The Relationship Between State-Trait Anxiety and Students' Sense of Social Self-Efficacy

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Abstract: This study investigates the relationship between state-trait anxiety and the students' sense of social self- efficacy on the basis of correlation. The statistical population consists of 750 people who are all the students in personality psychology in Psychology Faculty of Islamic Azad University, Karaj Branch and the sampling is done on the basis of stratified randomselection according to sample size Morgan's table who are 100 people (50 girls and 50 boys). The results revealed that there is significant negative difference between state-trait anxiety and the students' sense of self- efficacy in 95 % confidence level. In addition, in 95% confidence level, there are only significant differences in state anxiety between boys and girls; boys' state anxiety average is more than girls. Also, there is no significant difference between boys and girls with respect to the sense of social self-efficacy.

Key words: State-Trait Anxiety · Social Self-efficacy · Students · Psychology · Self-Confidence · Stress

INTRODUCTION

Anxiety is seen as a very uncomfortable feeling which is often vague and is associated with one or more physical feelings such as feeling an empty heart, palpitations, headache and sweating [1]. In addition, stress and anxiety can occur in response to what that has threatened the self-confidence or by the appearance of a situation in which the person feels pressure due to not being able to do something that is beyond his abilities [2].

The Theory of state-Trait Anxiety [3] focuses on interaction between personal variable (Trait anxiety) and situational variables (state anxiety) [4]. By Trait anxiety, it means that this type of anxiety is seen as part of the person' traits and the person is anxious without paying attention to the situation and by state anxiety, it means that the person is anxious due to the internal or external situations. Reference [4] has defined Trait anxiety as an emotional reaction. "Theunpleasant feeling of anxiety is accompanied with tensions and unhappiness that is associated with the unconscious arousal activities of the automatic nerving system" [5]. He also regards trait anxiety as the motivation or the background of the behavior that prepares the person to show his reaction in response to many situations that are not dangerous and the person becomes anxious in response to those situations. Anxiety in general is a factor which disrupts the person's physical and psychological balance and subsequently give raise to some psychosomatic and psychological problems which in turn decreases the individual's performance in different aspects of his life such as education, occupation, social ones [6].

According to the social cognitive theory of Bandura [7], the perceived inefficiency is essentially in response to potential threats that can cause anxiety and the avoidance behavior is triggered. As reference [7] states, the self-efficacy are seen as one's trust on his abilities in organizing and performing some specific and required activities in order to control different situations [8].

"The social self-efficacy" is one's trust on his abilities to succeed in specific social positions. According to reference [8], this belief can be the determinant of how one thinks feels or behaves. The sense of social self-efficacy, in fact, is one's beliefs of his abilities which

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in turn providedetermined levels of beliefs to influence the events that have affected people's life. The sense of social self-efficacy is an important factor in knowing one's anxieties because increasing the anxiety not only decreases the individual's efficiency in his social and personal environment but also by interfering in the sense of self-efficacy, it creates a vicious cycle in which anxiety leads to the feelings of inferiority, lack of self-efficacy and etc. [8].

Reference [7] believes that a significant and determinative factor in negative emotions is the amount or degrees of personal self-efficacy. Those who have a high stress mostly feel that they don't have the specific skills, abilities or the required features for interpersonal behaviors or they don't know how to react to threatening situations and subsequently their expectance of being successful in the society is lower than others. According to [7] the inability of the perceived one for affecting the events and the social condition significantly influences the individual's life and it can lead to the anxiety. In other words when one sees himself incapable in response to threatening events, he becomes anxious and when one becomes anxious he feels inefficient in reaction to threatening events. In what follows some researches in this regard are investigated.

Reference [9] in investigating the different methods of facing stress and its relation with the students' sense of self-efficacy and self-esteem revealed that there is a positive significant relation between the tracking methods of stress, sense of self-efficacy and self-esteem.

Ghaderi and Salehi [10] in their research investigated the level of self-efficacy, depression and anxiety between accounting and management students in Iran and they showed that the self-efficacy of accounting students is higher than management students. Furthermore, in their study, they focused on the relationships between self-efficacy, depression, anxiety and stress. They found that self-efficacy is negatively associated with depression. Also, the results of the study highlighted the relationship between self-efficacy and anxiety and revealed that the higher level of self-efficacy will reduce the level of anxiety and subsequently improve the performance. In addition, in their research, they got the result that the high degree of stress is an obstacle to the individuals' well being and there is a negative correlation between high level of self-efficacy and stress.

Reference [11] also investigated the relationship between identity styles and the students' imaginary self-efficacy showed that there is a reverse and significant relationship between confused identity styles and sense

of self-efficacy and between the soon formed identity style and self-efficacy. In addition, there is a significant difference between girls and boys in self-efficacy.

Reference [12] in his investigation demonstrates that there is a direct and significant relationship between self-efficacy, social support and valid health promotion of the students.

Reference [13], in addition, in his study, investigates the relationship between self-efficacy and the students' motivation for progress and the results of his study showed that there is a positive and significant relationship between the sense of self-efficacy and the motivation for educational progress.

In their research, Rahman *et al*. [14], which was investigating the psychological aspects of online discussion, also noted that there is a strong link between self-efficacy and anxiety. In fact students who feel ineffective and with the low level of self-efficacy will do nothing and they are only anxious at the thought of how they will manage, which in turn can be an obstacle for them to get involved in learning activities. So then, novel learning activities such as online discussion can motivate students with the lack of self-efficacy to take part in learning activities and can raise their self-efficacy by giving them opportunities to prepare themselves before having discussion online which reduces their anxiety and subsequently increase their self-efficacy which is not easily possible in face-to face interaction.

Reference [15] in his investigation also revealed that there is a significant relationship between self-efficacy and stress and anxiety.

In his research, Akin [16] investigated the relationship between self-efficacy, achievement goals and depression, anxiety and stress by the use of structural equation modeling and found that self-efficacy affects the achievement goals directly and depression, anxiety and stress indirectly. In fact, he revealed that achievement goals serve as a critical mediator in linking self-efficacy and depression, anxiety and stress.

Reference [8] in his studies proved that the sense of self-efficacy is affected by the following seven factors: existing capabilities, perceiving the degree of task difficulty, effort, the required external assistance, the conditions in which the task should be done, the patterns of success and failure and how to organize and remodel the experiences [17].

Orhan [18] studied the effect of the blended learning environment- a combination of internet-based computer assisted learning environment with those of peer learning- on learners' self-efficacy for learning and performance

and self-regulated learning strategies and got the result that a blended learning environment and using some self-regulation strategies can affect students' self-efficacy positively and improve their perceptions of self-efficacy for learning and performance.

Reference [19] in his research also demonstrates that empathic sensitivity can be seen as an important anticipant for self-efficacy and the more the person is emotionally sensitive, the better he can increase his sense of self-efficacy.

Reference [20] proved that performances that are very successful have features such as implications, consistency, universality and generality and in turn they affect the sense of self-efficacy and the performances which are less successful are generally one dimensional and they have less and controllable impact on the sense of self-efficacy.

In another study, Ebrahimi [21] attempted to investigate the effective factors in social participation of females and in her results; she also noted that the level of self-efficacy, as one of the important factors, can improve the women's level of social and political participation. Regarding what has been mentioned, this study is conducted to investigate the relationship between state-trait anxiety and the social sense of self-efficacy in students.

MATERIALS AND METHODS

This study is conducted on the basis of correlation. The population are 750 people who are all the students of personality psychology in psychology department in Karaj Azad University and the sampling is done on the basis of stratified random selection according to sample size Morgan's table who are 100 people (50 girls and 50 boys). The instruments for data collection include two types of questionnaires which are as what follows:

- Test State-Trait anxiety Inventory (STAI): This questionnaire contains 40 questions. The questions from 1 to 20 - State Anxiety (Obvious) - have four options of 'No, Sometimes, Generally, Very High' and questions from 21 to 40 are - Trait Anxiety (Hidden) - have four options of ' Almost Never, Sometimes, Most of the time, Almost Always'. The reliability of this test in Trait Anxiety is also calculated on the basis of Cronbach's Alpha which is 0. 90 and in State Anxiety the obtained reliability is 0. 92.

- The self-efficacy Test for social situation scale (SESS): This scale measures the three components of self-efficacy as what follows: 1) self-efficacy for coping skills (Items 1-3) and 2) self-efficacy for cognitive control (Items 4-6) and 3) self-efficacy for emotional control (Items 9-7).

Reference [6] has calculated the reliability and subscales of this questionnaire on the basis of Cronbach's Alpha as 0.84, 0.70, 0.62 and 0.60. In this study, Cronbach's Alpha Coefficient for the social self-efficacy scale and its subscales are 0.74, 0.72, 0.62 and 0.61. In addition, the validity of both questionnaires is confirmed by 30 experts.

RESULTS AND DISCUSSION

In order to assess the relationship between State-Trait Anxiety and the sense of social self-efficacy, the statistical indicators, correlation and regression are applied and for assessing the differences between the results in boys and girls, T-test has been used.

Table (1) illustrates that, regression analysis between boys and girls in state anxiety and the subscales of sense of social self-efficacy which is the only scale which has been calculated with respect to the regression coefficient revealed that coping skills significantly affect the anxiety in girls. Also, the scale for cognitive skills which has been calculated with respect to regression coefficient significantly affects the anxiety in boys.

In addition, the regression analysis between boys and girls in trait anxiety and the subscales of sense of social self-efficacy which is the only scale which has been calculated with respect to the regression coefficient revealed that coping skills significantly affect the trait anxiety in girls and the scale for cognitive skills which has been calculated with respect to regression coefficient significantly affect the trait anxiety in boys.

The data in Table (2) says that there is a significant and negative relationship between the anxiety and the general scale of sense of social self-efficacy in the whole sample.

Table (3) demonstrates that the absolute value of t in the same condition of the variance is smaller than the value of t in the table which is 0/05 with 98 degree of freedom. Therefore, the null hypothesis is confirmed. In other words, there is no significant difference between the compared averages.

Table 1: Statistical analysis of regression for State-Trait anxiety and the sense of social self-efficacy in boys and girls

State Anxiety - Boys and Girls	Regression	Nonstandard Regression coefficients B		Standard Deviation SE		Standard Regression Coefficients Beta		t		Significance level	
		Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys
	Constant	71/71	30/71	72/6	19/7			66/10	91/9	0001/0	0001/0
	Emotional Skills	31/0-	21/0-	28/0	30/0	15/0-	10/0-	07/1	71/0	28/0	48/0
	Cognitive Skills	19/0-	56/0-	31/0	26/0	09/0-	29/0-	62/0	14/2	53/0	04/0
	Coping Skills	91/0-	46/0-	38/0	31/0	39/0-	22/0-	38/2	51/1	02/0	14/0
Trait Anxiety-Boys and Girls	Constant	00/76	71/66	53/7	79/6			08/10	81/9	0001/0	0001/0
	Emotional Skills	02/0-	10/0-	32/0	28/0	008/0-	05/0-	05/0	35/0	95/0	72/0
	Cognitive Skills	37/0-	50/0-	35/0	24/0	15/0-	27/0-	05/1	04/2	30/0	05/0
	Coping Skills	28/1-	60/0-	42/0	29/0	48/0-	29/0-	00/3	07/2	004/0	04/0

Table 2: Correlations between anxiety and social self-efficacy in boys and girls

Variables		Groups	Statistical Indicator		
			r	Degrees of Freedom	Significance level
General Feeling of Anxiety	Social Sense of Self-efficacy	Girls	49/0-**	49	0001/0
		Boys	44/0-**	49	001/0
General Feeling of Anxiety	Social Sense of Self-efficacy	The Whole Sample	46/0-**	99	0001/0

** $P \leq 0/01$

Table 3: T-test to compare boys and girls in the sense of social self-efficacy variable

	Groups	The Average	Standard Deviation	Statistical Indicator				
				Levene's test				
				F	Significance Level	Degrees of Freedom	t	Significance Level
Emotional Skills	Girls	20.1200	5.26304	002/0	96/0	98	50/0	62/0
	Boys	19.6000	5.13094					
Cognitive Skills	Girls	16.4800	4.77340	78/0	37/0	98	75/0	45/0
	Boys	17.2600	5.59449					
Coping Skills	Girls	20.1800	4.52517	41/0	52/0	98	37/0	71/0
	Boys	19.8200	5.12971					
General Scale for Sense of Social Self-efficacy	Girls	43.3267	8.69344	04/0	83/0	98	08/0	93/0
	Boys	43.4667	9.13591					

Table 4: T-test to compare boys and girls in anxiety variable

	Groups	The Average	Standard Deviation	Statistical Indicator				
				Levene's test				
				F	Significance Level	Degrees of Freedom	t	Significance Level
State Anxiety	Girls	44.0000	10.40212	06/0	79/0	98	94/1	05/0
	Boys	48.1200	10.79614					
Trait Anxiety	Girls	43.6400	12.01998	17/1	28/0	98	18/0	86/0
	Boys	44.0400	10.32326					
Anxiety The general scale	Girls	65.8200	15.84548	93/0	76/0	98	39/1	17/0

Table (4) shows that the absolute value of t in the same conditions of the variance is smaller than the t in the table which is at the level of 0/05 with 98 degree of freedom. Subsequently, there is only difference in the subscale of state anxiety between boys and girls (0.05) and the hypothesis is not confirmed. In other words, with 95 % of certainty, it can be said that there is only difference between boys and girls in state anxiety and the average of state anxiety in boys is more than girls.

CONCLUSION

The obtained results in this study showed that there is a negative and significant relationship between anxiety and the sense of social self-efficacy. Furthermore, there is a significant difference between boys and girls with respect to state anxiety in a way that the average of state anxiety in boys is more that girls. However, there is not any significant difference between boys and girls in the sense of social self-efficacy. The results in previous studies such as [13] revealed that there is a positive and significant relationship between the sense of self-efficacy and the motivation for improvement. Reference [9] also showed that there is a positive significant relation between the tracking methods of stress, sense of self-efficacy and self-esteem. Reference [12], moreover, demonstrated that there is a direct and significant relationship between self-efficacy, social support and valid health promotion of the students. Furthermore, [15] proved that there is a significant relationship between self-efficacy and stress and anxiety. Chen [19] in his research also demonstrates that empathic sensitivity can be seen as an important anticipant for self-efficacy and the more the person is emotionally sensitive, the better he can increase his sense of self-efficacy. Finally, Ghaderi [10], in their study on the relationship between self-efficacy and anxiety and revealed that the higher level of self-efficacy will reduce the level of anxiety and subsequently improve the performance and they got the result that the high degree of stress is an obstacle to the individuals' well being and there is a negative correlation between high level of self-efficacy and stress. Therefore, it can be seen that the results of this study is consistent with the results of the previous studies.

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