



## Analysis of Academic Self-Efficacy Levels of University Students Doing Sport Regularly and those Not Doing Sport Regularly

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### Abstract

The purpose of this study is to analyze academic self-efficacy levels of university students studying in different departments according to their states of doing regular sports and some variables. 299 students, 153 females and 146 males, studying in different departments of Samsun Ondokuz Mayıs University participated in the study voluntarily. "Academic Self-efficacy Scale" which was developed by Owen and Froman (1988) and adapted to Turkish by Ekici (2012) and which included 33 questions and 3 sub-dimensions (social status, cognitive practices, technical skills) was used in the study to find out academic self-efficacy levels of students in terms of different variables. SPSS 22.0 program was used for statistical analysis. When the results were analyzed, statistically significant difference was found only in social status sub-dimension in terms of the variables of gender and grade ( $p < 0.05$ ). No significant difference was found in other sub-dimensions for both variables ( $p > 0.05$ ). When academic self-efficacy levels were analyzed in terms of students' states of doing regular sports, statistical significance was not found in any of the sub-dimensions ( $p > 0.05$ ). As a conclusion, it was found that the state of doing sports regularly did not have an influence on academic self-efficacy level. This result is thought to occur due to the fact that the experimental group in the present study does not consist of only students from the faculty of sport sciences, but also from students studying in different departments of the university.

**Keywords:** Academic self-efficacy, Sport, University students.

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**Ethical:** This study follows all ethical practices during writing.

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## 1. Introduction

Sport is among the most basic physical activities of our day. Ten thousands of people doing sport in various parts of the world every day are interested in sportive activities, even if in different branches. Even though we are not aware of it, sport activities have always been intertwined with vital activities and social life in almost every period of human history. Thus, it is not very possible to take sport out of social life (Dever, 2010; Cavusoglu *et al.*, 2017; Tekeli, 2017; Dogan *et al.*, 2018; Kabadayı *et al.*, 2018). Performance that people will show in both normal life conditions and also in sport is directly associated with self-efficacy. However, self-efficacy does not mean an individual's showing the performance expected from him/her (Çuhadar *et al.*, 2013). Self-efficacy is the basic concept of social learning process and it can be defined as an individual's being aware of his/her own capacity. This awareness does not cause an individual to realize what he/she has, but to realize what he/she can do with his/her existing abilities (Luszczynska *et al.*, 2005). Self-efficacy has been defined as an individual's organizing the necessary activities to show a specific performance and self-perception, judgement and belief about his/her capacity to successfully perform these. In other words, self-efficacy is the competence an individual views with himself/herself about to what extent he/she can overcome the problems encountered. It is the positive attitudes an individual develops against difficulties he/she might encounter [4]. Since the beginning of 1990s, self-efficacy concept has been the research subject of many scientists (Kurt, 2012; Alemdağ *et al.*, 2014; Oral and Aktop, 2014; Kılıç *et al.*, 2015; Sevilmış and Şirin, 2016; Şirin and Duman, 2018). Researchers have shown that individuals or groups with a high belief of self-efficacy have high level of performance (Turan *et al.*, 2016). Individuals with high self-efficacy notion set higher goals for themselves and thus their motivation levels increase and they show a better performance (Shea and Guzzo, 1987; Guzzo *et al.*, 1993; Bandura, 1997; Gibson, 1999; Gibson *et al.*, 2000; Bray, 2004; Myers *et al.*, 2004).

Academic achievement is claimed to be associated with many factors directly. In addition to cognitive characteristics, affective characteristics can also be discussed as one of these factors. When considered from this point of view, it can be thought that affective factors such as attitude, self-efficacy, motivation and anxiety can influence many factors, especially students' eagerness and interest for the lesson and in return this can influence students' performance and thus their academic achievement (Sevilmış and Şirin, 2016). Academic self-efficacy is an individual's subjective belief that he/she can successfully fulfil the assigned academic missions in predetermined levels (Bong, 2004). During the years university students are educated, their academic duties and responsibilities increase and as a result, it is very important for them to use time efficiently and effectively. Within this context, a student with high academic self-efficacy has very strong attitudes and behaviours about the academic duty he/she is assigned (Biricik, 2015). Based on all this information, the purpose of the present study is to analyze the academic self-efficacy levels of students who are doing sport regularly and those who are not doing sport regularly in terms of different variables.

## 2. Material and Method

### 2.1. Study Design

A total of 299 students, 153 females and 146 males, studying in different departments of Samsun Ondokuz Mayıs University were included in the study. In the study, "Academic Self-efficacy Scale" which had 33 questions and 3 sub-dimensions and which was developed by Owen and Froman (1988) and was adapted to Turkish by Ekici (2012) was used to find out the academic self-efficacy of students according to different variables. The subjects in the study filled in voluntary participation form and it was emphasized that it was important for them to read the questions and fill in the questionnaire form carefully for the reliability and validity of the study. The subjects' states of doing regular sport and some of their demographic information were found with the personal information form prepared by the author.

### 2.2. Academic Self-Efficacy Scale

In the present study, "Academic Self-efficacy Scale" which had 33 questions and 3 sub-dimensions (social status, cognitive practices, technical skills) and which was developed by Ekici (2012) was used to find out the academic self-efficacy of students according to different variables. The scale was a 5-Likert type scale and it was scored as quite a lot (5 points), a lot (4 points), partially (3 points), a few (2 points) and quite a few (1 point). According to the analysis results conducted to test the reliability level of the scale used in the study, Cronbach alpha coefficients were found as 0.77 (social status), 0.79 (cognitive practices) and 0.75 (technical skills). In addition, total internal coefficient of the scale was found as 0.77. These results show that the results of the scale are acceptable.

### 2.3. Data Analysis

Statistical analyses were conducted with SPSS version 22.0 software. Shapiro-Wilk test was used to analyze normality assumption. In case of normally distributed variables, groups of two were analyzed with independent t test, while groups of more than two were analyzed with ANOVA test. In case of variables which were not normally distributed, groups of two were analyzed with Mann Whitney U test, while groups of more than two were analyzed with Kruskal Wallis test. A p value of less than 0.05 was assessed as statistically significant.

## 3. Results

Table 1 shows the demographic information of the subjects. According to the table, 146 (48.8) of the subjects who participated in the study were male, while 153 (51.2%) were female. 48 (16.1%) first year students, 31 (10.4%) second year students, 27 (9.1%) third year students and 192 (64.4%) fourth year students participated in the study. In terms of doing regular sport, 128 (42.8%) students were found to do regular sport, while it was found that 171 (57.2%) students did not do regular sport.

**Table-1. Participants' Demographic Informations.**

Variables		N	%
Gender	Male	146	%48.8
	Female	153	%51.2
Year of study	1st year	48	%16.1
	2nd year	31	%10.4
	3rd year	27	%9.1
	4th year	192	%64.4
Regular sport status	Yes	128	%42.8
	No	171	%57.2
<b>Total</b>		299	%100

**Table-2. Comparison of participants' academic self-efficacy according to gender variable.**

Sub-dimensions	Gender	N	Ave.Rank	Stand.Test Stat.	P
<b>Social Status</b>	Male	146	160.66	-2.086	0.037*
	Female	153	139.82		
<b>Cognitive Practices</b>	Male	146	141.70	1.622	0.105
	Female	153	157.92		
<b>Technical Skills</b>	Male	146	156.08	-1.194	0.233
	Female	153	144.20		

\*p&lt;0.05.

In Table 2, when the subjects' academic self-efficacies were compared in terms of the gender variable, statistically significant association was found between academic self-efficacies of female and male students in terms of social status ( $p < 0.05$ ). However, no statistical significance was found in cognitive practices and technical skills sub-dimensions ( $p > 0.05$ ).

**Table-3. Comparison of participants' academic self-efficacy according to their year of study.**

Sub-dimensions	Year	N	Total square	Mean square	F	P
<b>Cognitive practices</b>	1st year	48	2.589	0.863	2.402	0.068
	2nd year	31	105.606	0.359		
	3rd year	27	108.194			
	4th year	192				
		N	Average	Ave. Rank	Chi square	P
<b>Social Status</b>	1st year	48	3.0601	143.70	8.414	0.038*
	2nd year	31		109.35		
	3rd year	27		158.76		
	4th year	192		156.13		
<b>Technical Skills</b>	1st year	48	2.9186	157.51	2.074	0.557
	2nd year	31		136.98		
	3rd year	27		134.11		
	4th year	192		151.68		

\*p&lt;0.05.

When the academic self-efficacy levels of the participants were compared in terms of their year of study, while statistical significance was found in social status sub-dimension ( $p < 0.05$ ), no significant difference was found in other sub-dimensions ( $p > 0.05$ ) Table 3.

**Table-4. Comparison of participants' academic self-efficacy according to their status of doing sport regularly.**

Sub-dimensions	Regular sport	N	Ave. Rank	Stand.Test Stat.	P
Social Status	Yes	127	158.10	-1.487	0.137
	No	171	143.11		
Cognitive Practices	Yes	127	143.95	0.959	0.338
	No	171	153.62		
Technical Skills	Yes	127	151.65	-0.374	0.709
	No	171	147.90		

p&gt;0.05.

Table 4 compares the participants' academic self-efficacy according to their states of doing sport regularly. When the results are analyzed statistically, no significant difference was found in all of the sub-dimensions between the academic self-efficacy of the students who did sports regularly and those who did not ( $p > 0.05$ ).

#### 4. Discussion and Conclusion

When the results of our study were analyzed in general, statistical significance was found in social status sub-dimension in favour of male students in terms of the gender variable ( $p < 0.05$ ). In addition, when analyzed in terms of year of study, statistical significance was found in social status sub-dimension ( $p < 0.05$ ). No significance was found between the participants' academic self-efficacy in terms of their state of doing sport regularly ( $p > 0.05$ ).

There are a great number of studies in literature which have measured academic self-efficacy of different groups. However, no studies have been found which have examined the academic self-efficacy levels of university students in terms of their states of doing sport regularly. When studies on academic self-efficacy were examined, some of these studies were found to report significance between genders in terms academic self-efficacy (Çakır *et al.*, 2006; Özsüer *et al.*, 2011; Oğuz, 2012; Tabanlı and Çelik, 2013; Kılıç *et al.*, 2015). These studies have proven

that different gender groups can show different results. However, all results have shown clearly that academic self-efficacy of only a single gender is not high. That is, in some studies male participants were found to have high averages, while female participants were found to have high averages in some others. For example, while Er and Gürkan (2011) reported that female participants had higher academic self-efficacy belief levels, Akbay (2009) and Durdukoca (2010) reported that male participants had higher academic self-efficacy levels. The fact that academic self-efficacy levels differed according to gender variable has brought up the necessity of avoiding generalizing psychological components that can change depending on factors such as different occupations or socio-economic structure. Sandıkçı and Öncü (2013) also supported this view. Studies examining the academic self-efficacy of occupations related with sport showed the following results. In a study conducted on students studying in physical education and sport department, Biricik (2015) found differences between groups and unlike the present study, found that female students had high rates. In a study conducted by Varol (2007) to find out self-efficacy of students of physical education and sport teaching department, no difference was found between female students and male students. Bozkurt (2013) also did not find any difference between female students and male students in a study conducted on prospective teachers of physical education. In terms of self-efficacy levels of university students who were not doing sport, Satici (2013) concluded that male students had higher academic self-efficacy when compared with female students. In some of the studies conducted on occupations related with sport, female participants were found to have high self-efficacy scores, while male participants were found to have high self-efficacy scores in others (Vurucu, 2010; Ciftçi, 2013).

In the present study, no statistically significant difference was found between the academic self-efficacy levels of students in terms of the state of doing sport regularly ( $p>0.05$ ). However, when studies in literature were examined in general, Biricik (2015) found that individuals who did sport regularly had higher scores when compared with those who did not and similarly, results of a great number of other studies showed that regular sports had positive effects on academic self-efficacy (Ünlü, 2008; Balyan, 2009; Baştuğ and Kuru, 2009; Kafkas *et al.*, 2010; Bozkurt, 2013). Based on all these results, it is thought that the reason why there is no significant difference between self-efficacy scores of students doing sport regularly and those not doing sport regularly results from the fact that the experimental group consists of not only students studying in the faculty of sport sciences, but also of students studying in different departments of the university. In all of the studies found in literature which showed significance between genders, the participants consisted of students studying in departments of sport sciences faculties or schools of physical education and sport. Sport phenomenon is a very important structure that exists in almost every period of life and it affects the human life with all its aspects. Everyone who does sports gains a status more or less in the social structure. The power of sport is measured with its being a means of socialization and its role of keeping people together. Based on this information, when the socializing power of sport is considered, it is thought as a possible result for students doing sport to have higher results than students who do not.

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