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The study of academic self-efficacy of the students studying in the departments of physical education and sport

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Abstract

The aim of this study is to analyze academic self-efficacy of the students who study at the faculty of sports sciences and Kazım Karabekir Faculty of Education in Atatürk University. In the study, in order to gather data about their self-efficacy, the scale of "academic self-efficacy" which was developed by Owen & Froman and was adapted to Turkish language by Ekici, was applied to 161 male and 84 female students, 245 in total, ın the analysis of the obtained data, in the SPSS programme, such tests were applied on frequence analysis, t-test and varience analysis (Anova), for independent groups, and so asto find out where they are originated from, scheffe test was applied. While comparing the sub-dimensions of academic self-efficacy of the attendants according to their engagement in sports regularly, any significant differences were not encountered in the sub-dimensions of cognitive practices ($p<0.05$) and technical skills ($p<0.05$) of the attendants, yet, a significant difference was encountered in the sub-dimensions of social status ($p<0.05$). According to this data, it can be seen that the students who do sports regularly have higher level of academic self-sufficiency in proportion to the students who do not do any sports regularly in the sub-dimension of social status.

Key words: Academic self efficacy, physical education, self efficacy.

INTRODUCTION

The idea of self-efficacy has recently become a widely used issue with several studies conducted in different fields in international educational environments. The reason of this is about personal ideas and acts related to the idea of self- efficacy and to how to deal with changing challenging situations, and how to overcome these obstacles. People have an experience capacity that they have gained by means of education, experience and external factors. The knowledge they gained comes up with result as to what extent the knowledge obtained is enough for anything with experiences and practices, and to what extent they are successful in dealing with the issue. Among the studies on the idea of self-efficacy, Bandura conducted the most important and cognitive one. According to him, self- efficacy is the fact that an individual should believe in himself/herself in dealing with different situations (4). He also emphasizes that the idea of self-efficacy effects an individuals being involves in right or wrong acts, and is also a sign of how much he/she can make an effort in order to find a solve to a problem he/she can encounter in the future, and to deal with this problem, and of how insistent he/she can be (1).

Woolfolk (19) states that the individuals who have low level of sufficiency avoid from much work while the others who regard themselves as sufficient work and struggle much more than the people who have a suspicion of their skills when they encounter challenges.

Self-efficacy have influence over such factors of academic success, social skills, giving up smokinng, resisting the pain, athletic success, career choice, enterprise, overcoming heart attack, dealing with dreadful conditions etc. According to Bandura, self-sufficiency effects on individuals choice of action, effort and determination (2). Academic self- efficacy is one's subjective belief in the fact that he/she will successfully concluct given academic Works. Self-efficacy is influenced by the attributions that the students make for their success and failure (6).There are many benefits of developing academik self-efficacy of students. There is a strong relation between academic self-efficacy and academic

success. Also, the students who have positive academic self-efficacy exhibit less risky behaviours, and deal with challenging situations more easily (11). Linnenbrink & Pintrich, (16) laid emphasis on the relation of the idea of academic self-efficacy with behavioral, cognitive and instictive aspects of the attendance level of the students to learning activity.

The students who have academic self-efficacy in high-levels have a less fragile manner compared to the ones who have less academic self-efficacy, and the former ones struggle against failure in the course of their belief without giving up. The students who have negative academic self-efficacy often experience academic failure, and have difficulty in getting used to the school (4). Schunk (14) explains the effects of setting goals, processing the knowledge, role modelling, feedback and being awarded on academic self-efficacy as follows: The fact that the student achieves the goals that he/she set before contributes to the development of academic self-efficacy. When evaluated especially in sports; numerous studies have been conducted on the relations between self-efficacy in sport and different results. It has been found out that individual team players who have high levels of academic self-efficacy have much more strongly aimed goal and success level than strong self-efficacy level on the percentage of success focusing on a goal.

When considered that the attendant group study on the field of physical education and sports on graduate level, and that they will occupy such professions as trainer, sports manager, physical education teacher in sport community in the future, the self-efficacy level that they have is highly important for both individually and socially. In this respect, the aim of this study is to research on whether the academic self-efficacy levels of the students who study on different departments of physical education and sports faculty differ according to a variety of variables.

MATERIAL & METHOD

Models of Research

The aim of this study is to inspect the academic self-efficacy of the students studying at Atatürk University Sports Faculty and Kazım Karabekir Physical Education teaching department.

Participants

While Atatürk University Sports Faculty's students and Kazım Karabekir Physical Education teaching department's students have constituted the study environment, randomly chosen 245 people, 161 of them are male and 84 of them are female, have formed the sample group.

Data Collection Tools

To gain data fort his study, ıt has been utilized from "Academic self-efficacy scale" which has three sub-dimension (social statue, 2, 3, 4, 11, 14, 15, 16, 17, 25, 27, cognitive practice, 1, 5, 6, 7, 8, 9, 10, 12, 13, 18, 19, 20, 21, 22, 24, 30, 31, 32, 33, technical ability, 23, 26, 28, 29) and 33 questions developed by Owen & Fromen (1988) and adated to Turkish by Ekici (8).

The questionnaire is Likert Scale and the method of scoring was identified as quite a lot (5 points), a lot (4 points), partially (3 points), a few (2 points) and quite a few (1 point)

Data Analysis

In the study, for determing the participants' demographic features Frequency-analysis, for compering the academic self-efficacy according to gender and regularly sporting condition in independent group, t-test, for comparing the academic self-efficacy acording to department and grade situations one-sided variance analysis (Anova) and for finding the differences source scheffe test have been used.

In the analysis of the gained data statistical packet program in computer environment has been used and significance level has been taken as ($p<0.05$).

RESULTS

When the age ranges of the participants are taken into consideration, it can be seen that 34.3% of them are female with 84 people and 65.7% of them are male; when the departmental distributions of the participants are examined, it is seen that 25.7% of them study at the department of physical education teacher with 63 people, 22.4% of them study at sports management department with 55 people, 31.8% of them study at trainership department with 78 people, and 20.1% of them study at recreation department with 49 people; when the grade distributions of the participants are taken into consideration, 35,5% of them study at 1 st grade with 87 people, 22.4% them study at 2nd grade with

55 people, 26.2% of them study at 3rd grade, with 64 people, and 15.9% of them study at 4th grade with 39 people; when the distributions of education styles are analyzed, it is clear that 64.5% of them are formal education students with 158 people, and 35.5% of them are evening education students with 87 people. When the total monthly income distributions of the families are taken into consideration, it is seen that 15.1% of them have 1000 TL and below income with 37 people, 31.4% of them have 1001-2000 TL income with 77 people, 32.7% of them have 2001-3000 TL income with 80 people, 9.4% of them have 3001-4000 TL income with 23 people, and 11.4% of them have 4001 TL or above income with 28 people. When the distributions of regularly sporting data is analyzed, it is seen that 54.3% of them do sports regularly with 133 people, and 45.7% of them don't do sports regularly with 112 people.

In the comparision of the sub-dimension of academic self-efficacy according to gender of the participants, while there is no significant difference in sub-dimensions of social status (p=.390) and technical abilities (p=761), there is some significal differences in the sub-dimension of cognitive practices (p=0.007).

Accordingly, it has been seen that female students have higher academic self-efficacy (Mean = 2.50 ± 0.49) than male students (Mean = 2.32 ± 0.467) in cognitive practice sub-dimension.

In the comparision of sub-dimension of academic self- efficacy according to regularly sporting condition of participants; while there is no significant difference in cognitive practice (p=.601) and technical abilities (p=257) sub-dimension, there are some significant differences in social status (p=.024) sub-dimension.

Table 1. Information on demographical features of the participants.

Variables	N	%
Gender		
Male	161	65.7
Female	84	34.3
Department		
Physical Education Teacher	63	25.7
Sport Management	55	22.4
Trainership Education	78	31.8
Recreation	49	20.1
Grade		
1.grade	87	35.5
2.grade	55	22.4
3.grade	64	26.2
4.grade	39	15.9
Education Cycle		
Formal Education	158	64.5
Evening Education	87	35.5
Family Income		
1000 TL and below	37	15.1
1001-2000 TL	77	31.4
2001-3000 TL	80	32.7
3001-4000 TL	23	9.4
4001 TL and above	28	11.4
Sporting Regularly		
Yes	133	54.3
No	112	45.7
Total	245	100

Table 2. Comparision of academic self-sufficiency of participants according to genders.

Sub Dimensions	Gender	N	Mean	SD	t	p
Social Status	Male	161	3.10	0.640	0.860	0.390
	Female	84	3.02	0.662		
Cognitive Practices	Male	161	2.32	0.467	2.736	0.007*
	Female	84	2.50	0.490		
Technical Skills	Male	161	2.85	0.723	-0.304	0.761
	Female	84	2.88	0.680		

* p<0.05

Table 3. The comparision of acedemic self-efficacy of participants according to their regularly sporting condition.

Sub Dimensions	Sporting Regularly	N	Mean	SD	t	p
Social Status	Male	133	3.16	.626	2.264	0.024*
	Female	112	2.97	.660		
Cognitive Practices	Male	133	2.40	.447	.524	0.601
	Female	112	2.37	.520		
Technical Skills	Male	133	2.91	.735	1.136	0.257
	Female	112	2.81	.671		

* p<0.05

Table 4. The comparision of differences in academic self-efficacy level according to participants department.

Sub Dimensions	Sporting Regularly	N	Mean	SD	t	p
Social Status	Physical Ed.	63	3.29	0.652	5.251	.002*
	Sport Man.	55	2.95	0.628		
	Trainership	78	3.12	0.667		
	Recreation	49	2.86	0.539		
Cognitive Practices	Physical Ed.	63	2.49	0.483	1.718	.164
	Sport Man.	55	2.39	0.502		
	Trainership	78	2.34	0.528		
	Recreation	49	2.31	0.349		
Technical Skills	Physical Ed.	63	3.10	0.703	4.606	.004*
	Sport Man.	55	2.71	0.565		
	Trainership	78	2.89	0.788		
	Recreation	49	2.68	0.639		

Table 5. Multiple comparision results of differences in academic self- efficacy levels according to participants departments.

Sub Dimensions	Post Hoc (Scheffe Test)			
	Comparison		Difference between averages	p
Social Status	Physical Education Teacher	Sport Management	.343	.036*
		Trainership	.168	.485
		Recreation	.433	.006*
Technical Skills	Physical Education Teacher	Sport Management	.395	.024*
		Trainership	.208	.368
		Recreation	.419	.019*

* p<0.05

With respect to this, ıt has been clear that In social statue sub-dimension the students who do sports regularly (Mean = 3.16 ± 0.63) have more academic self-efficacy than the students who don't do sports regularly.

As it is seen in table 4, while there is a significant difference in technical abilities (p=0.004) and social statü (p=0.002) sub-dimension, there is no significant difference in the sub-dimension of cognitive practices (p=0.164). The results of multiple comparision are given in Table 5.

According to multiple comparision results there is a significant difference between sports management department (p=0.036) and physical education teaching department with respect to social statü sub-dimension.

Accordingly, ıt has been seen that the students of physical education teaching (Mean = 3.29 ± 0.652) have more acedemic self- efficacy level than the students of sports management.

According to multiple comparasion result, there is a significant difference between physical education teaching department and recreation department (p=0.006) in social statue sub-dimension. Accordingly, ıt has been seen that physical education teaching students (Mean = 3.29 ± 0.65) have more academic self-efficacy level than recreation (Mean = 2.86 ± 0.54) students.

According to multiple comparision results, there is a significant difference between physical education teaching department and sports management (p=.020) in the sub-dimension of technical abilities.

Accordingly, it has been seen that physical education teaching department's students (Mean = 3.10 ± 0.70) have more academic self-efficacy level than the studentsof sports management (Mean = 2.71 ± 0.57).

According to multiple comparision results, there is a significant difference between physical education teaching department and recreation department (p=0.019) in technical abilities sub-dimension.

Accordingly, ıt has been seen that The students of physical education department (Mean = 3.10 ± 0.70)have more academic self-efficacy than the students of recreation department (Mean = 2.68 ± 0.64).

Table 6. The comparision of the differences in academic self-efficacy level of participants according to their grades.

Sub Dimensions	Grade	N	Mean	SD	F	p
Social Status	1. Grade	87	2.96	.578	3.612	.014*
	2. Grade	55	3.00	.759		
	3. Grade	64	3.11	.605		
	4. Grade	39	3.35	.625		
Cognitive Practices	1. Grade	87	2.33	.364	2.023	.111
	2. Grade	55	2.30	.511		
	3. Grade	64	2.48	.522		
	4. Grade	39	2.47	.570		
Technical Skills	1. Grade	87	2.74	.616	1.540	.205
	2. Grade	55	2.92	.796		
	3. Grade	64	2.89	.670		
	4. Grade	39	3.00	.802		

* p<0.05

Table 7. Multiple comparision results of differences in academic self- efficacy levels according to their grades.

Sub Dimensions	Post Hoc (Scheffe Test)			
	Comparison		Difference between averages	p
Social Status	1. Grade	2. Grade	-0.041	0.987
		3. Grade	-0.148	0.574
		4. Grade	-0.387	0.021*

* p<0.05

As it is seen in Table 6. While there is a significant difference social statue sub-dimension (p=.014) There isn't any significant difference in technical abilities (p=.205) and cognitive practices (p=.111) sub-dimensions. The results of multiple comparisions are given in table 7.

There are significant differences in social status sub-dimension on the levels of academic self-efficacy related to participants grades (p=.014). According to this, it is seen that 4th grade ($\overline{X}$ =3,35±,625) students have higher level of academic self- efficacy in social status sub-dimension in proportion to 1st grade students (Mean = 2.96 ± 0.58).

DISCUSSION

In our study which was conducted to inspect academic self-efficacy of the students studying at physical education and sports department, we have gained these results.

In participants academic self-efficacy level in relation to gender there are some significant differences in cognitive practices sub-dimension (p=.007).Accordingly, it is seem that Female students have more academic self-efficacy (Mean = 2.50 ± 0.49) than male students (Mean = 2.32 ± 0.47).

In his study, Koçer (10) found some significant differences in behalf of the women in academic self-efficacy situations with respect to gender distribution. In his study, Yelken (21) has concluded that Female students self-efficacy situations are higher than male students. In their study which was conducted to determine a group of candidate teachers self-efficacy in this profiency in Turkey, Akdağ & Walter (3) have stated that Female teacher candidates have more sense of self-efficacy than male teacher candidates.In another study, Özdemir (12) detected some significant differences in behalf of women, in his study which was aimed to searc the form teachers self-efficacy during the education process. These result have supported our findings. Yalmancı et al. (20) didn't encounter any significant differences in science teacher candidates academic self-efficacy perception in terms of genders in their students. Tozlu (15) didn't recognize any significant difference when the tennis trainers self-efficacy situations in terms of genders in his study which was conducted to determine the relation tennis trainers' leadership features and their self-efficacy levels. In his study which was performed to identify physical education and sports teachers' self-efficacy in teachership, Varol (18) didn't get any significant differences between male and female students. These results have conflicted with our findings. Among the students who study in the department of physical education and sports, female students have a higher level of academic self-efficacy in the sub-dimension of cognitive practices, and therefore, it

can be said that they are more efficient than male students in respect of social conditions of their environment and learning on social basis and of applying their gains to daily life. Also, whether in social life or business life, their wide occupation can be shown as evidence to this idea.

There are significant differences in social status sub-dimensions on the self-efficacy levels of the participants in relation with sporting regularly (p=.024).

Accordingly, it is seen that the students who do sports regularly (Mean = 3.16 ± 0.626) have higher level of academic self- efficacy than the ones who do not do sports regularly (Mean = 2.97 ± 0.66) in the sub-dimension of social status.

In his study of the research on teaching self-efficacy of teacher candidate in Physical Education Department, Bozkurt (7) has reached to the result that the scores of the students who do sports regularly are higher than those of the students who do not do sports regularly. In a similar study, Balyan et. al. (2009) have also reached to the result that the self-efficacy of the students who are engaged in sports is higher than those of the students who are not engaged in doing sports. Likewise, Başтuğ & Kuru (5) found in their study in the year 2009 that the students who do sports have higher level of self-efficacy in propartion to the ones who do not do any sports.In his study on the sense of sufficiency of physical education students, Ünlü (17) found that physical education teachers who do sports regularly got significantly high scores in proportion to the ones who do not do sports. In their study that focuses on teacher candidates in physical education department, Kafkas et al. (9) found out that licensed athlete students have a higher belief of self-efficacy than the students who do not have licence. These result are such as to support the findings we obtained.

Sports activities enable individuals to be together, and to more towards the same goal. As a result of conducted sportive activities, an individual gains a competitive spirit, group discipline and a determination to race and win. He/she learns to accept the failure, share the success, help each other and have indulgance towards people. As a consequence of sportive activities that are done in groups, an individual develops the sense of social responsibility and thanks to this sense of social responsibility, a social phenomenon in society can be obtained. Therefore, it can be thought that the dimension as status are high in the individuals who do sports.

While there are significant differences in the sub-dimensions of social status (p=.002) and tecnical skills (p=.004) of the participants on their academic self-efficacy levels related to the departments, it is evident that the students who study at physical education teaching department have higher level of academic self-efficacy than the ones studying at sport management and recreation departments. It can be generally said that the students who study at physical education and sports teaching department have high level of academic self-efficacy (18,7,20). The students who study at the department of physical education and sports teaching have the highest scores in academic self-efficacy sub-dimension. When it is considered that the graduate students from the departments of sport management, recreation and trainership have less possibility to become a teacher, and are assigned to be teachers in few numbers only once in two years, and that they are accepted with high scores to higher education, it can be accepted as normal that the students studying at this department have lower academic self-efficacy.

There are significant differences in social status sub-dimension on the levels of academic self-efficacy related to participants grades (p=.014). According to this, it is seen that 4th grade (Mean = 3.35 ± 0.625) students have higher level of academic self-efficacy in social status sub-dimension in proportion to 1st grade students (Mean = 2.96 ± 0.578). Satıcı (13) in his study reached to the result that 4th grade students have the highest level of academic self-efficacy. Yalmancı et al. (20) in their studies, academic self-efficacy levels can differ in terms of grades. They put forward the idea that 3rd and 4th grade students have the highest level of academic self-efficacy and 1st and 2nd grade students follow this range. These results are such as to support finding we obtained. The fact that 4th grade students have high level of social status can be derived from the fact that they have longer period of education in proportion to 1st grade students, and therefore make more friends socially.

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