

SOCIAL ANXIETY AND SPEECH ANXIETY. THE MEDIATING ROLE OF CONFIDENCE AS A SPEAKER

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Abstract

Social anxiety is a condition experienced by a large number of people. An estimated 12.1% of U.S. adults experience social anxiety disorder at some time (National Comorbidity Survey, 2007). People with social anxiety often experience extreme self-consciousness and a strong fear of being judged, criticized, or embarrassed by others. This fear can be so overwhelming that it interferes with their ability to engage in everyday activities, such as attending social gatherings, speaking in public, or conversing with others. Furthermore, speech anxiety, also known as public speaking anxiety, is a psychological condition characterized by fear, nervousness, or apprehension when speaking in front of an audience or any situation that involves public speaking. This is often associated with physical symptoms such as trembling, sweating, and dry mouth, and cognitive symptoms like fear of embarrassment or prediction of poor performance and failure. The study is based on a cross-sectional design, with data being collected from a convenience sample of 206 participants (39 males, 167 females), aged between 18 and 35 years old ($M=19.84$, $SD=2.38$) through the following structured questionnaires: Social Anxiety Questionnaire for Adults (Caballo et al., 2012), Speech Anxiety Thoughts Inventory (Cho et al., 2004), and Personal Report of Confidence as a Speaker scale (Heeren et al., 2013) who measure the fear of public speaking. The results of the study suggest that both Social Anxiety ($r=.606$, $p<.01$) and Fear of public speaking ($r=.766$, $p<.01$) correlate with Speech Anxiety. Moreover, the two subscales of Speech Anxiety, namely Fear of Negative Evaluations and Prediction of Poor Performance also showed significant correlations with Social Anxiety ($r=.576$, $p<.01$; $r=.579$, $p<.01$) and fear of public speaking ($r=.656$, $p<.01$; $r=.785$, $p<.01$). Furthermore, fear of public speaking mediates the relationship between Social Anxiety and Speech Anxiety ($z=7.960$, $p<.01$). Practical implications of the recent study are discussed as well as some directions for future research in the area.

Keywords: *Speech anxiety, social anxiety, fear of public speaking, mediation.*

1. Introduction

Social anxiety is a prevalent contemporary issue, clinically recognized as Social Anxiety Disorder (SAD). The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (APA, 2013) characterizes it as the "marked fear or anxiety about one or more social situations in which the individual is exposed to possible scrutiny by others" (p. 202). The APA's definition encompasses three situational markers: social interactions (e.g., conversations, meeting new people), being observed (e.g., having dinner), and performing in front of others (e.g., dancing, giving a speech). In essence, the social situations in which individuals engage in different types of activities while aware of being watched and evaluated by others (Caballo et al., 2014).

According to Stein and Stein (2008), "Social anxiety disorder is the most common anxiety disorder: it has an early age of onset—by age 11 years in about 50% and by age 20 years in about 80% of individuals" (Stein & Stein, 2008, p. 1115). It is characterized by persistent fear and avoidance of social interactions, the scrutiny of others, and withdrawal from social situations to evade feelings of embarrassment and humiliation (Alyami et al., 2017).

Different scholars describe specific forms of social anxiety such as fear of speaking to an audience or talking to persons in authority (Stein, Walker, & Forde, 1994, 1996). Earlier examinations within this field have determined that performance anxiety, with public speaking anxiety as its predominant fear, constitutes a distinct subtype of social anxiety. This subtype is recognized to be qualitatively and quantitatively distinct from generalized social anxiety, as highlighted by Hook and

Valentiner (2002). Numerous discussions regarding the criteria for distinguishing between public speaking anxiety and social phobia have taken place, particularly following the publication of Heimberg and colleagues' (1993) review of social phobia subtypes. Starting from these observations and the fact that speaking in public is considered the most commonly reported fear in the general population (Dwyer & Davidson, 2012; Sawyer, 2016), we have decided to study the relation between those variables including a specific mediator namely fear of public speaking (or confidence as a speaker as it is to be found in the scale description).

According to various studies (Cho & Won, 1997; Stein et al., 1996), public speaking emerges as the most frequently feared situation, with prevalence estimates ranging from 20% (Cho & Won, 1997) to 34% (Stein et al., 1996). It refers to the anxiety an individual undergoes while delivering a speech or preparing to speak in the presence of an audience. As noted by Bodie (2010), anxiety also encompasses the preparation of the speech. In mainstream scientific literature, public speaking anxiety has been described as social anxiety with a “threat of unsatisfactory evaluations from audiences” (Schlenker & Leary, 1982, p. 646). This condition has been associated with various outcomes, including inadequate preparation, suboptimal decision-making during speeches, and a detrimental impact on both effect and performance (Dwyer & Davidson, 2021).

For those grappling with the anxiety associated with public speaking, addressing an audience can adversely affect both their physical and emotional health. Symptoms of public speaking anxiety may manifest through various channels, including physical sensations, irrational thoughts, changes in emotions, and avoidance behaviors (Daly et al., 1997). Examples of physical symptoms include nausea, tremors, and excessive sweating in the palms, as identified by Kushner (2004) and North and Rives (2001).

Past research within the public speaking domain has confirmed that the prospect of being on stage instills fear in numerous individuals due to the phenomenon commonly referred to as glossophobia, or the fear of public speaking (Dansieh, Owusu, & Seidu, 2021). In the realm of communication research, the fear of public speaking is characterized as a distinct form of communication-related anxiety. In this context, individuals encounter physiological arousal, negative thoughts, and behavioral reactions in response to actual or anticipated presentations (Ayres & Hopf, 1992).

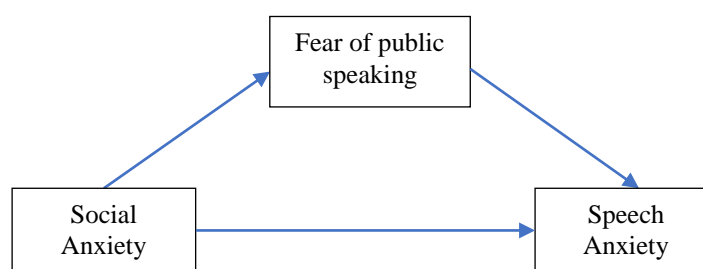
Fear of public speaking mainly involves a specific type of inner dialogue and thoughts that are self-deprecating, pessimistic, or undermining. Combining conscious thoughts and unconscious beliefs and biases provides a way for the brain to interpret and process daily experiences. In the area of interpersonal communication, focusing on negative thoughts may lead to decreased motivation as well as greater feelings of helplessness and anxiety.

Following the literature review findings, we propose the following hypothesis (Figure 1):

H₁: Social Anxiety positively correlates with Speech Anxiety

H₂: Fear of Public Speaking mediates the relationship between Social Anxiety and Speech Anxiety

Figure 1. Conceptual framework.



2. Methods

The study included 206 participants, comprising 39 males and 167 females, with ages ranging from 18 to 35 years ($M = 19.84$, $SD = 2.38$). Purposive convenience sampling was utilized for data collection, employing a self-reported method. Participants were briefly briefed on the study's purpose before providing informed consent. Assurance was given to all participants regarding the confidentiality of their data, emphasizing its use solely for research purposes. The participants were asked to complete the following structured questionnaires: Social Anxiety Questionnaire for Adults (Caballo et al., 2012),

Speech Anxiety Thoughts Inventory (Cho et al., 2004), and Personal Report of Confidence as a Speaker Scale (Heeren et al., 2013) who measure the fear of public speaking.

Social Anxiety Questionnaire for Adults (Caballo et al., 2012) is structured on 30 items designed to assess various aspects of social anxiety in adults. It comprises a series of social situations that may or may not cause unease, stress, or nervousness (e.g., *Talking to people I don't know at a party or a meeting*). Each item consisted of a 5-point Likert Scale where "1" represents no unease, stress, or nervousness and "5" represents very high or extreme unease, stress, or nervousness. The internal consistency coefficient was $\alpha=.919$.

Speech Anxiety Thoughts Inventory (Cho et al., 2004) is an instrument measuring maladaptive cognitions associated with speech anxiety. It consists of 23 items structured on 2 dimensions: prediction of poor performance (e.g., *I won't be able to speak as well as others*) and fear of negative evaluation by the audience (e.g., *I must deliver a good speech to gain approval from the audience*). The answers are distributed on a five-option Likert scale from 1 (Very strongly disagree) to 5 (Very strongly agree). The internal consistency coefficient of the composite score was $\alpha=.964$.

Personal Report of Confidence as a Speaker Scale (Heeren et al., 2013) is a scale designed to measure the fear of public speaking. It is structured on 12 items (e.g., *My thoughts become confused and jumbled when I speak before the audience*). The participants are invited to answer *True* or *False* to each of the respective statements. The internal consistency coefficient of the composite score was $\alpha=.842$.

3. Results

Following data collection, SPSS 26.0 software was used for data analysis. Examination of Skewness and Kurtosis coefficients revealed a normal distribution of the data. Consequently, to test the proposed hypothesis, the Pearson correlation was employed. Table 1 displays the means, standard deviations, and bivariate correlations for all study variables. The table illustrates several noteworthy positive correlations.

The results show that Social Anxiety positively correlates with Speech Anxiety ($r=.606, p<.01$) thus confirming our first hypothesis. Moreover, the two subscales of Speech Anxiety, namely Fear of Negative Evaluations and Prediction of Poor Performance also showed significant correlations with Social Anxiety ($r=.576, p<.01$; $r=.579, p<.01$).

Table 1. Descriptive statistics and inter-correlations of the study variable.

	Mean	SD	1	2	3	4	5
1. Social anxiety	90.46	19.83	-				
2. Prediction of poor performance	40.14	13.40	.579**	-			
3. Fear of negative evaluation	32.52	9.92	.576**	.812**	-		
4. Speech anxiety	72.66	22.23	.606**	.966**	.936**	-	
5. Fear of public speaking	6.52	3.43	.611**	.785**	.656**	.766**	-

n=206, **p<0.01

To address the second hypothesis (Hy 2: Public Speaking mediates the relationship between Social Anxiety and Speech Anxiety), and to examine the mediation model following the guidelines of Preacher and Hayes (2004), we utilized the PROCESS macro (version 3.5). The model incorporates Social Anxiety as a predictor, Fear of Public Speaking as a mediator, and Speech Anxiety as the outcome variable (Figure 1).

Table 2. Regression results for the first process of mediation.

Model	Coeff.	SE	t	p	CI(lower)	CI(upper)
Without mediator						
SoA -> SpA (c)	.679	.062	10.884	.000	.556	.802
With mediator						
SoA -> FPS (a)	.106	.010	11.013	.000	.087	.125
FPS -> SpA (b)	4.089	.354	11.537	.000	3.390	4.788
SoA -> SpA (c')	.247	.061	4.018	.000	.126	.368

*SoA=Social Anxiety; SpA=Speech Anxiety; FPS=Fear of Public Speaking

In Step 1 of the mediation model, the regression of the Social Anxiety on Speech Anxiety, ignoring the mediator, is significant, $F(1,204) = 118.45, p < .001, R^2 = .36, b = .679, t(204) = 10.884, p < .001$. Step 2 shows that the regression of the Social Anxiety on the mediator, Fear of Public Speaking,

is also significant, $F(1,204) = 121.29$, $p < .001$, $R^2 = .37$, $b = .106$, $t(204) = 11.013$, $p < .001$. Step 3 of the mediation process shows that the mediator, Fear of Public Speaking, controlling for Social Anxiety is significant, $F(2,203) = 164.12$, $R^2 = .61$, $p < .001$, $b = 4.089$, $t(203) = 11.537$, $p < .001$. Step 4 of the analysis reveals that controlling for the mediator, Fear of Public Speaking, Social Anxiety score is a less significant predictor of Speech Anxiety, $b = .247$, $t(203) = 4.018$, $p < .001$ than in the previous case.

Following Baron and Kenny's (1986) recommendation, we performed the Aroian version of the Sobel test, revealing that fear of public speaking mediates the connection between social anxiety and speech anxiety ($z=7.960$, $p<.01$).

4. Conclusions

The objective of the present study is to investigate the impact of Social Anxiety on Speech Anxiety, with a focus on the mediating influence of Fear of Public Speaking. Findings indicate that Fear of Public Speaking significantly mediates the association between Social Anxiety and Speech Anxiety.

The results are in line with previous studies that noted that the fear of public speaking is commonly associated with social anxiety (Tillfors & Furmark, 2007). Interestingly, this fear may manifest even in the absence of several or most other features of social anxiety as observed by Blöte and colleagues (2009).

Furthermore, the results mirror the findings of Scott (2023) who noted that negative self-talk plays a significant role in public speaking anxiety. Negative self-talk can contribute to heightened anxiety and make the experience more challenging.

While this study yielded valuable insights, it is not without its limitations. A primary weakness lies in the adoption of a cross-sectional design, preventing the examination of cause-and-effect relationships. Additionally, a common constraint, inherent in many studies, pertains to the reliance on self-reported questionnaires, where individuals may tend to explore and disclose attitudes rather than actual behaviors. The small sample size is another noteworthy limitation, posing challenges in generalizing the findings.

Future studies should take into account the observation of Horwitz (2001), who pointed out the fact that state anxiety differs from trait anxiety in that the former represents a temporary episode of anxiety, while the latter stems from inherent individual factors, like personality, that can lead to anxiety in diverse situations. This distinction is even more important when trying to understand the predictors of public speaking anxiety or speech anxiety.

Similarly, communication apprehension, defined as the degree of fear or anxiety linked to actual or expected communication with another individual (McCroskey, 1984) is also perceived in two measures. The first measure is trait-based, representing a consistent level of fear or anxiety, while the second is variable and depends on the situation or context (Aly & Islam, 2005; Harris, Sawyer, & Behnke, 2006). Hence, adding Communication Apprehension as a new variable to the conceptual model will enhance comprehension of the phenomena.

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