



The examining the obsessive-compulsive disorder and anxiety of students who do not make regular physical activity

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Abstract

The purpose of this study was to examine the obsessive-compulsive disorder and anxiety of students who do not make regular physical activity. For that purpose, 140 high school students participated in the study voluntarily. As data collection tools, inquiry form, State-Trait Anxiety and SCL-90 R inventories were developed by the researcher, Spielberg et al. (1970), and Derogatis (1977) respectively. In analysis of data, descriptive statistical techniques, independent simple t test and Pearson correlation were used. The data was analyzed in SPSS 16.0 package program. The significance level was found 0.05. According to results, there was not a significant statistically difference between males and females in obsessive-compulsive disorder (279, $p>0.05$) and trait anxiety (538, $p>0.05$). Besides, there was a significant statistically relationship between obsessive-compulsive disorder and trait anxiety in the positive direction ($r=,389$, $p<0.05$). As a result, those with obsessive-compulsive disorder had high levels of trait anxiety as well.

Keywords: Obsession; compulsive disorder; anxiety; student; sport

Introduction

The new era brings innovation and convenience for people. Moreover, business requirements, developing technology, population growth, urbanization, noise and other many

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variables can negatively impact on people. All of these factors severely affect the mental health of people. Status of a person's mood is varied and two of them are the obsessive-compulsive disorder and the anxiety. The obsessive-compulsive disorder with cognitive, emotional and behavioral aspects, is a mental disorder that adversely affect quality of life and overall functionality (Boysan et al., 2010). Obsessive-compulsive disorder is a heterogeneous condition characterized by the presence of obsessions and/or compulsions that are time-consuming and cause distress. Obsessions are recurrent thoughts, impulses, or images that are experienced as inappropriate, intrusive, and distressing. In response to obsessions, individuals with Obsessive-compulsive disorder perform repetitive behaviors, rituals or mental acts referred to as compulsions (McGuire, 2012). The other parameter is anxiety which is an important factor for worries and obsessions may be differentiate depend on their content; to illustrate it, this can be said that worries are more likely to concern real life problems, such as the health of a significant other, whereas obsessions may be more extreme, such as repeated thoughts about accidentally killing a loved one (Freeston et al., 1994; Jakatdar, 2010). Trait anxiety refers to an individual's general predisposition to respond with anxiety to perceived threats, whether real or imagined. When present in significantly high levels, trait anxiety may constitute an anxiety disorder (Spielberger & Rickman, 1990). Specifically, trait anxiety is more prevalent in younger than in older adults (Brenes et al., 2007). Therefore, high school students generally should be concerned with sport activities. Researchers have suggested that certain forms of exercise can be quite beneficial in reducing anxiety (Lightsey, 1997; Netz & Lidor, 2003). Lightsey (1997) also found that exercise not only helps with physical health, but also promotes psychological-being and helps decrease some forms of anxiety. Physical activities have many benefits for body and psychology. Sports have been increasing the impact on people in the world with each passing day. Countries are aware of the situation the sport benefits for society and should be mobilized in order to use the positive effects of sport.

In line with these explanations, the purpose of present study was to examine the obsessive-compulsive disorder and anxiety of students who do not make regular physical activity. As a result, it can be said that the students with high level of obsessive-compulsive disorder have had high level of trait anxiety.

Methodology

141 high school students ($M_{age}=17,33\pm74$) were voluntarily participated in this study. The researchers did verbal explanation for students on data collection tools. Random sampling method was used in the selection process of the participants. But a significant limitation of the present

study was the size of sample which may not be representative for the all high schools. Descriptive statistics of participants' age can be seen on table 1.

Table 1 Descriptive statistics of Age

	n	Min	Max	M	SD
Age	141	16	19	17,33	74

Data Collection

Symptom Screening Inventory (SCL-90-R) and State Trait Anxiety Inventory (STAI) were used for data collection.

Symptom Screening Inventory (SCL-90-R)

The SCL 90_R is a 90-item-self-report symptom inventory designed to screen for a broad range of psychological problems. Each of the 90-items is rated on five-point, Likert scale of distress, ranging from "not at all" (0) to "extremely" (4). The inventory was adapted into Turkish in 1991 by Dağ (Dağ, 1991). Cronbach's alpha internal consistency of the scale was .97 and construct validity .79 (Schmitze et al. 1999).

STAI (State Trait Anxiety Inventory)

State Trait Anxiety Inventory was developed by Spielberger et al. (1970) and in the present study. The inventory was adapted into Turkish in 1985 by Öner and Le Compte. The scale determines how an individual would feel, independently of a particular situation he was in. The inventory is made up of 20 items and provides a four-point Likert type assessment (1 is for almost never, 4 is for almost always) and was used for overlap validity in the present study. Cronbach's alpha of the scale was between .83 and .87 and test retest reliability was reported to be between .34 and .72 (Kolayış, 2012).

Data Analysis

The data was analyzed by SPSS 16.0 Package Program. Descriptive statistics, independent sample t-test, Pearson correlation test were used to analyze the data. Level of significance was determined to be 0.05.

Results

Table 1. Descriptive statistics of the students

		Obsessive-compulsive disorder				
		n	Min	Max	M	SD
Gender	Male	62	0	31	12,16	6,787
	Female	79	2	28	13,21	5,535
		Trait anxiety				
		n	Min	Max	M	SD
Gender	Male	62	33	60	44,90	6,283
	Female	79	31	64	45,53	7,411

As can be seen on table 1 the scores of obsessive-compulsive disorder are $12,16 \pm 6,787$ for male and $13,21 \pm 5,535$ for female. Also, the scores of trait anxiety are $44,90 \pm 6,283$ for male and $45,53 \pm 7,411$ for female.

Table 2. Pearson correlation of obsessive-compulsive disorder and trait anxiety

		Trait anxiety	
Obsessive-compulsive disorder	r	,389	
	p	,000	

According to Pearson correlation, there is a significant statistically relationship between obsessive-compulsive disorder and trait anxiety in positive direction ($r=,389$, $p<0.05$).

Table 3. The differences of obsessive-compulsive disorder and trait anxiety on gender

		Obsessive-compulsive disorder				
		n	M	SD	p	
Gender	Male	79	12,16	6,787	,279	$p>0.05$
	Female	62	13,21	5,535		
		Trait anxiety				
		n	M	SD	p	
Gender	Male	79	44,90	6,283	,538	$p>0.05$
	Female	62	45,53	7,411		

According to Pearson correlation, there is not a significant statistically difference between male and female in obsessive-compulsive ($,279$, $p>0.05$) and in trait anxiety ($,538$, $p>0.05$).

Discussion and Conclusion

This research aimed to examine the obsessive-compulsive disorder and anxiety of students who do not make regular physical activity. The results showed that the scores of obsessive-compulsive disorder are $12,16 \pm 6,787$ for male and $13,21 \pm 5,535$ for female. Also, the scores of trait anxiety are $44,90 \pm 6,283$ for male and $45,53 \pm 7,411$ for female.

According to Pearson correlation, there is a significant statistically relationship between obsessive-compulsive disorder and trait anxiety in positive direction ($r=,389$, $p<0.05$). These results support initial hypothesis that there would be a positive significant correlation between obsessive-compulsive disorder and trait anxiety. The results of present research are consistent with the results of some studies which revealed that there were significant similarities between worries in general anxiety and obsessions in obsessive-compulsive disorder (Brown et al., 1998; Zinbarg & Barlow, 1996; Jakatdar, 2010).

According to t test, there is not a significant statistically difference between male and female in obsessive-compulsive ($,279$, $p>0.05$) and there is not a significant statistically difference between male and female in trait anxiety ($,538$, $p>0.05$). These results did not support initial hypothesis that there would be a positive significant difference between obsessive-compulsive disorder and trait anxiety in relation to the gender. In the light of literature, obsessive-compulsive disorder is equally common among males and females (Niehaus & Stein, 1997; Perez, 2004). But the result of present research is consistent with the result of study which revealed that significant gender differences were not found for the trait anxiety (Cooper, 2008; Tabrizi, 2011). In comparison, generalized anxiety disorder is more prevalent in women than in men (Gliatto, 2000).

Approximately 40 to 60% of Obsessive-compulsive disorder individuals will meet criteria for another anxiety disorder at some point in their lives (Pigott et al., 1994; Perez, 2004). Therefore, these two psychological disorders are important to focus on. It is known that sport activities have many benefits not only physical but also psychology for people. In line with these comments, this study results advise to researchers for future studies that the researchers can study in the this area with more students from different schools to understand the relationships of these two psychological constructs on high school students.

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