ORTAÖĞRETİM ÖĞRENCİLERİNİN FİZİKSEL AKTİVİTE DÜZEYLERİNİN BAZI DEĞİŞKENLERE GÖRE İNCELENMESİ[1]

INVESTIGATION OF PHYSICAL ACTIVITY LEVELS OF SECONDARY SCHOOL STUDENTS IN TERMS OF SOME PARAMETERS

Mesut HEKİM[2], Yılmaz YÜKSEL[3]

*e-mail: mhekim@mehmetakif.edu.tr

ÖZET

Bu araştırmanın amacı ortaöğretim öğrencilerinin fiziksel aktivite düzeylerini bazı parametrelere göre belirlemektir. Araştırmaya Denizli ilindeki farklı ortaöğretim kurumlarında öğrenim gören 211 öğrenci katılmıştır. Katılımcıların fiziksel aktivite düzeylerinin belirlenmesinde Uluslararası Fiziksel Aktivite Anketi (IPAQ) Kısa Form kullanılmıştır. Elde edilen verilerin istatistiksel analizinde SPSS 22.0 for Windows programında ki-kare ve frekans analizleri kullanılmıştır. Araştırmanın sonunda, ortaöğretim öğrencilerinin fiziksel aktivite düzeylerinin yaş gruplarına ve ailelerinin ekonomik durumlarına göre istatistiksel olarak anlamlı farklılık gösterdiği tespit edilmiştir (p<0.05). Buna karşılık, öğrencilerin fiziksel aktivite düzeylerinin cinsiyete, spor yapma durumlarına, ailelerinde spor yapan birey bulunma durumuna göre istatistiksel olarak anlamlı farklılıklar göstermediği tespit edilmiştir (p>0.05). Bunun yanında öğrencilerin çoğunluğunun yüksek fiziksel aktivite düzeyine sahip oldukları belirlenmiştir. Araştırmada elde edilen sonuçlara göre ortaöğretim öğrencilerinin fiziksel aktivite düzeylerini etkileyen parametrelerin daha iyi anlaşılması için büyük örneklem grupları ile yeni araştırmaların yapılması gerektiği düşünülmüştür.

Anahtar Kelimeler: Ortaöğretim öğrencileri, spor, fiziksel aktivite düzeyi

ABSTRACT

The purpose of this study is to determine physical activity levels of secondary school students in terms of some parameters. 211 students taking education at different secondary schools in Denizli city participated to study. International Physical Activity Questionnaire (IPAQ) Short Form was used in identification of physical activity levels. Chi-square and frequency analyses in SPSS 22.0 for Windows program were used in data obtained. In result of research, it was established that secondary school students' physical activity levels are differentiated statistically as age groups and family economic conditions (p<0,05). On the other hand, it was established that students' physical activity levels aren't shown differences statistically as gender, doing sport situation, there is a person who do sport in family (p>0,05). Besides, it was identified that majority of students is active at high level. As results obtained in research, it was thought that application of researches with bigger sample groups is required to better understand parameters effecting secondary school students' physical activity level.

Keywords: Secondary school students, sport, physical activity level

JEL CODE:L83

INTRODUCTION

Nowadays, society's lack of knowledge about physical activity, lack of understanding of the importance of physical activity for health and adoption of an increasingly sedentary lifestyle have been one of the important reasons that increase the incidence of chronic diseases such as obesity, cardiovascular diseases, hypertension, diabetes, osteoporosis in the community (Baltacı & Düzgün, 2008).

It is stated that youth is a period in which exist curiosity and tendencies towards smoking, alcohol, drugs, various groups of friends, etc. Education is the only way to satisfy and overcome these curiosities and tendencies without turning into dangerous extents. Education

---

[1]This study was presented as a poster presentation at the 13th International Sport Sciences Congress
[2]Öğr. Gör., Mehmet Akif Ersoy Üniversitesi, Rektörlük Beden Eğitimi ve Spor Bölümü, Burdur, Türkiye
[3]Arş. Gör., Erzurum Teknik Üniversitesi, Spor Bilimleri Fakültesi, Erzurum, Türkiye

performs a variety of tools to achieve this goal. Among these means, sports is the easiest and perhaps most effective way to reach young people. Because sportive studies provide young people with the ability to use their energies in a way that contributes to their health and adapting to the rules, establishing the principles of unity, solidarity, cooperation and sharing, ensuring the adaptation of the individual to society. The young people expand their social environment through sports, and by this way, they have a certain group of friends and take part, they adopt the rules of this group. He realizes his sporting skills and wants to show them off. It is important for him to know and show that he has succeeded, because he can become a focal point by this way (Öztürk, 1998).

There are many studies in the literature addressing the physical activity levels of young people according to different variables (Strong et al., 2005; Hohepa et al., 2006; Trost et al., 2001; Fox et al., 2010). Altogether, the participation of young people in secondary education to sports and increasing their physical activity levels is very important to support their health in the light of the information in the literature. In this context, the parameters that affect the level of physical activity in high school students should be well known. The current aimed to investigate some parameters which influences the physical activity levels of secondary school students.

MATERIAL AND METHOD

Study Universe and Sample
The universe of the study consists of the students studying in secondary schools in the province of Denizli. Since it was not possible to reach the entire research universe, the sample group was chosen to represent the universe. In this context, the sample group of the study consisted of 211 students from different secondary schools in Denizli and selected randomly from the sample.

Data Collection Tool
The questionnaire was used as data collection tool. The questionnaire consists of two parts. In the first part of the questionaire, there are six questions aiming to determine the demographic characteristics of the participants. In determination of the physical activity levels of the participants, the physical activity level of those with a weekly MET value of less than 600 is considered to be low, while those with a mean of 601-3.000 are considered to be moderate and those with a score above 3000 are considered to be high according to the International Physical Activity Questionnaire (Cengiz et al., 2009).

Statistical Analysis
In the statistical analysis of the data gathered in the study, SPSS 22.0 for Windows program was used Frequency and Chi-Square analysis.

Table 1. General physical activity levels of participants

Physical Activity Level	N	%
Inactive	46	21,8
Moderate Level Active	56	26,5
High Level Active	109	51,7
Total	211	100,0

It was found that 51.7% of the secondary school students who participated in the study were physically active at high levels, 26.5% were active at moderate levels and 21.8% were inactive.

Table 2. Comparison of the physical activity levels of the participants according to their age

Age	Physical Activity Level			x^2	p
	Inactive	Moderate Level Active	High Level Active		
14	1	0	0		
15	10	10	44		
16	9	18	26		
17	17	13	25	23,400	,009
18	5	13	14		
19	2	2	0		
Total	44	56	109		

It was determined that the physical activity levels of the secondary school students participating in the study were significantly different according to their age ($p < 0.05$). According to the findings in the study, it was found that the highest level of physical activity was in the 15 age group. In addition, it was determined that the number of students with high levels of physical activity decreased as the students get older.

Table 3. Comparison of physical activity levels of participants according to their economic income status

Income Level	Physical Activity Level			x^2	p
	Inactive	Moderate Level Active	High Level Active		
Very good	3	3	3		
Good	13	10	34		
Moderate	26	41	67	16,649	,034
Bad	0	1	3		
Very bad	4	1	0		
Total	46	56	107		

It was determined that the physical activity levels of the secondary school students participating in the study differed significantly from their families' economic income ($p < 0.05$). According to this, when compared with the students with other income status, it was determined that the highest level of physical activity was owned by the family children who had moderate income.

Table 4. Comparison of physical activity levels of participants according to their sporting status

| Licensed Sporting Status | Physical Activity Level | | | x^2 | p |
	Inactive	Moderate Level Active	High Level Active		
I generally do	9	5	20		
I occasionally do	11	21	39	5,061	,281
I never do	26	30	50		
Total	46	56	109		

It was determined that the physical activity levels of the secondary school students participating in the study did not differ significantly according to their sporting status (p> 0.05).

Table 5. Comparison of physical activity levels of the participants according to their sporting status in their leisure time

| Sporting Status in the leisure time | Physical Activity Level | | | x^2 | p |
	Inactive	Moderate Level Active	High Level Active		
I generally do	11	16	49		
I occasionally do	28	31	49	8,830	,065
I never do	7	9	10		
Total	46	56	108		

It was found that the physical activity levels of the secondary school students participating in the study did not show any significant differences in terms of doing sports in their leisure time (p> 0.05).

DISCUSSION AND CONCLUSION

The physical activity levels of the students were found mostly high. In the light of the findings, it was determined that the physical activity levels of the students participating in the study showed significant differences according to their age groups, and the highest physical activity level achieed was observed by 15-year-old students. The main reason of this result may be that students do not participate in physical activities sufficiently because they prepare for exams in the following years. In a study conducted on secondary school students, 49.7% of the students were found to have a habit of regularly doing sports. In the same study, it was concluded that the students performed regular sports two days a week (Akman et al., 2012). In the study conducted on the secondary school students in the orphanages; in parallel, it was determined that the students did not have regular doing sports habits and the physical activity levels of the participants were also low (Gümüş et al., 2011). According to the income level of the participants, it was found that physical activity levels differed significantly, and the highest level of physical activity was found to be children of family with moderate income. In addition, it was concluded that physical activity levels did not show a significant difference according to the status of participation in sports as licensed and sporting activities in their leisure time. It is possible to consider that the participation of a large number of the students in these activities is effective on the basis of the fact that physical activity levels do not differ according to the participation of students in extracurricular sports activities.

As a result, it can be said that physical activity levels in secondary education students are relatively higher than other study results in the literature, and other demographic factors do not have a significant effect on physical activity level other than age factor.

REFERENCES

Akman, M., Tüzün, S., & Ünalan, P.C. (2012). Adolesanlarda sağlıklı beslenme ve fiziksel aktivite durumu. *Nobel Med.,* 8(1), 24-29.

Baltacı, G., & Düzgün, İ. (2008). *Adolesan ve egzersiz.* Birinci baskı. Klasmat Matbaacılık. Ankara.

Cengiz, C., İnce, M. L., & Çiçek, Ş. (2009). Üniversite öğrencilerinin fiziksel aktivite düzeyleri ve fiziksel aktivite tercihleri. *Gazi Beden Eğitimi ve Spor Bilimleri Dergisi*, 14(2), 23-32.

Fox, C. K., Barr-Anderson, D., Neumark-Sztainer, D., & Wall, M. (2010). Physical activity and sports team participation: Associations with academic outcomes in middle school and high school students. *Journal of school health,* 80(1), 31-37.

Gümüş, H., Bulduk, S., & Akdevelioğlu, Y. (2011). Yetiştirme yurtlarında kalan adolesanların beslenme ve fiziksel aktivite durumlarının vücut kompozisyonları ile ilişkisinin saptanması. *International Journal Of Human Sciences*, 8(1), 785-808.

Hohepa, M., Schofield, G., & Kolt, G. S. (2006). Physical activity: what do high school students think?. *Journal of Adolescent Health,* 39(3), 328-336.

Öztürk, F. (1998). *Toplumsal boyutlarıyla spor.* 1. Baskı, Ankara, Bağırgan Yayımevi.

Strong, W. B., Malina, R. M., Blimkie, C. J., Daniels, S. R., Dishman, R. K., Gutin, B., ... & Rowland, T. (2005). Evidence based physical activity for school-age youth. *The Journal of pediatrics,* 146(6), 732-737.

Trost, S. G., Pate, R. R., Sallis, J. F., Freedson, P. S., Taylor, W. C., Dowda, M., & Sirard, J. (2002). Age and gender differences in objectively measured physical activity in youth. *Medicine & Science in Sports & Exercise*, 34(2), 350-355.