Vol. 13(13), pp. 518-525, 10 July, 2018
DOI: 10.5897/ERR2018.3499
Article Number: F9D1FAA57638
ISSN: 1990-3839

http://www.academicjournals.org/ERR

ACADEMIC JOURNALS
expand your knowledge

Educational Research and Reviews

Full Length Research Paper

The effect of physical education and ports departments on behavioral changes towards exercising

Aliye Menevşe

School of Physical Education and Sport, İstanbul Esenyurt University, İstanbul, Turkey.

Received 19 February, 2018; Accepted 7 June, 2018

This study was conducted to investigate the effects of Physical Education and Sports (PES) Departments over the exercise behaviors of male students (277 public, 283 private) from a sample group of 21 to 26 year-olds, who are studying in various departments from both private and public universities in Istanbul. The Physical Activity Stages of Change Questionnaire (PASCQ) was used for data collection and the effect of the PES sciences was investigated to determine the tendency to play sports. A chi-square test was used to examine the relationship between categorical variables. According to PASCQ variable of male students from different departments of these universities, the general distribution of the tendency to participate in a moderate physical activity is 34.7% in private universities and 62% in public universities. The tendency to participate in sports was almost non-existent in age groups of 23, 24, and 26 in private universities, and in age groups of 21, 23 and 26 in public universities. A meaningful relationship was found when we asked the students of private universities the question of "Do PES departments have an effect on your physical activity?" (X^2=33,952; p=,000; p<0.05). As 87.3% of the students work in the private sector along with school, they spend their non-school recreative time outside the campus and in the workplace. As a result, they are not in touch with the facilities, organizations and friend groups the PES departments have to offer, so they only show a 34.7% pre-tendency and behavior tendency in the Physical Activity Stages of Change compared to public universities. These three questions were asked and a meaningful relationship was found: "Do you have any close friends who are studying in the PES departments of public universities?" (X^2=16,696; p=,033) "Do you use the university's facilities when you exercise?" (X^2=38,241; p=,000) and "Does PES students have effect on your physical activities?" (X^2=59,815; p=,002) p<0.05). Despite the fact that 40% of these students work alongside schoolling, having friends in PES departments, wanting to participate in organizations and activities, having the opportunity to use facilities, and the tendency of PES students to exercise, gives these students a 62% maintenance stage tendency. It was found that PES sciences are more effective in state universities as regards directing students to physical activity in campus life. Individuals in PES sciences also affect the physical activity levels of students in other disciplines.

Key words: Physical education and sport, behavioral change, physical environment, physical activity, types of university.

INTRODUCTION

It is stated in Article 47 of the Higher Education Act No. 2547 under Social Services that the development of health and physical fitness of university students is a legal duty. The institutions of higher education, in accordance with the plans and programs of the Council of Higher Education, are to take necessary measures for

the mental and physical well-being of students; to provide their social needs regarding nutrition, studies, relaxation, use of leisure time and the like; and with this aim in mind and within the limits of the budget, to open reading rooms, health centers with inpatient facilities, medico-social centers, student canteens and restaurants; to provide cinema and theatre halls, outdoor camping sites, gymnasiums and sports grounds (Ziyagil et al., Project report, 2016).

Although the quality of life and the physical fitness of the students are guaranteed by this legislation, the sports competitions and competitions attended by the students are limited to the students of physical education and sports department. Students in different disciplines or departments are not as active as physical education students in exercise or physical activities, which suggests that the legal articles are inadequate in practice.

Besides, this inadequacy of the students from different disciplines in practice requires different choices to be made at public and private universities. Within these preferences, a solution within the campus can be found by implementing an approach based on the physical education and sports departments, and the sedentary lifestyle of the students can be changed. Even though this question concerns university students, the main problem is the different points of view in public and private universities. It is aimed to contribute to the regulations concerning this strategy towards the differences in policies that will be based on scientific (Şirinkan, 2002).

Therefore, private and public schools need awareness on new approaches to motivate university students to exercise. The physical development of young people in universities is almost completed, but this development can be delayed by some factors such as nutrition, climate conditions, and genetics. In addition, students who have just left home need physical activity for them not to be affected negatively by this change. Students need to participate in physical activities to use their free time well, to relieve the stress caused by their classes, and to create new social groups (Şirinkan, 2002). Participating in physical activities increases self-expression and self-confidence in individuals, increases unity and sportsmanship, helps decrease mental fatigue and stress, and also improves success and social communication skills (Gür and Küçükoğlu, 1992).

The World Health Organization (WHO) defines an adolescent as any person between ages 10 and 19 (young adult), any person between the ages of 20 and 24 as youth, and any person between the ages of 10 and 24 as young people (Özcebe, 2002). In studies conducted for young groups, it was observed that young people had a lower quality of life as regards mental dimension in for comparison to the physical dimension in the age range of 18-24, and again with age, risky behaviors concerning mental health, perceived health and health were observed (Zahran et al., 2007).

An approach to lead a healthy life combines models based on stages that brings to mind the effect physical activity has on cognition and behavior, and linear models. The change processes in the Stages of Change comprise various strategies. These processes include cognitive and behavioral strategies. The Physical Activity Stages of Change refers to a person's readiness to exercise regularly (Marcus et al., 1992). These stages classify a person's readiness to change their behavior. These stages are precontemplation, contemplation, preparation, action, and maintenance (Prochaska and Velicer, 1997).

Individual, social and physical determinants along with many other factors play an important role in widespread participation during physical and sporting activities. Social support, social obstacles or social impact caused by social roles, loyalty to a group, and physical environment determines the Physical Activity Stages of Change. It is necessary to analyze the factors that make an individual exercise or put off exercising. The importance individuals place on health, the internal control they have over their health behavior, the self-efficacy they have in solving problems, the meaning they attribute to health, and factors concerning how they perceive their current health status are the most defining features of exercise behavior. Demographic characteristics, interpersonal interaction, and the environment of the individual are among the changing factors related to improving health (Çepni, 2010; Dalak, 2010).

The study was conducted to investigate the effects of changing the exercise behaviors of students from various departments in both public and private universities and the effect Physical Education and Sports Departments have on these students' exercise behaviors.

METHODOLOGY

One criteria during the selection of private and public universities is, it was particularly important for the PES departments to be on the same campus and for the PES department's facilities to also be on campus. This includes an athletic field, a multi-purpose gym, a football field, a table tennis hall, an indoor tennis court, volleyball, handball, badminton courts, a fitness center, a basketball court, and a semi-olympic indoor swimming pool. However, the facilities of the Physical Education and Sports (PES) departments can be used by students of other departments that has membership with time constraints and a certain allowance.

The study used a descriptive study and simple random sampling method. The population consists of students in various departments from private and public universities in Istanbul, and the sample consists of 560 male students between 21 and 26 years of age.

E-mail: akademihk@hotmail.com.

Table 1. Participation of private and public university students according to their age, and ratios of students working in the private sector along with school.

Age	Prıvate / n	Publıc / n	Works along with school
Aged 21	38	17	
Aged 22	49	46	87.3% PR
Aged 23	76	87	
Aged 24	32	64	
Aged 25	67	48	40% PU
Aged 26	15	21	
Total	277	283	560

Those who participated from the private university were 38 people aged 21, 49 people aged 22, 76 people aged 23, 32 people aged 24, 67 people aged 25, and 15 people aged 26, a total of 277 students. 87.3% of these students also work in the private sector. From the public university, 17 people aged 21, 46 people aged 22, 87 people aged 23, 64 people aged 24, 48 people aged 25, and 21 people aged 26 participated in the study, a total of 283 students. 40% of these students also work in the private sector. In total, a survey consisting of 15 questions was applied to 560 students.

A small group was formed to develop a draft survey by taking in the views of expert lecturers in the field to identify possible mistakes. The first part of the three-part survey consists of four questions to determine the demographic characteristics of the participants. The second part consists of the five yes/no questions shown in Table 4 regarding Physical Education and Sports Departments. The Physical Activity Stages of Change Questionnaire (PASCQ) was applied in the third part. PASCQ is a tool that measures the individual's readiness to participate in physical activities and it has six questions (Marcus et al., 1992; Marcus and Lewis, 2003). The participants of the questionnaire answered questions on their participation in physical activity by answering Yes or No. Five categories were constructed for the answers they gave. These stages are precontemplation, contemplation, preparation, action, and maintenance. The Turkish version of PASCQ (Cengiz, 2007) was used in this study. The Test-Retest Reliability of the Turkish version is high (ISC= .80) (Priscilla et al., 1994).

The data obtained in the research was analyzed using Statistical Package for Social Sciences (SPSS) for Windows 21.0 package software. The data was evaluated in the program by Chi-square analysis for the relationship between frequency, percentage and categorical variables with a confidence level of 95% and a significance level of 5%.

FINDINGS

According to the Physical Activity Stages of Change variable of male students from various departments in private universities, 106 of them are in precontemplation (35.3%), 45 in contemplation (16.0%), 42 in preparation (14.0%), 26 in action (12.0%), and 58 in maintenance (22.7%). According to the Physical Activity Stages of Change variable of male students from various departments in public universities, 19 of them are in precontemplation (6.3%), 24 in contemplation (8.0%), 61 in preparation (23.7%), 64 in action (24.7%), and 115 in maintenance (37.3%) (Tables 1 to 3).

The preparation stage of the 21-year-old age group is 42.9% in Pr and 8.4% in Pu. The maintenance stage is 25% in Pr and 17% in Pu. The maintenance tendency decreased in Pr. The contemplation and preparation stages of the 22-year-old age group are between 20 to 23% in Pr and in Pu. The maintenance stage for this age group is 25% in Pr and 19.6% in Pu. The precontemplation stage of the 23-year-old age group is 34% in Pr and 47.4% in Pu. The contemplation stage is 29.2% in Pr and 45.8% in Pu, and the preparation stage is 19.0% in Pr and 40.8% in Pu. The maintenance stage decreases quite a lot in Pr to 14.7% and to 15.2% in Pu. The precontemplation, contemplation, preparation and action stages for the 24-year-old age group are around 15%. Meanwhile, the maintenance stage is 2.9% in Pr and 23.2% in Pu. The contemplation stage of the 25-year-old age group is 31.2% in Pr and 4.2% in Pu. The maintenance stage is 27.9% in Pr and 19.6% in Pu. The 26-year-old age group had the lowest maintenance stage ratio of 4.5% in Pr and 5.4% in Pu. Significance was determined in both groups $p<0.05$. The maintenance stage had the lowest percentages in the age groups of 23, 24 and 26 in private universities. Meanwhile, this was paralleled by the age groups of 21, 23 and 26 in public universities (Table 4).

When the table is examined, it can be seen that all 276 students from all age groups answered No to the question "Do you have any close friends studying in PES departments?" (X^2=8,403; p=,590; p>0.05). No significant relationship was found. 63 students said Yes and 214 students said No to the question "Do PES departments have an effect on your physical activity?" (X^2=33,952; p=,000; p<0.05) and a significant relationship was found. 128 students said Yes and 149 said No to the question of "Would you like to participate in the organizations and activities of the PES departments?" (X^2=10,529; p=,395; p>0.05) and no significant relationship was found. 72 students said Yes and 205 said No to the question "Do you use the university's facilities when you exercise?" (X^2=16,479; p=0.087; p>0.05) and no significant

Table 2. Stages of exercise change in private and public universities.

Variable	Group	Frequency (n)		Percentage	
		Private	Public	Private	Public
Stages of change	Precontemplation	106	19	35,3	6.3
	Contemplation	45	24	16,0	8.0
	Preparation	42	61	14,0	23.7
	Action	26	64	12,0	24.7
	Maintenance	58	115	22,7	37.3
	Total	277	283	100,0	100.0

Table 3. The physical activity stages of change ratios of private and public universities by age.

Age (years)	Recontemplation		Contemplation		Preparation		Action		Maintenance		p
	Pr %	Pu %	Pr %	Pu %	Pr %	Pu %	Pr %	Pu %	Pr %	Pu %	PR
21	10.0	5.2	2.1	12.5	42.9	8.4	5.6	6.6	25.0	17.0	
22	5.9	10.5	22.9	20.8	23.8	14.1	30.6	9.5	25.0	19.6	X^2=151.78 p=0.000*; PU X^2=59.815 p=0.002*
23	34.0	47.4	29.2	45.8	19.0	40.8	22.2	28.4	14.7	15.2	
24	15.1	15.8	10.4	12.5	4.8	18.3	19.4	25.7	2.9	23.2	
25	23.6	15.8	31.2	4.2	9.5	9.9	11	20.3	27.9	19.6	
26	11.4	5.3	4.2	4.2	0.0	8.5	11.2	9.5	4.5	5.4	
Total	106	19	45	24	42	61	26	64	58	115	277 / 283= 560

Pr; private; Pu; public; p<0.05***.**

Table 4. Private university students' questions related to physical education and sports.

Questions		21 Yrs		22 Yrs		23 Yrs		24 Yrs		25 Yrs		26 Yrs		P
		N	%	N	%	N	%	N	%	N	%	N	%	
Do you have any close friends in PES departments?	Y	0	0.0	0	0.0	0	0.0	1	3.1	0	0.0	0	0.0	X^2=8.403 p=0.590
	N	38	12.7	49	16.4	76	25.4	31	10.4	67	22.4	15	5.0	
Do PES departments have an effect on your physical activity?	Y	18	28.6	3	4.8	20	31.7	7	11.1	15	23.8	0	0,0	X^2=33.952 p=0.000*
	N	20	8.4	46	19.4	56	23.9	25	10.5	52	21.9	15	6,3	
Would you like to participate in PES org. and act.?	Y	18	12.9	25	17.9	35	25.0	18	12.7	26	18.6	6	4.3	X^2=10.529 p=0.395
	N	20	12.5	24	15.0	41	25.6	14	8.8	41	25.6	9	5.6	
Do you use the university's facilities when you exercise?	Y	6	7.9	15	19.7	20	26.5	14	18.4	15	19.7	2	2.6	X^2=16.479 p=0.087
	N	32	14.3	34	15.2	56	25.0	18	8.0	52	23.2	13	5.8	
Do PES students have an effect on your physical activity?	Y	12	10.3	18	15.5	24	20.7	15	12.9	27	23.3	6	5.2	X^2=16.355 p=0.090
	N	26	14.1	31	16.8	52	28.4	17	9.2	40	21.7	9	4.9	

Y: Yes; N: No; p<0.05*; yrs, years.

relationship was found. 102 students said Yes and 175 said No to the question "Do PES students have an effect on your physical activity?" (X^2=16,355; p=,090; p>0.05) and no significant relationship was found (Table 5).

Table 5. Public university students' questions related to physical education and sports.

Questıons		21 Yrs		22 Yrs		23 Yrs		24 Yrs		25 Yrs		26 Yrs		P
		N	%	N	%	N	%	N	%	N	%	N	%	
Do you have any close friends in PES departments?	Y	11	6.6	27	16.2	50	29.9	43	25.7	18	10.8	8	4.8	X^2=16.696
	N	6	4.5	19	14.3	37	27.8	21	15.8	30	22.6	13	9.8	p=0.033*
Do PES departments have an effect on your physical activity?	Y	3	3.2	16	17.2	32	34.4	25	26.9	7	7.5	6	6.5	X^2=13.022
	N	14	6.8	30	14.5	55	26.7	39	18.8	41	19.8	15	7.2	p=0.111
Would you like to participate in PES org. and act.?	Y	6	3.5	27	15.8	54	31.6	38	22.2	25	14.6	11	6.4	X^2=8.374
	N	11	8.5	19	14.7	33	25.6	26	20.2	23	17.7	10	7.8	p=0.398
Do you use the university's facilities when you exercise?	Y	15	8.4	21	11.7	54	30.1	52	29.1	22	12.3	7	3.9	X^2=38.241
	N	2	1.7	25	20.7	33	27.3	12	9.9	26	21.5	14	11.6	p=0.000*
Do PES students have an effect on your physical activity?	Y	9	5.4	27	16.2	54	32.3	38	22.8	20	12.0	7	4.2	X^2=59.815
	N	8	6.0	19	14.3	33	24.8	26	19.5	28	21.1	14	10.5	p=0.002*

Y: Yes; N: No; p<0.05*****.

DISCUSSION

It has been wondered whether there is a positive relationship between exercise and cognitive performance for many years. Many studies in the literature have revealed that participation in physical activity positively affects academic success, and there are also other studies that indicate that participation in these activities has an adverse effect on academic success (Cheung et al., 2009). Success in education is determined by “academic success,” which is obtained through classes given in school and grades given out by teachers,test scores or both (Carter, 2009). It is common knowledge that team playing and all kinds of sports helps improve social integration and social skills in individuals from all ages. As a result, physically active individuals are thought to display a higher academic performance (Gür and Küçükoğlu, 1992).

In this study, the relationship between Physical Education and Sports Sciences and Physical Activity Stages of Change were examined to determine the tendency to do sports in students between ages 21 and 26 from various departments of private and public universities, and the results are given in the tables. According to the Physical Activity Stages of Change variable of male students from various departments in private universities, 106 of them are in precontemplation (35.3%), 45 in contemplation (16.0%), 42 in preparation (14.0%), 26 in action (12%), and 58 in maintenance (22.7%). According to the Physical Activity Stages of Change variable of male students from various departments in public universities, 19 of them are in precontemplation (6.3%), 24 in contemplation (8.0%), 61 in preparation (23.7%), 64 in action (24.7%), and 115 in maintenance (37.3%) (Table 2).

According to this study findings, all of the students who study at state universities in our sample have a tendency to change behavior. When the action and maintenance percentages are combined, we get a representation of moderate participation in physical activity. 34.7% of the private universities and 62% of the public universities participate in physical activity.

Çeker et al. (2013) in a study conducted in Amasya about the regular Physical Activity Stages of Behavior Change in women and men from different age groups, results showed that ratios for precontemplation, contemplation, preparation, action and maintenance stages were 41.82, 17.23, 12.88, 11.04 and 17.04% respectively with a total of 1033 participants. When action and maintenance stages were combined, they found out that 28% of women participated in moderate physical activity. In our study group, we found that 62% of the students of public universities participated in moderate physical activity and therefore were more inclined.

Marcus et al. (1992) examined the structures related to the self-efficacy stages to change exercise habits. They developed two scales to measure The Physical Activity Stages of Change. These scales were used in a group comprising 1063 public servants and 429 hospital employees. The exercise self-efficacy skill of the employees have been tested with surveys according to the stage they were in. The results obtained from change scales showed that 34-39% of the employees participated in a physical activity regularly. Tümer et al. (2013) examined the exercise behavior in the city of Muğla according to the Transtheoretical Model and found that out of 200 female participants (67%) and out of 104 participants with an average of 31.81±10.44, the ratios for

precontemplation, contemplation, preparation, action and maintenance stages were 14.5, 18.0, 20.0, 23.5 and 24.0% respectively. From this study, the action and maintenance stages has similarities.

The preparation stage of the 21-year-old age group is 42.9% in Pr and 8.4% in Pu. The maintenance stage is 25.0% in Pr and 17% in Pu. The maintenance tendency decreased in Pr. The contemplation and preparation stages of the 22-year-old age group are between 20 to 23% in Pr and in Pu. The maintenance stage for this age group is 25.0% in Pr and 19.6% in Pu. The precontemplation stage of the 23-year-old age group is 34.0% in Pr and 47.4% in Pu. The contemplation stage is 29.2% in Pr and 45.8% in Pu, also the preparation stage is 19.0% in Pr and 40.8% in Pu. The maintenance stage decreases quite a lot in Pr to 14.7% and to 15.2% in Pu. The precontemplation, contemplation, preparation and action stages for the 24-year-old age group are around 15%. Meanwhile, the maintenance stage is 2.9% in Pr and 23.2% in Pu. The contemplation stage of the 25-year-old age group is 31.2% in Pr and 4.2% in Pu. The maintenance stage is 27.9% in Pr and 19.6% in Pu. The 26-year-old age group had the lowest maintenance stage ratio with 4.5% in Pr and 5.4% in Pu. Significance was determined in both groups $p<0.05$. The maintenance stage had the lowest percentages in the age groups of 23, 24 and 26 in private universities. Meanwhile, this was paralleled by the age groups of 21, 23 and 26 in public universities (Table 3).

When the questions private university students are asked as regards the Physical Education and Sports are examined, it can be seen that all 276 students from all age groups answered No to the question of "Do you have any close friends studying in PES departments?" ($X^2=8.403$; $p=.590$; $p>0.05$). No significant relationship was found. Of the students in the sample group, 87.32% said they have to work in other sectors besides school in order not to be a burden to their families with their tuition payments, and because of other reasons. Therefore, they do not have a chance to socialize with students from the PES department. İt is believed that all 276 students giving a No response is completely due to this situation. Although the contemplation stage of exercise is influenced by a group of friends, this group has been a negative influence on the willingness to change behavior.

63 Sixty three students said Yes and 214 students said No to the question "Does PES departments have an effect on your physical activity?" ($X^2=33.952$; $p=.000$; $p<0.05$) and a significant relationship was found. When the PES departments' influence over the action and maintenance stages is considered, students pointed out that they said No due to insufficient funds and because the allocated time conflicted with working hours.

128 students said Yes and 149 said No to the question "Would you like to participate in the organizations and activities of the PES departments?" ($X^2=10.529$; $p=.395$; $p>0.05$) and no significant relationship was found. The lack of participation in organizations may be due to the lack of appeal in the announcements of these organizations, or maybe because only the students of PES departments attend these organizations. However, these organizations and activities may be the determining factors in preparation and action tendencies.

72 Seventy twostudents said Yes and 205 said No to the question "Do you use the university's facilities when you exercise?" ($X^2=16.479$; $p=.087$; $p>0.05$) and no significant relationship was found. The fact that the vast majority do not or can not use the facilities may show an inhibition of the precontemplation and contemplation stages. 102 students said Yes and 175 said No to the question "Does PES students have an effect on your physical activity?" ($X^2=16.355$; $p=.090$; $p>0.05$) and no significant relationship was found (Table 4). For the students who said Yes, the fact that PES students wear athletic or comfortable clothes may be appealing, or recently, the fact that PES students have taken an interest in fitness and have developed a muscular build may be visually appealing. It shows that there may be action and maintenance behaviors toward exercise.

When the questions public university students were asked as regards the Physical Education and Sports are examined, it can be seen that all 157 students said Yes and 126 students said No to the question "Do you have close friends studying in PES departments?" ($X^2=16.696$; $p=.033$; $p<0.05$) and a significant relationship was found. The Yes and No answers are almost divided equally when compared to the private university. The fact that only 40% of the students work outside of school, and that the number of working students is significantly lower, and that they also spend more time in the campus allows relationships with the PES students.

89 students said Yes and 194 students said No to the question "Does PES departments have an effect on your physical activity?" ($X^2=13.022$; $p=.111$; $p>0.05$) and no significant relationship was found. Physical Education and Sports departments tend to create a tendency for action and maintenance. How to be a athlete may predict being creating. For example, do personality differences between sedanter and athlete be a reason fort he below results? 161 students said Yes and 122 said No to the question "Would you like to participate in the organizations and activities of the PES departments?" ($X^2=8.374$; $p=.398$; $p>0.05$) and no significant relationship was found. The fact that students wish to participate in organizations and activities at a high level affects the preparation and action stages positively. 171 students said Yes and 112 said No to the question "Do you use the university's facilities when you exercise?" ($X^2=38.241$; $p=.000$; $p>0.05$) and a significant relationship was found. The tuition payments and financial worries are lower in public universities than private universities. Furthermore, students are allowed to use social facilities longer and time restrictions have been lifted. As a result, the students in public universities can use the facilities and this has affected their Physical Activity Stages of Change positively.

155 students said Yes and 128 students said No to the question "Do PES departments have an effect on your physical activity?" (X^2=59.815; p=.002; p<0.05) and a significant relationship was found (Table 5). These students have relatively more friends in PES departments, and this has resulted in a higher number of Yes answers. This has affected their Physical Activity Stages of Change positively.

Another study using the Physical Activity Stages of Change Questionnaire in METU shows that new male students of METU have a higher level of physical activity when compared to female students, and students living in the dormitories also had a higher physical activity level when compared to students who lived in homes. Precontemplation, contemplation, preparation, action and maintenance stages of all of the METU students were found to be 9.2%, 39.3%, 27.8%, 14.5% and 9.2% respectively (Ebem, 2007). When we compare these findings with our study, it is evident that with a 22.7% in public universities and 37.3% in private universities in the maintenance stage, the exercise behavior was not only limited to contemplation, but that it also showed a maintenance tendency. Yıldırım and Bayrak (2017) conducted a study on students' participation in physical activities based on sports and its effects on their quality of life, academic success and social skills. In this study, 32.2% of the students (n=330) showed high participation in a physical activity based on sports; meanwhile, 28.8% of the students (n=295) did not participate in any activities and led quite the sedentary lifestyle.

In conclusion, in the Physical Activity Stages of Change of private universities, movement and maintenance stage ratios are 12.0 and 22.7% respectively, and 34.7% when these stages are combined. In public universities, the movement stage ratio is 24.7% and the maintenance 37.3%, which is 62% in total. Students of public universities have shown greater participation in physical activities. In the question where the effects of PES departments' effects on exercise was investigated, it was found that private university students from various departments did not have friends in the PES department, they did not utilize the facilities, they did not want to participate in the organizations and activities, and therefore the PES department was not effective in increasing the students' physical activities. 87.3% of these students said that they paid their own tuitions and that they had other financial problems, and therefore had to work in the private sector. As a result, they spent their recreative time outside of the campus and within work places.

Furthermore, they could not pay the membership fees for the physical education departments and they also could not find time in their schedules. In conclusion, they had a ratio of 34.7% in precontemplation. Students in public universities had a higher ratio of yes answers to these questions. Public university students do not have tuition fees to pay and their financial worries are 40% lower than the students of private universities. It is apparent that these facts have shaped their responses. The students who attended public universities have friends in PES departments and lots of people use the university's facilities.

Conclusıon

This has resulted in a higher number of students who wish to participate in organizations and activities. Therefore, the PES departments are directly involved in students' physical activities and this is evident by the answers that are given. This also shows that with a combined ratio of 62% in action and maintenance stages of the Physical Activity Stages of Change, participation is high on the moderate physical activity level.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

REFERENCES

Carter VE (2009). Good Dictionary of Education, vol: 4 New York: McGraw Hill Book Company,; as cited: Keskin G ve Sezgin B, Fırat Determination of the Factors Affecting a Group of Adolescents in Academic Achievement. Health Services Magazine 4(10):3-18.

Çeker A, Çekin R, Ziyagil MA (2013). Regular physical activity stages of behavior change in women and men from different age groups. CBU Beden Eğitimi ve Spor Bilimleri Dergisi 8(1):11-20.

Çepni SA (2010). The relationship between healthy lifestyle behaviors, health focus of control and health self-efficacy of college students. Gazi University Institute of Social Sciences, Ankara, Unpublished Master's Thesis.

Cheung Chau-Kiu, Kwok Siu-Tong (2009). Activities and academic achievement among collage students. The Journal of Genetic Psychology 159(2):147-162.

Dalak H (2010). The relationship between healthy living behaviors and social support in patients with essential hypertension. Mersin University Institute of Social Sciences, Mersin, Unpublished Master Thesis.

Ebem Z (2007). Health Promoting behaviors and exercise stages of change levels of students attransition to universıty. Middle East Technical University, Unpublished Master Thesis.

Gür H, Küçükoğlu S (1992). Old age and physical activity, Roche publication, 9. https://www.nadirkitap.com/yaslilik-ve-fiziksel-aktivite-yaslilar-icin-egzersiz-programlari-hakan-gur-selcuk-kucukoglu-kitap5753498.html

Marcus BH, Selby VC, Niaura RS, Rossi JS (1992). Self efficacy and the stages of exercise behavior change. Research Quarterly for Exercise and Sport 63(1):60-6.

Marcus BH, Lewis BA (2003). The transtheoretical model postulates that individuals move through a series of stages as they adopt and maintain physical activity 4:1-8.

Yıldırım M, Coskun B (2017). The participation of university students in physical activities based on sport and the effect of the students' quality of life on academic achievement and socialisation (Sample of Eskisehir Osmangazi University. H. U. Journal of Education doi: 10.16986/HUJE.2017032928.

Özcebe H (2002). Approach to adolescent problems ın primary care, Hacettepe University, Faculty of Medicine. Halk Sağlığı AD 11(10): 374. https://www.halksağlığı.hacettepe.edu.tr

Priscilla S, Don A, Dillman (1994). How to conduct your own survey, John Wiley & Sons, Inc. Newyork. P 55.

Prochaska JO, Velicer WF (1997). The transtheoretical model of health behavior change. American Journal of Health Promotion 12:38-48.
Tümer A, Arslan AS, Pehlivan Ç, Sunna E, Koç O (2013). Examination of exercise behavior of adults according to transtheoretical model. Health and Society 3(1):24-31.
Şirinkan A (2002). Special teaching methods (I-II). Sefa Kırtasiye Matbaa, Erzurum.
Ziyagil MA, Tamer K, Kabasakal Ö, Kayacan Y (2016). University students' tendencies toward physical and sport activities. Turkish University Sports Federation. Project report, December.
Zahran SH, Zack MM, Mary E, Smiley V, Hertz MS, Marci F, Vernon MD, Marci F, Hertz MS (2007). Health-related quality of life and behaviors risky to health among adults aged 18-24 years in secondary or highereducation united states, 2003-2005. Journal of Adolescent Health 41:389-397.