



Parks and Recreation Areas for Physical Activity: Barriers and Incentives

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Abstract

This study focused on studying parameters related to physical activities of users of park and recreation areas. The study population was consisted of those participants who visited park and recreation areas in Ankara Province while the study sample was consisted of 289 voluntary participants. 123 participants were male participants and 166 participants were female participants. In the study; "Physical Activity Venue Evaluation Scale" which was developed by Stanis et al. (2009) and Turkish adaptation study of which was conducted by Gümüş et al. (2015) was used as data collection tool. To analyze the data found in the study; descriptive statistical methods (percentages/frequency), t-Test for pairwise comparisons, one-way analysis of variance for determining the differences among two or more independent groups and Post-Hoc Bonferroni Test were employed. It was identified that the participants' physical activity venue evaluation scale scores did not differ statistically in terms of such variables as gender, educational status, marital status and body mass index. However, it was found that there was a statistically significant difference in the scores of physical activity venue evaluation scale, choice of physical activity space on behalf of those who did not perform physical activities regularly in terms of variable of performing physical activities regularly. Also; a statistically significant difference was found in the scores of physical activity location selection, factors preventing physical activity participation on behalf of those aged 42-53 years in terms of age variable. As a result of the study; it may be suggested that variables of gender, educational status, marital status and body mass index did not affect choosing physical activity space and physical activity participation whereas variable of doing sports regularly affected choosing physical activity space and age variable affected frequency of physical activity participation.

Keywords: Leisure, Park, Physical Activity, Recreation, Sport.

Fiziksel Aktivite İçin Park ve Rekreasyon Alanları: Engeller ve Teşvikler

Öz

Bu araştırmanın amacı; park ve rekreasyon alanları kullanıcılarının fiziksel aktivite ile ilişkili parametrelerinin incelenmesidir. Araştırmanın evrenini, Ankara İlindeki park ve rekreasyon alanlarına gelen katılımcılar oluştururken, örneklem grubunu ise 289 gönüllü katılımcı oluşturmuştur. Katılımcıların, 123'ü erkek ve 166'sı kadındır. Araştırmada; veri toplama aracı olarak, Stanis ve diğ., (2009) tarafından geliştirilen, Gümüş ve diğ., (2015) tarafından Türkçeye uyarlanan "Fiziksel Aktivite Mekânı Değerlendirme Ölçeği" kullanılmıştır. Araştırmada elde edilen verilerin analizinde; betimsel istatistik yöntemleri (yüzde/frekans), ikili karşılaştırmalarda t-Testi, üç ve daha fazla grup arasındaki farkı belirlemek için Tek Yönlü Varyans Analizi (ANOVA) ve Post-Hoc analizlerinden Bonferroni Testi kullanılmıştır. Katılımcıların, fiziksel aktivite mekânı değerlendirme ölçeği puanlarının, cinsiyet, eğitim seviyesi, medeni durum ve beden kitle indeksi değişkenlerine göre istatistiksel olarak anlamlı bir farklılık göstermediği tespit edilmiştir. Ancak fiziksel aktivite mekânı değerlendirme ölçeğinin, fiziksel aktivite mekânı seçimi alt boyutu puanlarının düzenli fiziksel aktivite yapma değişkenine göre düzenli fiziksel aktivite yapmayan katılımcılar lehine, fiziksel aktiviteye katılım sıklığını engelleyen unsurlar alt boyutu puanlarının ise yaş değişkenine göre 42-53 yaş grubunda yer alan katılımcılar lehine istatistiksel olarak anlamlı bir farklılık gösterdiği tespit edilmiştir. Araştırma sonucunda; cinsiyet, eğitim seviyesi, medeni durum ve beden kitle indeksi değişkenlerinin, mekân seçimini ve fiziksel aktiviteye katılımı etkilemediği ancak düzenli spor yapma değişkeninin, fiziksel aktivite mekânı seçimi üzerinde ve yaş değişkeninin fiziksel aktiviteye katılım sıklığını engelleyen unsurlar üzerinde bir etkiye sahip olduğu söylenebilir.

Anahtar Kelimeler: Boş zaman, Park, Fiziksel Aktivite, Rekreasyon, Spor.

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INTRODUCTION

Today, the belief that there is an important relationship between physical activities and health has become a stronger belief compared to the past (Gümüş, Alay-Özgül, & Karakılıç, 2017). In the current century, although a lively lifestyle has started to decrease day by day with the technological developments in transportation, business life and leisure activities; it is seen that Önemli (2020) physical activity has become more common in developed countries and its importance is gradually increasing in developing countries (Can, 2013). Because with the increasing technology, there has been an increase in the leisure time of the individuals in daily life and a sedentary lifestyle has emerged for individuals in parallel. It is thought that when the human body continues its life without performing the activities that it has to do for a long time, it may lose some of its functional abilities and some deficiencies may cause many diseases (Urlu, 2014). Also, Esen (2010) has determined that the society's insufficient knowledge of physical activity-related issues, the inability to fully understand the importance of physical activity for a healthy life, and the adoption of a sedentary lifestyle that is increasing day by day are considered to be important factors in the increase in the rate of chronic diseases in individuals. In addition, sports activities have an important place in terms of providing an environment where individuals can express themselves and take part in a socialization process (Tolukan & Akyel, 2019). In this context; meeting the needs of individuals for physical activity and evaluating their leisure time efficiently has turned into an important problem, and studies show that the effect of the space factor has an important place in the evaluation of leisure time (Vural & Yılmaz, 2018). Because researchers state that the quality of life can increase with regular physical activity (Esen, 2010).

Physical activity has been defined by Önemli (2020) as “*all movements in daily life that require energy expenditure and are performed using skeletal muscles*” (p.6). It is not limited to sports activities and planned entertainment, but also includes activities such as physical activity, hiking, cycling,

dancing, traditional games (Işıkgöz, Esentaş, & Şahin, 2018).

It is possible to explain the effects of physical activity on health as follows (“Physical Activity”, 2017);

- Preserving and increasing muscle strength,
- Maintaining body composition and posture,
- Reducing fatigue and regulating heart rhythm,
- By strengthening the heart, it increases blood flow to the heart and reduces the risk of having a heart attack,
- There is an increase in respiratory capacity,
- Individuals who do regular activities are more successful than inactive individuals in getting rid of smoking addiction,
- Regular physical activity helps control diabetes and blood sugar by controlling insulin activity,
- It helps the body to balance the use of water, salt and minerals,
- It accelerates metabolism and prevents weight gain by bringing the habit of meeting energy needs by burning fat,
- It reduces the risk of early dementia (dementia) and forgetfulness due to increased blood flow to the brain due to its effects on vascular structure,
- It reduces the risk of developing cerebrovascular diseases,
- It creates self-confident individuals who are at peace with their body by improving body smoothness and awareness due to its positive effects on healthy muscle, bone and joint structure,
- It improves the ability to think positively and cope with stress,
- It creates well-being and happiness.

Parks and physical activity areas play an important role in the health of individuals by promoting physical activity (Kruger, 2008). Leisure activities are organized in an

organized manner and turn into a service offered to the public through state institutions (Gümüş & Karakullukçu, 2015). In other words, local governments and organizations responsible for the management of sports activities are responsible institutions for creating spaces where society can participate in physical activity and they work on this issue. In addition, they develop and implement projects and programs in order to increase participation. It is thought that the society's ability to perform such physical activities is closely related to the existence of parks and recreation areas that can meet the demands and needs of the individuals in the community, and then to the factors that affect the place selection and participation of individuals who come to parks and recreation areas for physical activity. In addition, physical activity areas have many positive effects on society, individual and social health (Tolukan & Yılmaz, 2014). In this context; It is thought to be important in determining the factors that affect this situation.

The aim of this research is the study of parameters related to physical activity of park and recreation areas users.

METHOD

Model of the Research

Survey method, one of the descriptive research methods questioning the existing situation in the study, has been used. Survey models are a suitable model for studies that aim to describe a past or present situation as it exists (Karasar, 1996).

Study Group

While the population of the study consists of the participants who are coming to the parks and recreation areas in Ankara province, the sample group has been composed of 289 volunteer participants. Of the participants, 123 are men (%42.6) and 166 are women (%57.4).

Table 1. Frequency and Percentage Values of Participants' Demographic Values

Variables	Groups	n	%
Gender	Female	166	57.4
	Male	123	42.6
Education Level	HighSchool and Below	91	31.5
	University and Above	198	68.5
Age	Age of 18-29	116	40.1
	Age of 30-41	105	36.3
	Age of 42-53	68	23.5
Body Mass Index	Underweight	56	19.4
	Normal	131	45.3
	Overweight	71	24.6
	Obesity	31	10.7
Marital Status	Married	126	43.6
	Single	163	56.4
Regular Physical Activity Status	Yes	106	36.7
	No	183	63.3
	Total	289	100.0

Data Collection Tools

As a data collection tool in this study; Personal Information Form and Physical Activity Venue Evaluation Scale were used.

Personal Information Form

It has been prepared by the researcher in order to determine the demographic characteristics of the participants in the study. Inside; This section includes questions such as age, gender, education level, body mass index, marital status, and regular physical activity.

Physical Activity Venue Evaluation Scale

The "Physical Activity Venue Evaluation Scale" developed by Stanis et al. (2009) and adapted into Turkish by Gümüş et al. (2015) in order to identify the reasons for individuals to choose the place they go to as a place for physical activity consists of two factors and consists of 26 items in total. The scale consists of 2 sub-dimensions, namely the Choice of Physical Activity Site (11 items) and the Elements that Prevent Participation in Physical Activity (15 items), and is of the 5-point Likert type (1: Very Important, 2: Important, 3: Doesn't matter, 4: Unimportant, 5: Very Unimportant). In the adaptation study, the Cronbach Alpha internal consistency coefficients of the scale have been found to be 0.82 for the first sub-dimension, 0.91 for the second sub-dimension and 0.85 in total (Gümüş et al., 2015). The scale score has been graded between 1 and 5, and as the scores approach 5.00, it has been accepted that the factors affecting the participants' frequency of participation in physical activity and the choice of physical activity location

are insignificant, and the closer to 1.00 are important.

Analysis of data

In this study, SPSS 22.0 package program has been used to analyze the data. The normality distribution of the data has been examined and it has been determined that the data has shown a normal distribution and the data have been analyzed with parametric tests. Descriptive statistical methods (percentage / frequency), t-Test for paired comparisons, One-Way Analysis of Variance (ANOVA) to determine the difference between three or more groups have been used in the analysis of the data. The Bonferroni Test, one of the Post-Hoc analyzes, has been used to determine between which groups the statistically significant difference occurred as a result of the One-Way Analysis of Variance (ANOVA). The significance level of the findings obtained from the analysis has been accepted as $p < 0.05$ and the obtained findings have been arranged in tables.

FINDINGS

Table 2. Comparison of Physical Activity Venue Evaluation Scale Scores According to the Gender Variable

Variables	Gender	n	\bar{x}	SS	Sh $_{\bar{x}}$	t Test		
						t	Sd	p
Physical Activity Venue Selection	Male	166	2.03	0.49	0.04	-0.61	287	0.54
	Female	123	2.07	0.47	0.04			
Factors Preventing Frequency of Participation in Physical Activity	Male	166	3.01	0.92	0.07	-0.78	287	0.44
	Female	123	3.09	0.83	0.08			

$p > 0.05$

When Table 2 has been examined; It has been determined that the scores of the physical activity location evaluation scale have not

shown a statistically significant difference according to the gender variable ($t = -0.61$; $p > 0.05$; $t = -0.78$; $p > 0.05$).

Table 3. Comparison of Physical Activity Venue Evaluation Scale Scores According to the Education Level Variable

Variables	Education Level	n	\bar{X}	SS	Sh \bar{x}	t Test		
						t	Sd	p
Physical Activity Venue Selection	High School and Below	91	2.10	0.53	0.06	1.24	287	0.22
	University and Above	198	2.02	0.46	0.03			
Factors Preventing Frequency of Participation in Physical Activity	High School and Below	91	3.11	0.93	0.11	0.95	287	0.34
	University and Above	198	3.01	0.86	0.06			

p>0.05

When Table 3 has been examined; It has been determined that the scores of the physical activity location evaluation scale have not

shown a statistically significant difference according to the education level variable (t=1.24; p>0.05;t=0.34;p>0.05).

Table 4. Comparison of Physical Activity Venue Evaluation Scale Scores According to Marital Status Variable

Variables	Marital Status	n	\bar{X}	SS	Sh \bar{x}	t Test		
						t	Sd	p
Physical Activity Venue Selection	Married	126	2.04	0.47	0.04	-0.13	287	0.89
	Single	163	2.05	0.49	0.05			
Factors Preventing Frequency of Participation in Physical Activity	Married	126	3.14	0.79	0.07	1.74	287	0.08
	Single	163	2.96	0.95	0.07			

p>0.05

When Table 4 has been examined; It has been determined that the scores of the physical activity location evaluation scale have not

shown a statistically significant difference according to the marital status variable (t=-0.13; p>0.05;t=1.74; p>0.05).

Table 5. Comparison of Physical Activity Venue Assessment Scale Scores According to the Regular Physical Activity Variable

Variables	Doing Regular Physical Activity	n	\bar{X}	SS	Sh \bar{x}	t Test		
						t	Sd	p
Physical Activity Venue Selection	Yes	106	1.96	0.51	0.05	-2.43	287	0.02*
	No	183	2.11	0.46	0.03			
Factors Preventing Frequency of Participation in Physical Activity	Yes	106	3.12	0.81	0.08	1.12	287	0.27
	No	183	3.11	0.93	0.07			

*p<0.05

When Table 5 has been examined; It has been determined that the scores of the physical activity location selection sub-dimension of the physical activity location evaluation scale have shown a statistically significant

difference in favor of the participants (\bar{x} =2.11) who do not do regular physical activity (t=-2.43; p<0.05). In addition, it has been determined that the factors preventing the frequency of participating in physical activity

sub-dimension of the physical activity location evaluation scale have not shown a statistically significant difference compared to

the variable of regular physical activity (t=1.12; p>0.05).

Table 6. Comparison of Physical Activity Venue Evaluation Scale Scores According to Age Variable

Variables	Age	n	\bar{x}	ss	Source of Variance	Sum of Squares	Sd	Mean Square	F	p	Dif.
Physical Activity Venue Selection	18-29 Years ^(A)	116	2.06	0.51	Between G.	0.42	2	0.21	0.91	0.40	
	30-41 Years ^(B)	105	2.07	0.46	In groups	66.26	286	0.23			
	42-53 Years ^(C)	68	1.98	0.50	Total	66.69	288				
	Total	289	2.04	0.48							
Factors Preventing Frequency of Participation in Physical Activity	18-29 Years ^(A)	116	2.88	0.87	Between G.	6.00	2	3.00	3.92	0.02*	C>A
	30-41 Years ^(B)	105	3.11	0.88	In groups	219.13	286	0.77			
	42-53 Years ^(C)	68	3.23	0.88	Total	225.13	288				
	Total	289	3.04	0.88							

*p<0.05

When Table 6 has been examined; It has been determined that the scores of the factors that prevent the frequency of participating in physical activity sub-dimension of the physical activity location evaluation scale have shown a statistically significant difference according to the age variable (F=3.92; p<0.05). In addition, it has been determined that the physical activity location selection sub-dimension of the physical activity location evaluation scale has not shown a statistically significant difference according to the age variable (F=0.91; p>0.05).

The homogeneity of the variances has been examined to determine between which groups the statistically significant difference occurred, and Bonferroni Test, one of the post-hoc multiple comparison techniques, has been used because the variances have homogeneous characteristics (LF=0.23; p>0.05). The Bonferroni Test is preferred because it does not require the principle of equal sample size. As a result of the Bonferroni test, it has been determined that the statistically significant difference occurred in favor of the (\bar{x} =3.23) participants in the 42-53 age group (F=3.92;p<0.05).

Table 7. Comparison of Physical Activity Venue Assessment Scale Scores According to the Variable Body Mass Index

Variables	BMI	n	\bar{x}	ss	Source of Variance	Sum of Squares	Sd	Mean Square	F	p
Physical Activity Venue Selection	Underweight	56	2.11	.46	Between G.	0.43	3	0.14	0.61	0.61
	Normal	131	2.03	.49	In groups	66.26	285	0.23		
	Overweight	71	2.05	.44	Total	66.69	288			
	Obesity	31	1.97	.59						
Total		289	2.04	.48						
Factors Preventing Frequency of Participation in Physical Activity	Underweight	56	2.97	.85	Between G.	0.60	3	0.20	0.26	0.86
	Normal	131	3.08	.86	In groups	224.53	285	0.79		
	Overweight	71	3.02	1.01	Total	225.13	288			
	Obesity	31	3.08	.79						
Total		289	3.04	.88						

p>0.05

When Table 7 has been examined; It has been determined that the scores of the physical activity location evaluation scale have not

DISCUSSION AND RESULT

In this study; It has been determined that the physical activity location assessment scale sub-dimensions scores of the participants have not shown a statistically significant difference according to the gender variable (Table 2). This finding of our study is similar to the results of the study conducted by Stanis, Schneider, Chavez, & Shinew (2009). According to the study conducted by Gümüş, Alay-Özgül, and Karakılıç (2017), the scores of the physical activity location evaluation scale of the physical activity location evaluation scale have not shown a statistically significant difference, but the factors that prevent the frequency of participating in physical activity sub-dimension scores have been found statistically in favor of female participants. It has been determined that there is a significant difference. According to the study conducted by Işıkgöz, Esentaş, and Şahin (2018), the physical activity location evaluation scale has not shown a statistically significant difference in the physical activity location sub-dimension scores of the participants, but the factors preventing the frequency of participating in physical activity have been found to be statistically significant in favor of male participants. It has been determined that there is a difference. In addition, in the study conducted by Karasakız and Dinçer (2019), it has been determined that the scores of the physical activity location evaluation scale of the participants, the physical activity location selection and the factors that prevent the frequency of participation in physical activity, showed a statistically significant difference in favor of the male participants. This situation is thought to be due to the difference of the research groups.

In this study; It has been determined that the physical activity location evaluation scale sub-dimensions scores of the participants have not shown a statistically significant difference according to the educational level variable (Table 3). This finding of our study is similar to the results of the study conducted by Stanis,

shown a statistically significant difference according to the body mass index variable ($F=0.61;p>0.05:F=0.26;p>0.05$).

Schneider, Chavez, & Shinew (2009). According to the study conducted by Gümüş, Alay-Özgül, and Karakılıç (2017), the scores of the physical activity place selection sub-dimension of the physical activity place evaluation scale have not shown a statistically significant difference, but the factors that prevent the frequency of participating in physical activity have been included in the primary school group. It has been determined that there has been a statistically significant difference in favor of the participants.

In this study; It has been determined that the physical activity location assessment scale sub-dimensions scores of the participants have not shown a statistically significant difference according to the marital status variable (Table 4). When the literature has been examined, this finding of our research is similar to the results of the study conducted by Gümüş, Alay-Özgül, and Karakılıç (2017). However, in the study conducted by Karasakız and Dinçer (2019), it has been determined that the participants' scores of the physical activity location evaluation scale, the physical activity location selection and the factors that prevent the frequency of participating in physical activity, have shown a statistically significant difference in favor of the married participants.

In this study; The physical activity location evaluation scale of the participants has showed a statistically significant difference in favor of the participants who do not do regular physical activity compared to the regular physical activity variable, but the factors preventing the frequency of participating in physical activity have been statistically significant compared to the regular physical activity variable. It has been found that there has been no significant difference (Table 5). This situation may arise as a result of individuals who do not do regular physical activity, when they evaluate the parks and recreation areas they go to as a new place for regular physical activity. The fact that individuals who do regular physical activity regularly use physical activity spaces can be considered as an obstacle for them to

seek such a search. Rimmer, Schiller, & Chen (2012) states that lack of exercise is a serious public health problem. In addition, many researchers state that visiting recreational areas can increase participation in physical activity (Bedimo-Rung, Mowen, & Cohen, 2005; Cohen et al., 2007; Godbey, Caldwell, Floyd, & Payne, 2005; Librett, Henderson, Godbey, & Morrow, 2007).

In this study; There has been a statistically significant difference between the scores of the physical activity location evaluation scale in favor of the participants in the 42-53 age group according to the age variable, but the scores of the physical activity location sub-dimension showed a statistically significant difference according to the age variable. It has been determined that it did not show (Table 6). When the literature has been examined, this finding of our research is similar to the results of the studies conducted by Karasakız and Dinçer (2019) and Stanis, Schneider, Chavez, & Shinew (2009). However, in the study conducted by Gümüş, Alay-Özgül, and Karakılıç (2017) and Işıkgöz, Esentaş, and Şahin (2018), the scores of the physical activity location assessment scale of the physical activity location assessment scale and the factors that prevent the frequency of participation in physical activity have been statistically significant. It has been determined that there is no difference. This is thought to be due to the fact that the participants in the 42-53 age group are older than the participants in the other age groups. In addition, it can be thought that individuals' health problems increase with advancing age and their functional abilities deteriorate over time and prevent them from doing physical activity. Similarly, Brawley, Rejeski, & King (2003) stated that one of the biggest factors in the participation of elderly people in physical activity may be the lack of skills.

In this study; It has been determined that the physical activity location assessment scale sub-dimensions scores of the participants have not shown a statistically significant difference according to the body mass index variable (Table 7). When the literature has been examined, this finding of our research is similar to the results of the studies conducted by Gümüş, Alay-Özgül, and Karakılıç, (2017)

and Stanis, Schneider, Chavez, & Shinew (2009).

As a result of the research; It can be said that the variables of gender, education level, marital status and body mass index do not affect the choice of place and participation in physical activity, but the variable of regular sports has an effect on the choice of physical activity place and the age variable has an effect on the factors that prevent the frequency of participation in physical activity.

Suggestions

Future research can be carried out on a larger and more diverse sample group. In addition, with different variables, the factors affecting the space selection of individuals coming to the parks and recreation areas for physical activity and their participation in physical activity can be examined.

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