

## Determination of University Students' Situation in Undertaking Physical Activities and Factors Hindering Their Participation in Physical Activities

Eren Uluöz, Cem Yoksuler Yilmaz, Zeynep Filiz Dinç, İrem Kavasoglu and Ali İhsan Avluk

School of Physical Education and Sports, Çukurova University, Adana, Turkey

**Abstract:** The aim of this study was the determination of university students' situation in undertaking physical activities and factors hindering their participation in physical activities. A total of 530 students, with an average age of 21. 77±2.73 consisting of 226 female (42.64%) and 304 male (57.96%) students have taken part in the study. As a result of our analysis, it has been determined that 240(45.28%) of the participants perform physical activities and 290(54.72%) of them do not. It has been discovered in the evaluation conducted that 36.28% of the 226 female participants do perform physical activities, while 63.72% of them do not, 51.97% of the 304 male participants do and 48.03% of them do not perform physical activities. Furthermore, it has also been noted that participation rates of the females who participate in physical activities are low at a statistical significance level ( $\chi^2=12.88$ ,  $df=1$ ,  $p<0.01$ ). In this regard, it may be the thought that taking of all the necessary measures by all the public institutions and organizations and the universities which are aimed at determining the participation rates and increasing participation of the university students in physical activities, may help to preserve and improve the physical, psychological health and social well-being of the students.

**Key words:** Physical activities • University • Students • Health

### INTRODUCTION

Due to the effect of changed living conditions and technological developments since the Industrial Revolution, up to the present, people's life styles are gradually becoming more inactive, where life styles lacking activities are posing a threat to human health in many in many ways –socially, physically, psychologically, physiologically etc. It is reported in numerous scientific research projects that an inactive life style has negative effects on the vital systems of the human organism. The cardiovascular system, muscular skeletal system, endocrine system, respiratory system and digestive system are the systems that are affected by an inactive life style most often. Regardless of factors such as sex, race, regional differences and genetic structure, the fact that prevalence in cardiovascular diseases, metabolic diseases, diabetes, obesity and different varieties of cancer is significantly lower among individuals who perform physical activities than those who are inactive is a reality which has been agreed on by the world of science for a long time [1-3].

Government spending on health problems arising due to inactive life styles constitute a large portion of government budgets in all countries over the world without exception. Therefore, many physical activity and healthy life programs, although in different forms, are implemented nearly in all countries in the world. Especially in the American continent and Europe, budgets allocated for “*physical activity and healthy life*” programs are expressed in billions of dollars [4]. The development and application of projects on physical activity and healthy life styles have been initiated in our country as well, during recent years. Studies are being conducted and projects are being developed in numerous units set up within the body of our Ministry of Health, aimed at reducing the negative effects of problems related to inactive life styles on individuals, public health and national budget. With the “*Healthy Nutrition and Active Life in Turkey Program*” (2014-17) published by the Ministry of Health and the compulsory public spots added to the TV broadcasts, an effort is being made to spread the projects on healthy life, fight against obesity and physical activity programs throughout the society [5].

It may be considered that knowledge of the rate of participation in physical activities especially in different age groups and determination of the factors hindering participation among different age groups may contribute to the solutions to be produced. In this study, the objective however, is to determine the situation of the university students, forming a significant segment of the society, undertaking physical activities and the factors hindering their participation in physical activities.

**MATERIALS AND METHODS**

This is a causal comparative study aimed at determining the existing situation. A total of 530 students, attending different divisions of Çukurova University, with an average age of 21.77±2.73 consisting of 226 female (42.64 %) and 304 male (57.96%) students have taken part in the study. Stratified Random Sampling method has been selected in the sampling. Stratification has been carried out so as to have equal numbers of students attending different faculties and higher education institutions at Çukurova University are included in the sampling where the student to take part in the study have been determined by a draw method. The principle of voluntary participation has been followed in the study. As a result of the informative procedure conducted prior to the study, those students who had stated that they did not wish to take part in study were removed from the study sample.

A physical activities survey form, prepared by the researchers by utilizing data collection tools which were available in the literature and used by other researchers in similar studies, have been employed as a data collection tool. The survey form contains questions related to the participation situations in undertaking physical activities, preferred physical activities types, reasons for taking part

in physical activities and factors that hinder participation in physical activities, besides questions aimed at defining the demographic status of the participants.

The data obtained in the study have been summarized by means of defining statistical applications such as the average, standard deviation, frequency and percentage values. In order to test the significance of the differences of the averages among groups, the independent groups t-test, has been used and the chi-square has been used for defining the relationship among the categorical variables. P<0.05 is the level of accepted statistical significance.

**RESULT AND DISCUSSION**

As a result of analyzing the findings obtained in the research, it has been determined that 240(45.28%) of the participants in the study perform physical activities and 290(54.72%) of them do not. It has been found out in the evaluation conducted that 36.28% of the 226 female participants do perform physical activities, 63.72% of them do not, 51.97% of the 304 male participants do and 48.03% of them do not perform physical activities.

As a result of the chi-square test conducted with regard to performing physical activities by sex, it has been noted that performance rates of the female participants in physical activities are low at the statistical significance level ( $\chi^2=12.88, df=1, p<0.001$ ).

It has been found that among the types of physical activities preferred the most frequent ones are walking (26.27%), swimming (14.79%), football (14.72%), fitness/body building (12.10%) and jogging (10.45%). The most preferred reasons for performing a physical activities have been noted as the aim to be healthy (39.72%), a hobby aim (27.34%), the aim to gain a good physical appearance (17.18%) and the aim to establish good social relations (9.89%).

Table 1: Participation Rates in Physical Activities

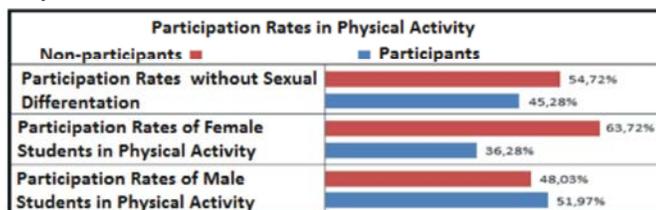


Table 2: Comparison of age means of Participants and non-participants

Groups	N	Mean	S.d.	df	t	p
Participants	240	20.67	2.71	528	-9.07	.000
Non-participants	290	22.69	2.39			

Whereas, factors hindering participation in physical activities have been expressed as unsuitability of class hours (36.93%), the inadequacy of facilities (14.39%), resentment of physical activities (11.5%) and financial problems (7.97%). In order to test whether there was a significant difference between the group performing physical activities and the group who were not, the independent groups t test has been performed and the results are given in the following table.

It has been found that the average age for the group who perform physical activities is  $20.67 \pm 2.71$  while the average for the group who do not is  $22.63 \pm 2.39$ . It has been also noted that there is a significant difference between the average age of those who perform physical activities and the group who do not ( $p < 0.05$ ). It has been further observed that participation in physical activities decreases with the increase in age.

### **DISCUSSION**

According to the WHO (World Health Organization) data, due to the living conditions which have changed in recent years and the inactive life style, the obesity rate has doubled world-wide since 1980 up to the present. It has been reported that 35% of the adult individuals living on earth are overweight and nearly 11% are obese. In the MONICA study conducted by WHO in six different regions of Asia, Africa and Europe, which has lasted 12 years, it has been reported that an increase of 10-30% was determined in the prevalence of obesity in ten years [6]. According to the preliminary study report, "Turkish Nutrition and Health Research-2010" carried out by our Ministry of Health, the frequency of obesity in Turkey has been found as 20, 5% in men, as 41.0% in women and as 30.3% in total [7]. While this threat of increasing obesity prevails on the one hand, it has still not been possible to raise the participation rates in physical activities to the desired levels. One of the findings that draws the most attention upon reviewing the related literature on this subject is the fact that the rate for inactive individuals has been found as 41.6% even in a study carried out on physical education instructors [8]. Even in a professional career group like physical education instructorship which is expected to set an example for its students, the guardians of the students and thereby, for the whole society, the results showing a rate of inactive life in nearly half of the group, may give some clues on the magnitude of the problems regarding inactive life in our country.

It has been noted upon analyzing the results obtained at the end of this study, however, that the basic aims of the students taking part in physical activities in

performing these activities are to be healthy, to engage in recreational activities and to have a good physical appearance. Walking, swimming and football have been reported as the most preferred types of physical activities. The fact that walking and swimming involve low costs and the fact that football can be easily applied may be considered as the reasons underlying the preference of these activities. It has been observed in the study that more than half of all the participants, nearly half of the male participants and a large majority of the female participants do not take part in any physical activities. Especially the average participation rates of the female participants have remained considerably below the rates in the studies conducted as noted in the developed countries in the related literature. Nearly half of the students in the group not participating in physical activities have reported, without any differentiation according to sex, unsuitability of class hours and inadequacy of the facilities as the factors hindering their participation in physical activities. Although there are tens of factors that are likely to hinder participation in physical activities, a large portion of the participants in the study have reported that they were unable to take part in physical activities due to the unsuitability of class hours. Whereas, another finding in the study which appears to support this finding is the fact that the average value for the group not taking part in physical activities is significantly higher with respect to the value for those who do take part. These two findings lead to a conception that individuals' concerns about their future may increase as they get older, that this may cause the consideration of academic responsibilities as more important and may hinder the participation in physical activities. Analyses of the results obtained in studies conducted, as reported in the related literature, show that participation in physical activities has reached rates in the range of 60-80% among university students in some of the developed countries without any differentiation between sexes [9-12]. Although most of the rates obtained in these studies are close to those obtained in the studies conducted in Turkey, they are considerably lower than the participation rates in the developed countries. Especially the participation rates for female students have been found as a significantly low rate. It has been reported that Religious beliefs, traditions and social barriers seriously constrain women's participation in physical activity and sports in middle-east countries [13]. In Turkey, however, although there are no restrictions against the participation of women in either physical activities or sports in the legal sense, it has been reported in many scientific research-projects conducted that certain segments of the society have a negative attitude against sports [14-17].

## CONCLUSION

In conclusion, with the conception that inactive life styles lead to many physical and psychological problems, extensive projects related to physical activities and active and healthy life are being produced and implemented all over the world and in Turkey. It is thought that for these projects to achieve success, the investigation of the participation rates in physical activities and the factors hindering participation in physical activities in all social segments, in terms of providing support to these projects conducted regularly, may contribute to the production of more sound projects and to the success of the projects to be undertaken in the future. It may also be considered that support with an increasing scope needs to be provided for the scientific research to be undertaken to determine the participation rates in physical activities and the factors inhibiting participation, by public institutions and establishments.

Considering the results obtained in this study, however, it has been noted that participation rates in physical activities is rather low among university students. In a study conducted by analyzing the related literature, it has been noted that nearly half of the participants, who were physical education instructors and expected to set an example for the society, did not take part in physical activities. This is a rather significant finding. In this connection, the determination of the participation rates for university students and for all the social segments regularly, in order to increase the participation rates in physical activities, appears as a social necessity. In this regard, it may be thought that taking of all the necessary measures by all the public institutions and organizations and universities is aimed at determining the participation rates and increasing participation rates of the university students in physical activities, may help to preserve and improve the physical and psychological health and social well-being of the students. In addition, the necessary arrangements should be made and measures taken with regard to continuously following the situations hindering the participation of the females from all age groups in physical activities and the elimination of the factors inhibiting their participation.

## REFERENCES

1. Steiner, H., R.W. McQuivey, R. Pavelski, T. Pitts and H. Kraemer, 2000. Adolescents and sports: risk or benefit?. *Clinical Pediatrics*, 39(3): 161-166.
2. Andersen, L.B., P. Schnohr, M. Schroll and H.O. Hein, 2000. All-cause mortality associated with physical activity during leisure time, work, sports and cycling to work. *Archives of Internal Medicine*, 160(11): 1621-1628.
3. Haskell, W.L., I.M. Lee, R.R. Pate, K.E. Powell, S.N. Blair, B.A. Franklin and A. Bauman, 2007. Physical activity and public health: updated recommendation for adults from the American College of Sports Medicine and the American Heart Association. *Circulation*, 116(9): 1081.
4. Cawley, J. and C. Meyerhoefer, 2012. The medical care costs of obesity: an instrumental variables approach. *J. Health Economics*, 31(1): 219-230.
5. Sağlık Bakanlığı, T.C., 2016. "Türkiye Sağlık Bakanlığı Beslenme ve Hareketli Hayat Programı". Url:[http://beslenme.gov.tr/content/files/yayinlar/turkiye\\_sagliklibeslenme\\_ve\\_hareketli\\_hayat\\_programi.2014\\_2017.pdf](http://beslenme.gov.tr/content/files/yayinlar/turkiye_sagliklibeslenme_ve_hareketli_hayat_programi.2014_2017.pdf) (accessed 26 January 2016)
6. World Health Organization, "Obesity and Overweight". Url: <http://www.who.int/mediacentre/factsheets/fs311/en/> (accessed 26 January 2016).
7. <http://www.thsm.gov.tr/upload/files/obezite%20web.pdf> (accessed 26 January 2016)
8. Arabacı R. and C. Çankaya, 2007. Beden Eğitimi Öğretmenlerinin fiziksel aktivite düzeylerinin araştırılması. *Uludağ Üniversitesi Eğitim Fakültesi Dergisi*, 20(1).
9. Brownson, Ross C., Tegan K. Boehmer and Douglas A. Luke, 2005. "Declining rates of physical activity in the United States: what are the contributors?." *Annu. Rev. Public Health*, 26: 421-443.
10. Pate, R.R., M. Pratt, S.N. Blair, W.L. Haskell, C.A. Macera, C. Bouchard and A. Kriska, 1995. Physical activity and public health: a recommendation from the Centers for Disease Control and Prevention and the American College of Sports Medicine. *Jama*, 273(5): 402-407.
11. Alexandris, K. and B. Carroll, 1997. Demographic differences in the perception of constraints on recreational sport participation: Results from a study in Greece. *Leisure Studies*, 16(2): 107-125.
12. Pate, R.R., S.G. Trost, S. Levin and M. Dowda, 2000. Sports participation and health-related behaviors among US youth. *Archives of Pediatrics & Adolescent Medicine*, 154(9): 904-911.
13. Sfeir, L., 1985. 'The Status of Muslim Women in Sport: Conflict between Cultural Tradition and Modernization'. Abstract. *International Review for the Sociology of Sport*, 20(4): 283-306.

14. Pfister, G., 2008. 'Equality and Social Missions: Muslim Women and Their Opportunities to Participate in Sport and Physical Activities'. Hacettepe Journal of Sport Sciences, 19: 250-260.
15. Tatar, G., T. Erdoğan and Z. Pehlivan, 2009. "The Study of Factors Effecting Doing Sports of Working and Nonworking Women Aged between 20-40." Journal of Physical Education and Sport Sciences, 11.3.
16. Dinç, Z.F., D. Sevimli and E. Uluöz, 2011. 'Parents' Opinions about Directing Their Children to Sports and Physical Activity'. NWSA: Sports Sciences, 6(2): 93-102.