



The relationship between perceived barriers to physical activity and leisure activity types in adolescence

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Abstract

Despite the benefits of physical activity and exercise for human health, many people do not engage in physical activity and exercise despite the well-known benefits for human health. Without access to active commuting or other school-related physical activity opportunities, adolescents are at risk of increased screen time use and weight gain. Physical activity barriers need to be investigated especially in adolescence. This study investigates the relationships between specific types of leisure activities and barriers to physical activity in adolescence. The study was undertaken with 1312 students in 14 different schools in Ankara province. Hierarchical multiple regression analyses were conducted to examine the relationships between specific types of leisure activities (outdoor, physical, hobbies and indoor, cultural, home-centered, and social and volunteering) and outcome variables. After controlling for covariates, it was revealed that outdoor activities and social activities were associated with all outcome variables. Volunteer activities were positively related to health perception. Negative relationships were observed between safety barriers and physical activities, individual barriers, and cultural activities. These findings suggest that promoting positive social interaction in recreational settings and encouraging participation in volunteer activities are important factors contributing to physical activity during adolescence.

Keywords: Adolescence, barriers, leisure, physical activity

Ergenlikte fiziksel aktivitenin önünde algılanan engeller ile boş zaman aktivitesi türleri arasındaki ilişki

Öz

Fiziksel aktivite ve egzersizin insan sağlığına olan faydalarının bilinmesine rağmen pek çok kişi, fiziksel aktivite ve egzersiz yapmamaktadır. Aktif işe gidip gelme veya okulla ilgili diğer fiziksel aktivite fırsatlarına erişimi olmayan ergenler, ekran başında daha fazla zaman geçirme ve kilo alma riskiyle karşı karşıyadır. Özellikle ergenlik döneminde fiziksel aktivite engellerinin araştırılması bu probleme çözüm noktasında katkı sağlayabilir. Bu çalışma, ergenlik döneminde belirli boş zaman etkinlikleri türleri ile fiziksel aktivitenin önündeki engeller arasındaki ilişkileri araştırmaktadır. Araştırma Ankara ilindeki 14 farklı okuldaki 1312 öğrenci ile gerçekleştirilmiştir. Belirli boş zaman etkinlikleri türleri (açık hava, fiziksel, hobiler ve kapalı alan, kültürel, ev merkezli ve sosyal ve gönüllülük) ile sonuç değişkenleri arasındaki ilişkileri incelemek için hiyerarşik çoklu regresyon analizleri uygulanmıştır. Ortak değişkenler kontrol edildikten sonra açık hava aktivitelerinin ve sosyal aktivitelerin tüm sonuç değişkenleriyle ilişkili olduğu ortaya çıktı. Gönüllü faaliyetleri sağlık algısı ile pozitif yönde ilişkilidir. Güvenlik engelleri ile fiziksel aktiviteler, bireysel engeller ve kültürel aktiviteler arasında negatif ilişkiler gözlemlendi. Bu bulgular, rekreasyonel ortamlarda olumlu sosyal etkileşimi teşvik etmenin ve gönüllü faaliyetlere katılımı teşvik etmenin ergenlik döneminde fiziksel aktiviteye katkıda bulunan önemli faktörler olduğunu göstermektedir.

Anahtar Kelimeler: Boş zaman, fiziksel aktivite, engel, ergen

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INTRODUCTION

The COVID-19 pandemic has spurred a surge in scholarly investigations pertaining to several issues, including sedentariness, illnesses associated with physical inactivity, both indoor and outdoor physical exercise, environmental aspects, and public health (Dominski et al., 2020; Lesser et al., 2020; Mitra et al., 2020; Sallis et al., 2020; Rossi et al., 2021). Humanity has undergone a significant transformation that includes wearing masks in public areas, home-based work environments, and online education. Amongst those disproportionately impacted by these shifts is the younger generation. Prior research on adolescents highlighted ailments associated with amplified screen time, a sedentary lifestyle, and obesity within this demographic (Guessoum et al., 2020; Pietrabissa et al., 2021; Hoke et al., 2022). Authorities have cautioned that this scenario has deteriorated post-pandemic, and it has been emphasized that immediate actions must be taken to address this concern (Le Brocq et al., 2020). Collaboration among scholars engaged in these fields with local and national governments and Non-Governmental Organizations (NGOs) can effectively facilitate the resolution of the issue at hand. Identification and mitigation of the underlying factors that predispose adolescents to a sedentary lifestyle are of paramount importance.

Investigating the physical activity patterns of adolescents and analyzing their leisure activities are essential components in addressing the inactivity issue among younger cohorts. Prioritizing the health of the age group ranging from 10 to 24 years old, which accounts for a significant 24% of the global populace, can yield a threefold impact by conferring advantages on their youth, future adulthood, and subsequent generations (Knowles et al., 2005; Van Sluijs et al., 2021).

Empirically derived remedies emphasize three fundamental constituents globally, 80% of adolescents are insufficiently active, and many adolescents engage in 2 h or more daily recreational screen time. the adolescent physical activity system, namely, schools that foster a conducive and nurturing environment, social and digital environments that promote physical activity engagement, and urban environments that offer multifaceted opportunities for physical activity participation.

Empirical solutions have identified three central constituents of the adolescent physical activity system: supportive schools, social and digital media, and multi-purpose urban environments (Van Sluijs et al., 2021). Although studies focusing on adolescents are increasing, there is a marked deficiency in research related to "multi-purpose urban environments." Studies

are necessary to ensure that adolescents can access these environments more readily to enable greater physical activity engagement. Therefore, investigating the factors that may impede adolescents' access to physical activity and leisure behavior patterns can serve as viable solutions to address the issue of physical inactivity. While many studies have emphasized the importance of access to physical activity among adolescents (Babey et al., 2008; Erbaş et al., 2020; Sundevall et al., 2020), it should be noted that most of these studies have been conducted in developed countries such as Europe and America. It is essential to explore whether access to physical activity and leisure activities are comparable among adolescents in developing or underdeveloped countries and if there are differences, to identify their nature and underlying reasons. Addressing these questions is particularly salient for improving the health and well-being of youth in developing countries.

The objective of this research is to provide answers to the aforementioned questions. While addressing these inquiries, we recognize that cultural disparities and divergent educational systems may also contribute to variations in the physical activity behaviors of young people. Therefore, we aim to investigate specific types of leisure activities (such as outdoor, physical, hobbies, and indoor, cultural, home-centered, social, and volunteering) and to examine the perceived barriers to physical activity engagement, as well as how these barriers affect different types of leisure activities. The aim is to identify the barriers that young people face in accessing physical activity, uncover the relationship between these barriers and young people's leisure activities, and develop plausible solutions in this regard.

METHOD

Research group

The Participants in this study came from a convenience sample of 1312 adolescents living in the city of Ankara, the capital of Turkey. Data collected after restrictions. The 1312 participants' mean age was 18.6 years (SD = 2.41), with 48.4% women. In the pursuit of maximizing the representativeness and diversity of data, a total of fourteen high schools located in varied regions of Ankara were carefully chosen to participate in this study. In order to ensure a broad range of sociocultural and economic backgrounds, schools from differing regions were selected. Furthermore, the chosen schools were purposefully varied in terms of their levels of academic achievement to provide a more comprehensive and nuanced dataset.

Data collection tools

The Barriers to Participation in Recreation Areas Scale (BPRAS) (Erbaş et al., 2020) was used to examine the participants' barriers to participating in physical activity. Two sub-

dimensions of BPRAS include 8 items. The subdimensions included the following: (a) Safety barriers and (b) Individual barriers. This scale was rated on a five-point Likert-type scale (1 = strongly disagree to 5 = strongly agree) and comprised four safety items and four Individual items. A higher score implied more barriers to participation.

The modified version of Ragheb's (1980) Leisure Participation Scale utilized in Chun et al.'s (2012) study was employed to assess the frequency of participation in various leisure activity types. The activities used in this study included six different activity types (1) outdoor activities; (2) physical activities; (3) hobbies and indoor; (4) cultural activities and entertainment; (5) home-centered and social activities; and (6) volunteer activities. Each activity was scored on a four-point scale relative to the frequency of respondents' participation in the leisure activity (i.e. 1 = never to 4 = frequently). A higher score implied more frequent participation.

To assess participants' health perception, a modified version of Willits and Crider's (1988) health rating question was employed. The question asked participants to rate their overall health on a five-point Likert-type scale, ranging from "poor" to "excellent." This widely used single-item measure of subjective health has been shown to possess strong test-retest reliability and construct validity. Studies have indicated that it correlates well with other established health indicators (Streiner & Norman, 2004; Jungsu & Jinmoo, 2018).

Data analysis

In order to examine the relationships between the study variables, Pearson correlations were employed. Hierarchical multiple regressions were performed to investigate the association between types of leisure activity and the outcome variables of health perception, safety barriers, and individual barriers. The inclusion of demographic variables, such as gender and income, as potential confounding factors, was also considered. All covariates were entered as the first step in the regression analyses. We conducted this analysis using the SPSS Amos 25 package. The level of significance was taken as 0.05 and 0.01 in all statistical analyses.

FINDINGS

The Pearson correlations between the variables are shown in Table 1.

Table 1. Zero-order correlation coefficients of dependent and independent variables.

Variables	1	2	3	4	5	6	7	8	9	10
1. Gender	1									
2. Income	-0.221**	1								
3. Outdoor activities	-0.115	0.181*	1							
4. Home-centered and social activities	0.049	0.069	0.171*	1						
5. Hobbies and indoor activities	-0.089	0.299**	0.231**	-0.086	1					
6. Cultural activities and entertainment	0.079	0.041	0.181*	0.246**	0.249**	1				
7. Physical activities	0.171*	0.069	-0.021	0.379**	0.217**	0.295**	1			
8. Volunteer activities	-0.029	0.149*	0.191**	0.145*	0.209**	0.029	0.161*	1		
9. Safety Barriers	-0.129	-0.105	-0.061	-0.379**	-0.105	-0.271**	-0.389**	-0.215**	1	
10. Individual Barriers	-0.128	-0.019	-0.059	-0.242**	-0.141	-0.309**	-0.369**	-0.026	-0.419**	1
11. Health Perception	-0.031	0.089	0.225**	0.192**	0.143*	0.221**	0.291**	-0.231**	-0.359**	0.285**

*= $p < 0.05$; **= $p < 0.01$.

The results indicate statistically significant relationships among the following study variables: six leisure activities, (i.e. physical, outdoor, hobbies and indoor, home-centered and social, volunteer activities), safety barriers, individual barriers, health perception and gender, life satisfaction, dispositional optimism and health perception. The largest coefficient was found between safety barriers and physical activities ($r = -0.389$), which implies that engagement in fewer safety barriers is associated with higher physical activity. Safety barriers were also significantly correlated with social activities ($r = -0.379$), cultural activities ($r = -0.271$), and volunteer activities ($r = -0.215$). Negative relationships existed between individual barriers and physical activities ($r = -0.369$), cultural activities ($r = -0.309$), and social activities ($r = -0.242$). Health perception was positively and significantly related to physical activities ($r = 0.291$), volunteer activities ($r = 0.227$), cultural activities ($r = 0.231$), outdoor activities ($r = 0.225$), social activities ($r = 0.192$) and hobbies and indoor activities ($r = 0.143$; Table 1).

Table 2. Hierarchical regression analysis of outcome variables

	Safety Barriers		Individual Barriers		Health Perception	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Gender	213** (0.198)	0.119 (0.184)	0.159* (0.089)	0.051 (0.088)	0.039 (0.143)	0.007 (0.136)
Income	201* (0.093)	0.046 (0.014)	0.079 (0.041)	0.015 (0.039)	0.131 (0.071)	-0.031 (0.014)
Outdoor activities		0.027 (0.013)		-0.11 (0.035)		-0.192* (0.052)
Physical activities		-0.197* (0.043)		-0.269** (0.047)		-0.191* (0.074)
Hobbies and indoor activities		-0.014 (0.032)		-0.056 (0.37)		-0.003 (0.057)
Cultural activities and entertainment		-0.126 (0.043)		-0.193* (0.041)		-0.099 (0.069)
Home-centered and social activities		-0.244** (0.081)		-0.103 (0.041)		-0.189* (0.077)
Volunteer activities		-0.145* (0.081)		-0.064 (0.039)		-0.191* (0.058)
F	3.324*	7.149***	1.413	4.937***		5.001***
R ²	0.515	0.264	0.215	0.199	0.034	0.211

*= $p < 0.05$; **= $p < 0.01$; ***= $p < 0.001$.

Three hierarchical multiple regression analyses were conducted to assess the unique contribution of leisure activities to safety barriers, individual barriers, and health perception. Table 2 presents associations between six leisure activities and safety barriers after controlling for gender and income. In model 1, gender and income explained 5.1% of the variance in safety barriers ($R^2 = 0.051$, $p < 0.05$). In model 2, six leisure activities were entered. Social activities ($\beta = 0.244$, $p < 0.01$), physical activities ($\beta = 0.197$, $p < 0.05$), and volunteer activities ($\beta = 0.145$, $p < 0.05$) were significant predictors of safety barriers. Model 2 accounted for 26.6% of the variance in safety barriers ($R^2 = 0.264$, $p < 0.001$).

A relationship between two different leisure activities and individual barriers existed after controlling for gender and income (Table 2). In model 1, gender and income explained 2.1% of the variance in dispositional optimism ($R^2 = 0.021$). In model 2, six leisure activities were introduced and cultural activities ($\beta = 0.193$, $p < 0.05$) and physical activities ($\beta = 0.269$, $p < 0.01$) were significant variables contributing to individual barriers. This model accounted for 19.98% of the variance in dispositional optimism ($R^2 = 0.199$, $p < 0.001$). In addition, an association was discovered between three different leisure activities and health perception after controlling for gender and income (Table 2). In model 1, gender and income accounted for 3.4% of the variance in health perception ($R^2 = 0.034$). In model 2, outdoor activities ($\beta = 0.192$, $p < 0.01$), physical activities ($\beta = 0.191$, $p < 0.05$), and volunteer activities ($\beta = 0.191$, $p < 0.01$) were significant predictors of health perception. This model explained 21.1% of the variance in health perception ($R^2 = 0.211$, $p < 0.001$).

DISCUSSION AND CONCLUSION

The objective of the present study was to investigate the relation between leisure activity types and impediments to involvement in physical activity among adolescents. The study revealed that "home-centered social activities" and "physical activities" were significantly associated with safety and individual barriers. Specifically, safety barriers and physical barriers were identified as hindrances to engagement in "home-centered social activities," whereas outdoor activities emerged as a key determinant of health perception in the adolescent population. These findings suggest that promoting outdoor activities among adolescents may contribute to enhancing their perceived health and well-being.

The findings of this research offer empirical support for the association between safety barriers and leisure activities, namely physical activity, home-based social activities, and volunteering. Alleviating concerns related to safety barriers is crucial for enhancing

participation in physical activity. This is particularly relevant in developing countries, where safety barriers have been identified as a significant deterrent to engagement in physical activity (Horne & Tierney 2012; Rajaraman et al., 2015). The study also highlights that the removal of safety barriers can have a positive impact on participation in social and volunteering activities. Given the adverse impact of the pandemic on the physical and mental well-being of young people, it is imperative to provide them with the motivation to reinforce their sense of well-being.

A substantial body of literature underscores the significance of volunteering skills and socialization for adolescents (Cemalcilar, 2009; Grant et al., 2020; Su et al., 2020). These studies highlight that volunteer work and socialization enhance the likelihood of achieving well-being. The present study contributes to this literature by providing evidence that safety barriers represent a crucial factor in determining participation in social and volunteering activities. Consistent with previous research, our findings suggest that safety barriers impose significant limitations on adolescents' engagement in social, physical, and volunteering activities.

Mitigating individual barriers in adolescents represents a crucial strategy for increasing their participation in physical and cultural activities. Previous research has defined individual barriers as factors that encompass the interplay between psychological states, such as stress, depression, anxiety, personal traits, and leisure preferences, as well as insufficient skills, health restrictions, height, weight, mood, and laziness (Crawford, 1987; Palen et al., 2010; Sarol, 2017). Studies have demonstrated that improving these elements significantly enhances participation in physical activity (Spiteri et al., 2019; Yıldız Kabak et al., 2021). Building on prior work, the current study shows that reducing individual barriers can also have a positive impact on adolescents' involvement in cultural activities. Cultural activities are deemed essential in combating digital addiction, and social scientists have called for an increase in cultural activities during adolescence (Ivanova et al., 2022; Lozano-Blasco et al., 2022). Thus, the study provides evidence that reducing individual barriers can facilitate the expansion of cultural activities during adolescence.

The present study recommends that adolescents engage in outdoor, volunteer, and physical activities to enhance their health perception. Our findings are consistent with previous research investigating the relationship between outdoor activities and health (Duke, 2020; Coventry et al., 2021; Liu et al., 2021). The COVID-19 pandemic has prompted many education systems to adopt alternative remote e-learning approaches, which have significant behavioral

and health implications for youth. The rise of e-learning environments and screen time, especially during the pandemic, has raised critical health concerns, and outdoor activities have emerged as a potential solution to these issues (Liu et al., 2021). Moreover, participating in volunteer activities has been identified as an effective means of addressing health-related concerns, (Bang et al., 2020) with studies demonstrating that volunteering can enhance subjective health (Wilson, 2020). In this context, our study corroborates existing literature by demonstrating that different leisure activities have a positive impact on perceived health. Our results suggest that socializing with others and engaging in meaningful activities may be more beneficial to subjective health than merely participating in physical activity later in life. In other words, engaging in physical activities that provide opportunities for socializing is especially beneficial for adolescents.

This study provides helpful evidence to practitioners who work with or advise adolescents to suggest appropriate leisure activities for varied groups of young people with different purposes and goals in pursuing leisure behavior. This body of evidence may help adolescents to select a form of activity that is appropriate to their needs, given environment, and level of physical and mental health.

First of all, this study provides important evidence showing that leisure activity type is closely related to safety and individual barriers in adolescents and that reducing these barriers will positively affect participation in leisure activity type. It sheds light on the level of influence of individual barriers on participation in physical activity in adolescents and implies that engaging in social activities and volunteering may play a more important role in subjective health than mere involvement in physical activities. In conclusion, this study shows that safety and individual barriers are important constraints for adolescents to participate in various leisure activities. Adolescents should be encouraged to choose activities that uniquely help their physical and mental health and are appropriate to their individual needs.

Recommendations

The present study has several limitations that should be acknowledged. Firstly, the measurement tools employed did not encompass all dimensions of leisure activity types or physical activity restrictions. Alternative measurement tools may be preferred to address similar research questions. Additionally, as this study was conducted solely in Turkey, it may not be representative of all adolescents globally. For this reason, further research is warranted to examine the relationship between physical activity barriers and different leisure activity types

in young people from diverse ethnic groups and countries. Such studies would provide a more comprehensive understanding of this important issue.

GENİŞLETİLMİŞ ÖZET

GİRİŞ

COVID-19 salgını, hareketsizlik ve buna bağlı hastalıklar, hem iç hem de dış mekanda fiziksel egzersiz, çevresel faktörler ve halk sağlığı gibi çeşitli konularla ilgili bilimsel araştırmalarda artışa yol açmıştır (Dominski & Brandt, 2020; Rosi ve ark., 2021). İnsanoğlu, ortak alanlarda maske takmayı, ev tabanlı çalışma ortamlarını ve çevrimiçi eğitim sistemini kapsayan önemli bir dönüşüm geçirmiştir. Bu değişimlerden orantısız bir şekilde etkilenenler arasında genç nesil de yer almaktadır. Ergenler üzerinde yapılan önceki araştırmalar, ergenlerin daha fazla ekran süresi, hareketsiz bir yaşam tarzı ve obezite ile ilişkili rahatsızlıklarını vurgulamıştır (Guessoum ve ark., 2020; Hoke ve ark., 2022). Yetkililer, bu senaryonun salgın sonrası kötüleştiği konusunda uyarılmış ve bu endişeyi gidermek için derhal harekete geçilmesi gerektiği vurgulamıştır (Le Brocq, 2020). Bu alanlarda çalışan bilim adamlarının yerel ve ulusal hükümetler ve sivil toplum kuruluşları (STK'lar) ile işbirliği yapması, mevcut sorunun çözümünü etkili bir şekilde kolaylaştırmaktadır. Ergenleri hareketsiz bir yaşam tarzına yatkın hale getiren altta yatan faktörlerin tanımlanması ve azaltılması büyük önem taşımaktadır. Ampirik çözümler ergenlerin fiziksel aktivite sisteminin üç merkezi bileşenini tanımlamıştır: destekleyici okullar, sosyal ve dijital medya ve çok amaçlı kentsel ortamlar (Van Sluijs ve ark., 2021). Ergenlere yönelik çalışmalar artmasına rağmen "çok amaçlı kentsel çevreler" ile ilgili araştırmalarda belirgin bir eksiklik bulunmaktadır. Ergenlerin daha fazla fiziksel aktivite katılımını sağlamak için bu ortamlara daha kolay erişebilmelerini sağlayacak çalışmalar gereklidir. Bal Turan ve ark., (2023) yapmış oldukları araştırmada, ders-boş zaman yoğunluk çatışmasının artması bireylerin öznel mutluluklarının düşüşüne sebep olduğu sonucunu bulmuşlardır. Bu nedenle, ergenlerin fiziksel aktiviteye erişimini ve boş zaman davranış kalıplarını engelleyebilecek faktörlerin araştırılması, fiziksel hareketsizlik sorununun çözümünde uygulanabilir çözümler olarak hizmet edebilir. Adölesanlarda fiziksel aktiviteye erişimin önemini vurgulayan pek çok çalışma olsa da (Sundevall & Jansson, 2020), bu çalışmaların çoğunun Avrupa ve Amerika gibi gelişmiş ülkelerde yapıldığını da belirtmek gerekir. Gelişmekte olan veya az gelişmiş ülkelerdeki ergenler arasında fiziksel aktivite ve boş zaman etkinliklerine erişimin karşılaştırılabilir olup olmadığını araştırmak ve farklılıklar varsa bunların doğasını ve altında yatan nedenleri belirlemek önemlidir. Her toplumun kendisine ait sosyal kodları ve değerleri vardır. Gelişmiş olarak kabul gören toplumlarda dinamik ve değişimin süreklilik arz ettiği, aynı zamanda bireyin yaşamının her döneminde kişisel gelişiminin önemli görüldüğü bir sosyolojik gerçeklikten bahsedilebilir (Aybek, 2023). Bu soruların yanıtlanması, gelişmekte olan ülkelerdeki gençlerin sağlık ve refahının iyileştirilmesi açısından özellikle dikkat çekicidir. Bu bağlamda araştırmanın amacı, gençlerin fiziksel aktiviteye erişimde karşılaştıkları engelleri belirlemek, bu engellerin gençlerin boş zaman etkinlikleriyle olan ilişkisini ortaya çıkarmak ve bu konuda makul çözümler geliştirmektir.

YÖNTEM

Araştırma grubunu, Ankara ilinde yaşayan kolayda örnekleme yöntemiyle seçilen yaş ortalaması 18,4, %51,6'sı erkek %48,4'ü kadın olan 1312 ergen birey oluşturmaktadır. Verilerin temsil edilebilirliğini ve çeşitliliğini en üst düzeye çıkarmak amacıyla, Ankara'nın çeşitli bölgelerinde bulunan toplam on dört lise bu çalışmaya katılmak üzere özenle seçilmiştir.

Katılımcıların fiziksel aktiviteye katılımındaki engellerini incelemek için Gümüş ve Özgül (2015) tarafından geliştirilen Rekreasyon Alanlarına Katılımın Önündeki Engeller Ölçeği (BPRAS) kullanılmıştır. BPRAS'ın iki alt boyutu 8 maddeden oluşmaktadır. Alt boyutlar şunları içermektedir: (a) Güvenlik bariyerleri ve (b) Bireysel bariyerler. Bu ölçek, beş noktalı Likert tipi bir ölçekte derecelendirilmiştir (1 = kesinlikle katılmıyorum ile 5 = kesinlikle katılıyorum) ve dört Güvenlik maddesi ve dört Bireysel maddeden oluşmuştur. Daha yüksek puan, katılımın önündeki engellerin daha fazla olduğu anlamına gelmektedir. Katılımcıların sağlık algısını değerlendirmek için Willits ve Crider (1988)'in sağlık derecelendirme sorusunun değiştirilmiş bir versiyonu kullanılmıştır. Soruda katılımcılardan genel sağlık durumlarını "kötü" ile "mükemmel" arasında değişen beş puanlık Likert tipi bir ölçekte derecelendirmeleri istenilmektedir. Yaygın olarak kullanılan bu tek maddeli öznel sağlık ölçüsünün, güçlü test-tekrar test güvenilirliğine ve yapı geçerliliğine sahip olduğu gösterilmiştir.

Araştırma değişkenleri arasındaki ilişkileri incelemek amacıyla Pearson Korelasyon analizinden yararlanılmıştır. Boş zaman aktivitesi türleri ile sağlık algısı, güvenlik engelleri ve bireysel engeller gibi sonuç değişkenleri arasındaki ilişkiyi araştırmak için hiyerarşik çoklu regresyon analizi uygulanmıştır. Cinsiyet ve gelir gibi demografik değişkenlerin potansiyel kafa karıştırıcı faktörler olarak dahil edilmesi de dikkate alınmıştır. Regresyon analizlerinde ilk adım olarak tüm ortak değişkenler girilmiştir. Bu analiz SPSS Amos 25 paketini kullanarak gerçekleştirilmiştir. Tüm istatistiksel analizlerde anlamlılık düzeyi 0.05 ve 0.01 olarak alınmıştır.

BULGULAR

Ortak değişkenler kontrol edildikten sonra açık hava aktivitelerinin ve sosyal aktivitelerin tüm sonuç değişkenleriyle ilişkili olduğu ortaya çıkmıştır. Gönüllü faaliyetleri sağlık algısı ile pozitif yönde ilişkilidir. Güvenlik engelleri ile fiziksel aktiviteler, bireysel engeller ve kültürel aktiviteler arasında negatif ilişkiler gözlemlenmiştir. Bu bulgular, rekreasyonel ortamlarda olumlu sosyal etkileşimi teşvik etmenin ve gönüllü faaliyetlere katılımı teşvik etmenin ergenlik döneminde fiziksel aktiviteye katkıda bulunan önemli faktörler olduğunu göstermektedir.

TARTIŞMA VE SONUÇ

Bu araştırmanın bulguları, güvenlik engelleri ile boş zaman etkinlikleri, yani fiziksel aktivite, ev temelli sosyal aktiviteler ve gönüllülük arasındaki ilişkiye ampirik destek sunmaktadır. Güvenlik engelleriyle ilgili endişelerin azaltılması, fiziksel aktiviteye katılımın artırılması açısından büyük önem taşımaktadır. Bu durum, özellikle güvenlik engelini fiziksel aktiviteye katılım konusunda önemli bir

caydırıcı olduğunun tespit edildiği gelişmekte olan ülkeler için geçerlidir (Horne & Tierney 2012; Rajaraman ve ark., 2015). Çalışma aynı zamanda güvenlik engellerinin kaldırılmasının sosyal ve gönüllü faaliyetlere katılım üzerinde olumlu bir etki yaratabileceğini de vurgulamaktadır. Pandeminin gençlerin fiziksel ve zihinsel sağlıkları üzerindeki olumsuz etkisi göz önüne alındığında, onlara refah duygularını güçlendirecek motivasyonun sağlanması zorunludur. Sonuçlar, rekreasyonel ortamlarda olumlu sosyal etkileşimin ve gönüllü faaliyetlere katılımı teşvik etmenin ergenlik döneminde fiziksel aktiviteye katılıma katkıda bulunduğunu göstermektedir.

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Tasarım <i>Design</i>	Yöntem ve araştırma desenini tasarlamak <i>To design the method and research design.</i>	Hüseyin GÜMÜŞ
Literatür Tarama <i>Literature Review</i>	Çalışma için gerekli literatürü taramak <i>Review the literature required for the study</i>	Bilal ÇAĞLAYAN
Veri Toplama ve İşleme <i>Data Collecting and Processing</i>	Verileri toplamak, düzenlemek ve raporlaştırmak <i>Collecting, organizing and reporting data</i>	Bilal ÇAĞLAYAN Cihan AYHAN
Tartışma ve Yorum <i>Discussion and Commentary</i>	Elde edilen bulguların değerlendirilmesi <i>Evaluation of the obtained finding</i>	Cihan AYHAN
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