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Research paper

# Design and Testing a Model of some Antecedents of Students Social Anxiety

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## Abstract

The aim of this study was to design and test a model of some antecedents of social anxiety. This descriptive research was the structural equation modeling method. The statistical population was included all the students of Ahvaz Jundishapur University of medical sciences in 2020-2021, of which 581 were selected by multistage cluster sampling method. Data were collected through Social Phobia Inventory, Shyness Scale, Shame Scale, Behavioral Inhibition system, Anger Expression Inventory and Depression Scale. Data were analyzed using structural equation modeling method. The results showed that the effects of the coefficient of direct standard paths of behavioral inhibition, shyness, depression, shame with social anxiety were significant but the direct coefficient for anger on social anxiety was not significant. Also, the findings were confirmed the indirect relationships of behavioral inhibition and shyness with the mediating role of depression and shame.

Keywords: Anger, behavioral inhibition, shame, shyness, social anxiety.

# Introduction

Social anxiety disorder (SAD) or social phobia is a type of fear of being in social situations in which people have a constant fear of social evaluation in social situations and avoid these situations (Zha, et al., 2023). In order to further understand the role of etiology and maintenance factors of social anxiety, it seems necessary to have a theoretical framework that can be based on the role of biological, behavioral, cognitive and emotional factors. Accordingly, Creswell, et al. (2021) proposed a model that shows that in addition to relatively stable traits, the interaction of a person's cognitive and emotional processes with the situation is one of the important determining factors for explaining the behavior of a socially anxious person. Shyness and behavioral inhibition in the cognitive-behavioral model of social anxiety have been proposed as factors affecting this disorder in the research of Chubar, et al. (2023). The effects of negative emotions of anger, shame and depression on social anxiety (Al-Johani, et al. 2023). Considering the shortcomings of previous researches in examining the contribution of the etiology and maintenance factors of social anxiety in the form of an integrated model, the current research seeks to examine these hypotheses;

-Behavioral inhibition and shyness have a positive relationship with social anxiety.

-Behavioral inhibition and shyness have an indirect effect on social anxiety through the mediation of anger, shame and depression.

-Also, the proposed model has a good fit with the data of all students.

# Method

The current research was descriptive of the correlation type. The statistical population included all the students of Ahvaz Jundishapur University of Medical Sciences, 581 people were selected from 7 faculties by multistage cluster sampling method. The participants completed the research tools. Failure to fully complete the questionnaires, was the criteria for exiting the research. Data were analyzed using structural equation modeling using AMOS23 software.

# Tools

**Social Phobia Inventory (SPIN):** This 17 items scale was created by Connor, et al. (2000), has 3 subscales, the fear, avoidance, and physiological arousal, scored on a 5-option Likert scale. Its Cronbach's alpha coefficient reported between 0.78 to 0.89. In this research Cronbach's alpha of the scale was between 0.82 and 0.90.

**Revised Check and Buss Shyness Scale (ARCBS):** This 14 items scale was created by Cheek and Buss (1981), has 2 subscales, the Discomfort in social situations, Discomfort in dealing with strangers, scored on a 4-option Likert scale. Its Cronbach's alpha coefficient reported between 0.88 to 0.89. In this research Cronbach's alpha of the scale was between 0.87 and 0.90.

**Third Scale of Adult Self-Conscious Affection (TOSCA-3):** A 16-scenarios questionnaire introduced by Tangney, et al. (2000), which includes shame to Proneness, guilt to Proneness, Externalization, Detachment, Alpha pride, Beta pride subscales that scored on a 4-option Likert scale. Its Cronbach's alpha coefficient reported between 0.51 to 0.88. in this research Cronbach's alpha of the scale was between 0.71 and 0.79.

**Carver and White Behavioral Activation/ Inhibition System Scale (BAS/BIS):** This 24 items scale was created by Carver and white (1994), has 2 subscales, the Behavioral Inhibition System and Behavioral Activation System, scored on a 4-option Likert scale. Its Cronbach's alpha coefficient reported between 0.66 and 0.74. Cronbach's alpha of the scale was between 0.77 and 0.78 in this research.

**State-Trait Anger Expression Inventory-2 (STAXI-2):** STAXI has 57 items, scored on a 4-option Likert scale which has three sections: state of anger, attribute of anger, expression of anger and control of anger that introduced by Spielberger (1996). The Cronbach's alpha of all subscales is higher than 0.84. In present study Cronbach's alpha of the scale was 0.85

**Depression Anxiety Stress Scale-21 (DASS-21):** This 21 items scale was created by Lovibond and Lovibond (1995), has 3 subscales, the depression, anxiety and stress, scored on a 4-option Likert scale. Its Cronbach's alpha coefficient reported between 0.79 to 0.85. In present study Cronbach's alpha of the scale was 0.91.

# Results

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The results showed that the conceptual model presented for SAD has a good fit in medical students. As, can be seen in Figure1, indirect predictor variables (exception of anger) had effects on social anxiety(p<0.05). in other words, behavioral inhibition and shyness indirectly through the mediating variables of depression and shame (exception of anger) had effects on social anxiety.

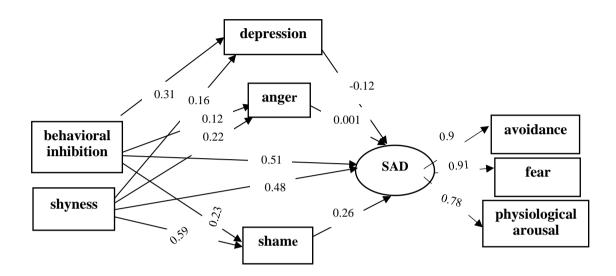


Figure 1. structural equation modeling.

## **Discussion and Conclusion**

According to the obtained results, it can be said that due to shame, depression and social anxiety, a person underestimates his communication skills compared to others, hence he uses behavioral-emotional inhibition as a protective behavior. Behavioral inhibition, shyness, shame and social anxiety have common psychological and social factors such as passivity and lack of assertiveness, which are organized in a hierarchical manner, they are seemingly distinct variables, they are latent factors related to have each other. Therefore, the results of the present study can support the assumptions of biopsychosocial treatment models of social anxiety. Since one of the goals of universities of medical sciences is to provide optimal health services, the present research can be effective in this field by presenting a model of factors students social anxiety. One of limitations of the present study was the focus of the research on the student sample in a university of medical sciences, which makes it difficult to generalize the results to the entire Iranian medical science student sample.

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## **Conflict of Interests**

The author declared no conflict of interest.



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