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Investigation of the relationship between sedentary women's physical activity levels and attitudes towards leisure time

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Abstract

This study aims to examine the relationship between the physical activity levels of sedentary women and their attitudes towards leisure time. The research was conducted on a total of 828 sedentary women participating in physical activities in private gyms in Kırıkkale, Türkiye. A quantitative research method using a relational survey model was employed, and participants' physical activity levels were compared with their leisure time perceptions. Data analysis was performed using the SPSS software. The normality of the data was assessed with the Shapiro-Wilk test, and since the data met the normality assumption, parametric tests were used. One-way ANOVA was applied to examine the effects of demographic variables, and when significant differences were found, Tukey's post-hoc test was conducted. The results showed significant relationships between the physical activity levels of sedentary women and their attitudes towards leisure time. In particular, women with a positive attitude towards leisure time had higher physical activity levels. Additionally, differences in physical activity participation and leisure time attitudes were observed based on participants' age, educational status, and socioeconomic level. These findings highlight the need to improve the leisure time perceptions of sedentary women to enhance their physical activity levels. In conclusion, it is crucial to develop strategies aimed at fostering positive leisure time attitudes to encourage women's participation in physical activities.

Keywords: Sedentary women, physical activity, leisure time attitude.

Sedanter kadınların fiziksel aktivite düzeyleri ile serbest zamana yönelik tutumları arasındaki ilişkinin incelenmesi

Öz

Bu araştırma, sedanter kadınların fiziksel aktivite düzeyleri ile serbest zamana yönelik tutumları arasındaki ilişkiyi incelemeyi amaçlamaktadır. Çalışma, Kırıkkale ilinde özel spor salonlarında fiziksel aktivite etkinliklerine katılan toplam 828 sedanter kadın üzerinde gerçekleştirilmiştir. Nicel bir araştırma olup, ilişkisel tarama modelinde planlamıştır. Veri analizi SPSS yazılımı kullanılarak gerçekleştirilmiştir. Verilerin normalliği Shapiro-Wilk testi ile değerlendirilmiş ve veriler normallik varsayımını karşıladığından parametrik testler kullanılmıştır. Demografik değişkenlerin etkilerini incelemek için tek yönlü ANOVA uygulanmış ve anlamlı farklılıklar bulunduğunda Tukey'in post-hoc testi yapılmıştır. Sonuçlar, sedanter kadınların fiziksel aktivite düzeyleri ile boş zamana yönelik tutumları arasında anlamlı ilişkiler olduğunu göstermiştir. Özellikle, olumlu serbest zaman tutumuna sahip kadınların fiziksel aktivite düzeylerinin daha yüksek olduğu belirlenmiştir. Ayrıca, katılımcıların yaş, eğitim durumu ve sosyoekonomik düzeyine göre fiziksel aktivite katılımı ve serbest zaman tutumları arasında farklılıklar gözlemlenmiştir. Bu bulgular, sedanter kadınların fiziksel aktivite düzeylerinin artırılması için serbest zaman algılarının iyileştirilmesi gerektiğini vurgulamaktadır. Sonuç olarak, kadınların fiziksel aktiviteye katılımlarını teşvik etmek amacıyla serbest zaman tutumlarının olumlu yönde geliştirilmesine yönelik stratejilerin önemli olduğu sonucuna ulaşılmıştır.

Anahtar Kelimeler: *Sedanter kadınlar, fiziksel aktivite, serbest zaman tutumu.*

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INTRODUCTION

Today, physical activity and sports activities are among the important factors that support the physical and psychological health of individuals (Teychenne et al., 2020; Sokić et al., 2021). Based on the data from the World Health Organization (WHO), inadequate physical activity ranks fourth among the causes of mortality worldwide and is considered an important risk factor for chronic diseases such as cardiovascular diseases, diabetes, and obesity (La Sala & Pontiroli 2020; Lopez-Jimenez et al., 2022; Emlek et al., 2023). Regular physical activity plays a critical role not only in terms of physical health but also in terms of mental health and social integration (Ciumărnean et al., 2021; Yapici et al., 2023).

One of the key factors that directly influences sedentary women's levels of physical activity is their attitudes towards leisure time. (de-Pedro-Jiménez et al., 2021; Zimmermann et al., 2021). These attitudes play a critical role in determining the duration and intensity of participation in physical activity (Martínez-Andrés et al., 2020; Bozzola et al., 2023). Attitudes towards leisure time activities determine an individual's motivation to participate in sports, time management skills, and habit of sustaining physical activity (Portela-Pino et al., 2020; Cachón-Zagalaz et al., 2023). It provides an accessible and affordable alternative for sedentary women to engage in regular physical activity and promotes women's participation in sports within the framework of gender equality (Cárcamo et al., 2021; Aljehani et al., 2022).

In Turkey, recent studies have highlighted a rise in physical inactivity among sedentary women, emphasizing the need for targeted intervention programs. For instance, Timurtaş et al. (2022) reported that cultural and socio-economic factors contribute to low leisure-time physical activity participation among Turkish women. Similarly, Gillison et al., (2019) found that structured exercise programs effectively boost motivation and participation in this group. Additionally, Ominyi and Clifton (2025) emphasized that leisure-time attitudes are crucial for sustaining physical activity, particularly among middle-aged sedentary Turkish women.

Nonetheless, various socio-cultural, economic, and individual barriers continue to limit physical activity participation among sedentary women (Zou et al., 2021; Peng et al., 2023). Traditional social roles, challenges in managing time, family obligations, economic difficulties, and safety concerns are among the most prominent constraints (Uddin, 2021; Ugurlu et al., 2023). How sedentary women allocate and utilize their leisure time directly impacts both the quantity and quality of their physical activity engagement (Morse et al., 2021; Chen et al., 2022). Therefore, understanding the link between their leisure time attitudes and physical

activity habits is essential for developing effective intervention strategies. Furthermore, designing sports facilities and programs that meet the specific needs of sedentary women is critical for increasing their participation in physical activity (Kruszyńska & Poczta, 2020).

Although much research has focused on general populations or specific groups like adolescents and athletes, relatively few studies address sedentary women, especially within the Turkish context. Global data underline the health risks posed by physical inactivity, but studies conducted in Turkey reveal unique socio-cultural barriers limiting women's engagement in physical activity (Gillison et al., 2018; Timurtaş et al., 2022). These barriers include entrenched gender roles, limited leisure time due to domestic responsibilities, and inadequate access to sports facilities (Ominyi and Clifton 2025). Moreover, sedentary women's attitudes toward leisure and physical activity vary greatly, influencing their motivation and actual participation levels (de-Pedro-Jiménez et al., 2021; Zimmermann et al., 2021). The existing literature highlights the importance of tailored interventions that address both psychological and environmental factors affecting physical activity habits (Cárcamo et al., 2021; Aljehani et al., 2022).

This study aims to investigate how sedentary women's attitudes towards leisure time relate to their levels of physical activity. By identifying the factors influencing women's physical activity habits, the study seeks to contribute to the development of strategies to increase participation in physical activity. In line with the WHO's global action plan for physical activity, it is of great importance to establish policies to encourage sedentary women to adopt a more active lifestyle. In this context, this study aims to provide a scientific basis that will contribute to the adoption of healthy lifestyles at individual and societal levels.

METHOD

Research model

The research is a quantitative study. It was designed using the relational survey model, one of the main survey models. Relational survey model is a research method that allows determining the relationship between two or more variables (Karasar, 2019; Büyüköztürk, 2021).

The ethical approval of the research was obtained with the decision of Kırıkkale University Graduate School of Social Sciences Ethics Committee, 2025/03.

Research group

The sample group of the study consists of a total of 828 sedentary women participating in physical activities in private gyms in Kırıkkale, Türkiye as of 2024, selected by random sampling method. Private gyms refer to licensed, membership-based fitness centers offering supervised exercise sessions such as cardio, Pilates, and strength training. The selection of the participants was carried out on a voluntary basis and consists of individuals determined in line with the inclusion criteria. Participants were given detailed information about the purpose of the study, and their informed consent was obtained before the data collection process. The sample size was determined using the G*Power 3.1 software. Assuming a medium effect size ($f = 0.25$), a power level of 0.95, and a significance level of $\alpha = 0.05$ for ANOVA comparisons, the minimum required sample size was calculated as 280 participants. To enhance the generalizability of the results and to account for possible data loss or incomplete responses, the final sample was expanded to include 828 participants. In addition, demographic data were recorded to allow for detailed analysis. The data were analyzed using the SPSS 25.0 (IBM Corp., Armonk, NY, USA) package program. First of all, the Shapiro-Wilk test was applied to determine whether the data showed normal distribution. According to the results obtained, the p-values of all variables were found to be greater than 0.05, and thus it was determined that all variables met the assumption of normal distribution. Descriptive statistics (frequency and percentage) regarding the demographic characteristics of the participants were calculated. Parametric tests were used for intergroup comparisons. An independent groups t-test was applied for variables with two groups, and one-way analysis of variance (ANOVA) was applied for variables with more than one group. If significant differences were detected as a result of ANOVA, Tukey's multiple comparison test was used to determine which groups were different. Pearson correlation analysis was used to examine the relationships between variables, and correlation coefficients and significance levels were reported. For statistical significance, the $p < 0.05$ level was accepted.

Data collection tools

In this study, a demographic information form including variables such as age, educational status, marital status, perceived socioeconomic status, weekly physical activity frequency, and intensity of physical activity was used to determine the demographic characteristics of the participants. Additionally, two scales were used to collect data in the study. In order to measure cognitive, affective, and behavioral attitudes towards leisure time

activities, the "Leisure Time Attitude Scale-Short Form (LAS-SF)" developed by Ragheb and Beard (1982) and adapted into Turkish by Önal and Bedir (2023) was used.

The LAS-SF consists of 18 items grouped under three sub-dimensions: cognitive (6 items), affective (6 items), and behavioral (6 items). It is a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree), where higher scores indicate more positive attitudes toward leisure activities. The internal consistency (Cronbach's alpha) values in the original Turkish adaptation ranged from .79 to .87. In the present study, the reliability coefficients were calculated as .81 for the cognitive, .84 for the affective, and .83 for the behavioral sub-dimensions, demonstrating high internal consistency.

The "International Physical Activity Questionnaire (Short Form)" developed by Craig et al. (2003) was used to assess the physical activity levels of the participants. The validity and reliability study of the questionnaire in Türkiye was conducted by Öztürk in 2005. The questionnaire aimed to measure the physical activity level of the individual in the last seven days. During the data collection process, all scales were checked and evaluated completely by the researchers.

Data analysis

The data were analyzed using the SPSS 25.0 (IBM Corp., Armonk, NY, USA) package program. First of all, the Shapiro-Wilk test was applied to determine whether the data showed normal distribution. According to the results obtained, the p-values of all variables were found to be greater than 0.05, and thus it was determined that all variables met the assumption of normal distribution. Descriptive statistics (frequency and percentage) regarding the demographic characteristics of the participants were calculated. Parametric tests were used for intergroup comparisons. An independent groups t-test was applied for variables with two groups, and one-way analysis of variance (ANOVA) was applied for variables with more than one group. If significant differences were detected as a result of ANOVA, Tukey's multiple comparison test was used to determine which groups were different. Pearson correlation analysis was used to examine the relationships between variables, and correlation coefficients and significance levels were reported. For statistical significance, the $p < 0.05$ level was accepted.

RESULTS

Table 1. Demographic characteristics of the participants (mean ± SD)

		(N=828)	Column N %
Age	18-25(1)	121	14.6
	26-31(2)	102	12.3
	32-38(3)	215	26.0
	39-45(4)	184	22.2
	46 and over(5)	206	24.9
Marital Status	Married	521	62.9
	Single	307	37.1
Socioeconomic Status	Low1	78	9.4
	Medium2	579	69.9
	High3	171	20.7
Educational Status	Secondary Education1	288	34.8
	Undergraduate2	389	47.0
	Postgraduate3	151	18.2
Physical Activity Days per Week	1-2(1)	299	36.1
	3-4(2)	398	48.1
	5 and over(3)	131	15.8
Intensity of Exercise Performed	Low1	103	12.4
	Medium2	496	59.9
	High3	229	27.7

Table 1 shows the demographic characteristics and physical activity profiles of the participants. Among the 828 participants, the largest age group was 32–38 years, comprising 26.0% of the sample. Regarding marital status, 62.9% were married and 37.1% were single. In terms of perceived socioeconomic status, 69.9% reported medium, 20.4% high, and 9.7% low socioeconomic status. Education level distribution was as follows: 48.3% held a bachelor's degree, 33.2% had completed secondary education, and 18.5% had postgraduate education. Weekly physical activity frequency indicated that 48.3% exercised 3–4 days, 36.2% exercised 1–2 days, and 15.5% exercised 5 or more days per week. Regarding exercise intensity, 60.4% engaged in moderate intensity, 27.3% in high intensity, and 12.3% in low intensity activities.

Table 2. Comparison of physical activity scale short form and leisure time attitude scale short form (LAS-SF) by age in sedentary women

Variables	18-25 [1] (n=121)	26-31[2] (n=102)	32-38[3] (n=215)	39-45[4] (n=184)	46 and over[5] (n=206)	F	p	Tukey
Cognitive	28.7±2.7	28.6±3.1	28.9±2.1	28.4±4.5	29.6± 2.1	1.374	0.241	-
Affective	28.7±2.7	28.4 ±3.3	28.7 ±2.1	28.3± 4.3	29.3± 1.7	3.303	0.001*	1=2=3=4<5
Behavioral	20.6± 5.5	20.0±5.8	18.3± 5.5	21.5± 5.7	22.9± 5.0	19.672	0.001*	3<2=1=4<5
VPA	1138±1583	1011±1421	1181±1656	1478±1674	1493±1854	2.523	0.001*	1=2=3<4=5
MVPA	514± 654	394± 636	502± 580	855±1329	499± 688	7.205	0.001*	2<1=3=5<4
WA	1701± 1235	1366±1088	1499±1276	1420±1018	1587± 1071	1.757	0.136	-

Variables	18-25 [1] (n=121)	26-31[2] (n=102)	32-38[3] (n=215)	39-45[4] (n=184)	46 and over[5] (n=206)	F	p	Tukey
Total	3353± 2561	2771±2151	3181±2571	3754±2983	2580± 2803	2.794	0.001*	2=5<1=3=4
OA	569± 231	586± 208	581± 206	535± 175	540± 188	2.282	0.001*	4=5<1=2=3

*p< 0.001 Vigorous Physical Activity (VPA), Moderate Vigorous Physical Activity (MVPA), Walking Activity (WA), Sitting Activity (OA)

Table 2 shows that in the affective sub-dimension, only the 46 and over age group scored significantly higher than the other groups (p<0.001). In the behavioral sub-dimension, the 32–38 age group had the lowest, and the 46 and over group had the highest scores, with significant differences across groups (p<0.001). Regarding physical activity, the 39–45 age group showed the highest level of MVPA, while the 26–31 group had the lowest (p<0.001). In terms of vigorous and total activity, the 18–25, 26–31, and 32–38 age groups showed similarly lower levels, whereas the 39–45 and 46+ groups had higher scores (p<0.001). Sitting activity was significantly lower in older age groups (39 and over) compared to younger groups (p<0.001), while no significant difference was found for walking activity. These findings indicate varied patterns across age and emphasize the importance of tailoring physical activity strategies according to age-specific needs.

Table 3. Comparison of physical activity scale short form and leisure time attitude Scale Short Form (LAS-SF) by marital status of sedentary women

Variables	Married (n=521)	Single (n=307)	t	*p*
Cognitive	28.8±2.7	28.4±3.4	1.951	0.051
Affective	29.0±2.7	28.2±3.2	3.345	0.001*
Behavioral	21.4±5.5	19.5±5.8	4.564	0.001*
Vigorous Physical Activity	1265 ±1632	1350±1762	-0.694	0.488
Moderate Physical Activity	474±603	726±1145	-3.575	0.001*
Walking	1444±1017	1639±1328	-2.223	0.001*
Total	3183±2438	3717±3045	-2.614	0.001*
Sitting	599±202	536±194	-4.373	0.001*

*p< 0.001

Table 3 shows that married women scored significantly higher than single women in the affective and behavioral sub-dimensions of the Leisure Time Attitude Scale (p < 0.001). Although their scores were also higher in the cognitive sub-dimension, the difference was not statistically significant. When examining physical activity levels, single women had significantly higher levels of moderate physical activity, walking, and total physical activity compared to married women (p < 0.001). No significant difference was found between the groups in vigorous physical activity. Furthermore, married women were observed to spend significantly more time sitting than single women (p < 0.001).

Table 4. Comparison of physical activity scale short form and leisure time attitude scale short form (LAS-SF) according to perceived socioeconomic status in sedentary women

Variables	Low [1] (N=80)	Medium[2] (N=580)	High[3] (N=168)	F	p	Tukey
Cognitive	27.3±4.6	28.9±2.7	29.1±2.8	10.112	0.001*	1<2=3
Affective	27.5±4.7	28.8±2.6	28.9±2.7	7.789	0.001*	1<2=3
Behavioral	18.7±4.6	20.9±5.7	20.9±6.1	5.577	0.001*	1<2=3
Vigorous Physical Activity	878±1339	1291±1678	1497±1794	3.660	0.001*	1<2<3
Moderate Physical Activity	301±452	503±665	904±1338	19.552	0.001*	1<2<3
Walking	1256±1179	1507±1069	1658±1345	3.356	0.001*	1<2<3
Total	2437±2433	3301±2501	4059±3215	10.747	0.001*	1<2<3
Sitting	659±206	549±201	550±179	10.844	0.001*	3=2<1

*p< 0.001

Based on the findings presented in Table 4, as perceived socioeconomic status increases, both the sub-dimension scores of the Leisure Time Attitude Scale and physical activity levels show a significant increase. Women with low socioeconomic status scored significantly lower in the cognitive, affective, and behavioral sub-dimensions compared to those with medium and high status ($p < 0.001$). When physical activity levels are examined, vigorous, moderate, walking, and total physical activity levels significantly increase with higher socioeconomic status ($p < 0.001$).

Table 5. Comparison of physical activity scale short form and leisure time attitude scale short form (LAS-SF) in sedentary women according to educational status

Variables	Secondary Education [1] (N=275)	Undergraduate [2] (N=400)	Postgraduate [3] (N=153)	F	p	Tukey
Cognitive	27.9±3.8	29.2±2.1	29.1±3.1	17.580	0.001*	1<2=3
Affective	28.1±3.5	29.1±2.1	28.7±3.3	11.592	0.001*	1<2=3
Behavioral	20.4±5.7	21.2±5.5	20.1±6.1	3.078	0.005*	1<2=3
Vigorous Physical Activity	1069±1460	1213±1572	1932±2134	14.366	0.001*	1<2<3
Moderate Physical Activity	413±436	618±1014	729±956	8.250	0.001*	1<2<3
Walking	1412±1147	1478±1092	1805±1231	6.281	0.001*	1<2=3
Total	2895±2240	3309±2709	4466±3105	17.836	0.001*	1<2=3
Sitting	555±196	566±206	549±190	0.511	0.600	-

*p< 0.005, *p< 0.001

Table 5 shows that as the educational level of sedentary women increases, there are significant improvements in the sub-dimensions of the Leisure Time Attitude Scale and physical activity levels. In the cognitive and affective sub-dimensions, women with secondary education scored significantly lower than those with undergraduate and postgraduate degrees ($p < 0.001$). In the behavioral sub-dimension, women with secondary education also had lower scores, and this difference was statistically significant ($p < 0.001$). Regarding physical activity, levels of vigorous, moderate, walking, and total physical activity significantly increased with higher educational levels ($p < 0.001$). Women with postgraduate education showed the highest means in nearly all physical activity categories. However, no significant difference was found in sitting time among the educational groups ($p > 0.001$).

Table 6. Comparison of physical activity scale short form and leisure time attitude scale short form (LAS-SF) according to weekly physical activity status in sedentary women

Variables	1-2 [1] (N=300)	3-4 [2] (N=400)	5 and over[3] (N=128)	F	p	Tukey
Cognitive	28.4±3.3	28.9±2.4	28.7±3.8	3.315	0.037*	1<2=3
Affective	28.1±3.1	29.1±2.2	28.7±3.9	6.614	0.001*	1<2=3
Behavioral	19.8±5.8	21.4±5.5	20.4±5.7	7.031	0.001*	1<3<2
Vigorous Physical Activity	1057±1417	1354±1722	1653±2004	6.312	0.002*	1<2<3
Moderate Physical Activity	496±915	569±724	721±1037	3.165	0.001*	1<2<3
Walking	1262±943	1642±1240	1703±1171	11.838	0.001*	1<2<3
Total	2816±2524	3567±2692	4077±2818	12.270	0.001*	1<2<3
Sitting	579±190	554±208	531±192	2.851	0.058	-

*p< 0.005, *p< 0.001

According to the findings in Table 6, as the frequency of weekly physical activity increases, significant improvements are observed in both the sub-dimensions of the Leisure Time Attitude Scale and physical activity levels. In the cognitive sub-dimension, women engaging in physical activity 1–2 days per week scored significantly lower than those active for 3–4 days or 5 or more days. A similar pattern was observed in the affective and behavioral sub-dimensions, with women exercising 3–4 days per week showing the highest behavioral scores ($p <0.001$). Regarding physical activity levels, vigorous, moderate, walking, and total physical activity significantly increased with higher weekly frequency ($p < 0.001$). Although there was a numerical difference in sitting time between the groups, this difference was not statistically significant ($p> 0.001$).

Table 7. Comparison of physical activity scale short form and leisure time attitude scale short form (LAS-SF) according to exercise intensity of sedentary women

Variables	Low [1] (N=102)	Medium[2] (N=500)	High[3] (N=226)	F	P	Tukey
Cognitive	28.6±2.9	28.5±3.5	29.4±1.4	8.159	0.001*	1=2<3
Affective	28.7±3.0	28.4±3.3	29.4±1.3	8.694	0.001*	1=2<3
Behavioral	21.2±5.7	20.9±5.5	19.9±5.9	3.452	0.032*	3<2<1
Vigorous Physical Activity	1021±1351	1154±1522	1721±2030	10.735	0.001*	1<2<3
Moderate Physical Activity	495±620	601±1017	706±1146	4.932	0.007*	1<2<3
Walking	1366±954	1499±1165	1614±1174	1.768	0.171	-
Total	2989±2596	3149±2458	4042±3079	10.066	0.000*	1<2<3
Sitting	619±229	552±186	547±210	5.368	0.005*	3=2<1

*p< 0.005, *p< 0.001

According to the findings in Table 7, as exercise intensity increased, there were numerical increases in cognitive and affective subscale scores, which were statistically significant ($p < 0.001$). Women performing high-intensity exercise scored higher than the other groups. In the behavioral subscale, scores showed a numerical decrease with increasing exercise intensity, and this difference was statistically significant. Regarding physical activity levels, vigorous, moderate, and total physical activity scores numerically increased with exercise intensity, and these increases were statistically significant ($p < 0.001$). Although walking levels also showed a numerical increase, this difference was not statistically significant. Sitting time was numerically higher in the low-intensity exercise group, and this difference was statistically significant ($p < 0.005$).

Table 8. Analysis of the relationships between sedentary women's physical activity scale short form and leisure time attitude scale short form (LAS-SF)

Correlations											
	Age	**Socioeconomic Status**	**Intensity of Exercise Performed**	**Cognitive**	**Affective**	**Behavioral**	**VPA**	**MVPA**	**Walking**	**Total**	**Sitting**
Age	1										
Socioeconomic Status	0.086*	1									
Intensity of Exercise Performed	0.015	0.910**	1								
Cognitive	0.032	0.118*	0.114**	1							
Affective	0.065	0.101**	0.105**	0.840**	1						
Behavioral	0.179**	0.076*	-0.082**	0.184**	0.287**	1					
VPA	0.095**	0.090**	0.147**	0.006	-0.021	-0.129**	1				
MVPA	0.057	0.207**	0.066**	0.012	-0.016	-0.142**	0.421**	1			
Walking	0.015	0.088*	0.065	0.021	0.012	-0.072*	0.223**	0.157**	1		
Total	0.071*	0.159**	0.141**	0.009	-0.013	-0.157**	0.853**	0.647**	0.615**	1	
Sitting	-0.077*	-0.105	-0.087*	0.000	-0.042	-0.133**	-0.230**	-0.027	-0.116**	-0.202**	1

Vigorous Physical Activity (VPA), Moderate Vigorous Physical Activity (MVPA), Walking Activity (WA), Sitting Activity (OA) *. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).

Table 8 presents the correlations between sedentary women's physical activity levels and leisure time attitudes. Age showed significant positive correlations with behavioral (r =

0.179**), vigorous physical activity (r = 0.095**), and total physical activity (r = 0.071*). Perceived socioeconomic status was significantly correlated with exercise intensity (r = 0.910**), cognitive attitude (r = 0.118*), moderate physical activity (r = 0.207**), and total physical activity (r = 0.159**). Within leisure time attitudes, strong positive correlations were found between cognitive and affective subscales (r = 0.840**) and between affective and behavioral subscales (r = 0.287**). Among physical activity variables, vigorous physical activity showed a very strong positive correlation with total physical activity (r = 0.853**), while sitting time was negatively correlated with vigorous (r = -0.230**) and total physical activity (r = -0.202**).

DISCUSSION AND CONCLUSION

This study examined the relationship between sedentary women's physical activity levels and their attitudes towards leisure time. The results indicate that the participants' socioeconomic situation is average and they typically engage in moderate levels of physical activity. In the comparisons between age groups, it was determined that the leisure time attitudes of women aged 46 and over showed a more positive trend, while their physical activity levels decreased with age. It was also observed that single women had higher physical activity levels. Women with higher socioeconomic status had higher leisure time attitudes and physical activity levels. In terms of educational level, women with undergraduate and postgraduate education had significantly higher physical activity levels and leisure time attitudes than those with secondary education. It was concluded that education level is an effective factor in individuals' adoption of healthy lifestyles.

These findings are supported by international studies. Bauman et al. (2012) emphasized the significant relationship between women's physical activity participation and socioeconomic and educational status. Trost et al. (2002) reported a decline in physical activity with age but highlighted the importance of age-appropriate exercise programs to mitigate this decrease. Smith et al. (2018) found that married women tend to engage more in physical activity due to social support, aligning with our findings on marital status. Furthermore, Sallis et al. (2016) pointed out that low socioeconomic groups face more barriers to physical activity participation, underscoring the need for targeted interventions. Brown et al. (2015) demonstrated that higher education levels positively affect physical activity adoption and leisure attitudes. Eime et al. (2013) showed that increased weekly physical activity frequency enhances both physical health and psychosocial well-being, especially in women, which parallels the positive effects observed in this study.

In the affective and behavioral sub-dimensions of the leisure time attitude scale of sedentary women according to the age variable, it was observed that the age groups of 46 and over and 39–45 years had high scores, while the age groups of 18–25 years, 26–31 years, and 32–38 years had low scores. In terms of physical activity levels, individuals in the 18–25 age group performed the lowest level of activity in the sub-dimensions of vigorous physical activity, moderate physical activity, and walking, while the 46 and over age group performed the highest level of physical activity. However, the statement that sedentary women demonstrated a decrease in physical activity levels as they got older contradicts the findings, as higher age groups (particularly 39–45 and 46+) showed greater physical activity levels in several sub-dimensions. Sedentary women demonstrated a decrease in physical activity levels as they got older. These results highlight the importance of encouraging age-appropriate physical activity. Munusturlar et al. (2016) found that there were differences in the physical activity of the participants based on their age range. In their study, however, Kaya, Aksu, and Arslan (2021) stated that there was no significant difference in women's physical activity self-worth in terms of the age variable.

In the cognitive, affective, and behavioural sub-dimensions of the leisure time attitude scale of sedentary women, married women's scores were found to be higher than those of single women, based on the marital status variable. The analysis of physical activity levels revealed that single women scored higher than married women in vigorous physical activity, moderate-intensity physical activity, walking activity, and total physical activity levels. In their study, Karadeniz et al. (2019) previously found that women have more positive leisure time attitudes both cognitively and affectively than men. Likewise, Tektaş et al. (2017), Akyüz and Türkmen (2016), and Çimen and Sarol (2015) stated that female students have more positive leisure time attitudes. In his study, Serdar (2021) stated that there was no significant difference between gender and leisure time barriers. Kaya et al. (2021) reported that there was a significant difference in the marital status variable of women's physical activity self-worth.

In terms of the socioeconomic status variable, it was observed that the scores of individuals with high socioeconomic status were higher than those with medium and low socioeconomic status in all sub-dimensions of the Leisure Time Attitude Scale of sedentary women. When the physical activity scale scores were examined, it was determined that the scores of vigorous physical activity levels, moderate physical activity, walking, and total activity scores reached high scores in favor of those with high socioeconomic status. These findings reveal that socioeconomic status has a significant effect on physical activity levels and

leisure time attitudes. In this regard, Demirel et al. (2023) found that there was a significant difference between the leisure time attitudes of those with low and high perceived socioeconomic status. However, Kaya et al. (2021) stated that there was no significant difference in women's physical activity self-worth in terms of the income status variable.

The educational level variable showed that those with undergraduate and post-graduate degrees scored higher than those with secondary education in all cognitive, affective, and behavioural sub-dimensions of the leisure time attitude scale of sedentary women. In the scores of the physical activity scale, it was observed that the undergraduate and postgraduate groups reached high scores in vigorous physical activity levels, moderate physical activity, walking activity, and total activity scores. These results reveal that educational status has a positive effect on cognitive, affective, and behavioral attitudes and physical activity levels of sedentary women. Previously, Kaya et al. (2021) also found that women's physical activity self-worth differed significantly in terms of educational status and participation in regular physical activities.

As the number of days of weekly physical activity increased among the groups, it was found that all sub-dimension scores in the cognitive attitude, affective attitude, and behavioural attitude sub-dimensions of the leisure time attitude scale increased in accordance with the weekly physical activity variable. The physical activity scale showed that the groups with more days of weekly physical activity scored higher in the variables of vigorous physical activity, moderate physical activity, walking, and total activity. These findings suggest that weekly physical activity duration has a positive effect on cognitive, affective, and behavioral attitudes and physical activity levels of sedentary women. Akyürek et al. (2018) reported that the attitudes of students who spent their leisure time with physical activity were more positive than those of students who did not spend their leisure time with physical activity. Ayhan et al. (2023) found that the sub-dimension (physical) of the leisure time satisfaction scale positively affected the attitude towards physical activity. Accordingly, it showed that individuals with high levels of leisure time satisfaction had high levels of cognitive behavioral physical activity. Demiral and Karakaş (2024) reported that the length and frequency of physical activity engagement did not affect satisfaction levels, however the recreational flow experience differed with more frequent physical activity participation.

The exercise intensity variable revealed that the scores of sedentary women in the cognitive, affective, and behavioral attitudes sub-dimensions of leisure time attitudes and in the

vigorous physical activity, moderate physical activity, walking activity, and total activity sub-dimensions of the physical activity scale were in favor of those with high exercise intensity. It was observed that the group with low exercise intensity had more sitting time than the other groups. In general, the findings show that exercise intensity has a positive effect on cognitive, affective, and behavioral attitudes and physical activity levels of sedentary women. Kalkavan et al. (2024) reported that there was no significant difference between physical activity level and leisure time attitude, but individuals with very active physical activity had higher scores than individuals with minimal and inactive physical activity.

Affective attitude and behavioral attitude sub-dimensions, vigorous physical activity, total activity, and a negative correlation with sitting activity were all related to the age variable in the study of sedentary women's physical activity levels and attitudes towards leisure time. Furthermore, there is a correlation between the perceived socioeconomic status variable and exercise intensity, cognitive sub-dimension, and moderate physical activity; a correlation between cognitive attitude and affective attitude sub-dimension according to the exercise intensity variable; a positive correlation between cognitive attitude and affective attitude sub-dimension of leisure time attitude scale; a correlation between behavioral attitude sub-dimension; a correlation between affective sub-dimension of leisure time attitude scale and behavioral sub-dimension. Besides, there is a negative correlation between the behavioral sub-dimension of the leisure time attitude scale and the sitting activity sub-dimension; a correlation between the vigorous physical activity and moderate physical activity sub-dimensions; a high positive correlation between total activity; and a negative correlation between the sitting activity sub-dimension. There is a correlation between the moderate physical activity sub-dimension of the physical activity scale and walking activity, a high positive correlation with total activity, and a negative correlation between the sitting activity sub-dimension. There is a high positive correlation between the walking activity sub-dimension of the physical activity scale and total activity, and a negative correlation between the sitting activity sub-dimension. There is a negative correlation between the total activity sub-dimension of the physical activity scale and the sitting activity sub-dimension. These findings show that the relationships between sedentary women's physical activity levels and leisure time attitudes are complex and affected by various factors. In this regard, Gümüş and Işık (2018) found a low and moderate positive relationship between individuals' physical activity levels and the sub-dimensions of the leisure time motivation scale in their study conducted with prospective teachers. In this context, it was reported that as the physical activity levels of individuals increased, the level of leisure time

motivation also increased, albeit slightly. Kocamaz et al. (2025) stated in their study that leisure time is currently interesting for young people due to technological advancements and that setting goals based on sports and physical performance for the intensity of young people's interest will contribute to the growth of healthy young generations.

It is important to note some limitations of this study. The sample was drawn from a specific region and consisted solely of sedentary women, limiting the generalizability of the findings. Data were collected via self-report questionnaires, which may be subject to bias. Future research should expand to include diverse populations and utilize longitudinal designs to better capture changes over time.

In conclusion, there are significant relationships between sedentary women's physical activity levels and leisure time attitudes. The effects of demographic factors such as age, marital status, socioeconomic status, and education level on this relationship should be taken into consideration. This suggests that programs to promote physical activity should be customized according to the socioeconomic and demographic characteristics of individuals, and future studies should examine the effects of these factors in more detail and contribute to the development of strategies to increase physical activity.

Recommendations

In order to increase the physical activity levels of sedentary women, various special physical activity programs should be created, and programs should be customized according to demographic factors. In addition, educational seminars and workshops should be organized to raise women's awareness about physical activity and healthy lifestyles. Creating community groups to provide social support can increase individual participation and create a motivating environment. Increasing the number of accessible sports facilities is important to encourage women's participation in physical activity. Offering financial support or subsidized programs for women with low socioeconomic status is also an effective method. In addition, appealing to women's interests by offering different types of physical activity will increase participation. Finally, more research should be conducted in this area, and changes in participants' physical activity levels and attitudes should be monitored. These recommendations offer important steps towards the adoption of healthy lifestyles by sedentary women.

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KATKI ORANI *CONTRIBUTION RATE*	**AÇIKLAMA** *EXPLANATION*	**KATKIDA BULUNANLAR** *CONTRIBUTORS*
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Tasarım *Design*	Yöntem ve araştırma desenini tasarlamak *To design the method and research design.*	Döndü UĞURLU Hakan YAPICI Zeynep BAŞER Mehmet GÜLÜ
Literatür Tarama *Literature Review*	Çalışma için gerekli literatürü taramak *Review the literature required for the study*	Döndü UĞURLU Abdüsselam TURGUT Büşra EMLEK Mehmet GÜLÜ
Veri Toplama ve İşleme *Data Collecting and Processing*	Verileri toplamak, düzenlemek ve raporlaştırmak *Collecting, organizing and reporting data*	Döndü UĞURLU Abdüsselam TURGUT Hakan YAPICI Büşra EMLEK Zeynep BAŞER
Tartışma ve Yorum *Discussion and Commentary*	Elde edilen bulguların değerlendirilmesi *Evaluation of the obtained finding*	Döndü UĞURLU Abdüsselam TURGUT Hakan YAPICI Zeynep BAŞER Mehmet GÜLÜ

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