INVESTIGATION OF ACADEMIC SELF-EFFICACY ACCORDING TO PERCEPTIONS OF SPORTS HIGH SCHOOL STUDENTS

Spor Lisesi Öğrencilerinin Görüşlerine Göre Akademik Benlik Yeterliklerinin İncelenmesi

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Araştırma Makalesi/Research Article

ABSTRACT

This study aims to investigate academic self-efficacy according to the perceptions of students who studied in sports high schools. The study covered a sample of 538 students, who were randomly chosen and studied in Elazığ Sports High School, Malatya Sports High School, and Mardin Sports High School. The data were collected from the sample of the study by using the *"Academic Self-Efficacy Scale"*. The data were analyzed by using the licensed SPSS 22.0 package software. The Cronbach alpha coefficient of the scale was calculated as 0.82. As a result of the investigations, in the education period, statistically significant differences were determined according to the variable of the place of residence. No differences were observed in terms of the variables of gender, grade level of education, and family's monthly income level. In conclusion, supporting academic self-efficacy in sports high school students, especially developing academic planning skills, can contribute to reducing academic procrastination behaviors. In both educational and other guidance activities to be held in these educational institutions, studies that emphasize improving the academic self-efficacy of students can be conducted. Additionally, conducting similar studies can further contribute to the comprehension of the concept by including qualitative data collection processes such as open-ended questions.

ÖZ

Bu araştırma, spor liselerinde eğitim alan öğrencilerin görüşleri doğrultusunda akademik benlik düzeylerini tespit etmek amacıyla yapılmıştır. Araştırma grubu Elazığ Spor Lisesi, Malatya Spor Lisesi ve Mardin Spor Lisesi'nde rastgele yöntemle seçilmiş 538 öğrenciden meydana gelmektedir. Araştırma grubundan *"Akademik Benlik Yeterliği Ölçeği"* kullanılarak veriler elde edilmiştir. Veriler lisanslı SPSS 22.0 paket programı kullanılarak analiz edilmiştir. Bu araştırmada, ölçeğin Cronbach alfa değeri 0.82 olduğu belirlenmiştir. Araştırma sonucunda, eğitim sürecinde ikametgâh değişkenine göre istatistiksel anlamda farklılık elde edilmiştir. Cinsiyet değişkeni, eğitim aldıkları sınıf düzeyi ve aile gelir durumu değişkenlerine göre bir farklılık elde edilmemiştir. Sonuç olarak, spor lisesi öğrencilerinin akademik benliklerinin desteklenmesiyle, akademik planlama yeteneklerinin artırılmasına ve akademik ertelemeye yönelik davranışlarının azaltılmasına katkı sağlayabilir. Bu eğitim kurumlarında yürütülecek eğitimsel ve diğer rehberlik aktivitelerinde, öğrencilerin akademik benlik algılarının artırılmasına yönelik faaliyetler üzerine odaklanılabilir. Ayrıca benzer çalışmalara görüşme, açık uçlu sorular gibi nitel veri toplama süreçlerinin de dâhil edilmesi konunun daha kapsamlı anlaşılmasına katkı sağlayacaktır.

1. Introduction

In today's societies, every field has undergone unbelievable processes of changes and transformations. Rapid developmental and transformational processes have occurred in every field that is concerned with societies such as social structure, science, economy, technology, arts, sports, education, and professions. Naturally, these rapid developments and changes brought about changes in wishes, characteristics, future expectations, learning, and teaching activities of individuals. Therefore, the individuals who live in these societies that rapidly change and develop question the information that belongs to this world where they live and have turned into individuals who play active roles in the development and transformation of the society where they live rather than being a direct receiver of this information.

Young individuals spend this section of their lives, which affects them in various ways, with education. As it is in the whole world, one of the most important subjects for young individuals in Turkey is education as well. Young individuals get in a great race to receive a sound education, enroll in university, and have a job. This race, which starts with primary education, continues until the university exam. In Turkey, because the way of achieving a high status and economic income is through this exam, the preparation process for this exam, unfortunately, creates psychological and social pressure on individuals (Tekeli, 2010).

While young individuals try to adapt to emotional, physical, and cognitive changes, they try to prepare for their future by obtaining academic success. The period of secondary education is rather important for young individuals in terms of both preparing for the exam and making decisions about their future. In this period, young individuals are to determine the field of their future profession and make decisions about their future professions. One of the elements that affect achievement in schools is academic self-efficacy (Korkmaz and Kaptan, 2002).

Academic self-efficacy is the perception of students regarding whether they can learn a unit of learning based on their educational background. It is the way of perceiving their skills in self-evaluation processes (Kirk, 2000; Boekaerts, 1996). Academic self-efficacy is the evaluation of students' academic achievement, academic self-confidence, and academic proficiencies with other standards (Gabriela et al., 2014). Academic self-efficacy is generally viewed as a valuable educational outcome in numerous educational systems. It is also defined as the attitudes, values, emotions, and perceptions of individuals regarding their mental skills, learning skills, and achievements. The academic self-efficacy in individuals develops with mental and physical developments. It starts in early childhood and turns into a stereotyped structure (Yanal, 2019; Preckel and Brüll, 2010; Çağlar, 2010: 25; Byrne, 2002; Byrne and Shavelson, 1986: 474). In brief, academic self-efficacy indicates the belief that individuals have academic skills and the perception of themselves in terms of their acquisition in academic fields (Tekeli, 2010: 24).

In the learning-teaching process, students make decisions about their schools, branches, courses, or some of the extracurricular activities. These decisions of students are based on their experiences and bring along outcomes that can affect every field in their future professional lives. The academic self-efficacy of students was proved to have rather important effects on their academic and future performance. The basis of students' academic self-efficacy covers important factors such as what type of skills and areas of interest they have to make correct decisions and conduct their learning process healthily (Kuzgun, 1996: 34-35).

The attitudes of individuals toward themselves and their academic self-efficacy are based on the judgments of teachers, parents, peers, and environments in their educational background. For individuals to make correct decisions on this subject, they first need to know what they want and what kind of skills, economic possibilities, and environmental support they have (Yanal, 2019; Kuzgun, 1996: 34).

Under the condition of Turkey, it is widely accepted that it is rather difficult to enroll in a good university and department. For young individuals, the most important thing is to enroll in university and prepare for their future. Therefore, the most stressful process for young individuals is the last grade of high school, when they prepare for the university exam. In this period, the students both prepare for the exam and make decisions about their professional preference. Thus, the inability to cope with stress causes young individuals to experience mental and physical disorders and certainly hinders academic achievement. Generally, young individuals who cannot cope with their problems demonstrate reactions of withdrawal rather than seeking help. Thus,

supporting and guiding young individuals is of great importance to ensure that they can cope with stress in their educational lives (Tekeli, 2010: 88, 89). Regardless of educational steps, processes, or types of schools, the aim of almost every student is to enroll in a higher education institution that can prepare the students for their future professions by which they believe they can lead comfortable lives. For example, one of the aims of sports high schools, which is one of the formal education institutions, is to ensure that the students receive education in the field of physical education and sports according to their interests and skills and to train them to be successful athletes (Ministry of National Education, 2009. When studies that are conducted with this aim in sports high schools were evaluated, it was observed that the opinions, expectations, physical activities, or motor features of sports high school students were emphasized while studies that were related to education were neglected. Although sports high school students are chosen by special talent exams and these schools are mostly chosen by athletes, they should fall behind in terms of meeting certain standards in education. Considering sports high schools within this framework, the study was conducted to determine the academic self-efficacy levels according to perceptions of sports high school students. Accordingly, the study is important in terms of guiding administrators, educators, and educational policy, project, and program makers.

2. Material and Method

In the current study, the quantitative method was implemented and the research design was chosen as the correlational survey model.

In the study, the sample group consisted of 538 students who received sports education in Elazığ Sports High School (285 students), Malatya Sports High School (141 students), and Mardin Sports High School (112 students). The reason for creating the study group from the students in these three high schools was convenience.

To collect the data from the sample of the study, the *"Academic Self-Efficacy Scale",* which was developed by Peterman (1992) and adapted into Turkish by Tekeli (2010: 94), was utilized. The scale measures self-efficacy regarding school. In other words, it measures subjective perceptions of individuals regarding overcoming a difficult situation based on their skills. The scale consists of a single subscale and 13 items. The items are scored with a 5-point Likert-type scale, which ranges from *"Strongly Disagree"* to *"Strongly Agree".* The lowest score that can be obtained from the scale is 13 while the highest is 65. As the scores obtained from the scale increase, the academic self-efficacy levels are increased as well. For the 13 items in the scale, the Cronbach alpha coefficient was determined as 0.863 (Tekeli, 2010: 101).

The data that were obtained in the study were transferred to licensed SPSS 22.0 package software. First, the data were analyzed in terms of normal distribution and it was determined that the data demonstrated a normal distribution. In the study, the scale's Cronbach alpha coefficient was calculated as 0.82.

Then, frequency and percentage analyses were carried out to demonstrate the distribution of the sample group in terms of individual variables. To evaluate the level of differences in terms of the variable of gender, which was an independent variable, "Independent Samples t-test", which is a parametric test, was carried out. To determine the level of differences according to the variables of grade, and monthly income level, *"One-Way Variance Analysis (ANOVA)",* which is a parametric test, was conducted. For the variable of residence place, *"Kruskal Wallis H Test"* was conducted. The statistical significance (α error level) level was considered as p<0.05.

3. Findings

Within the framework of the aims of the study, the results that were obtained from the high school students, who received sports education, were demonstrated below.

When the variable of the place of residence in the sample was analyzed, it was determined that there were statistically significant differences between the students who resided in their own houses and the students who resided in school dormitories (Table 1). The students who resided in their own houses reported perceptions that were more positive compared to the students who resided in school dormitories.

Table 1. Results of Kruskal Wallis H Test That Was Conducted in Terms of the Variable of the Place of Residence in the Sample Group

Scale	Place of Residence	N	$\overline{X}_{rank}$	SD	X2	P	U Test
Academic Self-Efficacy Scale	(a) Own House	384	283.45				
	(b) School Dormitory	142	233.07	8.462	11.026	0.004	a, b
	(c) Relatives' House	12	254.21				

Table 2. Results of Independent Samples T-Test That Was Conducted to Determine Whether There Were Differences According to the Variable of Gender in the Sample Group

Scale	Gender	N	$\overline{X}$	SD	t-Value	p- Value
Academic Self-Efficacy Scale	Male	421	51.137	8.541	0.069	0.945
	Female	117	51.076	8.209		

When the study group was evaluated in terms of the variable of gender, it was discovered that there was no statistically significant difference between males and flames (Table 2).

Table 3. Results of One-Way Variance Analysis (ANOVA) That Was Conducted to Determine Whether There Were Differences According to the Variable of Grade Level in the Sample Group

Scale	Grade Level	N	$\overline{X}$	SD	F	p-Value
Academic Self-Efficacy Scale	(a) 9th Grade	123	51.105	8.586		
	(b) 10th Grade	143	49.825	9.037	1.893	0.130
	(c) 11th Grade	138	52.159	8.023		
	(d) 12th Grade	134	51.462	8.060		

When the study group was evaluated in terms of the variable of grade level, it was observed that there was no statistically significant difference among the grade levels (Table 3).

Table 4. Results of One-Way Variance Analysis (ANOVA) That Was Conducted to Determine Whether There Were Differences According to the Variable of Family's Monthly İncome Level in the Sample Group

Scale	Income Level	N	$\overline{X}$	SD	F	p-Value
Academic Self-Efficacy Scale	(a) 0-1500 TL	53	51.150	7.860		
	(b) 1501-3000 TL	329	51.203	7.968	0.326	0.806
	(c) 3001-5000 TL	106	51.386	8.895		
	(d) 5001 TL and above	50	50.020	11.099		

*TL refers to Turkish Liras.

When the study group was evaluated in terms of the variable of the family's income level, no statistically significant difference was observed (Table 4).

4. Discussion and Conclusion

The results that were obtained from the analyses in the study were evaluated below.

According to the variable of the place of residence in the education period, significant differences were observed between the students who resided in their own houses and the students who resided in school dormitories (Table 1). The students who resided in their own houses reported perceptions that were more positive compared to the students who resided in school dormitories. In a study conducted by Acar and Çakır (2015), it was reported that the burnout levels of students who resided in school dormitories were higher compared to the students who resided in houses. In other studies, it was observed that the students who resided in school dormitories were affected negatively by this situation (Uğurlu, 2014; Savcı, 2013; Yılmaz, 2012; Yavuzer, 2004). These results supported the findings of this study. It is widely accepted that peaceful and comfortable environments are important for achievement in educational life. The students who reside in school dormitories connect with different groups of peers and they can be affected both positively and negatively by them. However, in these environments, they may not sufficiently concentrate on educational lives. Thus, it can be interpreted that being far away from families can result in negative effects on the academic self-efficacy of the students.

Within this scope, it was observed that there were no statistically significant differences between the responses of female and male students in the academic self-efficacy scale in terms of the variable of gender (Table 2). When the studies that were conducted with high school and university students were evaluated, no significant differences were observed between the academic self-efficacy and the variable of gender (Tekeli, 2010; Ekici, 2008; Yılmaz et al., 2007; Gerçek et al., 2006; Ercan, 2007; Keskin and Orgun, 1996). The students who receive the same education in sports high school under the same conditions naturally interact with each other in the same way. As a result of this association, subjects such as education life, concern for future, academic expectancy and higher education preference affect all the students irrespective of gender. It was believed that having common concerns for the future were unavoidably due to sharing the same conditions.

In the study, no statistically significant differences were observed according to the variable of grade level in the sample group (Table 3). When previous studies were evaluated, similar results were observed (Pehlivan and Köseoğlu, 2011; Tepeköylü, Soytürk, and Çamlıyer, 2009; Uyanık and Akman, 2004). In a study conducted by Tekeli (2010: 136), it was reported that academic self-efficacy in university students was significantly higher compared to high school students in the last grade, which was compatible with the Social Learning Theory of Albert Bandura, which explains academic self-efficacy and other studies in the literature. Furthermore, Tekeli (2010: 123-124) stated that "Under today's conditions, enrolling to university is a successful deed and an important element that affects academic self-efficacy of students. This could be the greatest reason why mean academic self-efficacy scores of university students were significantly higher compared to high school students in the last grade. However, according to the Social Learning Theory of Albert Bandura, individuals with high levels of academic self-efficacy set difficult goals and they are persistent and decisive in terms of obtaining achievements. It is possible that these characteristics were influential for the students in enrolling in university. Being persistent and decisive in achieving goals, and spending effort for these goals are key points for achievement in any subject". In the study group, the fact that there was no significant difference between the grades was evaluated as a natural result when it was considered in terms of the beliefs of the young individuals that they could achieve their future goals through education and academic success regardless of their educational stage.

When the variable of the monthly income level of the sample group was investigated, no statistically significant difference was observed (Table 4). In previous studies, similar results were reported (Tepeköylü, Soytürk, and Çamlıyer, 2009; Uyanık and Akman, 2004). In today's societies that change rapidly, the importance of education gradually increases while the expectations of parents from educational institutions demonstrate

similarities. Parents expect their children to become individuals who are self-confident, who have academic expectations, and who spend efforts on these goals. Therefore, such a result was evaluated to be natural.

In previous studies, it was generally revealed that academic self-efficacy was related to achievement in schools (Muijs, 1997; Marsh, Byrne and Shavelson, 1988). In other words, it can be stated that higher levels of academic self-efficacy bring about higher academic achievement. In today's world, where information technologies have come to the forefront, the greatest contribution to students is to train them in the best way and provide a sound education for them. Furthermore, whether the students consult their parents is important when they experience problems in terms of their self-confidence, academic self-efficacy, how to deal with problems, and inability to solve problems. For students to benefit from education at the highest level, the characteristics of the students should be defined. These subjects, which affect the quality of education, are also the responsibilities of school administrators. Within this framework, it can be beneficial to conduct certain surveys with students at the initiation of the education period to determine the problems of the students in guidance and counseling services. Supporting the academic self-efficacy of students, especially developing their academic planning skills, can also contribute to reducing academic procrastination behaviors of the students. In both educational and guidance activities in these educational institutions, focusing on variables that develop the academic self-efficacy of students can yield beneficial results. Conducting similar studies at different educational stages and different high schools can contribute to the comprehension of the subject in a better way. In such studies, the participation of parents and teachers in the data collection process can contribute to obtaining more valid results. Furthermore, including qualitative data collection methods, such as interviews and open-ended questions, can contribute to the comprehension of the subject.

Kaynaklar

Acar, H. and Çakır, M.A. (2015). The investigation of high school students' burnout levels: yeşilova township case. *Mehmet Akif Ersoy University Journal of Education Faculty*, 34, 152-168.

Boekaerts, M. (1996). Self-regulated learning at the junction of cognition and motivation. *European Psychologist*, *1*(2), 100-112.

Byrne, B.M. and Shavelson, R.J. (1986). On the structure of adolescent selfconcept. *Journal of Educational Psycholog*y, *78* (6), 474.

Byrne, B.M. (2002). Validating measurement and structure of self-concept: Snapshots of past, present and future research. *American Psychologist*, 57, 897-909.

Çağlar, A. (2010). *The attitudes and academic self-concepts towards science course of 6.7. and 8th grade students*. (Master Thesis, 18 Mart University, Institute of Science, Çanakkale). Access Address https://tez.yok.gov.tr/UlusalTezMerkezi/tarama.jsp

Ekici, G. (2008). The effects of the classroom management lesson on preservice teachers' teacher sense of self-efficacy. *Hacettepe University Journal of Education*, 35, 98-110.

Ercan, S. (2007). *Comparing elementary teachers' scientific process skills and scientific self-efficacy levels: As a sample of Usak province*. (Master Thesis, Kocatepe University, Social Sciences Institute, Afyon). Access Address https://tez.yok.gov.tr/UlusalTezMerkezi/tarama.jsp

Gabriela, O.V., Guadalupe, A.T., Lagunes, R. and Isabel, L. (2014). Development of an academic self-concept for adolescents (asca) scale. *Journal of Behavior*, 117-130.

Gerçek, C., Yılmaz, M., Köseoğlu, P. and Soran, H. (2006). Biology teaching self-efficacy beliefs of the teacher candidates. *Ankara University, Journal of Faculty of Educational Sciences*, *39* (1), 57-73.

Keskin, Ü.G., Orgun, F. (2006). Studying the strategies of students' coping with the levels of self-efficacy-sufficiency. *Anatolian Journal of Psychiatry*, *7* (2), 92-99.

Kirk, G. (2000). *The relationship of attitudes toward science, cognitive style, and self-concept to achievement ın chemistry at the secondary school level*. (Unpublished doctoral dissertation), Florida International University, Miami, Florida.

Korkmaz, H. and Kaptan, F. (2002). The effects of project-based learning on elementary school students' academic achievement, academic self-concepts and study time in science education. *Hacettepe University Journal of Education Faculty*, 22, 91-97.

Kuzgun, Y. (1996). *Academic self-concept scale handbook.* 1. Edition, İstanbul: Turkish Ministry of Education Press.

Marsh, H.W., Byrne, B.M. and Shavelson, R. J. (1988). A multifaceted academic self-concept: Its hierarchical structure and its relation to academic achievement. *Journal of Educational Psychology*, *80*(3), 366.

Milli Eğitim Bakanlığı. (2009). *Güzel sanatlar ve spor lisesi yönetmeliği* (trans.: Fine arts and sports high school regulations). Official Gazette No: 27260, Access: https://www.resmigazete.gov.tr/eskiler/2009/06/20090616-7.htm. Access Date: 20 November 2020.

Muijs, R.D. (1997). Predictors of academic achievement and academic self-concept: A longitudinal perspective. *British Journal of Educational Psychology*, *67*(3), 263-277.

Pehlivan, H. and Köseoğlu, P. (2011). Attitudes towards mathematics course and the academic self-concept of the students attending at Ankara science high school. *Dokuz Eylül University, The Journal of Buca Faculty of Education*, 31, 153-167.

Preckel, F. and Brüll, M. (2010). The benefit of being a big fish in a big pond: Contrast and assimilation effects on academic self-concept. *Learning and Individual Differences*, *20*(5), 522- 531.

Tepeköylü, Ö., Soytürk, M. and Çamlıyer, H. (2009). Examining the levels of perception of communication skills in physical education and sports college (pesc) students in terms of pre-determined variables, *Spormetre The Journal Of Physical Education and Sport Sciences*, 7(3), 115-124.

Savcı, M. (2013). *A study for examining psychological symptoms of boarding and day students in boarding schools*. (Master Thesis, Atatürk University, Institute of Education Sciences, Erzurum). Access Address https://tez.yok.gov.tr/UlusalTezMerkezi/tarama.jsp

Tekeli, Ş. G. (2010). *A comparison between senior high school students and college students: Academic self-efficacy, locus of control, coping with stress and problem-solving*. (PhD Thesis, Ankara University, Social Sciences Institute, Ankara). Access Address https://tez.yok.gov.tr/UlusalTezMerkezi/tarama.jsp

Uğurlu, Y. (2014). Türkiye'nin yatılı çocuklar/öğrenciler karnesi (trans.: Turkey's boarding children / students pass. *Journal of Education Overview* Access: https://www.ebs.org.tr/ebs_files/files/yayinlarimiz/egitimebakis30.pdf, Access Date: 20 November 2020.

Uyanık B. G. and Akman. B. (2004). The Level Of Self-Esteem In High -School Students Of Different Socio-Economic Status. *Fırat University Journal of Social Science*, *14*(2), 175-183.

Yanal, S. (2019). *Investigations of the attitudes of Turkish and Syrian secondary school students' acquisitions, attitudes and academic self-concept for visual arts lessons*. (Master Thesis, Necmettin Erbakan University, Institute of Education Sciences, Konya). Access Address https://tez.yok.gov.tr/UlusalTezMerkezi/tarama.jsp

Yavuzer, H. (2004). Ana baba ve çocuk (trans.: Parents and children). 4. Edition, İstanbul: Remzi Bookstore.

Yılmaz, M., Gürçay, D. and Ekici, G. (2007). Adaptation of the academic self-efficacy scale to Turkish. *Hacettepe University, Journal of Education*, 33, 253-259.

Yılmaz, A. (2012). The purpose of this study to evaluate the boarding primary school problems in terms of student perception. *Gaziantep University Journal of Social Sciences*, *11* (3), 659 -679.