

Effect of Sports in Self-Control & Self-Management Levels of

Students

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Abstract

The study was conducted to examine the effect of sports on students' self-control and self-management levels. The research group totally consists of 277 people, 125 of them are female and 152 of them are male, studying in the School of Physical Education and Sports in Bingol University in the 2018-2019 academic year. In order to gather data for the purpose of the research, "Self-Control-Self-Management Scale-SCMS" was used. The students participating in the research were asked personal information questions regarding their demographic characteristics. The research was carried out in SPSS 22 statistical package program and the significance level was taken as 0.05. For testing whether the collected data show normal distribution, the normality of the distributions (Kolmogorov-Smirnov) and then skewness and kurtosis tests were examined. According to the test results, double comparisons are Mann Whitney-U, and multiple comparisons are Kruskal Wallis analysis. According to the answers given by the students participating in the research, the self-assessment and self-empowerment levels of the students who are doing licensed sports are significantly higher, female students are more self-confident in the activities that need to be done, and the self-management-control of the students engaged in individual sports levels were determined as higher.

Key Words: Sports, Self-Control, Self-Management INTRODUCTION

Self-control is an attempt to control oneself with the self-respect. Self control comes into play when a person tries to think, feel and act otherwise (20). Self-control, which is important both in relation to the individual and with others, defines the control and management of the individual's emotions, thoughts and behaviors (21). According to Rotter (22), the balance between internal and external control is a distinctive feature on our life. Individuals who balance the internal and external control become more successful in school and business life. This is because individuals who provide internal and external control set permanent goals and enjoy realizing these goals (10). Erikson also mentioned that this would come out as a universal article. In addition, internal and external control is achieved through the high performance and intensive work of skilled people. People with high self-awareness and patience achieve their goals along with perfection (11). The fact that individuals have high self-control skills prevents them from performing unwanted behaviors and ensures that they are protected from undesirable results from their behaviors (14).

Self-management is related to the use and use of learning resources for individuals to achieve their learning goals (9). Candy (3) expresses the concept of self-management as a willingness to learn and the capacity to manage the learning process. The individual should make learning continuous and meaningful by reaching the right material, giving feedback and asking questions. In the self-managed learning process, the self-management of the individual is also considered important for obtaining positive results from their attempts to learn. Secondly, it is important for the success of the process that learners can control and organize internal situations (effort, ability, motivation) and external situations (luck, opportunity, risk, etc.) which are the possible effects on the learning process (3, 19). Finally, in the self-managed learning process, individuals' willingness to learn is seen as important in organizing learning environments in order to activate themselves and achieve their goals (28).

Self-control and self-management are extremely important for people to develop themselves positively and escape from negativity. When the body of literature was examined, it was determined that sports has an effect on self-control and selfmanagement as well as self-control on sport. As an example of these studies; It is determined that master athletes have better self-control skills than amateurs. (5, 17).

It was found that successful athletes tried to determine how close they were to the desired success by monitoring their current status and developed their self-control skills that increased their performance (4). In addition, in studies showing that self-control processes help athletes learn effectively, it is emphasized that self-control is very important especially in young athletes and lack of self-control leads to poor performance (1, 12, 13, 16, 31).

This research was carried out with the aim of determining the effect of sports on students' selfcontrol-self-management levels and examining whether they differ according to some variables.

Method

Study Group

The study group of the research conducted to examine the affect of sports on students' self-control and self-management levels consists of 277 people, 125 of them are female and 152 are male, studying at the School of Physical Education and Sports in Bingol University during the 2018-2019 academic year. It has been determined that 20.9% of the students participating in the study are studying in the physical education and sports teaching department, 33.9% in the coaching department, 19.1% in the recreation section and 26.0% in the management department.

Data Collecting Tools

In the research, survey technique was applied as a data collection tool. In the first part of the research, there are 6 questions that will reflect the demographic information of the participants (gender, department, etc.). In the second part of the research, " Self-Control-Self-Management Scale-SCMS ", which was adapted to Turkish by Ercoskun (8) developed by Mezo (18), used in the research. The self-management scale consists of 16 questions 3 sub-dimensions: self-adjustment, and selfassessment and self-empowerment. In the study of Ercoskun (8), the overall Cronbach alpha reliability coefficient of the scale was determined as .81. Expressions in the scale are rated as 6-Likert type.

Statistical Analyses

The data assembled through the scale used to determine the effect of sport on students' selfmanagement levels were analyzed through the statistical package program SPSS.22 program and the results were interpreted. Descriptive statistics including arithmetic average, standard deviation, frequency and percentage distributions are presented in order to gain insight into demographic information and other group questions. For the determination of the students' self-management levels and the sub-dimensions of these variables with some demographic variables, the normality of the distributions (Kolmogorov-Smirnov) and then Skewness and kurtosis tests were examined. In the research, "normal" expression scores are individuals whose Z value varies between -3 and +3, while "extreme values" are scores whose Z value is outside the range of -3 and +3. However, according to Shao (23), the normal distribution of the data to be applied in the study depends on the values of skewness and kurtosis between ± 3. According to test results, Mann Whitney-U was used in independent binary comparisons, and Kruskal Wallis tests were used in multiple comparisons between demographic variables. In case of differences between groups in multiple comparisons between demographic variables, Mann Whitney-U tests were used to determine which group or groups this difference derived from. Besides, Chi-Square (Chi-Square) test was used to compare the answers of students about each expression in the scale according to demographic variables. The results were evaluated at 95% confidence interval and significance was evaluated at the level of p <0.05. Besides, statistics including frequency and

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percentage distributions were presented in order to reveal students' opinions about determining the level of self-control. This is the section where the statistical results of the study will be explained. Statistical analysis based on the demographic characteristics of the people participating in the research will be contained.

Findings

Table 1. Comparison of the students' self-control - self-management general averages and sub-dimensions according to gender variance

		Gender	Ν	Х	S.s	U	Р	
	Calf A disaster and	Female	125	25.89	3.164	8150 000	040*	
	Self-Adjustment	Male	152	25.17	3.295	8150.000	,040*	
Self-control Self-	Self-Assessment	Female	125	21.39	4.270	0500 500	10(
management Sub dimensions		Male	152	21.04	4.116	- 8500.500	.126	
unitensions		Female	125	20.86	2.809	97(0,000	200	
	Self-Reinforcement	Male	152	20.26	3.413	8769.000	.266	
		Female	125	68.15	7.982	- 8583.500	1((
Self-control Self-management General Total		Male	Male 152		8.786	- 8583.500	.166	
Τα		277						
p<0.05*								

When Table 1 is examined, there was a significant difference found between the groups in terms of self-adjustment from the self-control subdimensions according to the gender variable of the students participating in the research. It is seen that the difference is in favor of female students. There were on significant differences found between the groups in terms of self-control-self-management general averages and self-assessment and selfreinforcement sub-dimensions.

Table 2. Comparison of the self-control - self-management general averages and sub-dimensions of	:
the students according to their licensed sports status	

		Do you do sports as licensed?	Ν	x	S.s	U	Р	
		Yes	135	25.61	2.977	- 9545.000	.952	
0.14 . 1.0.14	Self-Adjustment	No	142	25.38	3.498	9545.000	.952	
Self-control Self-	0.16.4	Yes	135	21.36	4.416	F04F 000	010*	
management Sub dimensions	Self-Assessment	No	142	21.04	3.957	- 7947.000	.012*	
unitensions	Self-	Yes	135	20.17	3.132	- 7794.000	.007**	
	Reinforcement	No	142	20.88	3.164	- 7794.000	.007***	
		Yes	135	67.14	8.329			
Self-control Self-management General Total		No	142	67.32	8.609	9284.000	.651	
Total			277					
p<0.05* p<0.01**								

When Table 2 is examined, there was a significant difference found between the groups in terms of self-Assessment and self-reinforcement among self-control and self-empowerment subdimensions according to the licensed sports of the students participating in the research. It is observed that the difference is in favor of students who do not do sports as licensed both in self-assessment and self-reinforcement sub-dimensions. There was no significant difference found between the groups in terms of self-control-self-management general averages and self-adjustment sub-dimensions.

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	What kind of sports do you do?	Ν	x	S.s	U	Р	
	Individual Sports	69	26.00	2.864	102(500	.120	
Self-adjustment	Team Sports	66	25.21	3.061	- 1926.500	.120	
C 1(A	Individual Sports	69	21.91	3.947	1017 500	100	
Self-Assessment	Team Sports	66	20.78	4.821	1917.500	.109	
Self-reinforcement	Individual Sports	69	20.65	2.822	1971 000	.072	
	Team Sports	66	19.66	3.375	- 18/1.000	.072	
	Individual Sports	69	68.56	7.788	1759 500	020*	
Self-control Self-management General Total Total			65.66	8.672	- 1758.500	.022*	
	gement General Total	sports do you do? Self-adjustment Individual Sports Self-Assessment Individual Sports Self-Assessment Individual Sports Self-reinforcement Individual Sports gement General Total Individual Sports	sports do you do? N Self-adjustment Individual Sports 69 Team Sports 66 Self-Assessment Individual Sports 69 Self-reinforcement Individual Sports 69 Self-reinforcement Individual Sports 69 Team Sports 66 Individual Sports 69 Team Sports 66 Individual Sports 69 Team Sports 66 Individual Sports 69 Team Sports 66	sports do you do?NXSelf-adjustmentIndividual Sports6926.00Team Sports6625.21Self-AssessmentIndividual Sports6921.91Team Sports6620.78Self-reinforcementIndividual Sports6920.65Team Sports6619.66Individual Sports6968.56Team Sports6665.66	sports do you do? N X S.s Self-adjustment Individual Sports 69 26.00 2.864 Team Sports 66 25.21 3.061 Self-Assessment Individual Sports 69 21.91 3.947 Self-reinforcement Individual Sports 66 20.78 4.821 Self-reinforcement Individual Sports 69 20.65 2.822 Team Sports 66 19.66 3.375 gement General Total Individual Sports 69 68.56 7.788 Team Sports 66 65.66 8.672	sports do you do? N X S.s U Self-adjustment Individual Sports 69 26.00 2.864 1926.500 Self-Assessment Individual Sports 66 25.21 3.061 1926.500 Self-Assessment Individual Sports 69 21.91 3.947 1917.500 Self-reinforcement Individual Sports 69 20.65 2.822 1871.000 gement General Total Individual Sports 69 68.56 7.788 1758.500	

Table 3. Comparison of the self-control-self-management general averages and sub-dimensions of the students according to the performed kind of sport

When Table 3 is examined, there was a significant difference found between the groups in the general average of self-control and self-

management only according to the type of sports performed by the students participating in the research. It is seen that the difference is in favor of the students doing individual sports.

Table 4. Comparing the students' self-control - self-management general averages and their sub-dimensions according to the department variance

		Department	Ν	x	S.s	Sd	X ²	р
		^a Physical Education and	58	26.25	2.039			.271
	_	Sports Teaching	58					
	Self-adjustment	Coaching Education	94	24.98	3.462	3	3.913	
	_	<pre> •Recreation </pre>	53	25.67	3.528	_		
		^d Sports Management	72	25.41	3.475			
		^a Physical Education and	58	22.06	0 1 1 1		11.062	.011* a>b
		Sports Teaching	58		3.111			
Self-control Self-management Sub dimensions	Self-Assessment	Coaching Education	94	19.81	5.339	3		
Sub almensions	_	 Recreation 	53	22.05	2.885	-		
	_	^d Sports Management	72	21.68	3.587			
	C 1(^a Physical Education and	58	20.96	2.239			
		Sports Teaching	58			3		
	Self- – reinforcement –	^b Coaching Education	94	20.25	3.372		1.085	.781
	reinforcement –	 Recreation 	53	20.71	2.957			
	_	^d Sports Management	72	20.43	3.645			
		^a Physical Education and	58	(0.20	E (72			
	_	Sports Teaching	58	69.29	5.672	_		
Solf control Solf man	- Conoral Total	^b Coaching Education	94	65.06	9.791	3	7.136	.068
Self-control Self-management General Total -		Recreation	53	68.45	7.102			
	-	^d Sports Management	72	67.52	8.884			
Total			277					
><0.05*								

When the Table 4 is analyzed, there is a significant difference found between the groups in the self-Assessment sub dimension which one of the sub dimensions of self-control- self-management according to students' department variance. It has been determined that the difference is between students studying in physical education and sports teaching and students studying in the education of coaching.

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Table 5. The Comparison of the students who participated in the research to the statements related to self-	
control and self-management according to their distribution and sports	

PI	ROPOSITIONS	Do you do sports as licensed	It never defines me	It does not mostly define me	It doesn't define me much	It defines me somehow	It pretty defines me	It defines me completely	It never defines me	It does not mostly define me	It doesn't define me much	It defines me somehow	It pretty defines me	It defines me completely	Р
			n	%	n	%	n	%	n	%	n	%	n	%	
	When I work on something,	Yes	-	-	1	0.7	1	0.7	21	15.6	58	43.0	54	40.0	.000
	I pay my full attention.	No	-	-	3	2.1	3	2.1	13	9.2	26	18.3	97	68.3	***
	I focus on the tasks I have to	Yes	-	-	2	1.5	2	1.5	21	15.6	60	44.4	50	37.0	.040*
	do, even if I don't like them.	No	-	-	4	2.8	8	5.6	14	9.9	79	55.6	37	26.1	.010
	While working for a purpose, I become	Yes	-	-	-	-	1	0.7	17	12.6	40	29.6	77	57.0	.620
stmen	conscious of what I am doing.	No	-	-	-	-	3	2.1	14	9.9	38	26.8	87	61.3	
Self-Adjustment	When I work towards a goal, I constantly follow my	Yes	-	-	-	-	1	0.7	21	15.6	52	38.5	61	45.2	.634
Sel	progress.	No	-	-	1	0.7	2	1.4	26	18.3	59	41.5	54	38.0	
	While working on something difficult, I	Yes	-	-	-	-	1	0.7	16	11.9	51	37.8	67	49.6	.304
	concentrate on my thoughts.	No	-	-	-	-	6	4.2	17	12.0	48	33.8	71	50.0	
-	While working for a purpose, I know which path I can follow.	Yes	1	0.7	1	0.7	2	1.5	20	14.8	54	40.0	57	42.2	.378
		No	-	-	2	1.4	3	2.1	30	21.1	62	43.7	45	31.7	
	When I set important goals for myself, I usually fail to	Yes	83	61.5	32	23.7	4	3.0	6	4.4	5	3.7	5	3.7	.005**
-	achieve those goals. (*)	No	59	41.5	67	47.2	3	2.1	4	2.8	5	3.5	4	2.8	.005
nt	I don't think I have the ability to make clear plans	Yes	67	49.6	50	37.0	7	5.2	6	4.4	3	2.2	2	1.5	.746
elf-Assessment	for most of the problems I encounter in my life. (*)	No	72	50.7	50	35.2	5	3.5	5	3.5	8	5.6	2	1.4	
Ass	The goals I achieved do not	Yes	73	54.1	39	28.9	15	11.1	1	0.7	7	5.2	-	-	.031*
self.	mean much to me. (*)	No	76	53.5	54	38.0	3	2.1	2	1.4	7	4.9	-	-	
0,	I think it is useless to make	Yes	84	62.2	35	25.9	6	4.4	5	3.7	5	3.7	-	-	.266
-	plan. (*) The standards I set for	No	78	54.9	53	37.3	5	3.5	4	2.8	2	1.4	-	-	
	myself are uncertain and it is difficult for me to decide	Yes	68	50.4	46	34.1	12	8.9	5	3.7	3	2.2	1	0.7	.023*
	on how to do a task. (*)	No	51	35.9	70	49.3	5	3.5	6	4.2	6	4.2	4	2.8	
	I appreciate myself when I	Yes	-	-	2	1.5	8	5.9	45	33.3	55	40.7	25	18.5	.004**
-	succeed.	No	-	-	-	-	6	4.2	25	17.6	63	44.4	48	33.8	
nt	To enjoy later; I plan hard	Yes	1	0.7	1	0.7	13	9.6	20	14.8	48	35.6	52	38.5	.672
eme	work by making a plan.	No	1	0.7	3	2.1	11	7.7	28	19.7	54	38.0	45	31.7	
Self-reinforcement	Although others do not appreciate me, I quietly appreciate myself.	Yes	-	-	2	1.5 2.1	8	5.9 4.2	24 20	17.8 14.1	45 50	33.3 35.2	56 63	41.5	.853
lf-re															
Sej	When I do something right,	Yes	-	-	-	-	3	2.2	21	15.6	43 51	31.9	68	50.4	.447
	I enjoy it.	No	-	-	1	0.7	4	2.8	13 22	9.2	51	35.9 39.3	73 53	51.4 29.2	
	When I make progress, I reward myself.	Yes No	-	-	2	1.5 1.4	5 4	2.8	 7	16.3 4.9	53 46	39.3	53 83	39.3 58.5	- 005**
-	0.05* p<0.01** p<0.001*** Proposition of the prop														option

that is not preferred at all.

When the Table 5 is examined, there is a significant difference found between the groups in terms of focusing on the work to be done and devote time for the work done in the answers given to the expressions in the self-adjustment sub-dimension of the students according to the situation of doing sports. It is observed that people who do not do sports on the work to be done spend more time, and students who do sports on focusing on the things to do are more focused. According to the responses made for the statements in the self-assessment subdimension; It was determined that people who do sports in setting and achieving important goals are more believers, in terms of giving meaning to what they accomplish, they are in favor of those who do sports, and finally, when they decide how to do a task, those who do sports see themselves more successfully than those who do not. In the selfreinforcement sub-dimension, it is revealed that people who do not play sports as licensed appreciate themselves more in case of success and reward themselves when they make progress on a topic.

DISCUSSION AND RESULT

The study group of the research carried out to investigate the effect of sports on the levels of selfmanagement of the students consists of 277 people, 125 of whom are female and 152 of whom are male at the School of Physical Education and Sports in Bingol University during the 2018-2019 academic years. In this research, the following results were reached:

According to the gender variable of the students participating in the study, there was a significant difference between the self-regulation subdimensions and self-adjustment dimensions between the groups. It is seen that the difference is in favor of female students. No significant differences were found between the groups in the self-control-self-management general averages and the self-assessment and self-reinforcement subdimensions. When the literature is examined, it is seen that these findings obtained in the research are supported by various studies in the literature (8, 15, 24, 27, 30, 6, 2).

Depend on the licensed sports of the students participating in the study, a significant difference was determined between the self-control and selfreinforcement dimensions among the self-control and self-management sub-dimensions. It is seen that the difference is in favor of students who do not do

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sports as licensed both in self-assessment and selfreinforcement sub-dimensions. In the subdimensions of self-control-self-management and self-adjustment sub-dimensions, there was no significant difference between the groups. When the researches on self-control and self-management levels of those who do sports in the literature are examined; shows that those who do sports have a better level of self-control and self-management than those who do not (7). In another study, when the students who do sports and do not do sports are compared; a significant finding has been reached in favor of students doing licensed sports (30). The results of these studies are in line with the results we obtained.

According to the type of sports performed by the students participating in the study, only a significant difference was found between the groups in the general average of self-control-selfmanagement. It is observed that the difference is in favor of students doing individual sports. In the study of Yılmaz (30) on high school students, although there is no difference between the students' self-control and self-management perceptions according to their team sports, individual sports or not doing sports; it has been determined that students who do team and individual sports have a significantly higher self-control and selfmanagement perception than non-sports students.

According to another finding, there was a significant difference between the groups in the selfassessment sub-dimension only from the selfcontrol-self-management sub-dimensions according to the department variable in which the students studied. It has been determined that the difference is between students studying in physical education and sports teaching and students studying in coaching education. It is seen that the self-control self-management levels of the students studying in the department of physical education and sports teaching are higher than the students studying in the education of coaching. The reason for this is that students who study in physical education and sports teaching departments have achieved a high score in the higher education exam that they entered in order to be eligible to study at universities, or that mostly national or professional athletes usually study in physical education and sports teaching; and for this reason, it can be said that the self-control-selfmanagement levels of the students studying in this section are significantly high.

In the last part of the study, there was a significant difference between groups in terms of self-regulation perceptions of self-regulation perceptions of self-regulation sub-dimension of students who are licensed sports and amateur level or sedentary. It is observed that people who do not do sports on the work to be done spend more time, and students who do sports on focusing on the things to do are more focused. According to the answers given to the statements in the selfassessment sub-dimension, people who do sports in setting important goals and achieving this are more professed; It has been determined that those who do sports in terms of giving meaning to what they have achieved are in favor of those who do sports and finally, when they decide on how to do a task, those who do sports still see themselves more successful than those who do not. In the self-reinforcement sub-dimension, it is determined that people who do not do sports as licensed will appreciate themselves in case of success and reward themselves more when they make progress on a subject. When the body of the literature is examined; in different studies, it was revealed that athletes with high selfcontrol benefit more from practices and competition (25, 26), better control their anxiety levels and perform high. (29).

Consequently; it has been revealed with the studies that sports has many positive effects on people. As it is known, sometimes sports are carried out in the context of certain rules and in a certain competitive environment. In order for people to be successful in sports environments, there are sometimes rules set by themselves and sometimes by their teammates and coaches. In order for the team spirit to be formed and success to be achieved, they must follow these rules. Hence, discipline and willpower are indispensable. It is inevitable that the people operating in such an environment and those with a certain level of discipline and will bring this to their daily life. In this context, it will not be a coincidence that people are successful in both business life and social relations even in their daily life. In this frame, it is recommended that families should do something for their children in the name of sports and benefit from sports environments at a very young age. It can be said that this will bring both health and success in an individual sense and social prosperity and development to the next level.

REFERENCES

- Anshel MH, Anne P. Self-regulatory characteristics of competitive swimmers as a function of skill level and gender. Journal of Sport Behavior. 1996; (19):2.
- Boyalı C. Öz-kontrol ile akademik erteleme arasındaki ilişkide akıllı telefon bağımlılığının aracı rolünün incelenmesi. Yüksek Lisans Tezi. Marmara Üniversitesi. Eğitim Bilimleri Enstitüsü. İstanbul, 2020.
- Candy PC. Self-direction for lifelong learning: A comprehensive guide to theory and practice. Jossey-Bass, Publishers. San Francisco. 1991.
- Chen D, Singer RN. Self-regulation and cognitive strategies in sport participation. International Journal of Sport Psychology. 1992; 23(4): 277-300.
- Cleary TJ, Zimmerman BJ. Self-regulation differences during athletic practice by experts, non-experts, and novices. Journal of Applied Sport Psychology. 2001; (13): 185-206.
- Çelik EO. Dağcılık sporu ile uğraşan bireylerin doğaya bağlılık, bilinçli farkındalık, öz kontrol düzeylerinin incelenmesi. Yüksek Lisans Tezi. Anadolu Üniversitesi. Sosyal Bilimleri Enstitüsü. Eskişehir. 2019.
- 7. Doğan O. Spor psikolojisi ders kitabı. Cumhuriyet Üniversitesi Yayınları. Sivas. 2004.
- Ercoşkun MH. Adaptation of Self-Control and Self-Management Scale (SCMS) into Turkish Culture: A study on reliability and validity. Educational Sciences: Theory & Practice. 2016; 16(4): 1125-1145. doi: 10.12738/estp.2016.4.2725.
- Garrison DR. An analysis of the control construct in selfdirected learning. in H.B Long (E,d), Emerging perspectives of self-directed learning, 1997; 27-44.
- Genet N. Association analyses of 249,796 individuals reveal 18 new loci: Associated with body mass index. Nature genetics. 2010; 11(42): 937-948.
- Gottfredson LS. On intelligence: a bioecological treatise on intellectual development (e.d) building academic in everyday life, intelligence, Cambridge, MA: Harvard University. 2001; (39)4: 363-365.
- 12. Jordet G. When superstars flop: Public status and "choking under pressure" in international soccer penalty shootouts. Journal of Applied Sport Psychology. 2009a; 21: 125-130.
- Jordet G. Why do english players fail in soccer penalty shootouts? A study of team status, selfregulation, and choking under pressure. Journal of Sports Sciences. 2009b; 27: 97-106.
- Kanfer FH. Implications of a self-regulation model of therapy for treatment of addictive behaviors. In W. R. Miller & N. Heather (Eds.), Treating addictive behaviors. Plenum Press. New York. 1986; 29-47.
- 15. Karataş M. Emniyet Genel Müdürlüğü Merkez Teşkilatı'nda çalışan polis teşkilatı mensuplarında öz denetim ve sosyal sorun çözme becerileri arasındaki ilişkinin incelenmesi. Yüksek lisans tezi. Ankara Üniversitesi. Sağlık Bilimleri Enstitüsü. Ankara. 2014.
- Kirschenbaum DS, Ordman AM, Tomarken AJ, Holtzbauer R. Effects of differential self-monitoring and level of mastery of sports performance: Brain power bowling. Cognitive therapy and Research. 1982; 6: 335-342.
- Kitsantas A, Zimmerman BJ. Comparing self-regulatory processes among novice, non-expert and expert volleyball players: A microanalytic study. Journal of Applied Sport Psychology. 2002; 14: 91-105.
- Mezo PG. The self-control and self-management scale (SCMS): Development of an adaptive self-regulatory coping

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skills instrument. Journal of Psychopathology and Behavioral Assessment. 2009; 31(2): 83-93.

- Miller CA, Fitch T, Marshall JL. Locus of control and at-risk youth: A comparison of regular education high school students and students in alternative schools. Education. 2003; 123(3): 548-552.
- Muraven M, Baumeister RF. Self-regulation and depletion of limited resources: Does self-control resemble a muscle? Psychological bulletin. 2000; 126(2): 247.
- Nebioğlu M, Konuk N, Akbaba S. The investigation of validity and reliability of the turkish version of the brief selfcontrol scale. Clinic Bulletin Of Clinical Psyhcopharmalogy. 2012; 340-351.
- 22. Rotter JB. Generalized expectancies for internal versus external control of reinforcement.Psychological Monographs. 1996; 80:609. doi: 10.1037/h009297
- 23. Shao AT. Marketing Research: An Aid to Decision Making, Cincinnati. South-Western/Thomson Learning. Ohio. 2002.
- Subaş R. Okul öncesi öğretmen adaylarının öz-denetimleri ve öğretmen özyeterlik inançları arasındaki ilişkinin bazı değişkenlerle incelenmesi. Yüksek lisans tezi. Dumlupınar Üniversitesi. Eğitim Bilimleri Enstitüsü. Kütahya, 2018.
- 25. Toering TT, Elferink-Gemser MT, Jordet G, Visscher C. Selfregulation and performance level of elite and non-elite youth soccer players. Journal of Sports Sciences. 2009a; 27: 1509-1517.
- 26. Toering TT, Elferink-Gemser MT, Jordet G, Visscher C. Selfregulation and performance level in top-level youth soccer:

International versus national level players. Abstract, ISSP 12th World Congress of Sport Psychology: Meeting new challenges and bridging cultural gaps in sport and exercise psychology? [CD]. Marrakech, Morocco: International Society of Sport Psychology (ISSP) 2009b, June.

- Türkeş MC. Ergenlerde sapkın davranışın nedenleri olarak özdenetim ve aile içi denetim mekanizmalarının analizi. Yüksek lisans tezi. Uludağ Üniversitesi. Sosyal Bilimler Enstitüsü. Psikoloji Anabilim Dalı. Bursa, 2004.
- Wang VCX, Dennett SK. Pedagogy vs Andragogy Organizations In Wang, Victor C. X (Ed.), Handbook of research on education and technology in a changing society. 2014; 318-330. doi:10.4018/978-14666-6046-5.
- 29. Woodman T, Hardy L. Self confidance and performance. a little self doubt helps.Psyhcology of Sport and Excercise. 2001; 467-470.
- 30. Yılmaz M. Lisanslı olarak spor yapan ve spor yapmayan ortaöğretim öğrencilerinin özkontrol ve özyönetim düzeyleri. Yüksek lisans tezi. Abant İzzet Baysal Üniversitesi. Eğitim Bilimleri Enstitüsü. Bolu, 2017.
- 31. Zimmerman BJ. Development and adaptation of expertise: The role of self-regulatory processes and beliefs. In K. A. Ericsson, N. Charness, P. J. Feltovich, & R. R. Hoffman (Eds.), The Cambridge handbook of expertise and expert performance. New York: Cambridge University Press. 2006; 705-722.