

## THE STUDY OF CORRELATION BETWEEN SECONDARY SCHOOL PLACEMENT SCORES OF SPORTS HIGH SCHOOL STUDENTS AND THEIR LEVEL OF ACADEMIC ACHIEVEMENT<sup>1</sup>

### SPOR LİSESİ ÖĞRENCİLERİNİN ORTAÖĞRETİM YERLEŐTİRME PUANLARI İLE AKADEMİK BAŐARI DÜZEYLERİ ARASINDAKİ İLİŐKİNİN İNCELENMESİ

<sup>2</sup>Ferhat ÇAKIR\*, <sup>2</sup>Kadir PEPE,

<sup>2</sup> Mehmet Akif Ersoy University, School of Physical Education and Sports, Burdur, Turkey

\*e-mail: [guler\\_ferhat@hotmail.com](mailto:guler_ferhat@hotmail.com)

#### ABSTRACT

In this study, we aimed to investigate the correlation between secondary school placement scores of sports high school students and their level of academic achievement. Secondary school placement scores of 201 sports high school students and their end-of-term grade point averages have been included in the study. Only the data for Isparta Sports High school students have been included in the study. Related data have been obtained from E-school system of Ministry of National Education. While Pearson Correlation analysis has been used to determine the direction of the correlation between the secondary school placement scores of the students and their grade point averages, Simple Linear Regression analysis has been used to study the magnitude of the correlation. In the study, it has been found that there is a statistically meaningful and positive correlation between the secondary school placement scores of the students and their grade point averages. As a result, it can be concluded that for sports high school students, the secondary school placement scores of the students is a significant determinant for end-of-term grade point averages, which shows their academic achievement level.

**Keywords:** Sport High school, academic achievement, secondary school placement score

#### ÖZET

Yapılan bu arařtırmada spor lisesi öğrencilerinin ortaöğretim yerleőtirme puanları ile akademik başarı düzeyleri arasındaki ilişkinin incelenmesi amaçlanmıştır. Arařtırmaya toplam 201 spor lisesi öğrencisinin Ortaöğretim Yerleőtirme Puanı (OYP) ve dönem sonu not ortalamaları dâhil edilmiştir. Arařtırmaya sadece Isparta Spor Lisesi öğrencilerinin verileri dâhil edilmiştir. Arařtırmaya katılan öğrencilerin OYP ile dönem sonu ortalamalarına ilişkin bilgiler Milli Eğitim Bakanlığı'nın e-okul sistemi üzerinden toplanmıştır. Arařtırmaya katılan öğrencilerin OYP puanları ile not ortalamaları arasındaki ilişkinin yönünü (doğrusal-zıt) belirlemek için Pearson Korelasyon analizi kullanılırken, ilişkinin büyüklüğünü incelemek için Basit Doğrusal Regresyon analizinden yararlanılmıştır. Arařtırmada spor lisesi öğrencilerinin OYP puanları ile dönem sonu not ortalamaları arasında istatistiksel olarak anlamlı ve pozitif yönlü bir ilişki olduğu belirlenmiştir ( $p<0.05$ ). Sonuç olarak spor lisesi öğrencilerinde akademik başarı düzeyini gösteren dönem sonu not ortalaması üzerinde OYP puanının önemli bir belirleyici olduğu söylenebilir.

**Anahtar kelimeler:** Spor lisesi, akademik başarı, ortaöğretim yerleőtirme puanı

**JEL CODES:** L83, I20, I21

<sup>1</sup>This article was presented as poster in the III. International Sports Science Tourism and Recreation Student Congress, Gaziantep, Turkey.

## INTRODUCTION

Academic success is defined as the evaluation of the students with a grade after a certain period of education (Güneş, 2010). High school students are always trying to study, taking exams, working hard to be successful at the exams and to pass their current grades. This continues consistently until they start their careers. In the stages mentioned, it is a common fact that students feel psychological fatigue which leads to a downfall in the academic success level of students related to fatigue (Çapulcuoğlu & Gündüz, 2013).

The motivations of the students in physical training and sports lesson affect the level of success. According to this, the motivation levels of the students are in parallel with their academic success level. Because the students with high motivation level are willing to plan their academic study plans, execute their plans, and setting a high level targets for the lesson (Akandere et al., 2010). Furthermore, participating into sport activities at early ages affects the academic successes of the students positively. A research in which the opinions of the parents are evaluated, it was found out that parent think that the success levels of the students increases during the periods in which the students take part in sport activities (Yalçın & Balcı, 2013).

It cannot be expected that each exam implemented can be perfect. Because, each examination has its positive sides as well as negative sides or shortcomings. It is extremely important to overcome the negations and that students taking part in the exams be affected by the negations mentioned as least as possible. From this point of view, whether an examination system is successful or not can be determined by evaluating the success levels of the students taking the exam. For the determination of the academic success of the students studying at secondary education institutions, the evaluations of the success they took from the transition to secondary education examination is necessary (Metin, 2013).

In Turkey, students are accepted to the sport high schools via special talent examinations; in addition, the students need to get a certain point from the transition to secondary education examination. Generally the lessons of the sport high schools are related sport field including basic sport training, physical education and sport history, sport physiology, prevention of sport accidents, sport massage, sport psychology, sport organization, sport sociology, sport facilities and materials, sport and nutrition (<http://ttkb.meb.gov.tr/program2.aspx>). A great proportion of the students studying at sport high schools generally have a sport history. However, getting a high point from the transition to secondary education examination also makes them advantageous.

It can be seen that there are a lot of researches related to the academic success levels of the secondary schools students. However, researches about how the previous success levels of the students affect their academic success levels are limited. It was found out that there is no research about how the previous academic success levels of the sport high school students affect their success. This research with this point of view aims to investigate the relationship between the previous academic success levels of the sport high schools students and their current success level.

## MATERIALS AND METHODS

### Research Group

In total 201 students 49 of which graduated from Isparta Sport High School; 44 of which are

senior students; 55 of which are junior students and 53 of which is sophomore students.

### Data Collection

As a data collection tool, the compilation of documentary resource method was used. In this context, the grade-point averages of the students taking part in this research belonging to each school term and their OYP (The transition to secondary education points) points are taken from e-okul system belonging to Turkish Ministry of Education.

### Statistical Analysis

In the analysis of the data obtained from the research, SPSS 22.0 program was used. In the research group, In the determination of the relationship between OYP points and grade-point averages Pearson Correlation Analysis was used, and in order to investigate the size of the relation, Simple Linear Regression Analysis was used. In these analysis, the significance level was determined as  $p < 0,05$ . In addition to the analysis made, in the determination of the descriptive statistics related to the OYP points and grade-point averages, mean, standard deviation, minimum and peak values were calculated.

## FINDINGS

**Table 1. Correlation between the OYP points and grade-point averages of the graduate students**

		OYP	Mean 9	Mean 10	Mean 11	Mean 12	R <sup>2</sup>
OYP	r	1	,673**	,485**	,416**	,420**	-
	p	-	,000	,000	,003	,003	
	N	49	49	49	49	49	
Mean 9	r	,673**	1	,830**	,718**	,530**	,442
	p	,000	-	,000	,000	,000	
	N	49	49	49	49	49	
Mean 10	r	,485**	,830**	1	,830**	,651**	,219
	p	,000	,000	-	,000	,000	
	N	49	49	49	49	49	
10	r	,416**	,718**	,830**	1	,589**	,156
	p	,003	,000	,000	-	,000	
	N	49	49	49	49	49	
Mean 10	r	,420**	,530**	,651**	,589**	1	,159
	p	,003	,000	,000	,000	-	
	N	49	49	49	49	49	

When Table 1 is analyzed, a meaningful correlation between the OYP points and grade-point averages of the graduate students at the end of each term was found out ( $p < 0.05$ ). It was concluded that in the graduate students, OYP points affect the grape-point average %44,2 at the end of the first grade, %21,9 the second grade, %15,6 the third grade and %15,9 at the fourth grade.

**Table 2. Correlation between the OYP points and grade-point average belonging to each term of the senior students**

		OYP	Mean 9	Mean 10	Mean 11	R <sup>2</sup>
OYP	r	1	,663**	,336*	,200	-
	p	-	,000	,026	,192	
	N	44	44	44	44	
Mean 9	r	,663**	1	,761**	,539**	,496
	p	,000	-	,000	,000	
	N	44	44	44	44	
Mean 10	r	,336*	,761**	1	,829**	,092
	p	,026	,000	-	,000	
	N	44	44	44	44	
Mean 11	r	,200	,539**	,829**	1	,017
	p	,192	,000	,000	-	
	N	44	44	44	44	

When table 2 is analyzed, a meaningful correlation between the OYP points and grade-point average belonging to each term of the senior students was found out ( $p < 0.05$ ). According to the data obtained, it was found out that OYP points affect the first grade-point average %49.6; the second grade-point average %0.92; and the third year grade-point average %0.17.

**Table 3. Correlation between the OYP points and grade-point averages of the junior school students**

		OYP	Mean 9	Mean 10	R <sup>2</sup>
OYP	r	1	,375**	,436**	-
	p	-	,005	,001	
	N	55	55	55	
Mean 9	r	,375**	1	,447**	,125
	p	,005	-	,001	
	N	55	55	55	
Mean 10	r	,436**	,447**	1	,175
	p	,001	,001	-	
	N	55	55	55	

When table 3 is analyzed, a meaningful correlation ( $p < 0.05$ ) was found in the OYP points and grade-point averages of the junior school students belonging to each term. According to the data obtained, it was concluded that OYP points affect the grade-point averages of the junior students %12.5 in the first year and %17.5 in the second year.

**Table 4. Correlation between the OYP points of the sophomore students and their grade-point averages**

		OYP	Mean 9	R <sup>2</sup>
OYP	r	1	,580**	
	p	-	,000	-
	N	53	53	
Mean 9	r	,580**	1	
	p	,000	-	,324
	N	53	53	

When table 4 is analyzed, it was found out that there is a meaningful correlation between the OYP points of the sophomore students and their grade-point averages ( $p < 0.05$ ). Based on the data obtained, it was concluded that OYP points of the sophomore students affect their grade-point averages by %32.4 at the end of the first year.

#### DISCUSSION AND CONCLUSION

At the end of the research, it was concluded that there is a meaningful correlation between the grade-point averages of the graduate students and their OYP points ( $p < 0.05$ ). Based on the data obtained, it was concluded that OYP points of the graduate students affect their grade-point averages by %44,2 at the end of the first year, by %21,9 at the end of the second year, by %15,6 at the end of the third year and by %15,9 at the end of the last year. According to the findings, it can be seen that the effect of the OYP point decreases as the grade level increases. Especially the OYP point having a significant importance on the first year by %44,2 affects the last year only by %15,9. It can be thought that the reason why this is the case is the fact that the topics in OYP (Turkish, History, Geography, Mathematics) are also in the first grade.

When the relationship between the OYP points and grade-point averages of the first year students evaluated, OYP has an effect on the grade-point average by %32.4 and the relationship mentioned is statistically significant. The effective reason why this is the case is the fact that the topics in OYP is in the first year curriculum.

A meaningful relationship was found between the OYP points and grade-point averages of the junior and senior students studying at sport high school. However, as in the graduate and freshman students, the relationship between OYP points and grade-point averages of junior and senior students decreases as the grade-level increases. The reason for this is the fact that it can be thought that OYP topics is not in their curriculum in the second, third and last year and that their curriculum generally consists of field topics related to sports.

As a result, there is a meaningful and positive relationship between OYP points and the grade-point averages of the sport high school students. As the grade levels of the students increases, the effect of OYP over the grade-point average decreases. The reason why this is the case is the fact that students have class not related to OYP since the beginning of the second year. These recommendations can be made based on the findings obtained from the research:

1. Because the theoretical lessons are intense and practical lesson are low in the first and second year of the sport high school; the importance of academic success should be taught to the students at the beginning of the school through counseling and guidance services, seminars and conferences.
2. Because of the decrease in the theoretical lessons and the increase in the practical lessons in the third and fourth year of the sport high schools, in order to keep the academic success high, refresher courses can be opened to fill this gap.
3. In the first year of the students attending sport high schools, the goal and objectives of the sport high schools should be told to the parents to determine the expectations. Also, in order for the parents of sport high school students to be better prepared for higher education; not only sport competence but also academic success awareness should be raised through seminars and meetings by the help of guidance and counseling services at schools.
4. In accordance with our research, in order to increase academic success, the effect of OYP points in the enrollments of sport high schools should be increased. Also, a report can be presented to the Ministry of National Education and national education council about a new curriculum about the separation of the curriculum based on four academic years in order to increase academic success since the examination structure is based on academic success in the transition to higher education.

## REFERENCES

- Akandere, M., Özyalvaç, N. T., & Duman, S. (2010). The Attitudes of The Students in Secondary Education to Physical Education Lesson and The Investigation of Their Success Motivations (Konya Anatolian High School Sample). Selçuk University The Journal of Institute of Social Sciences, 24, 1.
- Çapulcuoğlu, U., & Gündüz, B. (2013) .Investigation of Burnout of High School Students According to Gender, Grade Level, School Type and Perceived Academic Achievement Level. Trakya University Journal of Education, 3(1), 12-24.
- Güneş, V. (2010). Spor Lisesi ve Farklı Liselerdeki Öğrencilerin Atılganlık Düzeyleri İle Akademik Başarılarının İncelenmesi. Yüksek Lisans Tezi. Fırat Üniversitesi Sağlık Bilimleri Enstitüsü. Elazığ.
- Metin, M. (2013). Investigate Factor Effecting Of Students' Achievement on High School Entrance Exam-(SBS) Respect to the Different Variables. Journal of Kırşehir Education Faculty, 14(1), 67-83.
- Yalçın, U., & Balcı, V. (2013) Examination of the changes in primary school students' academic success, physical and social behaviors following their attendance to sport activities. SPORMETRE The Journal of Physical Education and Sport Sciences, 11(1), 27-33.
- <http://ttkb.meb.gov.tr/program2.aspx> erişim tarihi 23.11.2015.