

Physical Activity Level and Quality of Life of Women Aged 18-45*18-45 Yaş Arası Kadınların Fiziksel Aktivite Düzeyi ve Yaşam Kalitelerinin Belirlenmesi*Cansel Kaya¹, Selin Yıldırım², Tuba Yazıcı³, *Celal Bulgay⁴, Veli Ozan Çakır⁵, Mesut Cerit⁶¹ Faculty of Sport Sciences, Lokman Hekim University, Ankara/ Türkiye / canselkaya93@gmail.com / 0000-0002-5774-6749² Faculty of Sport Sciences, Lokman Hekim University, Ankara/ Türkiye / Selin0658@gmail.com / 0000-0001-6092-2849³ Faculty of Sport Sciences, Lokman Hekim University, Ankara/ Türkiye / tubakilci@gmail.com / 0000-0002-4318-3332⁴ Faculty of Sport Sciences, Bingöl University, Bingöl/ Türkiye / celalbulgay@hotmail.com / 0000-0003-4026-9883⁵ Faculty of Sport Sciences, Gazi University, Ankara/Türkiye / veliozancakir@gazi.edu.tr / 0000-0002-2072-5039⁶ Faculty of Sport Sciences, Lokman Hekim University, Ankara/ Türkiye / Mesut.cerit@lokmanhekim.edu.tr / 0000-0001-6910-4770

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Abstract: Maintaining an active lifestyle is crucial for maximizing the benefits of physical activity and avoiding the drawbacks of inactivity. Regular physical activity is a key factor in enhancing the quality of life. Having a high-quality life for women will positively impact the health of the current society and future generations. Additionally, women serve as role models for their children as they raise them. In this context, women play a significant role in shaping societal norms regarding participation in physical activity and people's quality of life. Regarding research on physical activity and quality of life, most studies focus on the elderly population. There are fewer studies examining women's quality of life and their physical activity levels. Thus, this study aimed to investigate the relationship between physical activity levels and the quality of life among women aged 18–45. Furthermore, the study aimed to compare the disparities in quality of life and physical activity levels between single and married individuals. A total of 200 women participated in this study. Significant differences were identified in various study variables between single and married women. Additionally, variations were observed in the correlations between dimensions of quality of life and levels of physical activity. Consequently, physical activity emerges as a vital tool for enhancing our quality of life. Hence, it should be integrated into daily routines to reap individual and societal health benefits. Moreover, physical activity interventions should be tailored to individuals' unique physical abilities and developmental stages.

Keywords: Physical activity, quality of life, women

Özet: Aktif bir yaşam tarzı sürdürmek, fiziksel aktivitenin faydalarını en üst düzeye çıkarmak ve hareketsizliğin dezavantajlarından kaçınmak için hayati önem taşır. Düzenli fiziksel aktivite, yaşam kalitesini yükseltmede anahtar bir faktördür. Kadınlar için kaliteli bir yaşama sahip olmak hem mevcut toplumun sağlığını hem de gelecek nesillerin sağlığını olumlu yönde etkileyecektir. Ayrıca, kadınlar çocuklarını yetiştirirken onlara rol model olurlar. Bu bağlamda, kadınlar fiziksel aktiviteye katılım ve insanların yaşam kalitesi hakkındaki toplumsal normları şekillendirmede önemli bir rol oynarlar. Fiziksel aktivite ve yaşam kalitesi üzerine yapılan araştırmalarla ilgili olarak, çalışmaların çoğunluğu yaşlılara odaklanmaktadır. Kadınların yaşam kalitesi ve fiziksel aktivite üzerine daha az çalışma vardır. Bu nedenle, bu çalışma 18-45 yaş arası kadınların fiziksel aktivite düzeyleri ile yaşam kalitesi arasındaki ilişkiyi incelemek amacıyla yapılmıştır. Ayrıca, bekar ve evli bireylerin yaşam kalitesi ve fiziksel aktivite düzeyleri arasındaki fark da karşılaştırılmıştır. Bu çalışmaya 200 kadın katılmıştır. Bekar ve evli kadınlar ile çalışma değişkenleri arasında anlamlı farklılıklar bulunmuştur. Ayrıca, yaşam kalitesi boyutları ile fiziksel aktivite arasındaki ilişkilerde de farklılıklar vardır. Sonuç olarak, fiziksel aktivite yaşam kalitemizi iyileştirmemize olanak sağlayan önemli bir araçtır. Bu nedenle hem bireysel hem de toplumsal sağlık yararları için günlük hayatımızın bir parçası haline getirilmelidir ve fiziksel aktivite her bir kişinin benzersiz fiziksel yetenekleri ve gelişim evresi göz önünde bulundurularak sağlanmalıdır.

Anahtar Kelimeler: Fiziksel aktivite, yaşam kalitesi, kadınlar.

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INTRODUCTION

One of the most crucial health behaviors is physical activity, which helps prevent several age-related problems and supports healthy aging (Gopinath, Kifley, Flood, Mitchell, 2018). Additionally, regular physical activity can enhance mood and quality of life (QoL). On the other hand, inactivity increases the chance of negative health outcomes, such as diabetes, cancer, cardiovascular disease, and a shorter lifespan (WHO, 2010). Therefore, maintaining an active lifestyle is crucial for maximizing the benefits of physical activity and avoiding the drawbacks of inactivity. People engage in activities and continue to do so because it improves their QoL (Gill et al., 2013). Thus, overall health-related QoL and perceived health status are more likely to improve in people who meet suggested levels of physical activity (Kallings, Leijon, Hellénus, & Ståhle, 2008).

The term "quality of life" (QoL) refers to a multidimensional construct that represents an individual's perceptions of their level of pleasure and enjoyment in life (Shoup, Gattshall, Dandamudi, & Estabrooks, 2008). It is associated with personal well-being and covers a wide range of topics, including habits, lifestyle, personal satisfaction, leisure, and health (Pucci, Rech, Fermino, & Reis, 2012). An individual's well-being and sense of fulfillment in life are influenced by their QoL (Kotarska et al., 2021). Individuals who engage in

physical activity experience a positive increase in their QoL and lead happier lives (Papavasiliou, 2010). There is a beneficial cycle in which physical activity improves QoL, and improved QoL inspires participation, creating a positive health cycle (Gill et al., 2013).

Individuals belonging to different age groups and genders may engage in physical activity for various reasons. For instance, women may participate in community exercise programs for psychological reasons such as protecting cognitive function, social relationships, and mood (Gill et al., 2003). Middle-aged women are more motivated and likely to stick with an activity that prioritizes their social and psychological requirements (Gill et al., 2013). In their lifetimes, women experience numerous pivotal moments. Menstruation, pregnancy, and menopause are some of these, and they all involve various diseases and risks. Having a healthy life for women will positively affect both the health of the current society and the health of future generations. Additionally, women become role models for their children as they raise them. In this regard, women play a significant role in shaping societal norms about physical activity participation and people's QoL. For example, a study reported that children who had a single parent or a mother with depression had an increased risk of being overweight and

engaged in fewer leisure activities compared to other children (McConley et al., 2011).

The primary objective of this study is to investigate the correlation between physical activity levels and the quality of life (QoL) among women aged 18 to 45. It aims to explore how engagement in physical activity impacts various dimensions of QoL in this specific age group. Additionally, the study intends to compare the differences in QoL and physical activity levels between single and married individuals within the same age range.

METHODS

Research Model: Descriptive research is a type of research design that focuses on observing, describing, and documenting the characteristics of a phenomenon or situation without manipulating variables or attempting to establish causal relationships. Its primary purpose is to provide a comprehensive and detailed account of the subject under investigation. This research approach aims to answer questions like "what," "how," and "why" about a particular phenomenon, helping researchers gain a better understanding of it.

Purpose of the research: The primary objective of this study is to investigate the correlation between levels of physical activity and the quality of life (QoL) among women aged 18 to 45. Additionally, the study aims to compare the QoL and physical activity levels of single and married individuals within this age group. By focusing on this specific demographic, the research aims to contribute valuable insights into how physical activity habits impact the well-being and quality of life of women in their reproductive and early adulthood years. The study seeks to provide a comprehensive understanding of how engagement in physical activity relates to various dimensions of QoL, including psychological well-being, social interactions, and personal satisfaction. This research is intended to address a gap in the existing literature by shedding light on the relationship between physical activity and QoL in a population often underrepresented in such studies. Ultimately, the findings of this study could have implications for designing targeted interventions and programs that promote both physical activity and overall well-being among women in this age range.

Research Group: Between the ages of 18 and 45, a total of 200 women voluntarily completed the questionnaires. The sample consisted of 147 (73.5%) married women and 53 (26.5%) single women, making up a total of 200 participants. Considering the participants' educational backgrounds, 10 (5%) were primary school graduates, 42 (21%) were high school graduates, 124 (62%) were undergraduates, and 24 (12%) were graduates.

Regarding the participants' occupational statuses, 178 (89%) women were employed, 16 (8.5%) were unemployed, and 5 (2.5%) were students. Concerning chronic disease status, 181 (90.5%) women reported having no chronic diseases, while 19 (9.5%) women reported having chronic diseases. In terms of medication use, 165 (82.5%) women did not use medications, while 35 (17.5%) women reported medication use.

With regard to smoking habits, 118 (59%) participants were nonsmokers, and 82 (41%) were smokers. The study sample reflected varying smoking statuses among individuals. As for alcohol consumption, 155 (77.5%) women reported not consuming alcohol, while 45 (22.5%) women reported alcohol use. The demographic characteristics of the study sample are provided in Table 1 below.

Table 1. Demographic Profile of the Respondents

Variables	Category	n	%
Marital Status	Married	147	73,5
	Single	53	26,5
Education Status	Primary Education	10	5
	High School	42	21
	Bachelor's	124	62
	Graduate	24	12
Occupation Status	Working	178	89
	Unemployed	16	8,5
	Student	5	2,5
Chronic Disease Status	No	181	90,5
	Yes	19	9,5
Drug Use Status	No	165	82,5
	Yes	35	17,5
Smoking Status	No	118	59
	Yes	82	41
Alcohol Use Status	No	155	77,5
	Yes	45	22,5

Data Collection Procedures: This study was conducted between 2021 and 2022. After obtaining the required permissions, questionnaires were administered face-to-face to women aged 18 to 45 residing in Ankara, Turkey, on a voluntary basis. A total of 200 women willingly participated in the study. The participants' sociodemographic characteristics were determined using a personal information form. The International Physical Activity Questionnaire (IPAQ-SF) was employed to evaluate the participants' regular physical activity levels. Additionally, the Quality-of-Life Scale (SF36) was utilized to assess the quality of life (QoL) of the women.

International Physical Activity Questionnaire Short Form: Data processing and analysis in the present study adhered to the established IPAQ scoring protocol (www.ipaq.ki.se). The IPAQ-SF assesses the frequency and duration of engaging in physical activities of moderate to vigorous intensity, walking for at least ten minutes, and sitting down on weekdays during the preceding seven days. The Physical Activity Metabolic Equivalent of Task (MET)-minutes per day or week were utilized to express the total IPAQ-SF score. The summation of the calculated MET-minutes for each physical activity intensity level (moderate intensity = 4.0 MET, vigorous intensity = 8.0 MET, walking = 3.3 MET, sitting down = 1.5 MET) was employed to compute the overall weekly physical activity MET-minutes. The total score was categorized as low if it was below 600 MET-min/week, moderate if it ranged between 600 and 3000 MET-min/week, and high if it exceeded 3000 MET-min/week (www.ipaq.ki.se). The questionnaire's Turkish validity-reliability test was conducted by Öztürk (2005).

The Quality-of-Life Scale (SF36) Questionnaire: To assess the quality of life (QoL), the Short Form 36 (SF-36) questionnaire was employed. The SF-36 questionnaire covers the past four weeks and consists of a total of 36 questions.

Among these, 35 questions contribute to a health profile, yielding eight sub-scale scores: physical functioning, role limitations due to physical problems (physical role difficulty), bodily pain, general health, vitality, social functioning, role limitations due to emotional problems (emotional role difficulty), and mental health (Kallings et al., 2008). The first four subscales predominantly evaluate physical aspects, although general health and vitality provide a more comprehensive assessment of overall health (Kallings et al., 2008).

Analysis of Data: In this study, data obtained from participants were analyzed using the SPSS 26.00 program. Initially, extreme value analyses were conducted to assess assumptions and the appropriateness of the analyses by considering null data and Mahalanobis distance. After these processes, data from 12 participants with invalid or missing responses were excluded, and the analyses were carried out on the data of the remaining 200 participants. The conformity of the data to normal distribution was evaluated using the Shapiro-Wilk test. It was observed that the data had a normal distribution. Accordingly, the independent t-test was used to explore differences based on marital status variables, while Pearson's chi-square test was utilized to identify potential relationships between Participants' Physical Activity level and Quality of Life Sub-Dimensions ($p < 0.05$, $p < 0.01$) were considered statistically significant.

RESULTS

The difference in physical activity levels between single and married individuals was compared using the independent sample t-test. A statistically significant difference was observed in walking levels between single and married individuals; $t(198) = -4.390$; $p < 0.05$. The walking level of single individuals ($M = 692.83$, $SD = 1002.26$) was higher than that of married individuals ($M = 245.98$, $SD = 435.25$). However, no statistically significant difference was found in terms of moderate-intensity activity between single and married individuals; $t(198) = -0.887$; $p > 0.05$. In relation to vigorous physical activity levels, a statistically significant difference was identified between single and married individuals; $t(198) = -5.352$; $p < 0.05$. Vigorous physical activity levels of single individuals ($M = 1360.47$, $SD = 798.37$) were higher than those of married individuals ($M = 810.29$, $SD = 575.61$).

Regarding sitting levels of single and married individuals, a statistically significant difference was also observed; $t(198) = -2.408$; $p < 0.05$. The sitting level of single individuals ($M = 466.41$, $SD = 131.89$) was higher than that of married individuals ($M = 393.87$, $SD = 204.26$). Additionally, a statistically significant difference was found in the overall physical activity levels of single and married women; $t(198) = -7.005$; $p < 0.05$. The overall physical activity level of single individuals ($M = 2702.35$, $SD = 828.90$) was higher than that of married individuals ($M = 1594.92$, $SD = 1333.63$). The comparison of participants' physical activity levels and marital status is presented in Table 2 below.

Table 2. Comparison of the Participants' Physical Activity Levels and Marital Status

Variables	Marital Status	n	Mean (MET-min/week)	SS (MET-min/week)	t	Sd	p
Walking	Married	147	245,98	435,25	- 4,39	198	0,00*
	Single	53	692,83	1002,26			
Moderate Intensity	Married	147	144,76	275,76	- 0,88	198	0,37
	Single	53	182,64	238,84			
Vigorous Intensity	Married	147	810,29	575,61	- 5,35	198	0,00*
	Single	53	1360,47	798,37			
Sitting	Married	147	393,87	204,26	- 2,40	198	0,01*
	Single	53	466,41	131,89			
Total PA	Married	147	1594,92	828,90	- 7,00	198	0,00*
	Single	53	2702,35	1333,63			

* $p < 0,05$; ** $p < 0,01$

Subsequently, the distinction in QoL sub-dimensions between single individuals and married participants was assessed using the independent sample t-test. A significant difference was identified in the physical functioning dimension between single and married women ($t(198) = -6.504$; $p < 0.05$). Single individuals ($M = 88.49$, $SD = 16.51$) exhibited better physical functioning scores compared to married individuals ($M = 72.27$, $SD = 15.20$). The sub-dimension of physical role difficulty (role limitations due to physical problems) displayed a statistically significant difference between single and married individuals; $t(198) = -3.911$; $p < 0.05$. The physical role difficulty scores of single individuals ($M = 94.33$, $SD = 20.00$) were higher than those of married individuals ($M = 73.25$, $SD = 37.31$). However, there was no statistically significant difference in emotional role difficulty (role limitations due to emotional problems) scores between single and married individuals; $t(198) = 1.106$; $p > 0.05$.

A statistically significant difference emerged in the mental health scores of single and married individuals; $t(198) = -6.649$; $p < 0.05$. Mental health scores of single individuals ($M = 62.89$, $SD = 10.65$) were higher than those of married individuals ($M = 49.26$, $SD = 13.48$). In terms of the sub-dimension of social functioning, a significant difference was noted between single and married women; $t(198) = -5.629$; $p < 0.05$. Single women displayed greater social functioning scores ($M = 73.58$, $SD = 12.89$) compared to married women ($M = 53.23$, $SD = 25.13$). Significant disparities were observed in the bodily pain sub-dimension between single and married individuals; $t(198) = -9.397$; $p < 0.05$. The bodily pain score of single women ($M = 88.86$, $SD = 16.77$) surpassed that of married women ($M = 57.22$, $SD = 22.33$). Similarly, a significant difference was found in the general health perception sub-dimension between single and married individuals; $t(198) = -6.344$; $p < 0.05$. Single individuals exhibited a higher general health perception ($M = 69.62$, $SD = 11.76$) compared to married individuals ($M = 55.06$, $SD = 15.12$).

Furthermore, a significant difference was detected in the vitality scores of single and married individuals; $t(198) = -4.760$; $p < 0.05$. The vitality scores of single individuals were higher than those of married individuals. The comparison of participants' marital status and QoL sub-dimensions are presented in Table 3 below.

Table 3. Comparison of the Participants' Marital Status and Quality of Life Sub-Dimensions

Variables	Marital Status	n	Mean (MET-min/week)	SS (MET-min/week)	t	Sd	p
Physical Functioning	Married	147	72,27	15,20	-6,50	198	0,00*
	Single	53	88,49	16,51			
Physical Role Difficulty	Married	147	73,25	37,31	-3,91	198	0,00*
	Single	53	94,33	20,00			
Emotional Role Difficulty	Married	147	60,31	40,67	1,10	198	0,27
	Single	53	53,55	30,13			
Mental Health	Married	147	49,26	13,48	-6,64	198	0,00*
	Single	53	62,89	10,65			
Social Functioning	Married	147	53,23	25,13	-5,62	198	0,00*
	Single	53	73,58	12,89			
Bodily Pain	Married	147	57,22	22,33	-9,39	198	0,00*
	Single	53	88,86	16,77			
General Health Perception	Married	147	55,06	15,12	-6,34	198	0,00*
	Single	53	69,62	11,76			
Vitality	Married	147	43,48	15,62	-4,76	198	0,00*
	Single	53	54,71	11,82			

* $p < 0,05$; ** $p < 0,01$

Lastly, the correlation between participants' physical activity levels and QoL sub-parameters was examined using Pearson correlation analysis. A significant and positive relationship was observed between participants' vigorous-intensity physical activity levels and the sub-dimensions of physical functioning ($r = 0.250$, $p < 0.01$), general health ($r = 0.231$, $p < 0.01$), and mental health ($r = 0.233$, $p < 0.01$). In terms of women's moderate-intensity activity level, a significant and positive correlation was found between the women's moderate-intensity activity level score and physical functioning ($r = 0.149$, $p < 0.05$). Similarly, a positive and significant relationship emerged between the level of walking and sub-dimensions including physical functioning ($r = 0.245$, $p < 0.01$), physical role difficulty ($r = 0.204$, $p < 0.01$), bodily pain ($r = 0.233$, $p < 0.01$), general health ($r = 0.289$, $p < 0.01$), social functioning ($r = 0.225$, $p < 0.01$), and mental health ($r = 0.199$, $p < 0.01$). However, a negative correlation was found between the level of walking and the sub-dimension of emotional role difficulty ($r = -0.202$, $p < 0.01$).

Regarding the sitting levels of the women in the study, a positive correlation was identified between their sitting levels and the bodily pain sub-dimension ($r = 0.263$, $p < 0.01$), while a negative correlation was found between sitting levels and the physical role difficulty sub-dimension ($r = -0.167$, $p < 0.05$). Furthermore, a positive and significant relationship was established between the total physical activity level and sub-dimensions including physical functioning ($r = 0.351$, $p < 0.01$), bodily pain ($r = 0.241$, $p < 0.01$), general health ($r = 0.337$, $p < 0.01$), social functioning ($r = 0.144$, $p < 0.01$), and mental health ($r = 0.269$, $p < 0.01$). Conversely, a negative correlation was found between the total physical activity level and the sub-dimension of emotional role difficulty ($r = -0.141$, $p < 0.05$). The association between participants' physical activity levels and QoL sub-dimensions is presented in Table 4 below.

Table 4. Relationship between Participants' Physical Activity level and Quality of Life Sub-Dimensions

Variables		Vigorous Intensity	Moderate Intensity	Walking	Sitting	Total PA
Physical Functioning	r	,250**	,14*	,24**	0,06	,35**
	p	0,00	0,03	0,00	0,34	0,00
Physical Role Difficulty	r	-0,01	-0,13	,20**	-,16*	0,05
	p	0,78	0,05	0,00	0,01	0,44
Bodily Pain	r	0,06	0,04	,23**	,26**	,24**
	p	0,36	0,49	0,00	0,00	0,00
General Health Perception	r	,23**	0,09	,28**	-0,02	,33**
	p	0,00	0,20	0,00	0,71	0,00
Social Functioning	r	-0,04	0,02	0,10	0,09	0,06
	p	0,51	0,72	0,13	0,18	0,40
Emotional Role Difficulty	r	-0,03	0,07	-,20**	-0,04	-,14*
	p	0,58	0,32	0,00	0,52	0,04
Mental Health	r	,23**	0,06	,19**	-0,06	,26**
	p	0,00	0,36	0,00	0,33	0,00

* $p < 0,05$; ** $p < 0,01$

DISCUSSION

Physical activity plays a pivotal role as a lifestyle habit that has the potential to enhance both health and quality of life (QoL). Furthermore, marital status significantly influences people's lives due to the opportunities and responsibilities it brings, impacting their engagement in physical activity (Sobal & Hanson, 2010). This study aimed to explore the correlation between physical activity levels and the QoL of women aged 18-45, while also comparing single and married individuals. Numerous studies with various age groups have demonstrated that physical activity improves QoL (e.g., studies in adults; Rejeski et al., 2002; Shibata, Oka, Nakamura, & Muraoka, 2007; studies in children; Chen, Sekine, Hamanishi, Yamagami, & Kagamimori, 2005; participants with a mean age of 44 years; Wendel-Vos, Schuit, Tjhuis, Kromhout, 2004).

In a systematic review of the relationship between physical activity and QoL among adults, Bize, Johnson, and Plotnikoff (2007) asserted that higher physical activity levels were associated with higher scores across various health-related QoL dimensions. While associations between health-related QoL dimensions and physical activity may vary, elevated levels of physical functioning and vitality consistently correlate with increased physical activity levels. A review conducted by Vagetti et al. (2014) focusing on the relationship between physical activity and health-related QoL among older individuals identified moderate associations between physical activity and different dimensions of QoL, including physical, emotional, general health, social relationships, pain, and environmental aspects. The authors posited that physical activity fosters physical independence by enhancing physical health and functional capacity—critical components for individual autonomy. These favorable adjustments in one's circumstances, they argued, contribute to an overall enhancement of general QoL and mental health. Prior research substantiates the existence of a positive correlation between physical activity and QoL. Nevertheless, the strength of this association varies across different sample groups (e.g., Rejeski et al., 2002; Shibata, Oka, Nakamura, & Muraoka, 2007).

Physical activity emerges as a pivotal lifestyle habit capable of bolstering both health and quality of life (QoL). Furthermore, marital status significantly impacts individuals'

lives, introducing opportunities and responsibilities that can influence their level of engagement in physical activity (Sobal & Hanson, 2010). This study aimed to explore the correlation between physical activity levels and the QoL of women aged 18-45, while also making a comparison between single and married individuals. A plethora of studies spanning various age groups have substantiated the notion that physical activity contributes to an improved QoL (e.g., studies in adults; Rejeski et al., 2002; Shibata, Oka, Nakamura, & Muraoka, 2007; studies in children; Chen, Sekine, Hamanishi, Yamagami, & Kagamimori, 2005; participants with an average age of 44 years; Wendel-Vos, Schuit, Tijhuis, Kromhout, 2004). In a systematic review elucidating the connection between physical activity and QoL among adults, Bize, Johnson, and Plotnikoff (2007) asserted that heightened physical activity levels correlated with elevated scores across a spectrum of health-related QoL dimensions. While the associations between health-related QoL dimensions and physical activity may exhibit variances, augmented physical functioning and vitality consistently corresponded with increased physical activity levels. A review undertaken by Vagetti et al. (2014), which scrutinized the nexus between physical activity and health-related QoL among older individuals, unearthed moderate associations between physical activity and diverse dimensions of QoL, encompassing the physical, emotional, general health, social relationships, pain, and environmental facets.

The authors contended that physical activity nurtures physical autonomy by bolstering physical health and functional capacity—fundamental elements for individual autonomy. These salubrious adaptations in one's circumstances, they propounded, catalyze an overarching augmentation in both general QoL and mental health. Previous research substantiates the existence of a positive correlation between physical activity and QoL. Nevertheless, the potency of this correlation varies among diverse sample groups (e.g., Rejeski et al., 2002; Shibata, Oka, Nakamura, & Muraoka, 2007).

Limitations: The presented study has a few limitations. Firstly, it focused on participants in specific districts of Ankara, limiting the generalizability to the wider population. Including diverse districts would enhance the results' applicability. Secondly, the age range (18-45) restricts broader insights. Studying a wider age spectrum would provide a comprehensive view. Thirdly, cross-sectional design hindered establishing causality. Longitudinal studies are crucial. Fourthly, self-reported data pose bias; objective measures are more reliable. Fifthly, sample bias due to specific districts and age groups affects generalization. Sixthly, causality wasn't definitively established; other factors could impact it. Seventh, social desirability might overestimate responses. Eighth, unaccounted variables like socioeconomic status could affect outcomes. Ninth, focusing on women limits gender comparisons. In summary, while valuable insights are gained, considering these limitations is essential for a comprehensive understanding.

Conclusions: In conclusion, this study has demonstrated that various factors such as marital status, educational background, occupational status, presence of chronic illnesses, medication usage, alcohol, and tobacco consumption, and place of residence have an impact on participants' levels of physical activity and sub-dimensions of

quality of life. These findings emphasize the significant role of individuals' lifestyles and personal characteristics in the relationship between physical activity levels and quality of life. In this context, considering personal factors is crucial for enhancing individuals' quality of life and optimizing their levels of physical activity. To summarize, as a result, a variety of factors influence people's QoL. Physical activity is an important tool that enables us to improve our QoL. Therefore, it should be incorporated into daily life for both individual and societal health benefits, and physical activity should be provided by considering each person's unique physical abilities and developmental stage.

Ethical Considerations: Institutional permission was obtained for the study with the information of Lokman Hekim University, Non-invasive clinical research ethics committee Number: 2021/97, Date: 09.08.2021.

Conflict of Interest: There is no conflict of interest between the authors.

Contribution of authors: All authors contributed equally to the literature and analysis of the study.

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References

- Bell, S., & Lee, C. (2005). Emerging adulthood and patterns of physical activity among young Australian women. *International Journal of Behavioral Medicine*, 12(4), 227-35. <https://pubmed.ncbi.nlm.nih.gov/16262541/>
- Bize, R., Johnson, J. A., & Plotnikoff, R. C. (2007). Physical activity level and health-related quality of life in the general adult population: a systematic review. *Preventive Medicine*, 45(6), 401-415. <https://pubmed.ncbi.nlm.nih.gov/17707498/>
- Chen, X., Sekine, M., Hamanishi, S., Yamagami, T., & Kagamimori, S. (2005). Associations of lifestyle factors with quality of life in Japanese children: A 3-year follow-up of the toyama birth cohort study. *Care, Health, and Development*, 31(4), 433-439. Doi:10.1111/j.1365-2214.2005.00529.x
- Çat G., (2021). Investigation of Eating Behaviors, Physical Activity Levels and Quality of Life of Office Workers. (Unpublished Master's Thesis) Mersin University, Institute of Educational Sciences, Department of Physical Education and Sports, Mersin.
- Gill, D. L., Hammond, C. C., Reifsteck, E. J., Jehu, C. M., Williams, R. A., Adams, M. M., ... & Shang, Y. T. (2013). Physical activity and quality of life. *Journal of Preventive Medicine and Public Health*, 46(Suppl 1), S28 S34. Doi: 10.3961/jpmph.2013.46.S.S28
- Gill, D., Williams, K., Williams, L., Kim, B. J., Schultz, A. M., Araki, K., & Kamphoff, C. (2003, June). Physical activity Behaviors and values for older women. In *Journal of Sport & Exercise Psychology* (Vol. 25, Pp. S59-S60). 1607 N Market St, Champaign, IL 61820-2200 Usa: Human Kinetics Publ Inc.
- Gopinath, B., Kifley, A., Flood, V. M., & Mitchell, P. (2018). Physical activity as a determinant of successful aging over ten years. *Scientific Reports*, 8(1), 1-5. Doi: 10.1038/s41598-018-28526-3
- Hull, E. E., Rofey, D. L., Robertson, R. J., Nagle, E. F., Otto, A. D., & Aaron, D. J. (2010). Influence of marriage and parenthood on physical activity: a 2-year prospective analysis. *Journal of Physical Activity and Health*, 7(5), 577-583. DOI: 10.1123/jpah.7.5.577

- International Physical Activity Questionnaire. Retrieved in August 12, 2022 from International Physical Activity Questionnaire (google.com)
- Kallings, L. V., Leijon, M., Hellénus, M. L., & Ståhle, A. (2008). Physical activity on prescription in primary health care: a follow-up of physical activity level and quality of life. *Scandinavian Journal of Medicine & Science in Sports*, 18(2), 154-161. DOI:10.1111/j.1600-0838.2007.00678.x
- Kaplan, M. S., Newsom, J. T., McFarland, B. H., & Lu, L. (2001). Demographic and psychosocial correlates of physical activity in late life. *American Journal of Preventive Medicine*, 21(4), 306-312. DOI: 10.1016/s0749-3797(01)00364-6
- King, A. C., Kiernan, M., Ahn, D. K., & Wilcox, S. (1998). The effects of marital transitions on changes in physical activity: results from a 10-year community study. *Annals of Behavioral Medicine*, 20(2), 64-69. Doi: 10.1007/BF02884450
- Kotarska, K., Paczyńska-Jędrycka, M., Sygit, K., Kmieć, K., Czerw, A., & Nowak, M. A. (2021). Physical Activity and the Quality of Life of Female Students of Universities in Poland. *International Journal of Environmental Research and Public Health*, 18(10), 5194. Doi: 10.3390/ijerph18105194
- McConley, R. L., S. Mrug, M. J. Gilliland, R. Lowry, M. N. Elliott, M. A. Schuster, et al. 2011. Mediators of maternal depression and family structure on child BMI: Parenting quality and risk factors for child overweight. *Obesity*, 19:345-52. <https://doi.org/10.1038/oby.2010.177>
- Nomaguchi, K. M. and Bianchi, S. M. (2004). Exercise Time: Gender Differences in the Effects of Marriage, Parenthood, and Employment. *Journal of Marriage and Family*, 66, 413-430. <https://doi.org/10.1111/j.1741-3737.2004.00029.x>
- Öztürk, M. (2005). The Validity and Reliability of the International Physical Activity Questionnaire (Ipaq) and Determination of Physical Activity Level in University Students. (Unpublished Master's Thesis). Hacettepe University, Institute of Health Sciences, Ankara.
- Papavasilou, K. A., (2010). Egzersiz ve yaşam kalitesi. *Balkan Medical Journal*, 2010(1), 54-56. <https://dergipark.org.tr/tr/download/article-file/42708>
- Pettee, K. K., Brach, J. S., Kriska, A. M., Boudreau, R., Richardson, C. R., Colbert, L. H., Satterfield, S., Yisser, M., Harris, T., Ayonayon, H. N., & Newman, A. B. (2006). Influence of marital status on physical activity levels among older adults. *Medicine and Science in Sports and Exercise*, 38(3): 541-546. Doi: 10.1249/01.mss.0000191346.95244.f7
- Pucci, G. C. M. F., Rech, C. R., Fermino, R. C., & Reis, R. S. (2012). Association between physical activity and quality of life in adults. *Revista de Saude Publica*, 46(1), 166-179. Doi: 10.1590/s0034-89102012000100021
- Rejeski, W. J., Focht, B. P., Messier, S. P., Morgan, T., Pahor, M., & Penninx, B. (2002). Obese, older adults with knee osteoarthritis: Weight loss, exercise and quality of life. *Health Psychology*, 21(5), 419-426. Doi: 10.1037//0278-6133.21.5.419
- Segar, M. L., Eccles, J. S., & Richardson, C. R. (2011). Rebranding exercise: closing the gap between values and behavior. *International Journal of Behavioral Nutrition and Physical Activity*, 8(1), 1-14. <https://ijbnpa.biomedcentral.com/articles/10.1186/1479-5868-8-94>
- Shibata, A., Oka, K., Nakamura, Y., & Muraoka, I. (2007). Recommended level of physical activity and health-related quality of life among Japanese adults. *Health and Quality of Life Outcomes*, 5(1), 1-8. Doi: 10.1186/1477-7525-5-64
- Shoup, J. A., Gattshall, M., Dandamudi, P., & Estabrooks, P. (2008). Physical activity, quality of life, and weight status in overweight children. *Quality of Life Research*, 17(3), 407-412. Doi: 10.1007/s11136-008-9312-y
- Sobal, J., & Hanson, K. (2010). Marital status and physical activity in US adults. *International Journal of Sociology of the Family*, 36(2), 181-198. Doi:10.2307/23028828
- Sternfeld, B., Ainsworth, B. E., & Quesenberry Jr, C. P. (1999). Physical activity patterns in a diverse population of women. *Preventive Medicine*, 28(3), 313-323. Doi: 10.1006/pmed.1998.0470
- Vagetti, G. C., Barbosa Filho, V. C., Moreira, N. B., Oliveira, V. D., Mazzardo, O., & Campos, W. D. (2014). Association between physical activity and quality of life in the elderly: asystematic review, 2000-2012. *Brazilian Journal of Psychiatry*, 36(1), 76-88. Doi: 10.1590/1516-4446-2012-0895
- Wendel-Vos, G. W., Schuit, A. J., Tijhuis, M. A. R., & Kromhout, D. (2004). Leisure time physical activity and health-related quality of life: cross-sectional and longitudinal associations. *Quality of Life Research*, 13(3), 667-677. Doi: 10.1023/B:QURE.0000021313.51397.33
- World Health Organization. *Global Recommendations on Physical Activity for Health*; WHO: Geneva, Switzerland, 2010. <https://doi.org/10.1287/isre.11.4.342.11872>
- Yüksel, S., (2020). The Relationship Between Physical Activity Levels and Quality of Life of Academic Staff Working at the University (Unpublished Specialization Thesis). Sakarya University of Applied Sciences Graduate Education Institute. Sakarya.
- Zimmermann, E., Ekholm, O., Gronbaek, M., & Curtis, T. (2008). Predictors of Changes in Physical Activity in a Prospective Cohort Study of the Danish Adult Population. *Scandinavian Journal of Public Health*, 36(3), 235-241. Doi: 10.1177/1403494808086982

GENİŞLETİLMİŞ ÖZET

Çalışmanın Amacı Çalışmanın amacı, 18 ila 45 yaş arasındaki kadınlar arasında fiziksel aktivite seviyeleri ile yaşam kalitesi (QoL) arasındaki ilişkiyi araştırmaktır. Ayrıca çalışma, aynı yaş aralığındaki bekar ve evli bireyler arasındaki yaşam kalitesi ve fiziksel aktivite düzeylerindeki farkları karşılaştırmayı amaçlamaktadır. Bu özel demografik grubu odak noktası olarak seçerek, fiziksel aktivite alışkanlıklarının üreme ve erken yetişkinlik yıllarındaki kadınların iyi olma ve yaşam kalitesi üzerindeki etkisini anlamaya katkıda bulunmayı hedeflemektedir. Çalışma, fiziksel aktivite ile QoL'nin farklı boyutları arasındaki ilişkiyi aydınlatarak mevcut literatürdeki bir boşluğu doldurmayı amaçlamaktadır. Sonuç olarak, bu çalışmanın bulguları, bu yaş aralığındaki kadınlar arasında hem fiziksel aktiviteyi hem de genel iyi olmayı teşvik eden hedefli müdahaleler ve programların tasarımı için etkileri olabilir.

Araştırma Problemleri Bu çalışmanın ana amacı, kadınların yaşam kalitesi ile fiziksel aktivite seviyeleri arasındaki ilişkiyi incelemektir. Bu bağlamda, aşağıdaki araştırma problemleri ortaya çıkabilir: 1) Kadınların Fiziksel Aktivite Seviyeleri ile Yaşam Kalitesi Arasında İlişki: Çalışma, 18 ila 45 yaş arasındaki kadınlar arasında fiziksel aktivite düzeyleri ile yaşam kalitesi arasındaki ilişkiyi anlamayı amaçlıyor.

Hangi fiziksel aktivite düzeylerinin daha yüksek yaşam kalitesi ile ilişkili olduğu ve nasıl bir korelasyon gösterdiği belirlenmeye çalışılıyor. 2) Bekar ve Evli Bireyler Arasındaki Farklılıklar: Çalışma, aynı yaş aralığındaki bekar ve evli kadınlar arasındaki yaşam kalitesi ve fiziksel aktivite düzeylerindeki farkları incelemeyi hedefliyor. Bu farklılıklar nelerdir ve bu iki grup arasında hangi faktörler etkili olabilir? 3) Fiziksel Aktivite ve Yaşam Kalitesi İlişkisindeki Boyutlar: Hangi yaşam kalitesi boyutları, kadınların fiziksel aktivite düzeyleri ile daha fazla ilişkilidir? Çalışma, fiziksel aktivitenin farklı yaşam kalitesi boyutları üzerindeki etkisini ayrıntılı olarak incelemektedir. Bu araştırma problemleri, çalışmanın temel odak noktalarını ve sorunlarını belirlemeye yardımcı olmaktadır. Araştırmanın bu sorunları ele alarak literatüre ve bilimsel anlayışa katkı sağlaması amaçlanmaktadır.

Literatür Araştırması Fiziksel aktivite, yaşlanma sürecine bağlı sorunları önlemede ve sağlıklı yaşlanmayı desteklemede hayati bir rol oynar (Gopinath, Kifley, Flood, Mitchell, 2018). Aynı zamanda düzenli fiziksel aktivite ruh halini ve yaşam kalitesini olumlu yönde etkiler. Hareketsizlik ise diyabet, kanser, kardiyovasküler hastalıklar gibi olumsuz sağlık sonuçlarına ve daha kısa bir yaşama neden olabilir (WHO, 2010). Bu nedenle aktif bir yaşam tarzını sürdürmek, fiziksel aktivitenin faydalarını en üst düzeye çıkarmak ve hareketsizliğin olumsuz etkilerini önlemek açısından büyük önem taşır. İnsanlar aktivitelerle uğraşmayı, yaşam kalitesini artırdığı için sürdürürler (Gill et al., 2013). Özetle, önerilen fiziksel aktivite seviyelerine ulaşan bireylerde genel sağlıklı ilgili yaşam kalitesi ve algılanan sağlık durumunun iyileşme olasılığı daha yüksektir (Kallings, Leijon, Hellénus, & Ståhle, 2008).

"Yaşam kalitesi" (QoL) terimi, bireyin yaşamdan aldığı zevk ve memnuniyet düzeyini ifade eden çok boyutlu bir kavramdır (Shoup, Gattshall, Dandamudi, & Estabrooks, 2008). Bu kavram, kişisel iyi olma durumuyla ilgilidir ve alışkanlıklar, yaşam tarzı, kişisel memnuniyet, boş zaman aktiviteleri ve sağlık gibi geniş bir yelpazeyi kapsar (Pucci, Rech, Fermino, & Reis, 2012). Fiziksel aktivitede bulunan bireyler, yaşam kalitesinde pozitif bir artış yaşarlar ve daha mutlu bir yaşam sürerler (Papavasiliou, 2010). Fiziksel aktivitenin yaşam kalitesini artırmasıyla daha iyi bir yaşam kalitesi de katılımı teşvik ederek pozitif bir sağlık döngüsü oluşturur (Gill et al., 2013).

Yöntem Çalışmamız, 2021-2022 eğitim öğretim yılında Ankara ili Çankaya ve Mamak ilçelerinde yaşayan, 18-45 yaş aralığındaki kadınları kapsayan bir çalışmadır. Bu çalışma kapsamında, 200 katılımcının sosyodemografik verileri, uluslararası fiziksel aktivite kısa ölçeği ve yaşam kalitesi ölçeği içeren anketler yüz yüze görüşme yöntemiyle toplanmıştır. Çalışmaya katılanların 147'si evli (%73.5), 124'ü lisans mezunu (%62), 178'i çalışan (%89), 181'i kronik hastalığı olmayan (%90.5), 165'i ilaç kullanmayan (%82.5), 118'i sigara içmeyen (%59) ve 155'i alkol kullanmayan (%77.5) olarak tespit edilmiştir. Ankara ili Çankaya ilçesinde 117 kişi (%58.5) yaşarken, Mamak ilçesinde 83 kişi (%41.5) ikamet etmektedir. Araştırmada fiziksel aktivite düzeyi ile yaşam kalitesini belirleyen parametreler, sosyodemografik faktörlerle karşılaştırıldığında, bekâr olma, kronik hastalığın

olmaması ve ilaç kullanmama durumları tüm başlıklarda anlamlı bir şekilde yüksek bulunmuştur ($p<0.05$). Ayrıca fiziksel aktivite düzeyi ile yaşam kalitesinin alt parametreleri arasında anlamlı ilişkiler tespit edilmiştir ($p<0.05$).

Katılımcılardan elde edilen veriler SPSS 26.00 programı kullanılarak analiz edilmiştir. İlk olarak, varsayımların kontrolü ve analizlerin uygunluğu için aşırı değer analizleri yapılmış ve boş veriler ile Mahalanobis uzaklığı göz önünde bulundurularak analizlerin uygunluğu değerlendirilmiştir. Bu süreçlerin ardından, geçersiz veya eksik cevapları olan 12 katılımcının verileri dışlanmış ve analizler geriye kalan 200 katılımcının verileri üzerinde yapılmıştır. Verilerin normal dağılıma uygunluğu Shapiro-Wilk testi kullanılarak değerlendirildi. Verilerin normal dağılıma sahip olduğu gözlemlendi. Bu doğrultuda, medeni durum değişkenlerine göre farklılıkları incelemek için bağımsız t-testi kullanılmış, Katılımcıların Fiziksel Aktivite düzeyi ile Yaşam Kalitesi Alt Boyutları arasında olası ilişkileri belirlemek için ise Pearson testi uygulanmıştır ($p<0.05$, $p<0.01$), istatistiksel olarak anlamlı kabul edilmiştir.

Sonuç ve Değerlendirme Ankara ili Çankaya ve Mamak ilçelerinde yaşayan 18-45 yaş aralığındaki kadınların fiziksel aktivite düzeyleri ile yaşam kalitesi alt parametreleri arasında olumlu ve anlamlı bir ilişki tespit edilmiştir. Benzer konudaki literatürdeki araştırmaların sayısı oldukça sınırlıdır. Bu nedenle, farklı yaş grupları ve mesleklerden katılımcıların dahil olduğu benzer çalışmaların desteklenmesi ve artırılması, obezite ve buna bağlı sorunların önlenmesi ve iyileştirilmesine önemli katkılar sağlayabilir.