust issues.

This study found that FNE acts as a mediation variable in the correlation between interpersonal

trust and SA among college students, thus confirming Hypothesis H2. College is a sensitive period for social relationships, during which students have high expectations of social interactions. When they experience social exclusion—whether through rejection, negative evaluation, or neglect—it can lead to doubts about their self-confidence. Such doubts may cause them to strive to make a good impression in subsequent social interactions, fear negative evaluations, and lean towards pleasing others in their relationships. This, in turn, strengthens the solidity of social connections and ultimately leads to the emergence of SA [9](Jia et al., 2019).

Interpersonal trust is considered a prerequisite for taking on interpersonal risks, exposing oneself to the potential harm of others [27] (Mayer et al., 1995). Robust social support improves an individual's capacity to manage stress effectively [28] (Song & Li, 2020), and positive coping strategies contribute to protecting an individual's mental health [29] (Liao, 2014). Furthermore, research suggests that individuals without SA actively seek new social relationships, while those with SA often avoid pursuing novel social encounters due to fears that such actions may lead to significant distress [30] (Heimberg et al., 1995). They tend to reject unfamiliar social connections and prefer to maintain stable, familiar, or other potential relationships. However, regardless of the form, both approaches aim to satisfy their need for connection through enhanced social ties. Individuals exhibiting diminished trust are more predisposed to gather adverse comments. [31] (Fedor, 1991), maintain existing social relationships, reduce the frequency of social interactions, and avoid unfamiliar social connections [24] (Yanagisawa et al., 2013). This manifests as a heightened concern for others' negative evaluations, increased anxiety over potential negative feedback, and a focus on making a good impression in front of others. They experience extensive social evaluative anxiety in situations such as public speaking and gatherings, and FNE is linked to adverse emotions and behaviors like social phobia and excessive anxiety [32] (Wang, 1999). Therefore, we can mitigate the negative effects of SA by intervening in Fear of Negative Evaluation, such as providing trust training for college students with low interpersonal trust to reduce their focus on negative evaluations and alleviate the adverse effects of SA.

5. Conclusion

Interpersonal trust demonstrates a substantial negative correlation with both fear of negative evaluation and social anxiety; conversely, fear of negative evaluation shows a significantly positive correlation with social anxiety. Fear of negative evaluation partially mediates the association between interpersonal trust and social anxiety among college students, indicating that interpersonal trust directly impacts social anxiety and indirectly affects it via Fear of Negative Evaluation.

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