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Examination of motivation effects of participation in physical activity according to different variables

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Abstract.

The study aims to identify the reasons for a less active lifestyle due to the negative impact of modern technology on human life and to investigate the level of motivation to participate in physical activities. This quantitative study involved 939 adult volunteers. Participants were given a personal information form that included variables such as gender, age, education level, marital status, occupation, and monthly income, as well as the Physical Activity Participation Motivation Scale (PAPMS). Data analysis was performed using SPSS version 22.0 and reliability was determined using Cronbach's alpha analysis (0.704). The data were normally distributed and parametric tests were performed. The study found no significant differences in motivation to participate in physical activity between genders. However, significant differences were found in variables such as age, marital status, education and monthly income. In particular, people aged 21-30 and singles showed higher motivation. In addition, people with a higher level of education and employees in the public sector showed a higher level of participation in physical activity. These results suggest that different life situations are associated with variations in people's motivation to be physically active. However, since the comparison was made based on independent variables, it is more appropriate to discuss associations rather than direct effects.

Key words: Physical Activity, Motivation, Demographic Characteristics

Fiziksel aktiviteye katılım motivasyon etkilerinin farklı değişkenlere göre incelenmesi

Öz

Araştırma, modern teknolojinin insan yaşamı üzerindeki olumsuz etkileri nedeniyle daha az aktif yaşam tarzlarının nedenlerini belirlemeyi ve fiziksel aktiviteye katılım motivasyon düzeylerini incelemeyi amaçlamaktadır. Araştırma, 939 gönüllü yetişkin birey üzerinde gerçekleştirilmiş niceliksel bir çalışmadır. Katılımcılara cinsiyet, yaş, eğitim durumu, medeni durum, meslek ve aylık geliri içeren kişisel bilgi formu ve Fiziksel Aktiviteye Katılım Motivasyon Ölçeği (FAKMÖ) uygulanmıştır. Verilerin analizi SPSS 22.0 versiyonu kullanılarak yapılmış ve güvenilirlik Cronbach alfa analizi ile belirlenmiştir (0.704). Verilerin normal dağılım gösterdiği belirlenmiş ve parametrik testler uygulanmıştır. Araştırma sonuçlarına göre, cinsiyet değişkeni fiziksel aktiviteye katılım motivasyonunu etkilememiştir. Ancak, yaş, medeni durum, eğitim ve aylık gelir gibi değişkenlerde anlamlı farklılıklar bulunmuştur. Özellikle, 21-30 yaş aralığındaki ve bekar bireylerin motivasyon düzeyleri daha yüksek bulunmuştur. Ayrıca, eğitim düzeyi yüksek olan bireylerin ve kamu çalışanlarının fiziksel aktiviteye katılım oranları daha yüksek bulunmuştur. Bu sonuçlar, bireylerin yaşamlarındaki farklı durumların fiziksel aktiviteye katılım motivasyonunu önemli ölçüde etkilediğini göstermektedir.

Anahtar kelimeler: Fiziksel Aktivite, Motivasyon, Demografik Özellikler

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INTRODUCTION

In today's modern world, inactivity, stressful lifestyles, irregular and unhealthy diets and the negative impact of technology on human life are among the biggest problems. There is no doubt that regular physical activity, exercise and sport will help solve many of these problems (Yılmaz & Ulaş, 2016).

Physical activity is defined as the energy expenditure by skeletal muscle as a result of body movements (Rowland & Freedson, 1994; Yapıcı et al., 2023). In other words, it can be expressed as the energy expenditure above the basal metabolic rate as a result of skeletal muscle contraction (Hargreaves & Spriet, 2020). Studies have shown many benefits that can be counted among the main reasons for participating in physical activities, such as weight control, healthy living, socializing, stress management, and disease prevention (Yılmaz & Ulaş, 2016; Hudson et al., 2022). In addition, reasons such as distancing from everyday problems, avoiding bad habits, distancing from negative thoughts, having fun, improving the physical self, taking advantage of free opportunities, developing healthy lifestyle habits and increasing self-confidence also promote participation in physical activities (Hargreaves & Spriet, 2020; Van Lankveld et al., 2021). In this context, demographic variables such as income, age, gender and marital status, which were used in our study, play a crucial role in understanding people's motivations to engage in physical activity.

The individual's reasons to engage in physical activity are motivations that enable the individual to act according to his or her own will and pleasure (Van Lankveld et al., 2021). When an individual prioritizes personal gratification and desires, this is associated with intrinsic motivation (Durosini et al., 2021). On the other hand, the individual acts for environmental reasons, driven by external factors. Motivation generated by environmental factors is associated with extrinsic motivation as it is entirely dependent on external influences (Ryan & Deci, 2020; Ceylan et al., 2021). Ambivalence refers to the feeling of uncertainty about the performance of an action or its outcome (Silvi & Padilla, 2021). The most important activity that drives a person to engage in physical activity is motivation. Motivation is the force that drives and mobilizes a person to achieve certain goals (Tekkurşun Demir et al. 2018). While examining motivation in sports, one must also know the biological and social aspects of sports (Akyüz et al., 2016). In adults, the factors that motivate participation in physical activity can vary. Extrinsic evaluations such as good physical appearance, proportional height and weight and intrinsic factors such as satisfaction with physical characteristics and stress management have a positive effect on individuals and enable them to become active in this direction. This positive and motivating mood is an important factor in an individual's engagement in physical activity through extrinsic and

intrinsic influences. Adults are also encouraged to participate in physical activity for reasons such as maintaining their health, increasing their energy levels, improving their social relationships, coping with daily stress, and improving their quality of life (Bouchard et al., 1994; Paluska & Schwenk, 2000; Giles-Corti & Donovan, 2002; Çağlar & Taşkıran, 2024).

Physical activity has the potential to increase psychological well-being by enhancing an individual's self-perception, such as physical self-esteem and body image (Kim & Ahn, 2021). Learning at what levels people's satisfaction is affected creates a healthy and socially strong society (Akyüz et al., 2024). Therefore, physical activity is used as an important tool not only for physical health but also for mental and emotional well-being (Uğurlu et al., 2023). It has been observed that people who engage in regular physical activity have higher self-confidence, self-esteem and a sense of competence. This encourages individuals to engage in physical activity (Palenzuela-Luis et al., 2022). At the same time, physical activity provides important opportunities for social development. Group activities and sports teams have the potential to strengthen social relationships and promote a sense of community (Opstoel et al., 2020).

Demographic characteristics such as age, gender, income level, education level and marital status are important factors that cause individuals to make different choices in their daily lives. Studying the impact of these variables on individuals' motivation to exercise is of great importance in understanding people's lifestyles and health behaviors. For example, while there is a decline in physical activity with increasing age, individuals with higher incomes may have more opportunities to exercise. The level of education can also influence health awareness and interest in physical activity. This study aims to examine in detail the effects of demographic characteristics such as age, gender, income level, education level and marital status, which lead people to make different choices in their daily lives, on their motivation to participate in physical activity. The study aims to analyze how different situations in people's lives influence their motivation to participate in physical activity.

In this context, the main hypothesis of the study is as follows: Demographic variables have a significant influence on people's motivation to engage in physical activity. The analyses conducted to test this hypothesis aim to find out how people's different life circumstances relationship their motivation to participate in physical activity.

Within this framework, our study aims to assess in detail how specific personal characteristics influence motivation to be physically active. This approach will help to develop

more effective strategies to improve public health by showing how people's different life situations influence their motivation to be physically active.

METHOD

Research group (population-sample)

The research is a quantitative study conducted using the general survey model. In this study, 939 volunteers living in Ankara and Kırıkkale provinces participated. Participants were selected to represent the population based on specific criteria, including gender, age, education level, marital status, occupation, and monthly income, ensuring a diverse and representative sample.

Data collection tools

A personal information form was used to determine the participants' gender, age, education, marital status, occupation and monthly income. The Motivation Scale for Participation in Physical Activity, whose validity and reliability were examined by Tekkurşun Demir and Cicioğlu (2018), was then used.

Data collection/processing method

Physical Activity Participation Motivation Scale: The scale consists of 16 questions and has three sub-dimensions. The sub-dimensions of the scale are "Individual Reasons" (1,2,3,4,5,6) sub-dimension, "Environmental Reasons" (7,8,9,10,11,12) sub-dimension, and "Causelessness" (13,14,15,16) sub-dimension. Each question on the scale is given a score between 1 and 5. The maximum score that can be obtained on this scale is 80. The score ranges of motivation to participate in physical activity are evaluated as "1-16 very low, 17-32 low, 33-48 medium, 49-64 high, 65-80 very high." The Cronbach Alpha scores of the scale were found to be 0.89 for individual reasons, 0.86 for environmental reasons, and 0.82 for the causality sub-dimension (Tekkurşun Demir & Cicioğlu, 2018). The data were analyzed using SPSS version 22.0. Cronbach's alpha was analyzed to determine the reliability of the study. Cronbach's alpha was determined to be 0.704.

Data analysis

Before the data were subjected to any analysis, it was determined whether they met the prerequisites of parametric tests. In this context, skewness and kurtosis values were examined for the normal distribution of the data, and it was seen that the data had a normal distribution according to each variable. Since the data were distributed normally in pairs, it was determined that they met the prerequisites of parametric tests. For this reason, the t test was used for pairwise group comparisons, and the ANOVA test was used for comparisons of three or more groups. In addition, if there was a significant difference in the ANOVA results, the Tukey post hoc test, one

of the multiple comparison tests, was applied to determine which groups the difference was between. The following thresholds were used to determine the effect size of the associations.

Ethical approval

The research was approved by the Ethics Committee of the Institute of Social Sciences of Kırıkkale University, dated 2024, meeting number 09, decision number 2024/203236.

FINDINGS

In this section, the demographic characteristics of the participants as well as the data related to the motivation to participate in physical activity scale were analyzed.

Table 1. Demographic distribution of participants (n=939)

Variables		n	%
Candan	Women	424	45.2
Gender	Men	515	54.8
	20 years	118	12.6
A	21-30 years	539	57.4
Age	31-40 years	165	17.6
	41 years over	117	12.4
Marital status	Single	629	67.0
Marital status	Married	310	33.0
	Literate-Primary School	58	6.2
Education status	Middle School-High School	321	34.1
Education status	Associate Degree-License	503	53.6
	Master's - Doctorate	57	6.1
	Student	325	34.6
	Paid public employee	142	15.1
Occupational status	Paid private sector employee	257	27.4
Occupational status	Own business owner	75	8.0
	Housewife	61	6.5
	Unemployed	79	8.4
	0-10 thousand	398	42.3
Monthly Income Status	10-20 thousand	197	21.0
Monthly Income Status	20-30 thousand	239	25.5
	30 thousand over	105	11.2

According to Table 1, 57.4% of the participants were between the ages of 21 and 30, 67.0% were single, 53.6% were university graduates, 34.6% were university students, and 42.3% had a monthly income between 0 and 10 thousand.

Table 2. T-Test Results by Gender for PAPMS Scores

Scale Subscales	Men(n=515) X±S.d.	Women (n=424) X±S.d.	t	Cohen's d	p
Individual Causes	21.50±3.86	21.45±3.46	0.211	0.01	0.831
Environmental Causes	18.74 ± 4.94	18.27 ± 4.20	1.561	0.10	0.113
Causality	8.45 ± 4.28	8.59 ± 4.27	-0.493	0.00	0.622
PAPMS (Total)	48.69±7.10	48.30 ± 6.10	0.889	0.06	0.367

When Table 2 was analyzed, it was determined that there was no difference between the sub-dimensions of physical activity participation motivations when female and male participants were compared (p>0.001).

Table 3. ANOVA test results of (PAPMS) scores according to age variable

Scale Subscales	Age group	n	X ±S.d.	F	p	Tukey
	20 years (1)	118	21.58±3.36			
Individual Causes	21-30 years (²)	539	21.76±3.66	6.201	0.001*	1=2=3>4
marviauai Causes	$31-40 \text{ years } (^3)$	165	21.41 ± 3.68	0.201	0.001	1-2-3>4
	41 years over (4)	117	20.16±3.84			
	20 years	118	20.15±3.77			
Environmental	21-30 years	539	18.44 ± 3.65	6.065	0.001*	
Causes	31-40 years	165	18.36 ± 4.66	6.965		1>2=3>4
	41 years over	117	17.51 ± 4.87			
	20 years	118	8.76±4.31			
G 1''	21-30 years	539	8.14±3.97	2.047	0.0014	
Causality	31-40 years	165	8.89 ± 4.70	3.947	0.001*	4>3=1>2
	41 years over	117	9.48 ± 4.80			
	20 years	118	50.46±6.00			
PAPMS	21-30 years	539	48.34 ± 6.76	5 1 1 1	0.001	1>2-2>4
(Total)	31-40 years	165	48.67 ± 6.72	5.141	0.001	1>2=3>4
	41 years over	117	47.16±6.40			

^{*}p<0.001

According to the data in Table 3, as a result of the ANOVA test conducted for the (PAPMS) sub-dimensions in the age variable, a significant difference was detected in the (PAPMS) total, individual causes, environmental causes, and lack of reason sub-dimensions (p<0.001).

Table 4. T-test results of (PAPMS) scores according to marital status

PAPMS Subscales	Marital status	n	X ±S.d.	t	Cohen's d	p
I. I. 11 .1 C.	Single	629	21.76±3.55	2 220	0.22	0.001*
Individual Causes	Married	310	20.89 ± 3.87	3.330	0.32	0.001*
Environmental	Single	629	18.92±4.53	2.625	0.25	0.001*
Causes	Married	310	17.74 ± 4.73	3.625	0.25	0.001*
Consolity	Single	629	8.38±4.12	-1.357	0.10	0.161
Causality	Married	310	8.80 ± 4.56	-1.557	0.10	0.101
PAPMS	Single	629	49.05±6.52	2 119	0.24	0.001*
(Total)	Married	310	47.44±6.83	3.448	0.24	0.001*

^{*}p<0.001

According to Table 4, according to the results of the t-test, there was a significant difference in the total, individual reasons, and environmental reasons sub-dimensions of the PAPMS (p<0.001), while there was no significant difference in the causality sub-dimension (p>0.001).

Tablo 5. ANOVA test results of (PAPMS) scores according to education level

PAPMS Subscales	Education	n	±S.d.	F	p	Tukey
	Literate-primary school (1)	58	19.01±3.77			
Individual Causes	Middle-high school (2)	321	21.12 ± 3.83	15.674	0.001*	3>4>2>1
iliuividuai Causes	Associate Degree-License (3)	503	21.79 ± 3.49	13.074	0.001	3>4>2>1
	Postgraduate (4)	57	23.19±2.94			
	Literate-primary school	58	17.51 ± 4.36			
Environmental	Middle-high school	Middle-high school 321 18.60±4.57		0.202		
Causes	Associate Degree-License	503	18.60 ± 4.61	0.999	0.393	-
	Postgraduate	57	18.50 ± 5.28			
	Literate-primary school	58	12.72±4.25			
Consolity	Middle-high school	321	8.97 ± 4.38	5.290	0.001*	3>4>2>1
Causality	Associate Degree-License	503	7.91 ± 3.99	3.290		
	Postgraduate	57	7.01 ± 3.30			
	Literate-primary school	58	49.25±7.60			
PAPMS (Total)	Middle-high school	321	48.68 ± 6.55	<i>5</i> 200	0.716	
	(Total) Associate Degree-License		48.32 ± 6.70	5.290	0.716	-
	Postgraduate	57	48.60 ± 6.01			

^{*}p<0.001

According to the data in Table 5, when the sub-dimensions of (PAPMS) were analyzed according to the Anova test results, it was determined that there was a significant difference in the individual reasons and causality sub-dimensions (p<0.001), while there was no significant difference in the total and environmental reasons sub-dimensions of (PAPMS) (p>0.001).

Tablo 6. ANOVA test results of (PAPMS) scores according to occupational status

PAPMS Subscales	Occupational	n	±S.d.	F	p	Tukey
	Students (1)	325	21.65±3.55			
	Public (2)	142	22.77 ± 3.04			
Individual Causes	Private sector (3)	257	21.22 ± 3.83			
individual Causes	Free trade (4)	75	21.66 ± 4.15	8.806	0.001*	2>1=3=4>6>5
	Housewife (5)	61	19.40 ± 3.62			
	Unemployed (6)	79	20.72 ± 3.45			
	Students	325	19.62±4.18			
	Public	142	18.10 ± 5.06			
Environmental	Private sector	257	17.92 ± 4.58	6.235	0.001*	1>2=4=6>3=5
Causes	Free trade	75	18.18 ± 5.09	0.233	0.001	1>2-4-0>3-3
	Housewife	61	17.08 ± 4.86			
	Unemployed	79	18.22 ± 4.29			
	Students	325	8.52 ± 4.29			
	Public	142	7.28 ± 3.61			
C 1'4	Private sector	257	8.55 ± 4.35	6.554	0.001*	5=6>1=3>2=4
Causality	Free trade	75	7.88 ± 4.03			
	Housewife	61	10.24 ± 4.38			
	Unemployed	79	9.91 ± 4.47			

PAPMS Subscales	Occupational	n	X ±S.d.	F	p	Tukey
	Students	325	49.78 ± 6.40			
	Public	142	48.16 ± 6.46			
PAPMS	Private sector	257	47.67 ± 6.70	4.417 0.001*	0.001*	1=2=6>3=4=5
	Free trade	75	47.73 ± 7.19			
(Total)	Housewife	61	46.73 ± 6.43			
	Unemployed	79	48.86 ± 6.94			

^{*}p<0.001

According to the data in Table 6, when the occupational group variable was examined, it was determined that there was a significant difference in the total, individual reasons, causality and environmental reasons sub-dimensions of the (PAPMS) according to the Anova test results (p<0.001),

Table 7. ANOVA test results according to monthly income of (PAPMS)

PAPMS Subscales	Monthly Income	n	±S.d.	F	P	Tukey
	$0-10$ thousand $(^1)$	398	21.19±3.68			
	10-20 thousand (2)	197	21.07 ± 3.74			
Individual Causes	20-30 thousand (³)	239	22.05 ± 3.62	4.299	0.001*	3=4>1=2
	30 thousand over (4)	105	22.00 ± 3.54			
	0-10 thousand	398	18.82 ± 4.33			
Environmental	10-20 thousand	197	18.75 ± 4.36	1.887	0.130	-
Causes	20-30 thousand	239	18.11 ± 5.00	1.00/		
Causes	30 thousand over	105	17.94 ± 5.22			
	0-10 thousand	398	8.68 ± 4.27			
Consolity	10-20 thousand	197	8.99 ± 4.51	4.085	0.001*	1_2_4>2
Causality	20-30 thousand	239	7.71 ± 3.70	4.083	0.001*	1=2=4>3
	30 thousand over	105	8.86 ± 4.85			
	0-10 thousand	398	48.70±6.40			
PAPMS	10-20 thousand	197	48.79 ± 6.38	0.060	0.407	
(Total)	20-30 thousand	239	47.88 ± 6.81	0.968 0.407		-
	30 thousand over	105	48.75±7.81			

^{*}p< 0.001

According to the data in Table 7, according to the results of the Anova test, there was a significant difference in the individual reasons and causality sub-dimensions of the (PAPMS) (p<0.001), while there was no significant difference in the total and environmental reasons sub-dimensions of the (PAPMS) (p>0.001).

DISCUSSION AND CONCLUSION

This research was conducted to explore the factors influencing people's motivation to engage in physical activities and exercise, with the aim of understanding how various life situations impact this motivation. In trying to explain the reasons why people participate in physical activities or exercise, it has been noted that studies in this field generally aim to understand the cause-effect relationship. Many factors such as the individual's lifestyle, opportunities, environment, the conditions of this environment that enable physical activities,

personality traits, emotional intelligence, previous experiences, gender, income, marital status, age and education level determine the individual's need for physical activity and which activity is performed and with whom (Ardahan & Yerlisu, 2010). The reason why these variables are so important is that each of them influences motivation and adherence to physical activity participation in different ways. For example, a person's lifestyle and opportunities determine the time and resources available for physical activity. Environmental conditions influence whether an individual has safe and accessible spaces for physical activity. Personality traits and emotional intelligence shape an individual's motivation and attitude towards physical activity. Past experiences influence an individual's future participation through previous successes and failures. Demographic factors such as gender, income, marital status, age and education have a direct influence on participation in physical activity through social expectations, economic opportunities and level of knowledge.

A high interest in physical activity and sport increases compliance with social rules in daily life (Buckworth & Nigg, 2004; Raiola & Domenico, 2021). Therefore, the demographic variables used in this study are crucial for understanding individual motivation to participate in physical activity and how this motivation is shaped.

Table 1 shows some selected demographic characteristics of the participant group. These results are important for understanding the demographic diversity of the study and the profile of the participants. 54.8% of the participants were male and 45.2% were female. This gender distribution is consistent with the gender distribution of the Turkish population (Ardahan, 2013; Bulgu et al., 2008). Looking at the age distribution, it can be seen that 57.4% of the participants are between 21 and 30 years old. The high proportion of this age group shows that young adults are more interested in physical activity and our study reflects this demographic group.

In terms of marital status, 67% of participants were single, suggesting that the marriage rate among young adults is low and that single people may be more motivated to participate in physical activities. In terms of educational status, 53.6% of participants had an associate's or bachelor's degree, suggesting that educational level has a significant impact on participation in physical activity. In addition, 34.6% of participants were university students, suggesting that this group may have more time for physical activities and therefore be more motivated to participate. In terms of income distribution, 42.3% of participants were in the 0-10,000 TL monthly income range. The high proportion of this income group underlines the influence of economic factors on participation in physical activities. Income level can have a direct impact on the amount of time

and resources individuals can devote to physical activity. These results provide important clues as to how demographic characteristics influence people's motivation to participate in physical activity. It can be observed that people who are young, single, educated and have a certain income are more likely to participate in physical activity. These demographic characteristics play a crucial role in understanding people's interest in physical activity and their motivation to participate. By focusing on these variables in our study, we can contribute to the development of strategies that increase the overall level of physical activity in the population. It shows that the participants' motivation to participate in physical activity is high. According to gender, motivation to participate in physical activity did not differ in total and sub-dimensions; the differences were found to be small and in favor of male individuals. This small difference in favor of males could be attributed to various social and cultural factors that may encourage men more than women to engage in physical activities. For instance, societal expectations and norms often promote physical fitness and sports participation more strongly among males. Additionally, males might have more opportunities or feel more societal pressure to maintain physical fitness. If similar sources of motivation existed for both genders, no significant difference would be observed. Therefore, the slight favor towards males suggests the influence of these external factors (Table 2). Similarly, the findings of the study conducted by Yıldırım and Bayrak (2017) on university students reveal that there is no gender difference in physical activity participation. Again et al. (2013) concluded that there was no significant difference in terms of gender in terms of participation or non-participation in physical activity in their study on people living in Gaziantep province (Şahin & Ekinci 2013). Despite this, there are also studies in the literature that support the difference found in favor of men, albeit at a small level in our study. For example, Demirtürk et al. (2017), Işık et al. (2015), and Lapa and Korkmaz (2017) concluded that there was a difference in favor of men in participation in physical activity in studies on university students. This finding suggests that gender is not a determining factor on motivation to participate in physical activity. The small difference in motivation between male and female participants suggests that both genders may have similar sources of motivation. These results suggest that gender-based interventions may have a limited effect on increasing physical activity participation.

It shows that there are significant differences in both total and sub-dimensions of motivation to participate in physical activity according to age variable (Table 3). When we look at the analysis of these differences, we can say that when the motivation to participate in physical activity is evaluated in general, we can say that the highest motivation difference in the age group up to 20 years old is in the age group up to 20 years old, followed by 21–30 years old and 31–40

years old, respectively, with close ratios, and the lowest level is determined in the group 41 years old and above. When the motivation to participate in physical activity is analyzed in terms of subdimensions, it can be said that the group up to 40 years of age has a higher rate than the group aged 41 years and over in the sub-dimension of individual reasons. For environmental reasons, it can be said that the motivation to participate in physical activity is affected by the environmental reasons of the group aged 20 years, 21–30 years, 31–40 years, and finally 41 years and older. In the sub-dimension of causelessness, it was determined that the group aged 41 years and over had the highest rate, followed by the group aged 31–40 years and 20 years, with the group aged 21–30 years being at the bottom. This suggests that older adults may feel a lack of clear reasons or motivations for participating in physical activity more acutely than younger individuals. One possible explanation for this finding is that as people age, they may experience more physical limitations or health issues, which can reduce their perceived ability to engage in physical activity, leading to a sense of causelessness. Additionally, older adults might have fewer social or environmental prompts encouraging them to stay active. Conversely, younger individuals, particularly those aged 21–30, are often in life stages where physical activity is more integrated into their routines, whether through social activities, work-related fitness programs, or personal health goals, resulting in lower scores in the causelessness sub-dimension. This highlights the importance of targeted interventions for older adults to provide clear and compelling reasons for physical activity, such as promoting the health benefits specific to aging populations or creating more age-friendly physical activity opportunities. These findings are consistent with other studies in the field, which have similarly noted a decline in physical activity motivation and participation with advancing age. Therefore, addressing the specific motivations and barriers experienced by different age groups can be crucial for designing effective health promotion strategies. For example, Şahin and Ekici (2013), Ardahan (2011), and Ardahan (2013) reached similar results according to the age variable in their studies. However, in some studies, for example, Kasırga et al. (2021), Yıldırım and Coşkun (2017), and Ünver (2022), they did not find a significant difference in participation in physical activity according to the age variable. The reason for this is thought to be due to the fact that these studies are for university students and that the research groups are in similar and close age groups.

The marital status variable was found to be significantly different in favor of singles in both the total and sub-dimensions of motivation to participate in physical activity, except for the sub-dimension of "causality". This finding can be attributed to several factors that affect the lives and motivations of single and married individuals differently. Singles may have more free time, fewer

familial responsibilities, and greater flexibility in their daily schedules, which can make it easier for them to engage in physical activities. In contrast, married individuals often have additional responsibilities such as childcare, household chores, and work commitments, which can limit their available time and energy for physical activities. Additionally, social expectations and personal priorities can differ between singles and married individuals. Singles might be more focused on maintaining their physical appearance and socializing through physical activities, while married individuals might prioritize family time and other obligations over personal fitness. These differences in lifestyle and responsibilities can significantly influence motivation levels. Studies in the literature support these findings (Table 4). For example, Ardahan (2013) found a statistically significant difference in favor of singles, and Kasırga et al. (2021) observed a significant difference in the perception of exercise participation benefits for men and singles. Şahin and Ekici (2013) found that middle-aged and married people cited 'lack of time', 'income status', and 'lack of energy' as significant barriers to physical activity participation. These studies highlight how marital status impacts the ability and motivation to engage in physical activity, underlining the importance of considering these factors when designing interventions to promote physical activity. On the other hand, there is no study in the literature on the lack of difference in the "lack of reason" sub-dimension. It is thought that the questions related to the sub-dimension of causality are perceived in the same way by the research group. However, the questions asked in the individual and environmental reasons sub-dimensions are perceived very differently between married and single people.

Using the data on the educational status variable, it was found that there was a significant difference in both the overall and sub-dimensions of motivation to participate in physical activity in the "individual reasons" and "lack of reasons" sub-dimensions, while there was no significant difference in the overall and "environmental reasons" sub-dimensions of motivation to participate in physical activity (Table 5). A statistically significant difference was observed in the sub-dimensions of individual reasons and causelessness in favor of associate, bachelor's, and postgraduate education levels. This may lead to the conclusion that as the educational level increases, individuals' motivation to participate in physical activity is positively affected. There are many studies showing similar results in the literature. For example, Lowel et al. (2010) and Ardahan (2013) concluded that there is a positive relationship between educational status and participation in physical activity.

It is found that there are significant differences in both the overall and sub-dimensions of motivation to participate in physical activity depending on the occupational status variable (Table 6). In terms of motivation to participate in physical activity, it can be said that the motivation of students, public employees, and unemployed people is higher than the other three groups. This is thought to be due to the perception that these groups have less time at work than others. In the "individual" and "environmental reasons" sub-dimensions, it can be said that students and public employees have higher motivation to participate in physical activity than other occupational groups. The reason for this is thought to be due to other reasons, such as age and income status. In the "causelessness" sub-dimension, it can be said that the motivation perceptions of housewives and unemployed people are higher than those of other groups. The reason for this is thought to be due to the fact that they have enough free time compared to other occupational groups. Although there are no studies in this direction in the literature, it can be said that there is a parallelism in this direction when studies such as having enough time to participate in physical activities, age status, and income status are taken into consideration.

The income status variable data show that while there is no significant difference in the motivation to participate in physical activity in total and in the "environmental reasons" sub-dimension, there is a significant difference in the "individual reasons" and "lack of reason" sub-dimensions. The income groups of 20000–30000 TL and 30000 TL and above differ significantly from the other groups (Table 7). Increasing income levels also increase the standards for individuals to spend time on sports, such as going to gyms and eating a high quality diet. (Demirtürk et al. 2017; Işık et al. 2015; Lapa & Korkmaz 2017; Ardahan 2013; Ardahan & Lapa 2010).

Based on the data obtained from the study, it was found that the variables age, education level, marital status, income level and occupational group have an influence on the motivation to participate in physical activity, while the variable gender has no influence on this motivation. The motivation to be physically active was higher among people in their twenties, single people, bachelor's and associate's degree holders, students and public sector employees. For the monthly income variable, it was found that environmental reasons did not affect individuals in the high income group and that motivation to participate in physical activity increased due to individual reasons.

According to the results of the scale on motivation to participate in physical activity, differences were found in the sub-dimensions of individual reasons (e.g. personal satisfaction, health benefits), environmental reasons (e.g. social interaction, community support) and lack of reasons (e.g. lack of motivation). People in their twenties and single people were generally more

likely to engage in physical activity for individual reasons such as personal satisfaction and health benefits. People with higher levels of education were more motivated for both individual and environmental reasons. These results indicate that different life situations significantly influence the motivation to participate in physical activity. Therefore, interventions to increase participation in physical activity should be designed with these demographic variables in mind. These results can provide important information for the definition of strategies to improve the health of the population. However, this study has several limitations. First, the sample was limited to volunteers from Ankara and Kırıkkale provinces, which may not fully represent the entire population. Second, the data was collected through self-reported questionnaires, which could introduce response biases. Additionally, the cross-sectional design of the study limits the ability to establish causal relationships between the variables. Based on these limitations, future research should consider using a larger and more diverse sample to enhance generalizability. Longitudinal studies could provide better insights into causal relationships. Additionally, incorporating objective measures of physical activity, such as wearable fitness trackers, could reduce the potential for response biases. Future research could also explore the impact of interventions designed to enhance motivation for physical activity across different demographic groups.

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KATKI ORANI CONTRIBUTION RATE	AÇIKLAMA EXPLANATION	KATKIDA BULUNANLAR CONTRIBUTORS
Fikir ve Kavramsal Örgü Idea or Notion	Araştırma hipotezini veya fikrini oluşturmak Form the research hypothesis or idea	Döndü UĞURLU Rafet ÜNVER Hakan YAPICI Yusuf BULUT
Tasarım Design	Yöntem ve araştırma desenini tasarlamak To design the method and research design.	Döndü UĞURLU Rafet ÜNVER Hakan YAPICI Yusuf BULUT
Literatür Tarama Literature Review	Çalışma için gerekli literatürü taramak Review the literature required for the study	Döndü UĞURLU Rafet ÜNVER Hakan YAPICI Yusuf BULUT
Veri Toplama ve İşleme Data Collecting and Processing	Verileri toplamak, düzenlemek ve raporlaştırmak Collecting, organizing and reporting data	Döndü UĞURLU Rafet ÜNVER Hakan YAPICI Yusuf BULUT
Tartışma ve Yorum Discussion and Commentary	Elde edilen bulguların değerlendirilmesi Evaluation of the obtained finding	Döndü UĞURLU Rafet ÜNVER Hakan YAPICI Yusuf BULUT

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Catışma Beyanı/ Statement of Conflict

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Etik Kurul Beyanı/ Statement of Ethics Committee

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This research was conducted with the decision Ethics Committee of the Institute of Social Sciences of Kırıkkale University Ethics Committee numbered 21.02.2024- E.234670.



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