

## The Effect of Climbing Community Activities as a Leisure on University Students' Social Anxiety

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**ABSTRACT** In this study, the effect of some of the recreational activities of university students participating in extra-curricular time on their levels of social anxiety was examined. In addition, it was examined whether there is an effect of gender difference on the results of participation. The study group consisted of thirty volunteer students. The data were collected by using the Adolescents Social Anxiety Scale. The subjects climbed on artificial wall and the real rock surfaces for two months. As a result of the study, it was observed that the subjects in the climbing community as a free time activity influenced social anxiety levels of students in a statistically significant positive way ( $p < 0.05$ ). Furthermore, it was observed that gender difference had no effect on the effectiveness of education and the outcome of education ( $p > 0.05$ ).

### INTRODUCTION

Anxiety is the response of an individual against insecurity, instability and conflict shaped by the idea of encountering difficulties that she/he has/had periodically in life and will have in future. It can be said that one of the feelings a human has during his/her interpersonal relationships is anxiety experienced in many cases. Since anxiety is one of the conditions that would endanger an individual's mental structure, it also affects the communication formats of human as a social entity (Kaya 2001). Anxiety arising especially in social environments is called social anxiety. It is stated that the symptoms of social anxiety in individuals include the fear of flushing, sweating, tremor of the hands, doing something wrong to humiliate himself or herself while sitting, speaking or doing anything within the community, and the individuals having this fear avoid getting into the community. Additionally, people having this fear find various excuses in order not to get into the society due to the fear that their anxiety symptoms would be noticed by everyone in the community (Ozturk 1997). According to Beck and Emery (1985), the feature differentiating social anxiety from other anxiety forms is whether there is a possibility of interpersonal evaluation or not at imaginary or real environments. For this reason, social anxiety can be referred to as "evaluation anxiety". Erkan (2002) stated that social anxiety is not only related with how a person is perceived and evaluated by others but also related with the existence of evaluation probability which causes it.

Social phobia is defined as the situation in which a person continually fears to be judged by others in multiple cases and fears to behave in a way that would lead to being humiliated, shamed and ridiculed among others. People with social phobia have an extreme fear of being evaluated negatively and then humiliated in social environments or in situations that requires performance. In those fearing environments, physical symptoms such as flushing, palpitations, sweating and tremors occurs with these people having tendency of excessive self-awareness and self-criticism (Dilbaz 1997). It is remarkable that over-anxiety on social evaluation had not been sufficiently considered either by society or psychology and psychiatry before 1990s (Hudson and Rapee 2000) and it will avoid developing adequate and positive interpersonal relationships (Greca 2001). Among the reasons of neglecting this issue especially in children and adolescents, the following can be considered: Children with social phobia don't harm others with disruptive behaviors like the children showing outward behavior problems, they prefer staying back and generally remain silent in social environments which is approved socially as a sign of "sobriety" and individuals may refrain from seeking help due to their fear or shyness and being negatively evaluated that naturally exist in social anxiety (Masie-Warner et al. 2007). Considering this process, all activities reducing social anxiety become important for university students, however, it doesn't seem possible with the course contents being used in formal educa-

tion. Therefore, the issue on how and what kind of activities students will use their extracurricular times for is gaining importance.

Kir (2007) pointed out that free time should help the individual development as well as social welfare and development; however students are used to spending their extracurricular times passively which is far from contributing an increase to the welfare of the country. In their study related with the approach and habits of university students on how to use their free time, Terzioğlu and Yazıcı (2003) reported that students have lots of free time but they are not able to use it efficiently, all students consider free time and sport as a means of physical and mental development. In a similar study, Sabbag and Aksoy (2011) declared that university students and public employees have enough free time however they have difficulties using their free time due to a shortage of amenities and facilities.

A study of Ardahan and Lapa (2011) stated that individuals participate in outdoor recreation activities in order to integrate with nature, to affect their health positively, to get rid of boredom and stress relief, to get rid of monotony, to relax, to increase efficiency at work, to be with friends, to learn new skills and use them, to get into a new environment, get rid of loneliness, and so on. Regarding this fact, it is really important to have university students create different activities via the communities. This type of events/activities should be conducted again by student communities and used as ancillary elements contributing to personal development beside formal education of students who don't have any idea on how and where to use their extracurricular time.

Climbing sport emerges as a branch patterning /including artificial wall climbing, rock climbing and camping together and participants have different experiences as a result of this deal. Sheard and Golby (2006) stated that participating in outdoor activities such as rock climbing, canoeing, camp life, and orienteering leads to the development of desired character traits and underlined that participants both individual and group also get benefits while challenging difficulties encountered during the trainings.

Bandura (1977) pointed out that people will develop private beliefs on their coping skills based on their experiences throughout their lifetime (Kolb 1984). It is considered that students who will have to face challenges with the diffi-

culties in Camp life and artificial or natural race-courses among the activities said above will learn from their own experiences and these experiences will provide a positive contribution to their lives. It is reported that different experiences in life will create opportunities for participants to improve their leadership qualities as well as providing positive development of social patterns such as problem solving, communication, trust and locus of control (Celebi and Ozen 2004). This set of activities which includes learning from one's experiences and using these experiences efficiently and safely are called experiential learning method (Kolb 1984).

It is indicated that adventure-based training and experiences of participants has a very old epistemological origin referring to studies extending to BC. Climbing activities give participants the chance of facing their personal fears (Martin 2001). Horney has differentiated fear and anxiety by stating that fear emerges against a real danger whereas anxiety raises against a situation perceived as hazardous (Yanbasti 1996). Regarding this perspective, it is indicated that there is no real threat among experiential learning activities and participants will experience personal development by going out of their comfort zone via the perceived risk factor (Luckner and Nadler 1997). Additionally, climbing is an activity that help us to discover personal differences and limits, and it is mostly considered that there are more physical challenges, however climbing will help us to break through the mental barriers. Due to the high sense of excitement, active participation is extremely high, which is remembered even after a long time and it contains bouldering activities (short-rock work) eliminating injury risk by supporting or leader climbing which requires various safety systems (Moote and Wodarski 1997). In their studies, Priest and Gass (2005) listed the developments that emerges in experiential learning as a whole and in society and group: increase in collaboration, advanced communication skills, high confidence to others, increase in shared-decision making process, generating new ways of resolving conflicts, an increase in problem-solving skills. Literature in the field of outdoor education has also shared the positive outcomes of outdoor education, including academic, physical, social, and emotional well-being (Quay et al. 2000; Fiskum and Jacobsen 2013; Harun 2014). It is emphasized that positive changes occur in participants by introducing

them to adventure activities designed to encourage self-discovery and character building (Wang et al. 2006).

By considering all the issues mentioned above, achievements that will be gained during the climbing activities in which the participants are actively involved and well-experienced are considered to be the factors reducing social anxiety.

### METHODOLOGY

In this research, sectioning method among the general screening models was used and the data were collected by survey method. The research sample is same with the study population covering the volunteers and 30 volunteer students (17 males, 13 females) of our university. Before starting the research, a written consent saying that they are all volunteers was taken from all participants. For two months (two days in weekdays and one day at weekend), rock climbing was practiced by the group of participants on artificial walls and real rock surfaces recreatively. Regarding their level, the participants climbed in groups, faced with a totally controlled risk under the supervision of an expert climber. The participants were asked to fill questionnaires before and after the program.

#### Data Collection Instrument

For collection of data, Social Anxiety for Adolescents (SAS-A) which is known as SASC-R (Social Anxiety Scale for Children- Revised) consisting of 22 items and adapted by Aydin and Tekinsav-Sutcu (2007) into Turkish was used. In the Turkish adaptation, the overall scale items were 18, the remaining 4 items were composed of other items selected from different subjects such as "I like reading book", "I enjoy doing sports" and so on. (2,7,11 and 16. items). SAS-A is composed of three subscales including 18 items.

In order to study the validity in scale adapting, the principal components factor analysis was applied according to varimax rotation. As a result of the structural factor analysis, there are three factors found explaining 48 percent of the total variance. These three factors are Fear of Negative Evaluation (FNE), General Social Avoidance and Distress (S-SAD) and the Social Avoidance and Distress in New Situations (Y-SAD), respectively. In responding to the scale, 5-points rating in Likert style (Never, Rarely, Sometimes,

Usually, Always) was prepared and used, and then expressed with values ranging from 1 to 5. Those who participated in the study were asked to mark the specified option showing the intensity of emotion indicated in the items. The higher the scores obtained from the scale, the higher the level of social anxiety.

In their adaptation study, Aydin and Tekinsav-Sutcu (2007) calculated Cronbach Alfa internal consistency coefficients for the whole scale and sub-dimensions in order to determine the reliability level of the scale. Reliability coefficients were found as 0.88 for the whole scale; 0.83 for FNE, 0.68 for S-SAD and 0.71 for Y-SAD.

#### Analysis of Data

The arithmetic mean and standard deviations of all values were taken. For the differences between the data, Mann Whitney U test was applied for gender variable and dependent-t test was used to find out the difference between pre-test and post-test. SPSS software program was used for all statistical analysis and their significance was tested at 0.05 level.

### RESULTS

In this part, statistics have been given according to the questionnaire results conducted before and after all activities in which students participated recreatively within the scope of this study.

Considering Table 1 in terms of pre-test and post-test points, there was a statistically significant difference found in sub-dimensions and total scores of Fear of Negative Evaluation and Social Avoidance and Distress in New Situations. Considering the arithmetic average, it was seen that there is a positive development in terms of the specified sub-dimensions and total scores (Table 1).

In terms of gender differences as analyzed in Table 2, there was no statistically significant difference in all sub-dimensions and total scores and also the difference in differences. Considering arithmetic average, it is observed that in some sub-dimensions, males perceive themselves better whereas in some sub-dimensions, females perceive themselves better; however, they had quite similar points in all sub-dimensions and total scores (Table 2).

**Table 1: t-test table to compare total scores belonging to social anxiety scale pre-and post-test of climbing community activities among the leisure time activities**

<i>Sub-scales of the social anxiety scale for adolescents</i>	<i>Pre-test Mean±SD n:30</i>	<i>Post-test Mean±SD n:30</i>	<i>t</i>
Fear of negative evaluation	25.96±2.31	24.06±2.04	4.59*
Social avoidance and distress in general situations	18.40±3.63	17.90±1.88	.72
Social avoidance and distress in new situations	24.30±2.89	20.73±2.18	6.55*
Total scores	68.16±6.81	65.10±4.45	3.44*

\*p&lt;0.05

**Table 2: Mann-Whitney U table for gender variable**

<i>Sub-scales of the social anxiety scale for adolescents</i>		<i>Pre-test</i>		<i>Post-test</i>		<i>Difference</i>
		<i>Male N:17</i>	<i>Female N:13</i>	<i>Male N:17</i>	<i>Female N:13</i>	
Fear of negative evaluation	Mean±SD	25.64±2.02	26.38±2.66	24.11±1.96	24.00±2.23	-.889
	Z	-.678		-.193		
Social avoidance and distress in general situations	Mean±SD	18.58±1.90	18.15±1.91	17.52±1.62	18.38±3.28	-.254
	Z	-.407		-.531		
Social avoidance and distress in new situations	Mean±SD	24.41±2.95	24.15±2.91	20.94±2.53	20.46±1.66	-.274
	Z	-.148		-.297		
Total scores	Mean±SD	67.58±5.19	68.92±6.66	65.17±5.27	65.00±3.31	-.316
	Z	-.168		-.084		

\*p&lt;0.05

## DISCUSSION

It was stated that the higher the students' social anxiety level, the higher their loneliness level becomes (Subasi 2007). Considering the grounds that the participants join outdoor recreation activities in order to get rid of boredom and stress relief, to get rid of the monotony and loneliness and to get into a new environment and so on (Ardahan and Lapa 2011), it can be said that factors like getting into a new environment, getting rid of loneliness, stress relief, and so on leads to a significant decrease in social anxiety scores of participants.

In their studies, Acikgoz (2003), Kimonen and Nevalainen (2005), and Gulbahar et al. (2012) stated that participation of students actively in their learning process increases their motivation. Additionally, it was mentioned how the effort improves learning within the framework of experiential learning, the participants getting feedback on how their abilities are improved increase their self-sufficiency and motivate the students to improve their skills more (Gulbahar et al. 2012). It has become an expected condition that a participant with an increasing self-sufficiency will have

a decreasing social anxiety during this process. Therefore, it is believed that the findings of this study are important in terms of showing trainers the fact of why student-centered teaching as well as learning by doing and experiencing are important, and how this approach increases student success in time.

In his study done with college students who participated and who did not participate in the program named "Beyond the Limits", Eagle et al. (2000) stated that the students who participated in the program had reported higher scores under the sub-title of positive behavior development. Graham and Robinson (2007) reported a significant improvement in the perception of college students' self-esteem during the program organized under the Project Adventure. It has become an expected situation that individuals developing positive behaviors about themselves with an increasing self-esteem/ self-confidence will have a decreasing social anxiety level. These results seem to support our findings of the study.

The question asked in the last fifty years is whether any change occurred or not in participants after the adventure training based on challenging and experiential learning method. With-

in the frame of these recreational activities where participants met with different expectations, Hopkins and Putnam (1993) emphasized that bond of reciprocity developed slowly within the group plays an important role in the personal development of group members. It has been emphasized for many years that various experiences like rock climbing, canoeing, orienteering, camping activities and so on nourished the qualifications such as entrepreneurship, cooperation, perseverance, determination, persistence, resistance, resourcefulness and so on. (Celebi and Ozen 2004; Sheard and Golby 2006); however, despite accepting this rhetoric, some researchers (Baldwin et al. 2004; Hatch and McCarthy 2005) highlighted that those results have to be supported by experimental (empirical) studies. Regarding this situation, it is considered that findings of this study will provide a significant contribution via empirical data.

Additionally, it is believed that getting into a new social environment, stress relief, getting out of comfort zone through different activities and facing with new situations contribute to personal development of participants. It has been emphasized via the quasi-experimental design study that leisure time activities program was partially effective on individuals with intellectual disabilities in terms of developing social skills and reducing emotional and behavioral problems (Eratay 2013). A longitudinal case study emphasized that shared experiences in the outdoor environment could become a valuable starting point (Fägerstam 2014), also it was denoted that play and learning in the natural environment effects participant attitude positively (Kosa and Jerman 2013).

Dyson (2014) argued for “a more holistic approach to physical education coming from a broader conception. Participation in physical activity is much broader than just physical activity, and we harm the future potential of outdoor education. In this way, the present study supports emerging trends in adventure education literature that emphasize challenge, perseverance (Ewert and Yoshino 2011), social support (Neill and Dias 2001) and positive self-esteem (Kafka et al. 2012; Hunter et al. 2013), encouraging resilience (Hayhurst et al. 2015) and also shared the positive outcomes of outdoor education, including academic, physical, social, and emotional well-being (Fiskum and Jacobsen 2013; Harun 2014)

Therefore, experiences at work decrease the fear of negative evaluation and anxiety that will arise in new situations, which causes a positive development on total social anxiety scores.

Feingold (1994) applied a meta-analysis by scanning research on the gender variable in personality carried out between 1940 and 1992 and reached the conclusion that there is no significant difference between males and females in terms of social anxiety. Similarly, Patterson and Ritts (1997) applied a meta-analysis by scanning social anxiety studies and found that social anxiety doesn't differentiate depending on gender.

In his study examining social anxiety of university students, Caglar et al. (2012) emphasized that gender variable doesn't have a significant effect.

In their meta-analysis study for examining the achievements of people who participated in trainings which are based on experiential learning with adventure-based activities, Hattie et al. (1997) stated that demographic characteristics, except the level of older age, have no significant effect on program achievements. In the meta-analysis study again on similar programs, Neil and Richards (1998) emphasized on the significant importance of the duration of the program on educational achievements while saying that there is no significant effect of gender difference.

In his study trying to model the reasons of participation into adventure recreation activities, Hsieh (2007) indicated that gender, age and the difference of skill level affects seeking adventure but variables such as gender, age and educational status doesn't affect the motivation of participants. The reason of having such a result is believed to be that although gender difference influences seeking adventure at different levels, the individuals participated in the activities in a motivated way regardless of gender difference since everyone who participated in the community activities were volunteers.

## CONCLUSION

A significant positive development has statistically been identified for social anxiety level of students participating in community activities among free time events.

It has been observed that gender difference of the participants had no effect on the effectiveness of training and the results, which shows that the activities were designed positively in terms of gender.

Recreation is teachable and plays an important role in the prevention of violence, which is crucial in order to improve the future habits of young people. In studies conducted on this issue, it is widely expressed that an increase in positive use of free time has contributed to development of self-fulfilled and mentally healthy young people, student's groups/clubs which are extremely important for students to organize their future business life throughout their educational process and to gain knowledge and skills provides opportunities for our students to be more social, sociable and productive. It is quite crucial to provide our students encounter with this type of activities and participate permanently and systematically. As the need of age we are in, it has been emphasized that the authorities in educational institutions should give importance to art and sport activities by considering these facts in order to raise more healthy, happy, daring and social individuals.

### RECOMMENDATIONS

Higher education programs targeting to raise self-supporting individuals have to relate the adequacy of an individual with the sum of the individual's previous interactions. Considering this relationship, higher education programs have to provide different opportunities to their students since the current adequacy of individual cannot be only the results of his or her own skills and effort but also can be affected by socio-economic and cultural opportunities that the individual has. In this case, it is quite clear that the only way to have students participate in a large number of different activities is that these types of organizations should be supported by the university administration. It is also considered that similar projects and activities should be disseminated by support of various state institutions in order to improve social development and self-representational skills and adequacy of students, especially the ones coming from rural areas. Beyond just convey information; raising more healthy, happy, daring, productive and socially self-sufficient individuals is the priority task of universities in this century. In order to fulfill this task, the importance of free time activities and the communities that are efficiently harnessing those activities arises again.

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