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An investigation of academic motivation levels of student adolescent athletes

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Abstract

The purpose of this study is to examine the academic motivation scale of student adolescent athletes in terms of different variables. Scanning model was used during the research. While the home of the research is composed of children who actively attend formal education and actively engage in sports during the adolescence period, it consists of 552 students who are selected by random practice method, continue formal education and actively engage in sports. In order to collect the research collection, the Personal Information Form maintained by the researcher and the Assistance Academic Motivation Scale by Bozanoğlu (2004) were used. All of the collected structures were transferred from IBM-SPSS 25.0 sections, they were found to have normal distribution and were analyzed using the Independent Simple T Test and One Way Anova test. According to the analyzes made, it was determined that there was a fundamental difference between the gender variable and age variable of the athletes participating in the practice and the presence of academic motivation, and there was no difference between the branch variable and the level of academic motivation. It is recommended that The educational institutions in the sports field are advised to provide professional psychological support in order to encourage students to participate in sports.

Keywords: Students; Motivation; Adolescent; Academic Motivation

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1. Introduction

1.1. Introduce the problem

Motivation is defined as an internal state that arouses, directs and maintains behavior (Woolfolk, 1998). Being motivated means acting to do something (Ryan & Deci, 2000).

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Fidan (1996), on the other hand, defines the motive as a motivating force that directs the person to the behavior, gives strength, causes an emotional rise and affects the behaviors in order to achieve certain goals and show the necessary behaviors in a certain situation. Motivation is examined in two sub-dimensions as intrinsic and extrinsic motivation.

Considering its sources, motivation is divided into two as intrinsic motivation and extrinsic motivation. If the individual takes action under the influence of an external stimulus, this refers to external motivation. For example, the child who started to do his homework after his parents said "you can't play computer games if you don't do your homework" is motivated externally. However, if the individual acts without the influence of any external stimulus or control, this indicates internal motivation. For example, if a child who is interested in geometry lessons is doing geometry exercises despite not being told to "study", that child is internally motivated.

Academic motivation is defined as the generation of energy necessary for academic work. (Bozanoglu, 2004). Many psychologists and educators agree that student motivation is an important factor for school learning (Ryan & Connell, 1898). Academic motivation is an important concept that determines the strength of insistence, effort and desire of students in academic subjects and affects student success.

Academic motivation can be defined simply as a factor that affects a person's attendance at school and getting a degree in school (Clark & Schroth, 2010). Academically unmotivated students do not pay attention to completing their work and attending school (Yonezewa, Jones, & Joselowski, 2009; cited in Wormington, Corpus, & Anderson, 2012). Academically motivated students have goals such as attending school and achieving success in school. Students with low academic motivation may encounter problems such as reluctance to attend school, absenteeism problems, academic failure, and dropping out of school.

Bozanoğlu (2004) defines academic motivation as the generation of energy required for academic work. Academic motivation is one of the necessary prerequisites for learning, and students who are motivated about learning exhibit behaviors such as attending the lesson, repeating information, associating with pre-existing information, and asking questions (Atay, 2014). Hot and Başören (2015), on the other hand, define motivation, which is also characterized as academic participation and has the power to affect the learner's performance the most, as the determinant of an individual's cognitive, emotional and behavioral commitment to education.

There are a number of factors that determine the speed, severity and continuity of many behaviors that individuals show in their daily lives. These factors are affected by various factors from internal (personal characteristics of the individual) or external (environment) (Akbaba, 2006, p.343). These factors likewise affect the academic success of the student. It has been observed that some social, cultural and economic reasons affect student achievement (Aslanargun, Bozkurt, Sarioğlu, 2016, p. 216). Education of

parents, profession of parents, economic situation of the family and the number of siblings in the family are among the factors that change student success. Like these external factors, internal factors also affect academic achievement, namely academic motivation. Aktaş (2017), the student's interest in the lesson or subject, liking the lesson, abilities, future goals, intelligence capacity, etc. argues that it affects academic motivation internally and causes high or low achievement. Student's perception, interest, meanings attributed to success and failure, self-concept, etc. affects academic motivation (Kelecioğlu, 1992).

Being motivated internally or externally in the participation of the student in learning activities in the environment ensures high academic success (Shot and Başören 2015). Changing motivation sources and different emotional intelligence levels can also differentiate academic achievement performance (Altun, Seyis, & Yazıcı, 2013, p. 53). Motivation is one of the most important power sources that determines the direction, severity, and stability of student behaviors at school and the speed in achieving the desired goal in educational environments. The source of a significant part of the learning difficulties and disciplinary incidents observed at school and in the classroom is related to motivation (Akbaba, 2006, p. 343). High academic motivation affects school success, discipline, etc. While it affects positively, low academic motivation affects success, discipline, etc. negative effects. Individuals with insufficient motivation are either unaware of their potential power or cannot use it. This leads to a negative effect on variables such as interest in an activity, participation, activation of prior knowledge, creativity and academic success, which have a very important place in learning (Bacanlı & Calp, 2016).

Within this information, in this study, it is aimed to examine the academic motivation levels of adolescent athletes in terms of different variables.

2. Method

In this study, the screening model was used because it was aimed to examine the academic motivation levels of adolescent athletes in terms of different variables. This model is a scan to be made on the whole universe or the sample to be taken from it in order to reach a general judgment about the universe in a universe consisting of many elements (Karasar, 1998).

Research design, and participants of the study

While the universe of this research consists of athletes in different branches who are in the adolescence period and continue formal education, the sample of the research consists of 552 athletes who were selected by random sampling method and who are in the adolescence period and continue formal education.

2.1. Data collection instrument

Personal Information Form

The Personal Information Form was developed by the researcher and it was aimed to obtain information such as age, gender and branch of the participants.

Academic Motivation Scale

It was developed by Bozanoğlu (2004) to determine the individual differences in students' academic motivation levels. The scale has 3 sub-dimensions in terms of item content. "Transcendence (2, 6, 7, 8, 9, 10, 16)", "Using Knowledge (1, 5, 12, 14, 15, 18)" and "Discovery (3, 4, 11, 13, 17), 19, 20)" consists of 20 items in total. Each item can be answered in accordance with the respondent. It is scored by making a 5-point Likert type (1=Definitely not suitable, 5=Absolutely appropriate) grading. One of the 20 items (4th item) in the scale is scored in reverse. While the minimum score that can be taken from the scale is 20, the maximum score is 100. (Bozanoglu, 2004). In the validity and reliability evaluation made by Bozanoğlu (2004), it was seen that the scale is a valid and reliable measurement tool. Reliability calculations were made by the researcher for the research group and the Cronbach Alpha value of the total score of AMS was calculated as ,86.

2.2. Data analysis

Table 1. Skewness and kurtosis values of the Academic Motivation Scale

Sub-Dimensions	Skewness	Kurtosis
Self Transcendence	-,784	-1,118
Using Information	-,604	-1,284
Discovery	,472	,926

The data collected for the sub-problems whose answers were sought within the framework of the purpose of the research were first processed into the data coding form. All 552 data were included in the research. Then, statistical analyzes were applied to the data transferred to the computer on the SPSS 25.0 program. The results of the personal information, scale scores, frequency and percentage values of the candidates were analyzed. The normal distribution of the scores and the skewness and kurtosis coefficients were examined. Cooper-Cutting explained that the skewness and kurtosis values were in the range of ± 2 as a suitable situation in terms of normality. In the study, Independent Simple T Test and One Way ANOVA test, which are parametric tests, were applied since it was seen that the skewness-kurtosis values of the scores were not at extreme levels and there were no excessive deviations in the normal distribution curves.

3. Findings

	Gender	f	%	$X \pm Ss$	t	р
Self Transcendence	Male	296	53,6	26,21±0,57	2.195	,003*
	Female	256	46,4	$23,87\pm0,54$		
Using Information	Male	296	53,6	$25.42{\pm}0,55$	1,248	,007*
	Female	256	46,4	$23,01\pm0,53$		
Discovery	Male	296	53,6	$24,06\pm0,53$	1,782	,002*
	Female	256	46,4	$22,72\pm0,51$		

Table 2. Analysis of academic motivation level by gender variable

p<0,05

When Table 3 is examined, 53.6% of the athletes participating in the research are male and 46.4% are female. According to the results of the analysis, it was determined that there was a statistically significant difference in the sub-dimensions of selftranscendence, using knowledge and discovery between the levels of academic motivation and the gender variable, and the academic motivation scores of male athletes were significantly higher than the academic motivation scores of female athletes in all subdimensions.

Table 4. Analysis of academic motivation level by age variable

	Age	n	%	$X \pm Ss$	F	р	Tukey HSD
Self Transcendence	13-14 Age ¹	152	27,5	$21,89\pm0,52$	1,153	,001*	
	$15-16 \ Age^2$	193	35,0	$22,87\pm0,52$			1-3*
	$17-18 \mathrm{Age}^3$	207	37,7	$23,97\pm0,53$			
Using Information	13-14 Age ¹	152	27,5	22,96±0,41			
	$15-16 \text{ Age}^2$	193	35,0	23,54±0,46	1,327	,002*	1-3*
	17-18 Age ³	207	37,7	$24,01\pm0,55$			
Discovery	$13-14 \text{ Age}^1$	152	27,5	$23,01\pm0,52$			
	$15-16 \mathrm{Age}^2$	193	35,0	23,74±0,54	1,417	,014*	1-3*
nc0.05	$17-18 \ Age^3$	207	37,7	$24,25\pm0,58$			

p<0,05

When Table 4 is examined, 27.5% of the athletes participating in the research are between the ages of 13-14, 35% are between the ages of 15.16 and 37.7% are between the ages of 17-18. As a result of the analysis, it was determined that there was a statistically significant difference between the academic motivations and age ranges of the athletes participating in the research. When the scores were examined, it was seen that the scores

for the 17-18 age range and 13-14 age range scores were significantly higher in the subdimensions of self-transcendence, using knowledge, and discovery.

Bran ch		n	%	X± Ss	F	р	Tukey HSD
Self Transcendence	$Basketball^1$	120	21,7	$22,88 \pm 0,49$,613	,14	
	$ m Football^2$	142	25,7	$23,57\pm0,51$			
	Table Tennis ³	79	14,3	$23,35\pm0,50$			
	$Badminton^4$	86	15,6	$23,76\pm0,50$			
	$Volleyball^5$	125	22,7	$23,42\pm0,51$			
Using Information	$Basketball^1$	120	21,7	$26,11\pm0,52$			
	$\rm Football^2$	142	25,7	$25,17\pm0,51$	2,252	,09	
	Table Tennis ³	79	14,3	$26,12\pm0,52$			
	$Badminton^4$	86	15,6	$25,12\pm0,53$			
	$Volleyball^5$	125	22,7	$26,66{\pm}0,53$			
Discovery	$Basketball^1$	120	21,7	26,03±0,51			
	$\rm Football^2$	142	25,7	$25,12\pm0,52$	2,558	,17	
	Table Tennis ³	79	14,3	$25,83\pm0,51$			
	Badminton ⁴	86	15,6	$26,46\pm0,52$			
	Volleyball ⁵	125	22,7	$25,34\pm0,53$			

Table 5. Analysis of academic motivation level by branch variable

p<0,05

When Table 5 is examined, 21.7% of the participants in the research are in basketball, 25.7% in football, 14.3% in table tennis, 15.6% in badminton and 22.7% in volleyball. have been found to do. As a result of the analyzes, it was determined that there was no statistically significant difference between academic motivation and the branch variable in all of the academic motivation sub-dimensions. When the scores are examined, it is seen that the highest score in the sub-dimension of self-transcendence is in badminton, and the lowest score is in basketball. In the sub-dimension of using knowledge, it was determined that the highest score was in volleyball, the lowest score was in badminton, and in the exploration sub-dimension, the highest score was in badminton, and the lowest score was in football.

4. Discussion and Conclusions

In this study, academic motivation levels of adolescent athletes were examined in terms of different variables. Of the athletes participating in the research, 53.6% are men and 46.4% are women. Looking at the age ranges of the participants, 27.5% are 13-14 years old, 35% are 15.16 years old and 37.7% are 17-18 years old. Looking at the

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branches of the participants, it was determined that 21.7% of them did sports in basketball, 25.7% in football, 14.3% in table tennis, 15.6% in badminton and 22.7% in volleyball.

According to the results of the analysis, it was determined that there was a statistically significant difference in the sub-dimensions of self-transcendence, using knowledge and discovery between the levels of academic motivation and the gender variable, and the academic motivation scores of male athletes were significantly higher than the academic motivation scores of female athletes in all sub-dimensions.

When the literature is examined, Eroglu et al. (2017) reported that the academic motivation levels of the students studying at the faculty of sports sciences showed a statistically significant difference according to the gender variable. In addition, Alemdag et al. (2014) and Erkensiz and Serhatoglu (2013) also found in their studies that there is a significant difference between gender variable and academic motivation. Bircan and Ünal (2021), in their study, reported that there was a statistically significant difference between the sub-dimensions of academic motivation, "transcendence and using knowledge", and the gender variable. As a result, all of the studies cited as reference above partially support our study because in the mentioned studies, academic motivation scores of women were found to be higher than academic motivation scores of men, while in this study, academic motivation scores of male athletes. It is thought that this situation is due to the different sample groups selected for the study.

As a result of the analysis, it was determined that there was a statistically significant difference between the academic motivations and age ranges of the athletes participating in the research. When the scores were examined, it was seen that the scores for the 17-18 age range and 13-14 age range scores were significantly higher in the sub-dimensions of self-transcendence, using knowledge, and discovery. According to this result, it can be said that the increase in academic motivation in athletes as the age increases is due to the motivating feature of sports.

When the literature is examined, Bircan and Unal (2021) reported in their study that the academic motivation of the participants differed according to their age, and the academic motivation increased as the age group increased. In addition, Demir (2008) found a significant relationship between the age variable and academic motivation in his study. These results support our study.

As a result of the analyzes, it was determined that there was no statistically significant difference between academic motivation and the branch variable in all of the academic motivation sub-dimensions. When the scores are examined, it is seen that the highest score in the sub-dimension of self-transcendence is in badminton, and the lowest score is in basketball. In the sub-dimension of using knowledge, it was determined that the highest score was in volleyball, the lowest score was in badminton, and in the exploration sub-dimension, the highest score was in badminton, and the lowest score was in football.

When the literature is examined, it is thought that there is no study on whether there is a significant difference between the level of academic motivation and the branch of the athletes.

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