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EXAMINATION OF THE USE OF RECREATION AREAS WITH SOPARC SYSTEM: THE CASE OF MERSIN PROVINCE[††‡‡]

REKREASYON ALANLARININ KULLANIMININ SOPARC SİSTEMİYLE İNCELENMESİ: MERSİN İLİ ÖRNEĞİ

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Abstract: The aim of this study is to examine the target area preferences of individuals in parks and recreation areas in terms of age, gender, day, time zone, physical activity level and sportswear and sports shoes usage. The sample of the study is individuals using the Mersin Maritime Museum Park and Recreation Area on the Mersin coastline. The research group consists of a total of 5343 participants. The determined park and recreation area was observed with the "System for Observing Play and Recreation in Communities- TORAGS" tool developed by McKenzie & Cohen (2006). Before the observation, a pilot study was conducted with 324 participants and the inter-observer reliability was tested with Kappa statistics. Since the kappa coefficients calculated in our study were greater than 0.81, a very good level of agreement was found between the raters. Frequency distribution and chi-square (χ^2) technique were used in the interpretation of the results. It was observed that individuals using parks and recreation areas differed significantly according to gender, age, time zone, day, level of activity they participated in and their use of sportswear and sports shoes.

Key Words: Recreation, Park, Local Government, Physical Activity, Health

Özet: Bu çalışmanın amacı, bireylerin park ve rekreasyon alanlarındaki hedef alan tercihlerini yaş, cinsiyet, gün, zaman dilimi, fiziksel aktivite seviyesi ile spor kıyafet ve spor ayakkabı kullanımları açısından incelemektir. Çalışmanın örneklemi Mersin sahil bandındaki Mersin Deniz Müzesi Park ve Rekreasyon Alanı'nı kullanan bireylerdir. Araştırma grubunu 2698 erkek ve 2645 kadın olmak üzere toplamda 5343 katılımcı oluşturmaktadır. Belirlenen park ve rekreasyon alanı, McKenzie ve Cohen (2006) tarafından geliştirilen "Toplulukları Oyun ve Rekreasyon Alanlarında Gözlemleme Sistemi- TORAGS)" (System for Observing Play and Recreation in Communities- SOPARC) aracıyla gözlemlenmiştir. Gözlem başlamadan

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[§§] Sorumlu yazar

önce 324 katılımcıyla pilot bir çalışma yapılarak gözlemciler arası güvenilirlik Kappa istatistiği ile test edilmiştir. Çalışmamızda hesaplanan kappa katsayıları, 0,81 den büyük olduğundan puanlayıcılar arasında çok iyi düzeyde uyum bulunmuştur. Araştırmada elde edilen verilerin analizinde güncel bir istatistiksel paket program kullanılmıştır. Sonuçların yorumlanmasında frekans dağılımı ve ki-kare (χ^2) tekniği kullanılmıştır. Park ve rekreasyon alanını kullanan bireylerin, cinsiyet, yaş, zaman dilimi, gün, katıldıkları etkinlik seviyesi ile spor kıyafet ve spor ayakkabı kullanımlarına göre anlamlı şekilde farklılaştığı görülmüştür.

Anahtar Kelimeler: Rekreasyon, Park, Yerel Yönetim, Fiziksel Aktivite, Sağlık

INTRODUCTION

The passive lifestyle frequently encountered in today's industrial societies, the stress caused by heavy workloads, and non-ergonomic working conditions lead individuals to suffer both psychologically and physically. As a result, their overall productivity decreases (Özer Kaya & Baltacı, 2008). Innovations introduced by rapidly developing technology have caused people's lifestyles to change day by day. Preferences such as using vehicles even for short distances and performing many tasks with machines have increasingly reduced people's daily physical activity durations (Ministry of Health [MoH], Turkey Healthy Nutrition and Active Life Program, 2013).

While technological advancements have resulted in reduced working hours, they have also significantly increased people's free time. Factors such as improved societal welfare and the development of modern transportation and communication systems have begun to shape individuals' desire to utilize their leisure time (Hazar, 2003, p.1). The concentration of industrial facilities in large settlements has accelerated the monotony of urban life. With shorter working hours and thus more free time, urban dwellers' desire to engage in recreational activities has increased, leading to a growing awareness of how to use leisure time effectively (Sağcan, 1986, p. 14). Leisure time should not be viewed as time wasted, but rather as involving all recreational activities that individuals willingly and enjoyably engage in, which benefit both themselves and society. This applies not only to workers but to all population groups (Karaküçük, 1997, p. 209).

Among recreational activities, sports, exercise, and physical activity are the most preferred by individuals. As a result of industrial development, changes in people's lifestyles and work patterns, migration to urban and industrial areas, and improved living standards, such activities have played an important role in alleviating physical and psychological shortcomings. Urban individuals who work in repetitive motions and static postures for long periods experience both psychological and physiological wear. When these negatives are combined with environments exposed to high noise levels and harmful chemicals, participation in recreational activities becomes essential for individuals to return to work as happy and productive people (Karaküçük, 1997, p. 213).

Physical activity and exercise help individuals become more resistant to fatigue and disease, improve general health, and prolong the duration of healthy living. Regular physical activity is known to prevent hypokinetic disorders and the premature deaths caused by them. It improves respiratory and cardiovascular function, prevents diabetes, reduces the risk of coronary artery disease, supports healthy joints, bones, and muscles, helps with weight control to prevent obesity, reduces depression, enhances overall well-being, and improves performance in work, recreation, and sports activities (Özer Kaya & Baltacı, 2008).

According to data published by the World Health Organization, adult obesity worldwide has more than doubled since 1990, and adolescent obesity has more than quadrupled (WHO, 2025). Based on the Turkey Healthy Nutrition and Active Life

Program, around 2.8 million people worldwide die annually due to diseases related to being overweight (Ministry of Health, 2013). A sedentary lifestyle ranks fourth among the risk factors causing death globally, accounting for 6% of all deaths. Every year, 3.2 million people die due to a lack of physical activity. Individuals who are insufficiently active are at 20% to 30% greater risk for all-cause mortality.

In highly technologically developed countries, people now prefer to use elevators instead of walking or using stairs. Individuals working desk jobs or remaining sedentary for extended periods—watching television, using computers, operating machinery, or driving—are adversely affected in terms of health. As a result, individuals who are naturally inactive and influenced by the conveniences of technology tend to suffer from modern lifestyle diseases (Ersoy, 2012).

Physical activity and recreation are directly and positively linked to well-being (McKenzie & Cohen, 2006). Recreation involves individuals of all ages and abilities, whether healthy or disabled, and evolves in parallel with their desire for a happier and higher-quality life (Tütüncü, 2012). Additionally, the desire for a long and healthy life drives people toward recreational activities that relieve mental and physical fatigue, build strength, and provide relaxation (Sağcan, 1986, p. 13).

Since the human demand for nature and recreation varies throughout life in different forms and dimensions, urban planning must be designed to meet this demand. Especially for young individuals, who are in the most energetic and active phase of life, it is crucial to have an adequate number and quality of recreational spaces in urban areas (Sağcan, 1986, p.12). In developing or underdeveloped countries, poorly maintained and inadequately designed recreational areas may lead young people to direct their energy toward harmful activities. Moreover, limited recreational opportunities can result in negative accumulations that may contribute to psychological problems affecting future generations (as cited in Tütüncü, 2012).

Children's activities in urban open spaces such as recreation and park areas—climbing, chasing, sliding, and skipping rope—have a significantly positive impact on their physical development. These outdoor activities help children gain physical skills that are not possible in confined indoor spaces like homes or schools. Parks and recreation areas allow children the freedom to move, interact without restrictions, coordinate better, release pent-up energy, take initiative, express themselves, and develop self-confidence (Sevinç, 2004). Conversely, a lack of adequate playgrounds and parks in urban open spaces may suppress children's needs subconsciously and potentially cause psychological problems in future urban generations (Sağcan, 1986, p. 13).

Like cities, parks and recreational areas have evolved differently depending on cultural and societal lifestyles. These areas add value to cities by reflecting architectural style, contributing to psychological and social development, and providing ecological benefits. Social life activities such as interaction, strolling, sharing, entertainment, and learning occur in these spaces (Kart, 2005).

The historical development of urban open spaces is as old as the existence of city centers and began taking shape with the transition to settled life. As people became urbanized, they sought to build more beautiful and livable environments to meet their psychological needs. However, with rapid and sudden urban growth, complex and variable problems arose. Increasing the number of parks and gardens was seen as a solution, but due to rapid population growth, these spaces have become insufficient to serve their intended purpose (Kart, 2005).

Active living spaces such as children's playgrounds, physical and sports areas, picnic spots, and rest areas in parks and recreational areas are a matter of direct concern

for local governments. Local governments hold an important mission to ensure that not only elderly and adult individuals live healthier, longer, and better lives, but also that children and young people grow into healthy adults (Yaman, 2010).

Mobley (2006) argues that the mission and goals of local governments in terms of parks, recreation, and leisure services should focus on improving the quality of life for all individuals—not only during their working hours but also during their leisure time. It is nearly impossible for people to meet their needs and organizational expectations without a governance mechanism. Local governments, defined as autonomous and democratic administrative levels whose decision-making bodies are elected by the public and which aim to meet the common needs of communities, carry great responsibility in increasing cultural and recreational activities, achieving cultural democracy, and developing recreational facilities (Bozkurt & Ergun, 1998; Köktaş, 2004).

According to the European Urban Charter published by the European Declaration of Urban Rights (2023), local governments are responsible for establishing recreational areas—such as playgrounds, gardens, swimming pools, open spaces, walking paths, jogging tracks, and tennis courts—for all individuals regardless of economic status, gender, age, or ethnicity. Article 24 of the Universal Declaration of Human Rights also emphasizes that everyone has the right to rest, leisure, and periodic paid leave (United Nations General Assembly [UN], 1948).

Articles 14 and 77 of Municipal Law No. 5393 (2005) clearly state that municipalities are responsible for creating or commissioning green areas, afforestation, parks, and recreation spaces for all citizens—regardless of age, gender, disability, or socio-economic status—within the scope of social services, sports, environment, parks, and cultural services.

Urban individuals face economic concerns, heavy workloads, and health-related anxieties. Parks and recreational areas established by local governments in urban open spaces are seen as the most accessible and economical areas where individuals or families can spend time safely and happily. Given the physiological and psychological benefits these areas provide to people of all ages—elderly, youth, children, retirees, and workers—it is important to determine variables such as user types, usage durations and frequencies, and most preferred areas. Evaluating the adequacy of existing parks and recreational areas, and considering these variables during the planning of new areas, would be beneficial.

In light of all this information, the aim of this study is to examine individuals' preferences for target areas within parks and recreational spaces based on gender, age, day, physical activity level, time of day, and the use of athletic shoes and sportswear.

METHOD

The method section of the study includes the research questions, the population and sample, the data collection tool, expert reliability, and the data analysis process.

Research Questions

Are there statistically significant differences in the use of Mersin Naval Museum Park based on users' gender, age group, time of day, day of the week, level of activity participation, and their use of sportswear and athletic footwear?

R.Q.1. Do the proportions of individuals using the park and recreation area differ by gender?

R.Q.2. Do the proportions of individuals using the park and recreation area differ by age groups?

R.Q.3. Do the proportions of individuals using the park and recreation area differ by time of day?

R.Q.4. Do the proportions of individuals using the park and recreation area differ by day of the week?

R.Q.5. Do the proportions of individuals using the park and recreation area differ by activity levels?

R.Q.6. Do the proportions of individuals using the park and recreation area differ by the use of sportswear?

R.Q.7. Do the proportions of individuals using the park and recreation area differ by the use of sports shoes?

Population and Sample

The population of the study consists of individuals using 12 different parks with recreational features located in the central districts of Mersin (Mezitli, Yenişehir, Akdeniz, and Toroslar). The sample consists of individuals using the Mersin Naval Museum Park and Recreation Area located along the coastline. The 12 park areas representing the population were observed on a Sunday afternoon in October. As the Mersin Naval Museum Park and Recreation Area had the highest number of participants among these 12 areas, it was selected as the main observation site for the study. While determining the observation date, the region's climatic and meteorological conditions were taken into account. Due to the high humidity and temperature in summer and frequent rainy days in winter, the observation was conducted in autumn (Turkish State Meteorological Service [TSMS], 2016).

The study group consisted of a total of 5,343 participants, including 2,645 women and 2,698 men. The research was conducted using a non-participant observation method, which refers to studies where the researcher/observer is not present in the environment or their presence is unknown (Erkuş, 2021, p. 177).

Data Collection Tool

The selected Mersin Naval Museum Park and Recreation Area was observed using the "System for Observing Play and Recreation in Communities - SOPARC" developed by McKenzie and Cohen (2006). SOPARC is a system designed to obtain direct information through observation methods about the use of parks and recreational areas. It provides information about the gender, physical activity levels, age, and types of activities of individuals using these spaces. The observation area is mapped as a sketch, and each target area to be observed is numbered separately. The data collection is carried out by marking the park name, observation time and date, observer number, park usage status, and target area number on the observation form.

Expert Reliability

During the data collection phase, the activity areas in the park were divided into four different target areas: "fitness," "track," "children's play area," and "other." Considering the distances between the areas, occasional crowding, and the movement of users within the activity areas, it was deemed appropriate for each target area to be

observed by at least one observer. Therefore, the study was conducted by four experienced observers who received a one-day training. Additionally, a pilot study was conducted in the same area one day before the actual research, during which 324 participants were observed. This allowed for the assessment of inter-observer consistency, which was tested using the Kappa statistic. The Kappa coefficient is a statistic used to measure the agreement between two observers in the evaluation of categorical items. It ranges from -1 to +1, with the following interpretations:

- 0.01–0.20: slight agreement
- 0.21–0.40: fair agreement
- 0.41–0.60: moderate agreement
- 0.61–0.80: substantial agreement
- 0.81–1.00: almost perfect agreement (Alpar, 2014, p. 510).

In this study, the calculated Kappa coefficients for variables such as age, gender, activity level, use of sports shoes, and use of sportswear were all above 0.81, indicating an almost perfect level of agreement among the observers.

Data Analysis

A modern statistical analysis program was used to analyze the data obtained from the study. Frequency analysis, chi-square (χ^2), and cross-tabulation methods were used to interpret the results. In analyzing the data, the target areas within the park and recreation area were compared by gender, age, physical activity levels, use of sports shoes and sportswear, days of the week, and different times of the day, and significance levels were evaluated. A significance level of $p < 0.05$ was considered.

FINDINGS

R.Q.1. Do the proportions of park and recreation area users differ by gender?

Table 1.

Target Area and Gender Statistics

Target Areas		**Gender**		
		Women	**Men**	**Total**
Track	**n**	416	633	1049
	%	39.7	60.3	100
Playground	**n**	566	472	1038
	%	54.5	45.5	100
Fitness	**n**	419	438	857
	%	48.9	51.1	100
Other	**n**	1244	1155	2399
	%	51.9	48.1	100
Total	**n**	2645	2698	5343
	%	49.5	50.5	100

$\chi^2(3)= 56.605, \quad p = 0.00$

According to Table 1, men use the track area more, while women use the playground more than men. The difference observed in target areas by gender is statistically significant.

R.Q.2. Do the proportions of park and recreation area users differ by age group?

Table 2.

Target Area and Age Statistics

Target Areas		**Age Groups**				
		Child	**Youth**	**Adult**	**Elderly**	**Total**
Track	**n**	49	157	627	216	1049
	%	4.7	15.0	59.8	20.6	100
Playground	**n**	543	82	363	50	1038
	%	52.3	7.9	35.0	4.8	100
Fitness	**n**	247	74	350	186	857
	%	28.8	8.6	40.8	21.7	100
Other	**n**	316	529	1189	365	2399
	%	13.2	22.1	49.6	15.2	100
Total	**n**	1155	842	2529	817	5343
	%	21.6	15.8	47.3	15.3	100

$\chi^2(9)=1015.206, \quad p = 0.00$

According to Table 2, adults predominantly use fitness, track, and other activity areas; children are the second most frequent users of fitness equipment, and youths prefer other activity areas proportionally. This difference across age groups is statistically significant.

R.Q.3. Do the proportions of users differ by time of day?

Table 3.

Target Area and Time Period Statistics

Target Areas		**Time Period**				
		Morning	**Noon**	**Afternoon**	**Evening**	**Total**
Track	**n**	402	88	217	342	1049
	%	38.3	8.4	20.7	32.6	100
Playground	**n**	41	257	381	359	1038
	%	3.9	24.8	36.7	34.6	100
Fitness	**n**	293	135	217	212	857
	%	34.2	15.8	25.3	24.7	100
Other	**n**	359	556	849	635	2399
	%	15.0	23.2	35.4	26.5	100
Total	**n**	1095	1036	1664	1578	5343
	%	20.5	19.4	31.1	29.0	100

$\chi^2(9)=616.944, \quad p = 0.00$

According to Table 3, track users prefer morning and evening hours; fitness users mostly prefer the morning; other activity areas are mainly used in the afternoon. This difference across time periods is statistically significant.

RQ4. Do the proportions of users differ by day of the week?

Table 4.

Target Area and Day Statistics

Target Areas		**Day of the Week**							
		Sat	**Sun**	**Mon**	**Tue**	**Wed**	**Thu**	**Fri**	**Total**
Track	**n**	156	235	129	143	128	126	132	1049
	%	14.9	22.4	12.3	13.6	12.2	12.0	12.6	100
Playground	**n**	247	345	68	69	71	79	159	1038
	%	23.8	33.2	6.6	6.6	6.8	7.6	15.3	100
Fitness	**n**	152	211	96	88	98	91	121	857
	%	17.7	24.6	11.2	10.3	11.4	10.6	14.1	100
Other	**n**	422	551	252	257	265	292	360	2399
	%	17.6	23.0	10.5	10.7	11.0	12.2	15.0	100
Total	**n**	977	1342	545	557	562	588	772	5343
	%	18.3	25.1	10.2	10.4	10.5	11.0	14.4	100

$\chi^2(9)=139.488, \quad p = 0.00$

According to Table 4, all areas are used most frequently on weekends, particularly Sundays. Overall usage increases from Monday to the weekend, with playground use rising sharply on Fridays. This difference across days is statistically significant.

RQ5. Do the proportions of users differ by activity level?

Table 5.

Target Area and Activity Level Statistics

Target Areas		**Activity Level**			
		Sedentary	**Walking**	**Active**	**Total**
Track	**n**	11	980	58	1049
	%	1.0	93.4	5.5	100
Playground	**n**	288	342	408	1038
	%	27.7	32.9	39.3	100
Fitness	**n**	42	58	757	857
	%	4.9	6.8	88.3	100
Other	**n**	1600	536	263	2399
	%	66.7	22.3	11.0	100
Total	**n**	1941	1916	1486	5343
	%	36.3	35.9	27.8	100

$\chi^2(6)=4128.665, \quad p = 0.00$

According to Table 5, track users mostly engage in walking, users of other activity areas are mostly sedentary, and those using fitness equipment are highly active. This difference across activity levels is statistically significant.

RQ6. Do the proportions of users differ by use of sportswear?

Table 6.

Target Area and Sportswear Statistics

Target Areas		Sportswear		
		Yes	**No**	**Total**
Track	**n**	480	569	1049
	%	45.8	54.2	100
Playground	**n**	196	842	1038
	%	18.9	81.1	100
Fitness	**n**	343	514	857
	%	40.0	60.0	100
Other	**n**	423	1976	2399
	%	17.6	82.4	100
Total	**n**	1442	3901	5343
	%	27.0	73.0	100

$\chi^2(3)=402.628, \quad p = 0.00$

According to Table 6, most individuals using fitness and track areas wear casual rather than sportswear. This difference across target areas in clothing type is statistically significant.

RQ7. Do the proportions of users differ by use of sports shoes?

Table 7.

Target Area and Sports Shoes Statistics

Target Areas		Sports Shoes		
		Yes	**No**	**Total**
Track	**n**	668	381	1049
	%	63.7	36.3	100
Playground	**n**	598	440	1038
	%	57.6	42.4	100
Fitness	**n**	427	430	857
	%	49.8	50.2	100
Other	**n**	852	1547	2399
	%	35.5	64.5	100
Total	**n**	2545	2798	5343
	%	47.6	52.4	100

$\chi^2(3)=292.602, \quad p = 0.00$

According to Table 7, the highest rate of sports shoe use is in the track area. In fitness areas, the use of sports shoes is nearly evenly distributed. This difference is statistically significant.

CONCLUSION AND RECOMMENDATIONS

Cities are the most densely populated settlement centers of the modern age, and the importance of parks and recreational areas, which aim to make these centers more livable in terms of psychology, ecology, health, and aesthetics, is increasing day by day. In this study, which aimed to identify the behavior of urban residents in using these areas, the Mersin Naval Museum Park and Recreation Area was observed for one week, and several findings were obtained. According to these findings, individuals' preferences for target areas within the park and recreational space differed significantly in terms of gender, age, day, time of day, physical activity level, and the use of sports shoes and clothing.

It was observed that adults used the park and recreation area more than other age groups; young people did not show sufficient interest in physical activity; and children were most interested in fitness equipment after playgrounds. In the "Active Muğla" project conducted in Muğla, it was aimed to increase individuals' physical activity levels and thus improve their quality of life and health levels, and for this reason, five of the most frequently used parks and recreational areas in the city were observed. According to the study results, participation was lowest among the elderly and youth, and highest among adults (Öcal, 2014). A study conducted in Melbourne also examined users' behavior in parks and recreational areas and found that most participants were adults (Veitch et al., 2014). Similarly, in another study conducted in Konya that examined the relationship between physical activity and parks, most park users were found to be in the adult age group (Sivri & Polat, 2024). These findings support our research. Based on the findings, it is believed that creating sports activity areas that instill a principle of engaging in sports in line with children's interests will contribute both to raising healthier generations and to addressing the inadequacy of sports activities observed among young users. However, a study conducted in sixteen different park areas in the U.S. to determine the physical activity levels of urban individuals found that children used these areas more than adults (Reed et al., 2012). In contrast, findings from Müftüler et al. (2010) did not reveal significant differences based on age groups, which does not support the findings of this study.

In terms of usage times, it was observed that fitness areas were generally preferred in the morning, track areas were used especially in the morning and evening, and other activity areas were mostly used in the afternoon. Overall, the most common usage occurred in the afternoon. These results can be interpreted as individuals planning their physical activity times according to the climatic conditions of Mersin, a city with a hot climate. However, individuals who use the park areas more for sedentary purposes such as walking, resting, or picnicking may not feel the need to make such distinctions based on climate. In a study by Sivri and Polat (2024), most park users preferred the afternoon. Similarly, Whiting et al. (2012) and Veitch et al. (2015) also found the afternoon to be the most commonly preferred time slot. These results support the study findings. However, a study in China that examined the relationship between park and recreation usage and physical activity characteristics found that individuals preferred these areas most frequently in the morning (Tu et al., 2015), partially supporting the findings.

It was observed that the users of the track and fitness areas, considered forms of physical activity, were predominantly male; that the playgrounds were mostly used by women, followed by adults; and that, overall, park and recreation areas were more frequently used by men than women. These results may be influenced by patriarchal structures and women's maternal roles. Additionally, men are thought to have a higher

tendency to participate in sports activities compared to women. Hino et al. (2010) observed four parks and four public squares and found that men used these areas more than women. Similarly, in a study investigating the usage patterns of low-income citizens, it was found that men used park areas more frequently than women (Cohen et al., 2007), supporting this study's findings.

On the other hand, the study by Sivri and Polat (2024) found a statistically significant difference in the number of female users compared to male users. A similar study conducted in Mersin also observed that female participants used these areas more frequently than males (Tatlı & Gündoğdu, 2014). In studies conducted in North Carolina and Kansas to examine the gender and age characteristics of park and recreation users (Shores & West, 2010; Besenyi et al., 2013), no significant differences were found between the genders. Likewise, a study conducted on three parks in Ankara found no significant gender difference (Müftüler et al., 2010). These studies do not support this study's findings. The differences are thought to be due to regional, climatic, seasonal, temporal, or cultural variations.

Regarding activity levels, users of fitness equipment engaged in vigorous movements, track users mostly walked, and users of other activity areas were generally sedentary. While these outcomes were expected, the overall majority of users were sedentary. This may be interpreted to mean that despite the popularity of the observed park and recreational area as a social activity space, it lacks features that encourage physical activity. Physical activity events were not planned to raise awareness among users, and therefore the area is not seen as an attractive destination for those interested in engaging in such activities. Studies by Banda et al. (2014), Cohen et al. (2007), Veitch et al. (2015), and Sivri and Polat (2024) have similarly found that most users of park and recreational areas were sedentary, supporting the findings of this study.

The usage of sports shoes was high in the track areas designated for physical activity. In fitness areas, sports shoe usage was nearly balanced. This suggests that in fitness areas, both knowledgeable users and individuals present out of curiosity, experimentation, or by coincidence were observed. Conversely, the track area seems to attract more goal-oriented and knowledgeable users. According to the findings of Tatlı and Gündoğdu (2014), the majority of users in sporting areas of parks wore sports shoes. Öcal (2014) also found that most participants wore sports shoes during physical activity. These results support our study. Additionally, the low rates of sports clothing usage across all areas suggest that individuals either lack a strong inclination toward sports or do not view wearing sports attire as important.

The lack of public awareness regarding physical activity and its health benefits has contributed to the rise of modern health issues such as obesity and sedentary lifestyles. In this context, urban parks play a vital role by offering individuals the opportunity to engage with nature and maintain an active lifestyle both physically and socially. Based on this perspective, the following recommendations have been developed to promote park usage and increase physical activity levels:

Park administrations and local municipalities should organize regular outdoor activities that appeal to all segments of the population. These may include cycling tours, group walking events, and outdoor fitness sessions. To ensure the sustainability of such programs, qualified personnel—such as trainers and event coordinators—should be employed and trained accordingly. Fitness equipment within parks should be designed in various sizes and functionalities to accommodate different age groups. These should be arranged in a systematic layout within designated areas. Additionally, fixed platforms should be constructed for activities such as aerobics, and user-friendly designs should be

prioritized. Playgrounds should be divided according to age groups. For younger children, play areas should be colorful, attractive, and designed with thematic elements such as animal figures. Furthermore, facilities should be provided to allow parents to spend quality time with their children, including shaded seating and social interaction zones. Play equipment in parks should not be limited to children; features such as larger swings, slides, and balance-enhancing structures should also be included to engage youth and adult users. These elements can support physical skills while also encouraging social interaction and friendly competition among participants. To encourage the elderly to use park facilities more actively, special design considerations are necessary. Walkways should be short, non-slippery, and supported with handrails for safety. Additionally, designated areas should be equipped with low-impact exercise equipment suitable for older adults, promoting gentle strength training without causing joint strain. In conclusion, these recommendations aim to position urban parks not only as aesthetic spaces but as multifunctional public areas that contribute significantly to public health and well-being.

To provide more comprehensive data to researchers and local governments working in park and recreational areas, the study can be supported with a survey. Moreover, information can be gathered regarding how far users travel to reach the area and whether they use a vehicle. The quality of the study can be improved by observing how long individuals use fitness equipment, which could help distinguish between conscious exercisers and casual users. Observations can also be made separately for physical activity areas, playgrounds, or other activity areas to gather more detailed information about user types. By conducting the study in different seasons and regions, more in-depth information about users can be obtained. To gather socio-economic data, areas in both low- and high-income or cultural level neighborhoods can be studied. Finally, in a selected pilot recreation area, activities can be organized at specific times of the day under the guidance of recreation experts and trainers, and participation levels can be observed.

Ethics Committee Approval

The data related to the research were obtained from a thesis study conducted before 2020. Therefore, there is no ethics committee approval for the study.

REFERENCES

Alpar, R. (2014). *Uygulamalı istatistik ve geçerlilik-güvenilirlik.* Detay Yayıncılık

Banda, J. A., Wilcox, S., Colabianchi, N., Hooker, S. P., Kaczynski, A. T., & Hussey, J. (2014). The associations between park environments and park use in southern US communities. *The Journal of Rural Health*, *30*(4), 369-378.

Besenyi, G. M., Kaczynski, A. T., Stanis, S. A. W., & Vaughan, K. B. (2013). Demographic variations in observed energy expenditure across park activity areas. *Preventive medicine, 56*(1), 79-81.

Bozkurt, Ö. ve Ergun, T. (1998). *Kamu yönetimi sözlüğü*. TODAİE.

Cohen, D. A., McKenzie, T. L., Sehgal, A., Stephanie, W., Golinelli, D., & Lurie, N. (2007). Contribution of public parks to physical activity. *American Journal of Public Health 97*(3), 509-514.

Erkuş, A. (2021). *Davranış bilimleri için bilimsel araştırma süreci*. Seçkin Yayıncılık

Ersoy, G. (2012). *Egzersiz ve spor yapanlar için beslenme*. Nobel Yayıncılık

European Declaration of Urban Rights. (2023, 6 February) *European Urban Charter.* Retrieved 16 May 2025 from https://rm.coe.int/cg-gov-2023-1-04-european-urban-charter-iii-en/1680aa8a9d.

General Directorate of Meteorology. (2016). Statistical data of our provinces. Retrieved 07 July , 2016 April 2025 from https://www.mgm.gov.tr/veridegerlendirme/il-ve-ilceler-istatistik.aspx?k=undefined&m=ICEL

Hazar, A. (2003). *Rekreasyon ve animasyon.* Detay Yayıncılık

Hino, A. A. F., Reis, R. S., Ribeiro, I. C., Parra, D. C., Brownson, R. C., & Fermino, R. C. (2010). Using observational methods to evaluate public open spaces and physical activity in Brazil *Journal of Physical Activity & Health, Supplement*, 7, 146-154.

Karaküçük, S. (1997). *Rekreasyon boş zamanları değerlendirme*. Seren Ofset

Kart, N. (2005). Emirgan parkında kullanıcıların memnuniyet derecelerinin değerlendirilmesi. *İstanbul Üniversitesi Orman Fakültesi Dergisi*, 55(1), 185-208

Köktaş, K.Ş. (2004) *Rekreasyon boş zamanı değerlendirme*. Nobel Yayıncılık

McKenzie, T. L., & Cohen, D. A. (2006, January 10). SOPARC (System for observing play and recreation in communities): *Description and Procedures Manual*. Retrieved on December 15, 2016 from https://activelivingresearch.org/sites/activelivingresearch.org/files/SOPARC_Protocols.pdf

Ministry of Health (2013). *Türkiye Healthy Nutrition and Active Life Program*. https://hsgm.saglik.gov.tr/depo/birimler/saglikli-beslenme-ve-hareketli-hayat-db/Dokumanlar/Programlar/hareketli-hayat-programi-2014-2017.pdf

Mobley, T.A. (2006, 27 Nisan). Yerel yönetimlerin halkın rekreasyon ve park ihtiyaç ve hizmetlerini karşılamadaki rolü. *Fiziksel Aktivite Sağlıklı Yaşam ve Yerel Yönetimler Sempozyumu. Tepebaşı*

Municipality Law (2005, July 3). Retrieved on April 22, 2025 from https://www.tbb.gov.tr/sites/default/files/online/yayinlar/temel_belediye_mevzuati2014/files/publication.pdf.

Müftüler, M., Yapar, A., Irez, S. G. ve İnce M. L. (2010). Examination of public parks for physical activity participation by their location, size and facilities the shield-ınternational. *Journal of Physical Education and Science,* 157, 128-139

Öcal, M. (2014). *Aktif Muğla Bireysel Araştırma Projesi.* Muğla Sıtkı Koçman Üniversitesi. Proje no: 16/63

Özer Kaya, D. ve Baltacı, G. (2012) *İş yerinde fiziksel aktivite*. Sağlık Bakanlığı, Türkiye Halk Sağlığı Kurumu, Obezite Diyabet ve Metabolik Hastalıklar Dairesi Başkanlığı. https://hsgm.saglik.gov.tr/depo/birimler/saglikli-beslenme-ve-hareketli-hayat-db/Dokumanlar/Kitaplar/is_yerinde_fiziksel_aktivite.pdf

Reed, J. A., Price, A. E., Grost, L., & Mantinan, K. (2012). Demographic characteristics and physical activity behaviors in sixteen michigan parks. *Journal of Community Health. The Publication for Health Promotion and Disease Prevention; 37*(2), 507-512.

Sağcan, M. (1986). *Rekreasyon ve turizm.* Cumhuriyet Basımevi.

Sevinç, M. (2004). *Erken çocuk gelişimi ve eğitiminde oyun.* Morpa Kültür Yayınları

Shores, K. A., & West, S. T. (2010). Rural and urban park visits and park-based physical activity. *Preventive Medicine, 50*, 13-17.

Sivri, E. ve Polat, A.T. (2024) Investigation of the relationship between physical activity and park for some parks by SOPARC method in the case of Konya city (Karatay), Türkiye. *Journal of design for*

resilince in architecture & planning, 5(3), 441-460 https://doi.org/10.47818/DRArch.2024.v5i3142

Tatlı, C.K. ve Gündoğdu, M. (2014). Yerel yönetimlerin yaptırdığı spor parklarıyla ilgili sorunlar ve çözüm önerileri (Mersin örneği). *Uluslararası Multidisipliner Akademik Araştırmalar Dergisi 1*(1), 42-52.

Tu, H., Liao, X., Schuller, K., Cook, A., Fan, S., & Lan, G. (2015). Insights from an observational assessment of park-based physical activity in Nanchang, China. *Preventive medicine reports, 2,* 930-934.

Tütüncü, Ö. (2012) Rekreasyon ve rekreasyon terapisinin yaşam kalitesindeki rolü. *Anatolia: Turizm Araştırmaları Dergisi, 23*(2), 248-252.

United Nations General Assembly (1948, 10 December). *Universal Declaration of Human Rights*. Retrieved 29 April 2025 from https://www.ohchr.org/en/human-rights/universal-declaration/translations/english.

Veitch, J., Carver, A., Abbott, G., Giles-Corti, B., Timperio, A., & Salmon, J. (2015). How active are people in metropolitan parks? An observational study of park visitation in Australia. *BMC public health, 15*(1), 610.

Whiting, J. W., Larson, L. R., & Green, G. T. (2012). Monitoring visitation in Georgia state parks using the System for Observing Play and Recreation in Communities (SOPARC). *Journal of Park and Recreation Administration*, *30*(3), 21-37.

World Health Organisation (2025, May 7) *Obesity And Overweight.* Retrieved on May 16, 2025 https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight

Yaman, N. (2010). *Belediyelerde görevli spor uzmanlarının mesleki doyum düzeylerinin araştırılması (Ankara ili örneği)* [Yayınlanmamış yüksek lisans tezi]. Sakarya Üniversitesi.