



The Attitudes of Turkish and Croatian University Students towards Exercise

Fatma Çelik Kayapınarⁱ
Mehmet Akif Ersoy University, Turkey
fkayapinar@mehmetakif.edu.tr

Behsat Savaşⁱⁱ
Mehmet Akif Ersoy University, Turkey
bsavas@mehmetakif.edu.tr

Lidija Gettoⁱⁱⁱ
Josip Juraj Strossmayer University, Croatia
getto@unios.hr

Abstract

The purpose of this study is to compare the attitudes of university students in Croatia and Turkey towards exercise and to develop recommendations for improving the health training programs when needed. Research indicates that exercising attitude approaches are significant factors affecting the quality of student life. Students should present effective methods in their pre-service education. If students used effective exercising attitude approaches in their own life, they would foster these same attitudes towards their friends or family members. For this reason, an investigation of exercising attitude approaches of university students is very important in order to see how well we develop our future generation and to enhance health training programs. Data were gathered from 230 Croatian and 580 Turkish university students who volunteered to participate in this study. In this study, attitude scale towards physical activities and its adaptation into English were used. The inventory contains 30 statements and responses indicating their agreement with each statement by using a five-point Likert scale.

Keywords: Activity, Burdur, Football, Handball, Osijek, Sport.

Reference to this paper should be made as follows:

Kayapınar, F. C., Savas, B., & Getto, L. (2017). The Attitudes of Turkish and Croatian University Students towards Exercise. *International Journal of Scientific Research in Education*, 10(1), 79-86. Retrieved [DATE] from <http://www.ijre.com>

INTRODUCTION

This study was carried out in order to compare the attitudes of Turkish and Croatian university students towards exercise and to make recommendations to establish environments that enable university students' improving their level of exercise for a healthy life when needed.

In this study, a scale that was developed by the researcher was used. It is determined by various studies that there is a positive and significant relationship between the level of exercise and the attitude towards exercise. Physical activity and exercise improve individuals' physical fitness and thus promotes a healthy life style. Although the positive effects of physical activity on health are determined by various studies carried out in a good number of countries in different parts of the world, the habit of sedentary life still remains an important public health concern. Modern lifestyle and the change in the socio-cultural structure have made human need less physical activity. This has resulted in sedentary lifestyle.

The children, who spent their spare time by playing out in gardens or street alleys 20 years ago, now spend their time in front of television and computer, influenced by the changing social structure and insecure streets. Besides, with the change in eating habits, the prevalence of obesity in childhood is increasing.

According to the research report of the project, monitoring the growth of school-age children (6-10 years of age) in Turkey (TOCBI) that was carried out by the Ministry of Health, 8.5% (M: 9.7%; F: 7.1%) of children in cities and 7.5% (M: 4.8 %; F: 3.2%) of children in rural areas are obese. In total, 14.3% of children are overweight and 6.5% of them are obese. Istanbul is the city where obesity is most commonly seen (13.0%) (TOCBI, 2011).

The absence of the habit of physical activity directly affects the prevalence of obesity. The absence of secure environment is the leading factor that affects physical activity. Families do not consider their children's playing on the street as safe, this constitutes the basic obstacle for physical activity (Lumeng et al., 2006). It is found that families' not considering the environment as safe quadruples the possibility of the child's being fat (Matthieu, 2008).

Physical environment, social, school and workplace environment, transportation system, urbanization might be a preventer or developer for doing physical activity; moreover it can cause inequalities in society (Pekcan et al, 2009). Walking areas, cycle paths, parks, playgrounds, traffic density, pedestrian zones, pavements, transportation system and the quality of these are important factors that affect the level of physical activity in structural environment.

Under recent conditions, especially in big cities, children are imprisoned in indoor areas because of such reasons that green areas are decreasing, there are not enough playgrounds, streets are not safe, mothers work, children spend most of their time in front of television or computers. Even if their school is near, children go to schools by school bus or they are brought by their parents with their private car. Moreover, children spend a long period of time sitting when they are at training center or while they are studying. Parents' not having the habit of doing exercise frequently, using the lift instead of the stairs, and the easiness that is provided in order not to tire the children cause inactivity of children, thus they are spending less energy. Increasing physical activity and doing exercise should be converted into a lifestyle for children. For this purpose, children should be taken to sport clubs and the duration and content of physical education courses should be enriched (Miller, 2011; WHO, 2007). It is also noticed that the physical environment of schools is a preventer for physical activity and it contributes to obesity in children. According to the results of TOÇBI study, 16.9% of children who play sports do so in a sport club. It is determined that there is not an

indoor sports hall in 87.4% of the schools, there is not an outdoor playground in 8.9% of the schools and sport club activities are carried out just in 65.2% of the schools.

Health has been accepted as an essential condition for a high quality of life. Individuals make use of technological developments to reduce the intensity of each activity in their life, but these developments have a negative impact on health and increase the number of inactive individuals in the long term (<http://www.eskisehir.gov.tr/2011>).

Overweight or obesity is defined as an abnormal or intensive fat build up; these can affect health negatively. Overweight or obesity can cause an imbalance between energy intake and the energy consumed, an increase of intake such as fat, sugar, salt in energy-rich foods and in the most working form changes, development of transport system and an increase in the rate of urbanization caused obesity by the decrease in the level of physical activity. Obesity is a preventable disease (WHO, 2011). An unhealthy diet and inactive life are risk factors for chronic diseases such as cardiovascular diseases, cancer and diabetes (WHO, 2010a).

Worldwide, about 43 million children under 5 years of age were overweight in 2010. The people who are obese in childhood are most probably expected to be obese and have a risk of chronic diseases in the future. For this reason, gaining weight should be prevented at early ages (WHO, 2010b)

Participating in physical activity frequently increases health and the physical strength in children. When active young children are compared to inactive young people, cardiorespiratory fitness, muscular endurance and muscle strength of active young is greater than inactive young. At the same time, active young children have decreased body fat, increased bone health and reduced symptoms of depression and anxiety symptoms and their cardiovascular and metabolic disease profile is favorable. Young children and children aged 5-17 should participate in severe or moderate intensity physical activities for at least 60 minutes per day. In addition, children should participate in the muscle-force activities such as pushing, pulling, climbing and playing with materials in children's playground 2-3 days a week (WHO, 2010c).

According to data from a series of disease studies from all over the world, in 2004 approximately 5.5% of the leading causes of death risk was physical inactivity, and 4.8% obesity. Physical inactivity was the fourth and obesity the fifth leading cause of mortality all over the world (WHO, 2009). World Health Organization (WHO) recently recommends that member countries develop policies and initiatives to increase physical activity. WHO particularly focuses on school-based training in this aspect (WHO, 2007).

Regular physical activity is accepted as doing a favored activity every day in a week or doing an activity at least 30 minutes 5 or more days in a week. Another way about regular activity is accepted as doing severe and nonstop activity during twenty to sixty minutes in three or more days a week) (Caspersen, Powell, Christenson, 1985; Arıkan, Metintas, Kalyoncu, 2008; Hoeger & Hoeger, 2010).

Sedentary lifestyle causes several health problems for each age group. Chronic diseases, especially the ones that emerge after a certain age, cause a number of problems. In order to get rid of all these negative conditions and to keep the organism fit and healthy, great attention is being paid to activities such as lifelong sport, sport for a healthy life, fitness, aerobics, jogging etc (Bompa, 1998; Ersoy, 1998; Shengel, 1986; Saygın, Dükkancı, 2009).

The loss of function in basic motor skills, such as strength, flexibility and durability in all muscles and easy mutilation, loss of bone mineral density, osteoarthritis and loss of function occur. Besides the increase in blood sugar and blood lipid levels, and obesity and formlessness because of not being able to spend the energy that is taken through food, the physical and mental problems brought by obesity are adverse effects of long-term sedentary life on organism (Biçer, Peker & Savucu, 2005). To get rid of all these adverse conditions

and to keep the organism fit and healthy, the necessity to do exercise emerges as a must (Arcury et al., 2006). As a result, the habit of physical activity is in interaction with family, school and environment and these effects directly affect the child's health.

The Benefits of Exercise

The benefits of exercise are emerging day by day for people of all ages. The importance of sports activities that are seen as necessary for solving a number of health and psychological problems which are experienced by individuals who choose a monotonous life style manifests itself in all areas of life. Exercise reduces blood pressure, reduces the risks of falling by losing balance and injury (hip or wrist fractures), slows down the loss of body muscle and bone mass, increases flexibility, improves balance and mobility, helps keeping the ideal weight, provides a sleeping pattern, keeps away from tension and stress and provides a healthy and long life (Chapek, 1994). It is stated in the related studies that a 1% increase in total cholesterol causes a 2% increase in coronary heart disease while a 1% decrease causes a 2-3% decrease in the risk of heart attack; an 11% decrease in LDL cholesterol causes a 19% decrease in coronary heart disease, a 1mg/dl increase causes a 3% decrease in the risk of coronary heart disease (Studd, 2000).

This study attempts to answer the following questions:

1. Is there a difference between the attitudes of Turkish and Croatian students towards exercise?
2. Is there a significant difference between the time that Turkish and Croatian students allocate for exercise and their attitudes?
3. What are the sports preferences of Turkish and Croatian students?

METHODS Descriptive method was used in this research. The population of this study was composed of students from Mehmet Akif Ersoy University in Turkey and Croatia's Josip Juraj Strossmayer University in Osijek. Sampling consisted of students from both countries who volunteered to take part in the study. Answers by 230 students from Josip Juraj Strossmayer University and 580 students from Turkey were accepted as valid. It was seen that while the Croatian students ranged between the ages of 18-37 and had an average mean of 21.97, Turkish students ranged between the ages of 18-37 and had an average mean of 22.62. While the average time that was allocated for exercise was 3.13 hours for Croatian students, it was 2.44 hours for Turkish students. It was determined that the time for doing regular exercise was 3.27 years for Croatian students while it was 1.66 years for Turkish students.

Data Collection Tool and Adaptation Studies

In this study, a scale that was developed by the researcher was used (Celik Kayapınar & Savas, 2013). In order to determine the attitudes of Croatian students towards exercise, a version that was translated into English was used. The sum of both English and Turkish scales and subscale reliability coefficients for Turkey was found to be 0.896 while it was 0.900 for Croatia (Pallant, 2003).

In the analysis of data obtained in this study

Independent T Test; Pearson's correlation test was used depending on the features of the questions to be answered.

RESULTS

Table 1: Independent T-Test Results for attitude Point of Turkish and Croatian University Students

Variables	N	Mean	SD	t	df	p
Croatia	230	97.743	12.426	10.462	808	.000
Turkey	580	107.782	12.269			

Independent sample T test was conducted to compare the attitude of exercise scores for Turkish and Croatian university students and there was significant difference in scores for Turkish students ($M=107,7828$, $SD=12,269$) and Croatian students ($M=97,743$, $SD=12,426$; $t_{(808)}=-10,462$, $p<0,000$). The magnitude of the difference in the means was moderate ($\eta^2=0,119$).

Table 2: Pearson Correlation Results between Total Attitude Points and the Duration of Doing Exercise of Turkish and Croatian University Students

Country	Correlations	Total attitude point	Duration of exercise	
Croatia	Total attitude point	Pearson Correlation	1	
		Sig. (2-tailed)	.302**	
		N	230	
	Duration of exercise	Pearson Correlation	.302**	1
		Sig. (2-tailed)	.000	
		N	230	230
Turkey	Total attitude point	Pearson Correlation	1	
		Sig. (2-tailed)	.184**	
		N	580	
	Duration of exercise	Pearson Correlation	.184**	1
		Sig. (2-tailed)	.000	
		N	580	580

** . Correlation is significant at the 0.01 level (2-tailed).

In the Croatian example presented above there is a medium correlation between the two variables ($r=0,302$, $n=230$, $p<0,001$), suggesting quite a moderate relationship between duration of doing exercise and total attitude points. In the Turkish example presented above there is a small correlation between the two variables ($r=0,184$, $n=580$, $p<0,001$), suggesting quite a weak relationship between the duration of doing exercise and total attitude points.

Table 3: Sports Preferences of Croatian and Turkish University Students

Preference Ranking	Sports	Croatia		Preference Ranking	Sports	Turkey	
		n	%			n	%
1.	Handball	62	25.3	1.	Football	84	15.0
2.	Football	43	17.5	2.	Volleyball	68	12.1
3.	Volleyball	39	15.9	3.	Swimming	61	10.8
4.	Basketball	28	11.4	4.	Basketball	55	9.8
5.	Tennis	13	5.3	5.	Walking	44	7.8
6.	Swimming	12	4.8	6.	Tennis	36	6.4
7.	Running	5	2.0	7.	Table tennis	25	4.4
8.	Table tennis	7	2.9	8.	Pilates	20	3.5
9.	Walking	1	0.4	9.	Running	34	6.0
10.	Pilates	0	0.0	10.	Handball	10	1.7
11.	None	24	9.7	11.	None	42	7.5
12.	Others	21	8.6	12.	Others	81	14.4

In the comparison of the two countries, the first three of the sports chosen are handball, football, and volleyball for Croatian students; while football, volleyball, and swimming were chosen by Turkish students.

CONCLUSIONS

According to findings; after comparison the attitude of exercise scores of university students that are participated from Croatia (N=230) and Turkey (N=580) were significant difference in attitude scores for Turkish students according to Croatia students.

Total attitude points and the duration of doing exercise in the Croatian example was a medium correlation between the two variables. A moderate relationship between duration of doing exercise and total attitude points for Croatian students. In the Turkish example was a small correlation between the two variables. A small correlation between doing exercise and total attitude points for Turkish students.

The first three of the sports chosen are handball, football, and volleyball for Croatian students; while football, volleyball, and swimming were chosen by Turkish students.

REFERENCES

- Arcury, T. A., Snively, B. M., Bell, R. A., Smith, S. L., Stafford, J. M., Wetmore, L. K., & Quandt, S. A. (2006). Physical activity among rural older adults with diabetes. *The Journal of Rural Health, 22*(2), 164–168.
- Arıkan, İ., Metintas, S., & Kalyoncu, C. (2008). The comparison of the two methods at determining the physical activity level at adolescent. *Osmangazi Medical Journal, 30*, 19-28.
- Bıçer, Y. S., Peker, İ. & Savucu, Y. (2005). The effect of planned regular walking on body composition values in women patients who have heart and vascular congestion. *Journal of Fırat University Health Sciences, 19*(4), 241-248.
- Bompa, T. O. (1998). Theory and method of training, (Trans. Keskin, İ.), Ankara Bağırgan Press, 1st Sportive Family Works Series.
- Caspersen, C. J., Powell, K., & Christenson, G. M. (1985). Physical activity, exercise and physical fitness: Definitions and distinctions for health-related research. *Public Health Reports, 100*, 126-131.
- Çelik Kayapınar, F., & Savaş, B. (2013). Editors; Strelova, O., at all. *Improving attitude scales study for physical activities*. The science and education at the beginning of the 21st century in Turkey Vol. 3, 495-499.

- Chapek, C. L. (1994). *Physical fitness programs microform*, Publications Instate For Sport and Human Performances Institute, University of Oregon, Eugene.
- Ersoy, G. (1998). *Healthy life sport and nutrition*, (3thed.). Ankara: Damla Press.
- Hoeger, W. K., & Hoeger, S. A. (2010). *Importance of increased physical activity: Life time physical fitness & wellness* (9thed.). USA, Thomson Wadsworth.
- Lumeng, J. C., Appugliese, D., Cabral, H. J., Bradley, R. H., & Zuckerman, B. (2006). *Neighbourhood safety and overweight status in children. Arch Pediatr Adolesc Med.* 160(1), 25-31.
- Matthieu, J. (2008). *Safe play and its effect on childhood obesity. J Am Diet Asssoc.*, 108(5), 774-775.
- Miller, D. P. (2011). *Associations between the home and school environments and child body mass index. Social Science & Medicine*, 1-8.
- Pallant, J. (2005). *SPSS Survival manual*. Allen & Unwin
- Pekcan, G., Robertson, A., & Pomerleau J., Knai, C. (2009). *EURO-PREVOB-Prevention of obesity in Europe project report for Turkey*. Ankara, Project no. 044291. www.europrevob.eu
- Physical activity knowledge (2011). /on-line/.Retrieved October 07, 2016 from: <http://www.eskisehir.gov.tr/sarici/saglik/fiziksel-aktivite-serisi/E-A4-fiziksel-aktivite-bilgi-serisi-tumu.pdf>.
- Saygın, Ö., & Dükkancı, Y. (2009). The research of relation health related physical fitness and intensity of physical activity of girls. *International Journal of Human Sciences*, 6(1).
- Shengel, T. R. (1986). *The training effects of a vigorous aerobic exercise program upon the changes of body composition neuromuscular endurance, flexibility and cardio respiratory capacity of 24 males aged 49 to 69 years as measured annually over three years*, Microform Publication, University of Oregon, Eugene, Ore.
- Studd, J. (2000). *The management of the menopause*, The Millennium Review, Parthenon Publishing.
- TOCBİ. (2011). *The project of monitoring the growth of school-age children (6-10 years of age) report in Turkey*, Republic of Turkey Ministry of Health General Directorate of Primary Health Care Publications No: 834.
- WHO. (2007). *A guide for population-based approaches to increasing level of physical activity, implementation of the who global strategy on diet, physical activity and health*, WHO Press, Geneva. Switzerland.
- WHO. (2009). *Global Health Risks: Mortality and burden of disease of attributable to selected major risks*. WHO Library Cataloguing-in-Publication Data.
- WHO. (2010a). *Diet and Physical Activity: A public health priority*, Retrieved October 20, 2016 from:<http://www.who.int/dietphysicalactivity/en/index.html>
- WHO. (2010b). *Population-based prevention strategies for childhood obesity*. WHO Press. Geneva. Switzerland.
- WHO. (2010c). *Global recommendations on physical activity for health*. World Health Organization. (ISBN 9789241599979).
- WHO. (2011). *Obesity and overweight*./on-line/. Retrieved October 20, 2016 from: <http://www.who.int/mediacentre/factsheets/fs311/en/index.html>.

ⁱ Assoc. Prof. Dr. Fatma Çelik Kayapınar, is of the Mehmet Akif Ersoy University, School of Physical Education and Sport Burdur/Turkey He can be reached via Phone:+90 248 213 4633 Fax:+90 248 213 4604 and email fkayapinar@mehmetakif.edu.tr.

ii Behsat Savaş, is of the Mehmet Akif Ersoy University, Faculty of Education, Burdur/Turkey. He can be reached via email at bsavas@mehmetakif.edu.tr.

iii Lidija Getto, is of the Josip Juraj Strossmayer University in Osijek, Croatia. Can be reached via email at getto@unios.hr.