Predicting the Social Anxiety Based on Stress and Timidity in University Students

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Abstract

This research was carried out in order to predict the social anxiety based on the level of stress and timidity in students of Islamic Azad University of Boroujerd. The present research was fundamental in terms of purpose, and it was descriptive-correlation with the type of prediction in terms of method. The statistical sample of this research composed of two-hundred undergraduate and master students in Azad Islamic University of Boroujerd, and all of them participated in this study. The data were collected using social anxiety (SPIN_2000), Stofford's timidity and stress (DASS_21) questionnaires. The Pearson Correlation Coefficient and Multivariate Regression Analysis were applied to analyze the data by step-by-step method. Data Analysis showed that social anxiety is predictable based on stress and timidity and these two variables could predict twenty-six percent of variant variance of social anxiety. Research findings indicated the significance of stress and timidity in social anxiety. Most of the university students encounter different stressors and factors that cause their anxiety in social occasions to be appeared. Also, these findings can raise the importance and role of timidity in outbreak of social anxiety disorder to a great extent although it has not still been considered as a separate disorder.

Keywords: Stress, Social anxiety, Timidity, University Students

Introduction

During two past decades, social anxiety disorder has known as one of the most prevalent disorders of chronic psychiatry, and one of the most common anxiety disorders. Social anxiety disorder is excessive

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or unreasonable fear of some occasions in which people's behavior or operation may be scrutinized or evaluated (Wild, Clark, Ehlers, & McManus, 2008).

University students' social anxiety is also viewed as special problems such as low self-confidence, feeling shyness, having problems in relationships with roommates and peers, and feeling sadness in college, and this disorder is an important issue among the university students due to their social lives. Those people with social anxiety may have more negative images from their operations in social occasions that make them anxious (Vitasari, Muhammad Nubli, Herawan, Sinnaduari, 2015).

In general, those socially-anxious young people have weak social intercourse, and they cannot match themselves with the conditions rather than their peers, so they face more difficulties when they want to meet their adulthood needs and expectations. We must note that social anxiety is positively related to more decrease of life quality (Acarturk, Smit, de Graaf, van Straten, Ten Have, & Cuijpers, 2003). It has been said that in terms of the level of its outbreak, the social anxiety is one of the three common psychiatric disorders after basic depression and alcoholism (Booglez, Alden, Bidel, Pinn & Clark, Skayn, Vankan, 2010).

The resent epidemiology studies have shown that the outbreak of social anxiety in public population ranges from 2.4 through 16 percent in lifetime; whereas, it is more common in women population. Kimberl (2008); Nil Vadelman (2003); Lafono, Bidel, & Dalrimpel, Galyoono, Herabooski, Chelminski, & Viong (2010) state that socially anxious people have low economical efficiency in their workplace rather than the healthy people. Some of the cognitive models have evaluated the etiology and pathology of social anxiety. Barlow & Hofman's etiological model (2002) addresses the combination of negative events in life and direct evaluative-social experiences of social anxiety disorder's pathology. In Clark & Wells' model (1997), people's incapability and inefficiency for encountering the social occasions can stimulate cognitive, physiological, and behavioral symptoms of social anxiety disorder. Moreover, this model considers that fear of negative evaluation in operational situations as the main core of social anxiety.

Since the social anxiety was introduced as a disorder in DSM-III, the authorities have hypothesized about the relationship between

social anxiety and timidity. From the beginning, the social anxiety was defined as a clinical disorder; whereas, timidity was considered as a non-specialized term on which there are few definitions (Heiser, Turner, & Beidel, 2003). Timidity is a term that the more we deal with it, the more variety we view in it. Therefore, before we can even thick of how we can check it, we should have more knowledge about the theme of timidity. Oxford English Dictionary states that the first recorded application of this word has been in Anglo-Saxon poetry that has been composed and versified about 1000 A.D. In that poetry, the mentioned meanings for this word are "is simply frightened" and "being shy" that indicate the characteristic of a person who doesn't have a close relationship with others because of his/her fear, caution, and uncertainty. A shy person consciously hates confronting certain people or things or doing some activities with them, and he/she is conservative in his/her speech and behavior. The timid person hates expressing him/herself, and he is intangibly coward. Moreover, the timid person may be secluded and distrustful, or he/she may have a questionable and suspicious character. Webster Dictionary presents a definition for timidity as "being sad in presence of others" (Ghiasizadeh, 2013). In fact, nowadays many people realize the attraction of living alone in a remote island again. However, even in some degrees of this small part of timidity continuum, there are some people who are able to communicate with others whenever they need; or there are some people who find some difficulties in establishing the mutual action due to their disability to advance the simple conversation, but they can communicate with a special group of people or celebrate a formal party with perfect calmness (Shams Alizadeh, Kakabraie, Ahmadian, & Yousefi, 2013).

The researches have presented some cases in which timidity associates with social anxiety disorder, and meanwhile they consider timidity as the more expanded feature than the social anxiety disorder (for example, Beidel, Marino, & Scharfstein, 2010). "Erozkan" (2009, quoted from Borna Vasvari, 1398) found that timidity can predict the social anxiety. Pozzulo, Cerscini, Lemieux, & Tafic (quoted from Taheri, Farafti, & Gharaie, 2009) believe that the timid people fear of negative evaluation, and this characteristic is also viewed in people with social anxiety. However, the relationship between timidity and social anxiety disorder is not known, and few studies performed in this context confirm this claim (Chavira, Stein, & Malcarne, 2002).

Stress is another variable that has a positive relationship with social anxiety. Stress is physical, mental, and emotional reactions that are experienced as a result of changes and needs of a person's life. These changes can be great and small, and people respond these changes differently. Positive stress can have a motivational aspect, while negative stress can be created when these changes and needs defeat the person (Noohi, Abdolkarimian, & Rahimi, 2011). Stress can happen in every age, race or sex, and even in every social class or position. Briefly, stress is a "public destruction", and it follows us wherever we go including street, workplace, classroom, exam time, marriage time, birth of child, disease, hospital, and even at night privacy (Noohi, Abdolkarimian, & Rahimi, 2011).

It is important how stress can be managed whenever we confront different social problems and positions. "Artemios, Angeli Key, & Alexoploos" (2012) concluded that the way of managing stress and anxiety has been a significant relationship with people's self-asserting and self-controlling during their eight-week research in two turns. In other words, the more a person can control his/her stress and anxiety, and speaks about the way of its control, and takes more encouraging feedback in interacting with consultants and nurses, the better and more suitable he/she can act towards the natural reactions of stress and anxiety (such as aggressiveness, worry and impatience, showing some symptoms and tics) rather than others as essentially it doesn't aim at preventing stress and anxiety.

Kimberli et al., (2015) conceptualized four approaches for understanding the social anxiety; the first approach is a pattern called defect of skill that social anxiety is described as a result of the lack of individual skills for managing threatening situations (Witasari et at., 2015). The contemporary cognitive patterns of social anxiety have also hypothesized that those people suffering from the social anxiety know the social situations as harmful situations. These people believe that their behavior will socially result in disastrous consequences (Hofman & Loh, 2015).

Stress is created in a relationship between a person and environment, and the person evaluates this relationship so stressful, and he/she thinks that he/she is not able to control the situation. Therefore, this situation disrupts his/her health and calmness, and on the study of social anxiety treatment it has been said that those treatments with the most effectiveness on the patients suffering from

the social anxiety are different kinds of behavioral therapy techniques, and their main axis is encountering with (stressful) scary agent (Salajeghe & Bakhshani, 2014). This indicates the significance of stressful factors in social anxiety.

Also, as many researches such as a research carried out by Gatchel, Blum, & Krantz (1989) have shown that almost every disease is affected by stress and stressful events and lifestyle; therefore, it is necessary to study an important role that stress can play in social anxiety (quoted from Salajeghe & Bakhshani, 2014). This study has been conducted to answer the question whether stress and timidity can predict the social anxiety.

Method

The present research is fundamental in terms of purpose, and it is descriptive-prediction in terms of method. The statistical sample of this research included the undergraduate and graduate students of Islamic Azad University of Boroujerd who studied in summer semester in academic year 2015-2016. Considering the research methodology that is descriptive-correlational, all the students (two-hundred students) were selected to participate in the study. The questionnaires known as "social anxiety" by "Kanoor, Davidson, & Cherchil" (2000), "timidity scale" by "Pinard" (1981), "the norm of Iranian version" by "Derakhshani, Hosseinian, & Yazdi" (2006), and stress scale from depression, anxiety, and stress questionnaire (Dass 21) have been used to collect data.

The social anxiety questionnaire with seventeen articles including three components called "avoidance" (seven articles), "fear" (six articles), and "physiological discomfort" (four articles) is scored by Likert spectrum ranging from zero for "never" option to four for "infinite" option. In main version, the final coefficients have been reported as desirable factors between 0.79 through 0.89 for the components, and 0.94 for the whole scale, and its validity by convergent and factor analysis methods. In the Iranian version (Hassanvand, Amouzade, Shaieri, & Asghari Moghaddam, 2010), the final coefficient has been reported for the whole test and for scales equal to 0.84, and 0.74 through 0.75, respectively. In this research, total final coefficient equals 0.82.

Timidity scale of the main version with forty-four questions by "Pinard" (1981), and its Iranian version by "Derakhshani, Hosseinian,

& Yazdi" (2006) with four-points Likert scale have been used. In a research conducted by "Derakhshani et al.," (2006) the Coronbach's Alpha has been reported 0.84 because of internal similarity, and in this research this is achieved equal to 0.89.

Depression, anxiety, and stress measure (Dass21) was made by "Lavibvand" (1995) as two short (with 21 articles) and long (with 42 articles) forms, and a form consisting of 21 questions was normalized in Iran by "Sahebi et al.," (2005) study in which the short form consisting of 21 questions by "Sahebi et al.," (1995) was applied. This four-point Likert scale is scored as zero for "it never applies to me" statement and three scores for "it completely applies to me" statement. In this research, only stress was applied by seven articles that its constancy coefficient was obtained by internal similarity method (Coronbach's Alpha).

Results

Descriptive indices of measurement variables have been presented in Table 1.

Table 1: Descriptive Statistics of Timidity and Stress Variables and the Level of Social Anxiety and Its Subscales in University Students

Variable	Number	Average	Middle	Exponent	Standard Deviation	Range	Min	Max
Social Anxiety	200	41.34	41	39	7.97	50	17	67
Fear	200	14.73	15	16	3.75	18	6	24
Avoidance	200	16.87	16	16	2.21	22	7	28
Physiological Discomfort	200	9.73	10	9	2.66	12	4	16
Timidity	200	95.97	94	92	10.85	67	64	121
Stress	200	12.11	12	14	3.56	18	3	21

Table 1 indicates the descriptive statistics' indices of social anxiety variables and its subscales, timidity and stress, in university students. As you see in table, the average of social anxiety in students equals 41.34 that is the average level of social anxiety with regard to social anxiety scale (SPIN). The maximum amount of average among the students in social anxiety subscales is related to avoidance (16.87) followed by fear (14.73) and physiological discomfort (9.73),

respectively. The average score of timidity and stress equals 95.97 and 12.11, respectively.

As reaching the prediction requires the computation of correlation coefficients among variables, and Pearson correlation requires establishing the normality hypothesis among the data. At first, this hypothesis was investigated by using Kolmogorov-Smirnov test, and the results showed that this hypothesis applies for criterion variable.

Therefore, the correlation coefficients among variables were calculated that its matrix has been presented in Table 2 as follows, and the data created in this table indicate the significant relationship between prediction variables and criterion at the level of 0.01; however, the correlation between two variables of prediction is not significant.

Table 2. The Matrix of Variables Correlation

	1	2	3
Stress (1)	1		
Timidity (2)	0.10	1	
Social Anxiety (3)	0.32**	0.42**	1

$P** < 0.01$

Therefore, by setting up the hypotheses and the obtained correlation matrix, the conditions were provided for accessing the prediction equation of social anxiety. To this end, the Multivariate Regression Analysis was applied by using step-by-step method, and its results are given in Table 3. Meanwhile, after finding the significance of Regression Analysis (F Statistics) in analysis steps, the prediction coefficients were calculated, and the results indicated that in first step timidity alone played its important role as much as 18 percent in predicting the social anxiety. In the second step, by introducing stress the rate of prediction reaches twenty-six percent ($p < 0.01$). That means that 26 percent of total variance of students' social anxiety is explained by timidity and stress ($p < 0.01$). Also, Beta coefficients for showing the main role of each variable indicate that in the first grade, both timidity (0.40) and stress (0.28) have the ability for students' social anxiety positively.

Table 3: The results of multivariate regression analysis by using step-by-step method for predicting the university students' social anxiety by timidity and stress

Steps	Variables	Summary of Model				β	T	P
		R	R^2	F	P			
First Step	Timidity	0.43	0.18	28.69	0.001	0.43	5.6*	0.001
Second Step	Timidity stress	0.51	0.26	22.18	0.001	0.40 0.28	5.23** 3.60**	0.001 0.001

Regarding the obtained regression coefficients (β), the equivalent of the prediction of university students' social anxiety has been achieved based on timidity and stress variables as follows:

Social Anxiety – stress (20%) + timidity (40%)

Conclusion and Discussion

The Multivariate Regression Analysis by using step-by-step method was applied to study the prediction of university students' social anxiety timidity and stress variables. The results of multivariate regression analysis by step-by-step method showed that in the first step, timidity is the strong predictable factor of social anxiety, so that timidity alone explains 18% of total variance of social anxiety. By adding stress, these two variables totally explain twenty-six percent of total variance of social anxiety. Timidity and stress correlate with social anxiety as much as 0.51 that means that regarding 99% of certainty, it can be said that twenty-six percent of total variance of students' social anxiety is explained by timidity and stress (p < 0.01).

Based on the findings obtained from the present research, timidity variable is the best predictable factor for students' social anxiety. In the similar research in abroad, Forter et al., (2011) have studied the relationship between these two variables, timidity and stress, and social anxiety among a hotel staffs, and two-hundred people were selected among all of the hotel staffs as a sample. They concluded that there is a relationship between these two variables.

Other findings of this research indicate the significance of stress and timidity on social anxiety. Most university students are facing stressors and different factors that make them anxious in social situations, such as being away from the family, lack of social support, lack of sleep, material problems, changes in sanitary habits, emotional and academic changes, educational stress, working stress,

environment changing, leaving the place to which they accustom, changing the traditional habits by encountering different cultures, and even in some places racial behaviors and harms by the region's inhabitants. Also, these findings can represent the significance and role of timidity in outbreak of social anxiety disorder that it has not yet considered as a virtual disorder. With regard to those findings, a process can be considered during the outbreak of social anxiety disorder in which some percent of timid people gradually exhibit the symptoms of social anxiety due to the special conditions, and probably after a while their mere timidity will change into the social anxiety disorder.

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