



## COMPARISON OF PHYSICAL ACTIVITY LEVELS OF UNIVERSITY STUDENTS STUDYING IN DIFFERENT DEPARTMENTS

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### **Abstract:**

The aim of this study is to compare the physical activity levels of university students studying in different departments. The universe of the study consists of students studying at the College of Physical Education and Sports of the Kafkas University and the sample of the study. The sample consists of 600 people aged between 17-35 years studying in these departments. Mean, standard deviation analysis techniques were used for data analysis. To determine differences One Way Anova, Mann Whitney U and correlation test it was used. The obtained data were statistically evaluated at  $p < 0.05$  level. As a result of the analysis; Physical Activity (FA) levels of BESYO students who participated in the study were 0 inactive, 76 people were minimal active, 224 people; has been found to be very active. The physical activity category of the students of the Faculty of Education is as follows: 0 people Inactive, 176 people have minimal active and 124 persons; has been found to be very active. As a result, it was observed that the FA levels of BESYO students were higher than the students of the Faculty of Education, to make physical activity improvement programs within the university, the importance of physical activity, to add the exercise to our lives,, can be said to help reduce this difference with less panels.

**Keywords:** physical activity, physical education, faculty of education

### **1. Introduction**

Today's health concept envisages a health care approach that protects, maintains and improves the health of the individual, family and society and takes the individual to the center. It is known that this understanding is based on gaining behaviors to maintain, maintain and improve the well-being of the individual, to take care of his body and to make the right decisions about his health. (Kong, 1995; Lundy et al, 2001; Sisk, 2000; Zorba et al, 2017).

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Information on physical activity can be seen even in grave remains of ancient times. Frequent dances and similar movements were performed in the rites. In the present sense, physical activity is the first time about BC. It is seen in China in 2500 years (Macauley, 1995; Paffanberger, 2001; Caz, 2018).

The effects of physical activity on the health of individuals have been demonstrated by the Italian physicians in the 1500s for the growth and development of children as well as the development of exercise programs for the protection of elderly health (Macauley 1995; Tanyeri et al. 2017). There are many studies suggesting that lack of physical activity is an important determinant in the occurrence and course of some diseases. One of the first researches on this subject was conducted in London in 1864. In the study, deaths from coronary heart diseases were investigated among the tailors and farmers and it was determined that the tailors died more than coronary heart disease. This situation is thought to be caused by the fact that tailors have more lives than farmers (Macauley 1995; Çakır 2019).

With modern life, exercise has increased its importance since the end of the 19th century. In the report prepared by American surgeon Smith in 1915, it was stated that the diseases related to degenerative diseases related to physical activity, kidney diseases, heart diseases and high blood pressure increased gradually. However, it is emphasized that exercise is necessary for all ages and both sexes (Macauley, 1995; Pancar et al. 2018; Paffanberger, 2001; Özdal et al. 2017; Tahhan et al, 2018; Bilgiç et al. 2016; Yıkılmaz et al., 2016; Mayda et al., 2016; Özdal, 2016). Efforts have been made to protect health, increase physical activity and maintain healthy life in children and adults. In some studies, the health effects of supplementary products have been investigated in children and adults. In the studies; it is generally aimed to increase physical activity and to examine the effects of performance on health (Pancar et al. 2016; Pancar et al. 2018; Çınar et al.2016; Pancar 2018; Özer et al. 2017; Pancar et al.2018; Gencer and Asma 2017; Çınar et al. 2018; Pancar et al. 2017; Pancar 2018). The studies conducted in the 1920s indicated that the work done based on physical strength and the deaths caused by some diseases were inversely proportional, but the cause of death was not related to physical activity (Macauley, 1995; Paffanberger, 2001).

The studies examining the relationship between activity and chronic heart diseases, especially II. After World War I increased. Morris et al., one of these studies, examined the deaths of postal employees and bus drivers in London and reported that the physical activity of the job reduced sudden deaths due to heart disease (Paffanberger, 2001).

In a clinical study conducted between 1968-1978, 1138 people were examined, and the frequency of chronic heart disease was found to be lower in people aged 45-54 years who frequently had physical activity. In the 55-64 age group the incidence of chronic heart disease was found to be lower in those who exercise regularly, while those with limited physical activity were found to be high and those who did not (Paffanberger, 2001). Lack of physical activity is common in adult and elderly population today. There are many psychological, behavioral and physiological reasons why people do not perform physical activities or do limited activities. In Turkey, the

lack of time, are among the most common causes of inadequate physical activity (Genç et al., 2002; Öztürk, 2005).

## 2. Method

This study was conducted to compare the Physical Activity levels of University students studying in different departments. The universe of the study consists of students studying at the College of Physical Education and Sports of the Kafkas University and the sample of the study. The sample consists of 600 people aged between 17-35 years studying in these departments. Before the survey is completed; all the necessary information about the research is given to the participant; volunteers were also granted permission to participate in the research. In this study to determine physical activity levels of individuals; International Physical Activity Questionnaire (IPAQ) short form was used (Craig ve ark. 2003). International validity and reliability study of Craig and validity and reliability studies in Turkey for this survey was carried out by friends of the university by students Ozturk (Öztürk, 2005).

This questionnaire provides information about sitting, walking, moderately intense activities and time spent in violent activities. The International Physical Activity Questionnaire has two forms, namely short form and long form. The short form structure is designed for telephone survey application and consists of 7 questions. The long form was developed for face-to-face survey applications and consists of a total of 27 questions. (Craig ve ark. 2003). The International Physical Activity Assessment Questionnaire (IPAQ) was developed to determine the physical activity levels of the participants aged 15-65 years. (Craig ve ark. 2003, Bauman, 2004).

Turkey 'in university students in education in 2005 by Ozturk also Hacettepe University School of Sport Sciences and Technology validity and reliability of the IPAQ survey was conducted in 2007 by (Karaca and Turnagöl, 2007).

Short form (7 questions); provides information about time spent in walking, moderate and violent activities, and time spent sitting.

The calculation of the total score of the short form includes the sum of walking, moderate activity, and duration (minutes) and frequency (days) of severe activity. The energy required for the activities is calculated by the MET-minute score. Standard BAT values for these activities were established.

These; Walking = 3.3 MET, Moderate Physical Activity = 4.0 MET, Severe Physical Activity = 8.0 MET, Sitting = 1.5 MET.

Using these values, daily and weekly physical activity levels are calculated. For example; one person walking 3 days and 30 minutes walking distance MET-min / week score:  $3.3 \times 3 \times 30 = 297$  MET-min / week.

Walking MET-dk / week =  $3.3 \times$  walking minutes  $\times$  walking days

Moderately severe MET-min / week =  $4.0 \times$  moderate activity minutes  $\times$  days of moderate activity

Severe MET-min / week = 8.0 x number of days of severe activity x severe activity

Total, MET-min / week = (walking + moderate + severe + sitting) MET-dk / week

In addition to this continuous scoring, the classification is based on the numerical data obtained. Accordingly, there are 3 activity levels:

- 1) **Inactive (Category 1):** The lowest level of physical activity. Cases that cannot be included in Category 2 and 3 are considered inactive.
- 2) **Minimal Active (Category 2):** Any of the following criteria is minimal active.
  - a: 3 or more days make for at least 20 minutes severe activity;
  - b: 5 or more days of moderate activity or walking at least 30 minutes per day to be done;
  - c: 5 days or more for a minimum of 600 MET-min / week.
- 3) **Very Active (Category 3):** This measurement is approximately equal to a moderate activity of at least one hour or more per day. This category is the level required to provide health benefits. At least 3 days of severe activity or combination of moderate or severe activity with 7 or more days of walking, providing a minimum of 3000 MET-min / week (Öztürk, 2005; Parmaksız, 2007; Arıkan et al. 2008; Savcı et al. 2006).

Mean, standard deviation and variance analysis techniques were used in the analysis of the data. One Way Anova, Mann Whitney U test was used to determine the differences. The results were statistically tested at significance level of  $p < 0.05$ .

#### 4. Results

**Table 1:** Distribution of Participants by Gender

Gender	N	%
Man	363	60,5
Women	237	39,5
Total	600	100

The findings related to the gender of the students participating in the study are shown in Table 1. A total of 600 participants, 363 (60.5%) male and 237 (39.5%) female students, participated in the study.

**Table 2:** Distribution of Participants by Sections

Department	N	%
BESYO	300	50
Faculty Of Education	300	50
Total	600	100

The findings of the students participating in the study are shown in Table 2. 300 students from the BESYO department consist of 300 students.

**Table 3:** Descriptive Information of Participants

Variables	Min	Max	Average	S.S
Age	17	35	23,4	3,28
Height	1,53	1,90	1,73	0,07
Weight	53	93	73	10,2

The findings of the descriptive information of the students participating in the study are shown in Table 3. Minimum age of the participants; 17, maximum; It was found to be 35 and the mean age was  $23.40 \pm 3.28$ . Information about paint; averages of 1.53 cm, maximum 1.90 cm and height were found to be  $1.73 \pm 0.07$  cm. Information on their weights; minimum 53 kg, maximum 93 kg and weight average  $73 \pm 10.2$  kg determined to be.

**Table 4:** Physical Activity Levels of Participants

Department	Inactive	Minimal Active	Very Active	Total
BESYO	0	76	224	300
Faculty Of Education	0	176	124	300
Total	0	252	348	600

The findings related to the Physical Activity category of the students participating in the study are shown in Table 4. The physical activity category of BESYO students participating in the study is as follows: 0 people Inactive, 76 people minimal active, 224 people; has been found to be very active. The physical activity category of the students of the Faculty of Education is as follows: 0 people Inactive, 176 people have minimal active and 124 persons; has been found to be very active.

#### 4. Discussion and Conclusion

In this study, the physical activity levels of students studying in different departments were examined. This study was carried out on 300 students of 300 Faculty of Education, 300 of whom were BESYO students. In this study, BESYO 224 students were very active in physical activity levels according to departments and 124 students were found to be very active. While 76 of the BESYO students were minimally active, 176 of the Faculty of Education students were found to be minimal active.

In studies conducted by Yeltepe (2005) and Vardar (2012), they found that the levels of exercise dependence did not differ significantly in terms of gender. These results are similar to the results of our study.

In a study, when the physical activity levels of the students were examined according to their gender; while there was no significant difference between the body mass indexes of the male students according to their exercise dependence status, the physical activity levels of the exercise addicts and their dependent candidates were statistically significantly higher than the non-dependent women. It was found that there was no significant difference in the body mass index of males at all addiction levels, and

the physical activity levels of the dependent candidate males were significantly higher than the females (Gün, 2018).

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