

# Analysis of anxiety, guilt and embarrassment changes of university students who do and do not do sports

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Accepted 27 October, 2020

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## ABSTRACT

This study aims to analyze anxiety, guilt and embarrassment changes of university students who do and do not do sports depending on some socio-demographic factors. In the study conducted with university students, a total of 585 university students are included, 307 of students whom do sports and 278 of students whom don't do sports. "Beck Anxiety Inventory", developed by Beck et al. (1988) and adapted to Turkish and conducted reliability and validity studies by Ulusoy et al. (1998), has been used to determine depression levels and "Guilt-Embarrassment Scale" developed by Şahin and Şahin (1992) has been used to determine the levels of guilt and embarrassment. Independent sample t test for paired comparison, One-way ANOVA for multiple comparisons, Tukey HSD test to determine the source of difference were used. In the study, Cronbach's Alpha value has been determined as .75 for Beck Anxiety Inventory and .82 for Guilt-Embarrassment Scale. As a result, it has been determined that changes depending on doing sports and gender factors are statistically significant ( $p < 0.05$ ). No statistical change has been observed depending on shelter and income factors. In the light of these findings, it has been found that anxiety scores are higher in males while guilt scores are higher in females. It is thought that this result can be caused by the physical and mental changes between male and female, as well as the socio-cultural structure, the social role and status given to female and male. It can also be said that the sport positively affects anxiety and does not have any effect on guilt and embarrassment.

**Keywords:** University student, anxiety, guilt, embarrassment, those who do sports, those who do not do sports.

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## INTRODUCTION

Emotional processes are one of the most important administrators of human behavior (Wagner et al., 2011). Anxiety, guilt and embarrassment are feelings that exist in life and can be experienced by everyone. Anxiety is one of the most common disorders among psychological diseases and is known as an advanced state of concern. The most prominent feature that distinguishes anxiety disorder that starts with worrying from worry is that when there is no danger, the feeling of anxiety manifests itself intensely, continues for a long time and is felt heavily. The developing technology and the increasing workload affect the psychological levels and innovative behaviors of the employees negatively (Ozsungur, 2020). The social lives and relationships of people with anxiety disorders are also negatively affected by this situation. People with anxiety are often aware that they feel worried

intensely. However, they cannot control themselves or calm down (Cam Celikel and Erkorkmaz, 2008). Accordingly, research results showed that the stress of time management significantly affected the work life (Ozsungur, 2020). The university period, during which human relations are most turbulent and many emotions are most complex, is a very difficult period especially for young individuals. Faced with many problems such as separation from the family, new environment and making friends, fear of being alone, economic difficulties, getting used to dormitory life, anxiety about future professional and working life, young people can be negatively affected in terms of social, cultural and economic aspects (Cam Celikel and Erkorkmaz, 2008; Aylaz et al., 2007). With the university, the increase in the population, in which youth has a relationship in human relations, highlights the

feeling of being safe, loved, desired, valuable, successful, strong and superior in every individual and therefore anxiety, guilt and embarrassment can be more common.

Guilt is a feeling that a person experiences as a result of attributing the negative emotions they experience after taking an action that would harm their moral values and the harm they suffer not to their self, but to their behavior they perceive as wrong (Bugay and Demir, 2011). Embarrassment, on the other hand, is an emotion that an individual experiences as a result of their negative evaluation of their self when they perceive that they violate the moral rules and feel weak and worthless (Bugay and Demir, 2011).

Feelings of embarrassment and guilt also differ in terms of social context. While a person needs to be in a social interaction to experience a sense of embarrassment, social interaction is not necessary for guilt; guilt is rather an emotion that the person lives inside of oneself and can often remain a secret (Bugay and Demir, 2011). The feeling of embarrassment is described as a more painful and stronger experience than guilt because self is targeted (Lewis, 1971; Lindsay-Hartz, 1984; Tangney et al., 1989; Wicker et al., 1983).

Moral feelings such as guilt and embarrassment are important for social adhesion in society. Consciousness of embarrassment helps to follow the rules of the society, and consciousness of guilt helps prevent harm to others and corrects mistakes. While respect, love, peace, friendship, happiness, enthusiasm and joy occupy a special place in the concept of sports, such positive emotions (Atasoy and Kuter, 2005) are expected and sought after in acquiring and accepting a social environment. Sports is defined as an educational and entertaining endeavor, which is carried out individually or collectively, having its own rules, based on a competition throughout, providing the development of physical and mental abilities. In his research, Alpaslan (2012) included opinions that emphasize that sports can have a therapeutic effect in children and adolescents with emotional difficulties and fragile self-perception and he stated that sports has a feature that facilitates individuals' feelings of self-confidence, especially for adolescents to reveal their talents.

Sports, which contributes to the well-being of the people both physically and mentally, is a physiological, cultural, socio-economic and social activity that makes its importance felt more and more every day with big investments (Silik, 2014).

It is important to know the reasons that increase the level of anxiety for a healthy and balanced life, and to search for ways to keep the anxiety level under control for this reason (Akandere, 2000). In today's world, people's desire to get rid of stress, keep their bodies in shape and above all international successes in sports have an important place in the daily life and moral level of the society and add an important dimension to sports (Bayraktar and Sunay, 2007). In particular, the most important feature that distinguishes university youth from

other youth groups is that they are the knowledgeable, executive, and decision-making candidates of the future (Yazıcı, 2003).

University youth make up 10% of the population between the ages of 18-22. They are few in number with a 6/1000 rate but they are an important part of the country in terms of trained human resources. It is very important to educate these young people very well and to find solutions to their problems for the future and continuity of the country (Tuzcuoğlu and Korkmaz, 2001). A university student is neither an adult nor a child. While young people try to overcome their own development problems in this period, they may experience other psychological problems because of stress and pressure from various sources (Cam Celikel and Erkorkmaz, 2008; Deniz et al., 2004). Students' anxiety levels increase during the exam periods, and this causes some students to fail. Failure causes anxiety to become more severe and thus a vicious circle may arise. High anxiety and depression levels of university students are associated with social factors, family factors and academic stressors (Balanza et al., 2008).

Rab (2008) has stated in their study that university students with a higher number of friends experience less anxiety and depression. In general, anxiety is a two-way health condition that arises as delusional or autonomic nervous system stimulation (Zeidner and Mathews, 2005; Morris and Liebert, 1970). While delusion constitutes the cognitive aspect of anxiety, it generally involves one's negative thoughts, assessments, and internal conversations about their failure, incompetence (Zeidner and Mathews, 2005). The second direction is autonomic nervous system stimulation and occurs in relation to the cognitive aspect of anxiety (Morris and Liebert 1970). As a basic belief, guilt is essentially a healthy emotion state. Despite the pressure and discomfort, it creates in the person; it is a human mechanism that brings self-criticism with it. Being human can sometimes involve involuntary feelings, such as misbehaving or harming the environment. In such cases, guilt gets involved and gives stimulus to the person about correcting the mistake. However, if the feeling of self-criticism goes beyond reasonable limits and becomes a pathological guilt, then a pathological situation arises, which is not a problem that the person can solve alone (Access 11-11-2019 [www.aklinizikesfedin.com](http://www.aklinizikesfedin.com)).

When the psychiatry literature is examined, it is seen that feelings of guilt and embarrassment are at the forefront among the causes of depression. If there is a feeling of guilt in relation to an incident and this feeling basically results in the feeling of "I am a bad person", it is unhealthy and means that depression is on its way. If you do not believe that you are actually bad and you think that you are somehow treating yourself or someone else in a way that does not comply with your moral values and are unnecessarily unkind, this is not guilt but a healthy sense of regret (Access: 11-11-2019 [www.aklinizikesfedin.com](http://www.aklinizikesfedin.com)). Youth period, depending on

the social and physical changes of the individual; is a period of contradictions in which there are many emotional, behavioral, sexual, economic, academic and social conflicts, and attempts to find identity increase with psychosocial and sexual maturity. In this period, the mental health of university youth is one of the important components of social health (Bayhan, 2003; Doğan et al., 1994; Çorapçioğlu Özkürkçügil, 1999).

In their study, Inanç (2004) has found that 35% of university students experience generalized anxiety disorders. This rate, which can be considered quite high, is going to enable university students to grow up to be healthier generations, both physically and mentally, by being supported by sportive activities, especially in adolescence period, which is considered one of the most important of their development periods. According to the article written by Psychology and Marketing Professor Art Markman for the Fast Company, it is the most rational method to use the energy given by guilt to perform other works rather than getting rid of this feeling.

It is possible to turn the negative effects of feelings such as guilt or embarrassment into an energy that can motivate us. Making no headway and creating energy with tides is nothing more than a vicious circle. We need to remember a simple physics rule. Energy without a direction creates heat, energy occurs, but since it is not used for anything, it is wasted. Energy with a direction is work (Access: 11-11-2019 <http://hrpozitif.net/322-sucululuk-duygunuzu-enerjiye-cevirin.html>).

In the researches we have conducted during our study, it has been noted that there are many studies on anxiety, guilt and embarrassment, but the importance of sports has not been mentioned in dealing with these emotional problems that has become the social problem of the era. Based on this finding, in our research, changes in anxiety, guilt and embarrassment of who do sports and who do not do sports university students has been examined.

## MATERIALS AND METHODS

### Participants

The population of this study, which aims to analyse anxiety, guilt and embarrassment changes of university students who do and do not do sports depending on some socio-demographic factors, is university students and the study group consists of 585 university students (260 female, 325 man), 307 of students whom do sports and 278 of students whom don't do sports selected by randomized sampling method.

### Research design

The personal information form developed by the researcher has been used to gather socio-demographic

information. "Beck Anxiety Inventory", developed by Beck (1988) and adapted to Turkish and conducted reliability and validity studies by Ulusoy et al. (1998), has been used to determine depression levels has been used to determine depression levels and "Guilt-Embarrassment Scale", developed by Şahin and Şahin (1992), has been used to determine the levels of guilt and embarrassment. In the study, Cronbach's Alpha value has been determined as .75 for Beck Anxiety Inventory and .82 for Guilt-Embarrassment Scale.

### *Beck anxiety inventory (BAE)*

"Beck Anxiety Inventory", developed by Beck (1988) and adapted to Turkish and conducted reliability and validity studies by Ulusoy et al. (1998), has been used to determine anxiety changes. In this inventory, there are 21 items that indicate the level of discomfort of the anxiety symptoms listed in the past week in a four-point Likert type (0: none; 1: mild; 2: moderate; 3: severe). The score range that can be obtained from the scale is between 0 and 63, and the high score indicates the high level of anxiety. In this study, Cronbach Alpha coefficient of Beck Anxiety Inventory has been determined as 0.82.

### *Guilt-embarrassment scale (SUÖ)*

This scale, developed by Şahin and Şahin (1992), measures the feelings of embarrassment and guilt which are experienced in various situations and thought to be related to depression. This scale consists of 24 items, which are 5-Likert-type. 12 items of it measure embarrassment and the other 12 items measure guilt. Cronbach Alpha value of the scale that can be applied to both adolescents and adults has been found to be .81 for the "guilt" subscale and .80 for the "embarrassment" subscale (Şahin and Şahin 1992). The Cronbach Alpha value of this scale used for this research has been found to be .73 for the "guilt" subscale and .76 for the "embarrassment" subscale.

The limitations of the study include the inability to reach larger study groups determined the limits of the study. It is thought that it will shed light on possible studies to be carried out in different fields and dimensions.

### Statistical analysis

Variance and homogeneity of the data have been tested and Independent Simples t test and One-Way Anova tests have been used to analyze the data.

## RESULTS

As can be seen in Table 1, the mean value of anxiety for

male is statistically higher than the mean value for female ( $p < 0.05$ ). It has been determined that the value of guilt for female is statistically higher than the mean value of male ( $p < 0.05$ ), and the change between male and female for embarrassment value does not constitute a statistical significance.

As can be seen from Table 2, it has been stated that the mean value of anxiety for students who are not athletes is statistically higher than the mean value of

athlete students ( $p < 0.05$ ). There is no statistical change in guilt and embarrassment mean values between who do sports and who do not do sports.

As can be seen from Table 3, no statistical change has been observed in anxiety, guilt and embarrassment mean values depending on the shelter factor.

As can be seen from Table 4, no statistical change has been observed in anxiety, guilt and embarrassment mean values depending on the income factor.

**Table 1.** T-test results anxiety, guilt and embarrassment changes on gender factor.

		n	x	Sd	t	p
Anxiety	Female	260	34.98	4.31	-3.304	.001 *
	Male	325	36.47	6.16		
	Total	585	35.81	5.47		
Guilt	Female	260	44.43	4.41	2.193	.028 *
	Male	325	43.60	4.66		
	Total	585	43.97	4.57		
Embarrassment	Female	260	44.73	4.72	1.811	.070
	Male	325	44.01	4.89		
	Total	585	44.33	4.82		

\*Significant difference between groups ( $p < 0.05$ ).

**Table 2.** T-test results anxiety, guilt, and embarrassment changes on doing sports.

		n	x	Sd	t	p
Anxiety	Who do sports	307	34.37	3.26	-6.719	.000 *
	Who do not do sports	278	37.39	6.81		
Guilt	Who do sports	307	44.17	4.07	1.120	.258
	Who do not do sports	278	43.74	5.06		
Embarrassment	Who do sports	307	44.51	3.96	.949	.335
	Who do not do sports	278	44.13	5.62		

\* Significant difference between groups ( $p < 0.05$ ).

**Table 3.** One-way Anova test results anxiety, guilt and embarrassment changes on shelter factor.

		n	x	Sd	F	p
Anxiety	Parent/Relative	160	35.83	5.36	.022	.978
	Dormitory	225	35.75	5.32		
	Student House	200	35.86	5.73		
Guilt	Parent/Relative	160	43.96	3.95	.226	.798
	Dormitory	225	43.83	4.83		
	Student House	200	44.13	4.74		
Embarrassment	Parent/Relative	160	44.09	4.38	2.151	.117
	Dormitory	225	44.85	4.82		
	Student House	200	43.95	5.13		

**Table 4.** One-way Anova test results anxiety, guilt and embarrassment changes on income factor.

		<b>n</b>	<b>x</b>	<b>Sd</b>	<b>F</b>	<b>p</b>
Anxiety	500-1500 TL	246	35.5691	5.17463	.565	.638
	1501-2500 TL	211	36.1469	6.13516		
	2501-3500 TL	78	35.9487	5.15449		
	3501 and above	50	35.3400	4.25038		
Guilt	500-1500 TL	246	44.2480	4.45562	.849	.467
	1501-2500 TL	211	43.5782	4.84102		
	2501-3500 TL	78	44.0385	4.05944		
	3501 and above	50	44.1400	4.69046		
Embarrassment	500-1500 TL	246	44.4593	4.86935	.302	.824
	1501-2500 TL	211	44.0853	4.76318		
	2501-3500 TL	78	44.5641	4.36512		
	3501 and above	50	44.3800	5.56919		

## DISCUSSION AND CONCLUSION

The findings of this study show that who do and who do not do sports university students have significant differences in both groups depending on doing sports and gender variables, and there is no statistical change when examined in terms of shelter and income. In consideration of the findings, it has been determined that males have higher anxiety and females have higher guilt scores. It can be said that this difference between both genders is due to the differences in the physical and mental changes of females and males, and the different socio-cultural role perception that society has assigned to females and males. We can say that social pressure and moral value discrimination between female and male is also likely to increase the feeling of guilt among female.

Benetti-McQuoid and Bursik (2005)'s study which was done among 104 young people, reports that the guilt feeling of women is higher than that of men. This result supports the findings in the study. In another study examining the styles of guilt, embarrassment and anger among those who are depressed and not depressed, it is seen that the mean guilt points of girls is 53.1695 and the mean guilt points of boys is higher than 50.875.

In the same study, the mean constant anger score of girls is 21.00, whereas the mean constant anger score of boys is lower than 22.5268. In this case, it can be said that the constant anger conditions of boys are higher than the girls and the results are in line with our research findings. In another study examining the relationships between childhood traumas and dissociative experiences and feelings of guilt-embarrassment among university students aged 18-24, the scores of guilt and embarrassment of girls are higher than that of boys (Kourt, 2011). The fact that the values of guilt scores are high for female supports our research findings when we look at other studies in the literature. Accordingly, girls

experience more guilt than boys. In the literature, according to the studies of Tangney and Dearing (2002), guilt-embarrassment levels of female of all ages have been found to be higher than male. Other studies also confirm this (Harder, 1995; Pulakos, 1996). These findings show that female and male are assigned certain roles in the society, and feelings are experienced as a result of socialization in this direction. Feelings of weakness, which implies guilt and vulnerability for the role of female, may cause female to experience feelings of guilt-embarrassment more frequently than male (Cirhinlioğlu and Güvenç, 2011).

In their study, Inanc (2004) found that 35% of university students experience generalized anxiety disorders. Social, cultural and economic changes can adversely affect the youth mentally (Cam Celikel and Erkorkmaz, 2008; Aylaz et al., 2007).

Gilbert and Irons (2005) developed a self-perception-based therapeutic approach called Compassionate Mind Training (CMT) for individuals who constantly criticize themselves relentlessly. This is an approach that involves the relaxation of clients, regaining trust and developing an understanding of their mistakes. As a result of their studies, they have found that CMT significantly reduced the anger, anxiety and depression feelings. In the results we have obtained in our study, it is seen that sports has a positive effect on anxiety. Sports is an activity that can encourage people to make mistakes with the instinct of competing and winning, and also teaches how to deal with the mistakes, find the cause of the mistakes, accept and compensate. These results also show that sports activities such as developing self-perception have an important role in reducing depression, anxiety, and stress for individuals. Sports oblige the person to face the mistakes after each contest or competition, which is a positive step towards success and recovery. The more the frequency and the degree of errors decreases, the

more anxiety and fiction of possible negativities is going to decrease. In the researches carried out by Spielberger with university students, it shows that university students with high levels of anxiety are less successful in their lessons, and as the level of anxiety decreases, success in lessons increases (Aytaç and Keser, 2002).

Neff et al. (2005) found in their study that self-perception is associated with lower anxiety levels and that self-confident individuals tend to apply more adaptive coping strategies when faced with academic failure. In addition, it has been observed that the negative relationship between self-perception and anxiety has been adjusted with less fear of failure and more perceived competence.

While it has been observed that sport has an inverse correlation with anxiety, no relation has been found between guilt and embarrassment in our study. Sports environment is a social environment and individuals can act in a phobic manner. With the advent of social phobia, the individual's tendency towards sports decreases significantly. The concept of socialization, which plays a key role in participating in sports activities, causes phobic individuals to fear. The reason for this is that phobic individuals refrain from socializing and taking part in social environments for fear of being ashamed, mocked, unable to demonstrate their ability. During sports activities, the emergence of negative factors such as trembling, sweating, stomach problem, and tension in the muscles due to social phobia decreases participation in sports. According to Sungur (2000), focusing on one's interest and attention on their self, making negative evaluations about themselves, displaying escaping and avoidance behavior, interruption of normal functions, lack of social skills are the prominent features of social phobic individuals.

According to Terlemmez (2018), social phobic individuals engage in sports activities because of pressure and being forced. They act timidly, cowardly; motionlessly and nervously thinking about what waits for them. This attitude causes the person to make mistakes and fail. These kind of physical and psychological attitudes continue increasingly and the individual starts to seek ways to avoid, and he has reported that they are going to have difficulty in concentrating on the action they must take accordingly.

In line with this information in the literature and the findings obtained in our research, a new research topic acquires currency, which is a comparative study of the social phobic status of individuals who do and do not do sports. Because in our study, there is no difference between the levels of embarrassment of who do and who do not do sports of university students. Therefore, in traumatic events from past childhood experiences to this day, the individual prefers to blame the person and events that cause the trauma, not themselves, and obscures the guilt.

In conclusion, in the study analyzing the changes in anxiety, guilt and embarrassment of university students

who do sports and do not do sports, it has been found that male students have higher anxiety levels, guilt feeling have higher value in female students and embarrassment values do not constitute a gender difference. Also, it has been established that the scores of anxiety feeling of university students doing sports are lower than those who do not do sports. No significant difference has been found between guilt-embarrassment values and doing sports. Therefore, in line with the findings, it is hoped that sports is going to contribute positively to the emotional development of university youth and support the future field articles and other researches.

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**Citation:** Yalçın, Y. G., and Tek, T. (2021). Analysis of anxiety, guilt and embarrassment changes of university students who do and do not do sports. *African Educational Research Journal*, 9(1): 44-50.

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