



Investigation of Physical Activity Level and Quality of Life School Administrators (Sample of Alanya)

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Abstract

Developing technology and innovations in all areas of life makes daily life easier and faster. However, it is known that a sedentary lifestyle causes inactivity, and this leads to significant health problems. The aim of this study is to examine the physical activity levels and quality of life of school administrators, taking into account their demographic characteristics. A total of 110 school administrators 62 male and 48 female, working in Alanya district of Antalya city, participated in the study. The short form of the International Physical Activity Questionnaire was used to determine the physical activity levels of the participants, while the Quality of Life SF-36 scale assessed their quality of life. Mann-Whitney U test, Kruskal-Wallis, and Spearman correlation analysis were used to analyze the data. In the study, it was determined that the total physical activity score of the participants was 1772.3864 ± 1465.67654 MET-min/week, and 60% of their physical activity levels were moderate. In addition, when the participants were compared based on demographic information, it was observed that physical activity levels differed only by gender ($p < 0.05$), while no statistically significant difference was found in other variables ($p > 0.05$). When the demographic information of the participants was compared by gender, marital status, age, and weight status, it was found that there was a statistically significant difference in the sub-dimensions of quality of life ($p < 0.05$), while no significant difference was found in other variables ($p > 0.05$). In addition, a significant positive correlation was found between the participants' total physical activity scores and quality of life scores ($p < 0.05$). As a result, the physical activity levels of school administrators are at a medium level, and as their physical activity levels increase, their quality of life increases.

Anahtar kelimeler: Administrator, Physical activity, Quality of life.

Okul Yöneticilerinin Fiziksel Aktivite Düzeyi ve Yaşam Kalitesinin İncelenmesi (Alanya Örneği)

Özet

Gelişen teknoloji ve hayatın her alanındaki yenilikler gündelik hayatı daha kolay ve hızlı hale getirmektedir. Bununla birlikte, kolay hayatın hareketsizliğe neden olduğu ve bu durumun önemli sağlık sorunlarına yol açtığı bilinmektedir. Bu araştırmanın amacı okul yöneticilerinin fiziksel aktivite düzeyleri ve yaşam kalitelerini demografik özellikleri de dikkate alınarak incelemektir. Araştırmaya Antalya'nın Alanya ilçesinde görev yapan 62 erkek, 48 kadın olmak üzere toplam 110 okul yöneticisi katılmıştır. Katılımcıların fiziksel aktivite düzeylerini belirlemek için Uluslararası Fiziksel Aktivite kısa formu, yaşam kalitelerini belirlemek içinse Yaşam kalitesi SF-36 ölçeği kullanılmıştır. Verilerin analizinde Man Whitney U Test, Kruskal Wallis ve Spearman korelasyon analizi yapılmıştır. Araştırmada katılımcıların fiziksel aktivite toplam skorunun $1772,3864 \pm 1465,67654$ MET-

dk/hafta olduđu, fiziksel aktivite düzeylerinin ise %60' ın orta seviye olduđu tespit edilmiştir. Bunun yanı sıra katılımcılar demografik bilgiler açısından karşılaştırıldığında sadece cinsiyet açısından fiziksel aktivite düzeylerinde fark olduđu ($p<0.05$), diğ er değı şkenlerde ise istatistiksel olarak anlamlı bir fark olmadığı görülmüştür ($p>0.05$). Katılımcıların demografik bilgilerinden cinsiyet, medeni durum, yaş ve kilo durumu açısından karşılaştırıldıklarında yaşam kalitesinin alt boyutlarında istatistiksel olarak anlamlı fark olduđu ($p<0.05$), diğ er değı şkenlerde ise anlamlı bir fark tespit edilmemiştir ($p>0.05$). Ayrıca katılımcıların fiziksel aktivite toplam puan ortalamalarıyla yaşam kalitesi puanları arasında pozitif yönde anlamlı ilişki tespit edilmiştir ($p<0.05$). Sonuç olarak okul yöneticilerinin fiziksel aktivite düzeylerinin orta seviye olduđu bunun yanı sıra fiziksel aktivite düzeyleri arttıkça yaşam kalitelerinin de arttığı söylenebilir.

Keywords: Yönetici, Fiziksel aktivite, Yaşam kalitesi.

INTRODUCTION

Rapid and inevitable technological and life changes not only make life easier, but also lead to the emergence of a fixed daily life in the society, while inactivity causes negative effects on the quality of life (Özer & Baltacı). Scientists are of the opinion that sedentary and irregular life causes physical and psychological effects, and this is an issue that should be emphasized and researched. Not moving enough affects people of all ages and levels, and it is even alarming that some diseases seen in the elderly are now being seen in very young people (Hendelman et al., 2000).

Human health is affected by many reasons such as the conveniences offered to human beings by technology, insufficient information on physical activity, and poor quality living conditions. Inactivity increases the incidence of serious chronic diseases in society. Physical inactivity creates inevitable health problems for people of all age groups. Therefore, even starting from pregnancy and infancy, it is of great importance to promote an active life. Inadequate physical activity accelerates aging and increases the rate of occurrence of various chronic diseases. People are exposed to these diseases from a young age (Robinson & Miller, 2004).

Factors such as changing living conditions and habits, insufficient physical activity, irregular and unhealthy nutrition, and pervasive stress negatively affect human health, and can cause health to worsen day by day (Vural, 2010). As a result, various diseases and negative impacts, as well as a restless and disorganized social life devoid of enjoyment, can emerge. Such unhealthy and negative living conditions seem to be largely eliminated in societies that move sufficiently daily, and regular sports and physical activity is an important factor in overcoming such problems (Tümer, 2007). Physical activity and adequate movement are not performed in sedentary desk jobs. Studies have shown that desk jobs that do not provide adequate physical activity trigger negative physical and psychological health problems (Hendelman et al., 2000). School administrators coordinate communication among the people working in the school, assume managerial responsibility in achieving the vision and mission of the school, evaluate the activities of the institution, try to maximize school unity, impact school culture significantly with their tasks, and have school management skills (Özdemir et al., 2015). In various studies, it is stated that the quality of life of school administrators is affected by physical, social, and emotional factors (Goldbeck et al., 2007; Janse et al., 2004).

It is seen that different definitions of quality of life are made in the literature due to various reasons, such as covering different fields and variations across cultures. In general, when quality of life is mentioned, expressions such as functional sufficiency, absence of complaints related to disease and treatment, psychological, physical functions, and social relations come to mind (Müezzinoğlu, 2005). Quality of life is one of the most important goals that people all over the World pursue. Although there is no definite standard when examining quality of life, certain criteria based on achieving desired levels in education, health, physical, psychological, and social areas are usually considered (Boylu & Paçacıoğlu, 2016). The way a person perceives their life in the context of meeting their expectations within the framework of their values and beliefs expresses the quality of life (Eriş, 2012). In the literature, it is seen that explanations describe the quality of life through normative thoughts rather than personal

perspectives, associating with satisfaction from preferences and emphasizing individual experiences social or individual dimensions (Diener et al., 1999).

Administrators in educational institutions raising awareness among students about the necessity and importance of physical activity can also set an example for the acquisition or maintenance of a lifelong sports culture. In addition, inadequate physical activity and the various problems it brings will negatively impact the quality of life of school administrators. In this context, knowing the physical activity levels of school administrators and examining their quality of life will shed light on studies concerning this professional group. Therefore, our study aims to examine the physical activity levels and quality of life of school administrators by considering demographic characteristics.

METHOD

Research Design

The research was conducted using the survey model based on the descriptive method. The general survey model is explained as a research method that aims to define an existing situation (Karasar, 2005). A random sampling technique was used to determine the sample of the study.

Participants

A random sampling technique was used to determine the sample of the study. The population of the research consists of school administrators working in the Alanya district of Antalya province, Turkey. The sample consists of 110 school administrators (age mean 40.80 ± 6.02 years), 62 male (age mean 40.90 ± 5.60 years), and 48 female (age mean 40.68 ± 6.59 years).

Inclusion criteria

Serving as an administrator for at least one year, voluntary participation.

Exclusion criteria

Not volunteering, retiring.

Ethics committee permission

The research was conducted with the permission of the Social Sciences and Humanities Scientific Research Ethics Committee at Alanya Alaaddin Keykubat University (dated 12.02.2024 and numbered 2024/09).

Data collection tools

Within the scope of the study, a personal information form developed by the researcher was used to collect data on the demographic characteristics of the participants (gender, age, weight, marital status, educational status, smoking, and years of seniority). The short form of the International Physical Activity Questionnaire (IPAQ) was used in the study; its international validity and reliability were established by Craig et al. (2003), and its Turkish validity and reliability study was conducted by Öztürk (2005) on university students.

The questionnaire includes information about the time spent in sitting, walking, moderate activities, and vigorous activities in the last 7 days to assess physical activity. In the

evaluation of activities, each activity must be performed for at least 10 minutes. A score is obtained as 'MET-minutes/week' by multiplying the number of minutes per day, the number of days per week, and MET values. In the calculation of the walking score, walking time (minutes) was multiplied by 3.3 METs. In the calculation, 4 METs for moderate-intensity activity and 8 METs for vigorous-intensity activity were taken into account. Using these MET values, the total MET-minutes per week was calculated by summing walking, moderate, and vigorous intensity activity scores. In addition, three physical activity categories, low, moderate, and high levels were used to classify the physical activity levels of the participants (Savcı et al., 2006; Ipaq, 2005). The physical activity levels of the participants were evaluated according to category criteria. The categorical score is proposed in three levels. These are;

Category 1: Low

This is the lowest level of physical activity. Those individuals who do not meet criteria for categories 2 or 3 are considered low/inactive.

Category 2: Moderate

Any one of the following three criteria:

- 3 or more days of vigorous activity of at least 20 minutes per day or
- 5 or more days of moderate-intensity activity or walking of at least 30 minutes per day or
- 5 or more days of any combination of walking, moderate-intensity or vigorous intensity activities achieving a minimum of at least 600 MET-min/week.

Category 3: High

Any one of the following two criteria:

- Vigorous-intensity activity on at least 3 days and accumulating at least 1500 MET-minutes/week or
- 7 or more days of any combination of walking, moderate-intensity or vigorous intensity activities achieving a minimum of at least 3000 MET-minutes/week

In the study, the SF-36 quality of life scale, which was developed by Ware and Sherbourne (1992) and whose validity and reliability study in Turkey was conducted by Koçyiğit et al. (1999), was utilized. The scale consists of eight sub-dimensions and 36 items in total. The questions in the scale were prepared using three, five, or six-point Likert type; the fourth and fifth question groups were prepared in a yes-no format. The calculation provides the total score, separately for each sub-dimension. The sub-dimensions are named physical functioning (10 items), physical role difficulties (4 items), emotional role difficulties (3 items), vitality (4 items), mental health (5 items), social functioning (2 items), pain (2 items), and general health (5 items).

Data analysis

SPSS 24 statistical package was used for data analysis. In data analysis, percentage (%), frequency (f), arithmetic mean (mean), and standard deviation (SD) were used as descriptive statistics to define independent variables. The Kolmogorov-Smirnov (K-S) test was used to

determine whether the data conformed to the normal distribution, and since the data did not show normal distribution, the Mann-Whitney U test was used for bivariate comparisons and the Kruskal-Wallis-test was used for multiple comparisons. Spearman correlation analysis was used to check the relationship between variables. The statistical significance value was accepted as $p < 0.05$.

FINDINGS

Table 1. Demographic characteristics of the participants

Gender	F	%
Female	48	43.6
Male	62	54.4
Total	110	100
Age	F	%
21-30 years	2	1.8
31-40 years	47	42.7
41-50 years	50	45.5
51 years and older	11	10.0
Total	110	100.0
Marital status	F	%
Married	73	66.4
Single	37	33.6
Total	110	100.0
Education status	F	%
Bachelor	86	66.4
Master	24	33.6
Total	110	100.0
Duration of being an administrator	F	%
1-10 years	35	31.8
11-20 years	39	35.5
21-30 years	28	25.5
31 years and more	8	7.3
Total	110	100.0
Cigarette smoking	F	%
No	77	70.0
Yes	33	30.0
Total	110	100.0
Weight	F	%
51-60 kg	26	23.6

61-70 kg	41	37.3
71-80 kg	30	27.3
81-90 kg	7	6.4
91 kg and more	6	5.5
Total	110	100.0

Table 1 presents information on the demographic characteristics of the participants. When the table is examined, it is seen that 43.6% of the participants are female and 56.4% are male school administrators, and 66.4% are married and 33.6% are single, respectively. When the age range is analyzed, it is seen that 1.8% are between the ages of 21-30, 42.7% are 31-40, 45.5% are 41-50, and 10.0% are 51 years and older.

Table 2. Mean physical activity scores of participants (MET-min/week)

IPAQ	Mean±SD
Walking (MET-min/weeks)	726.7500±536.93314
Moderate (MET-min/weeks)	425.2727±470.92084
Vigorous-intensity (MET-min/weeks)	620.3636±857.72279
Total (MET-min/weeks)	1772.3864±1465.67654
Sitting (MET-min/weeks)	1884.2727±921.07880

Examination of Table 2 reveals that the mean weekly physical activity score of the participants according to the IPAQ is 1772.3664 MET-min/week. The highest mean belongs to walking with 726.7500±536.93314 MET-min/week, and the lowest mean belongs to moderate physical activity with 425.2727 MET-min/week.

Table 3. Categorical evaluation of participants' physical activity levels

LEVEL	Female		Male		Total	
	N	%	N	%	N	%
Low	15	31.25	9	14.51	24	21.81
Moderate	27	56.25	39	62.90	66	60.00
High	6	12.5	14	22.58	20	18.18
Total	48	100	62	100	110	100

When Table 3 is analyzed, it is seen that 21.8% of the participants are at a low level, 60.0% are at a moderate level, and 18.8% are at a high level. In addition, 56.25% of women are at a moderate level, while 60% of men are at the same level.

Table 4. Comparison of the demographic characteristics of the participants according to the IPAQ total score

	Variable	N	Mean±SD	p
Gender	Female	48	1394.708 ±991.82758	0.03
	Male	62	2064.782 ±3879.68771	
Marital status	Married	73	1738.0753±935.20033	0.752
	Single	37	1840.0811±897.28645	
Age	21-40 years	49	1758.9388±1519.0110	0.687
	41 years and older	61	1783.1885±1434.0131	
Weight	51-60 kg	26	1384.4615± 199.03066	0.714
	61-70 kg	41	1824.3293± 233.02340	
	71-80 kg	30	2096.9500± 333.90437	
	81-90 kg	7	1333.2143± 262.99796	
	91 kg and more	6	1988.0000± 595.49643	
Educational Status	Bachelor	86	1603.5988±890.83265	0.065
	Master	24	2377.2083±1042.32521	
Cigarette smoking	No	77	1880.9286±901.02215	0.428
	Yes	33	1519.1212±930.97548	
Duration of being an administrator	1-10 years	35	1929.6429±1534.38960	0.717
	11-20 years	39	1921.0000±1686.87046	
	21-30 years	28	1471.1786±1128.74951	
	31 years and more	8	1414.1250±947.35786	

p<0.05

When Table 4 is analyzed in terms of gender and the total score of weekly physical activities is taken into consideration, women have 1394.7 MET-min/week and men have 2064.7 MET-min/week in the overall average of IPAQ. There is no statistically significant difference between male and female participants ($p>0.05$). In terms of marital status, when the total score of weekly physical activities is taken into consideration, the overall mean of IPAQ is 1738.0 MET-min/week in married people and 1840.0 MET-min/week in single people; there is no significant difference between married and single people ($p>0.05$). Considering the total weekly physical activity score in terms of age range, it is seen that the overall mean of IPAQ is 1758.93 MET-min/week in the 21-40 age range and 1783.18 MET-min/week in the 41 and older age range. There is no difference between them in terms of age ($p>0.05$).

In terms of educational status, when the total score of weekly physical activities is taken into consideration, it is seen that the overall average of IPAQ is 1603.59 MET-min/week in bachelor's degree graduates and 2377.20 MET-min/week in master's degree graduates. There is a significant difference between bachelor's degree graduates and master's degree graduates, and it is understood that master's degree graduates are more active. However, there is no significant difference ($p>0.05$). When the total score of weekly physical activities is taken into consideration in terms of smoking, it is seen that the overall mean of IPAQ is 1519.1 MET-min/week for smokers and 1880.9 MET-min/week for non-smokers, and there is no significant difference between smokers and non-smokers ($p>0.05$). In terms of seniority, when the total score of weekly physical activities is taken into consideration, it is seen that those with a seniority of 1-10 years have 1929.6 MET-dk/week, those with a seniority of 11-20 years have 1921.0 MET-dk/week, those with a seniority of 21-31 years have 1471.1 MET-dk/week, and those with a seniority of more than 31 years have 1772.3 MET-dk/week in the IPAQ general average. There is no significant difference between the seniorities, as indicated by a significance value of $p>0.05$. In terms of the weight of the participants, when the total score of weekly physical activities is considered, it is seen that in the general average of IPAQ, people between 51-60 kg have 1384.4 MET-dk / week, people between 61-70 kg have 1824.3 MET-dk / week, people between 71-80 kg have 2096.9 MET-dk / week, people between 81-90 kg have 1333.2 MET-dk / week and people with a weight over 91 have 1988.0 MET-dk / week. There is no significant difference between seniority because the significance value is $p>0.05$.

Table 5. Comparison of quality of life according to gender variable

	Gender	N	Mean \pm SD	Z	p
Physical functioning	Female	48	78.5417 \pm 15.34400	-1.832	0.067
	Male	62	83.5484 \pm 16.09805		
Role limitations due to physical health	Female	48	77.3810 \pm 25.78613	-2.295	0.013
	Male	62	86.3971 \pm 23.82845		
Role limitations due to emotional problems	Female	48	66.6905 \pm 35.36947	-2.766	0.006
	Male	62	79.9853 \pm 29.42407		
Energy vitalite	Female	48	54.7619 \pm 16.59975	-2.103	0.035
	Male	62	61.6912 \pm 19.36704		
Mental health	Female	48	57.5238 \pm 18.25462	-1.860	0.063
	Male	62	62.1176 \pm 19.45491		
Social functioning	Female	48	60.4167 \pm 24.98729	-2.234	0.025
	Male	62	68.9338 \pm 21.32424		
Pain	Female	48	68.9286 \pm 19.97058	-.963	0.336
	Male	62	68.5662 \pm 25.68943		
General health	Female	48	65.1190 \pm 15.24147	-2.622	0.009

Male	62	71.1029 ±15.20618
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p<0.05

According to Table 5, the mean scores of quality of life sub-dimensions differed by gender. In this study, there is a statistically significant difference between male and female participants in all sub-dimensions except physical functioning, mental health, and pain (p>0.05).

Table 6. Comparison of quality of life according to marital status

	Marital status	N	Mean±SD	Z	p
Physical functioning	Married	73	82.6712±16.11	-1.428	0.153
	Single	37	78.7838±15.56		
Role limitations due to physical health	Married	73	81.1644±24.93	-1.350	0.177
	Single	37	86.4865±24.71		
Role limitations due to emotional problems	Married	73	61.8082±33.53	-.934	0.350
	Single	37	57.5135±29.73		
Energy vitalite	Married	73	59.4521±18.05	-.619	0.536
	Single	37	58.2432±19.83		
Mental health	Married	73	61.8082±18.63	-.892	0.372
	Single	37	57.5135±19.80		
Social functioning	Married	73	67.8082±22.13	-1.315	0.188
	Single	37	61.4865±24.54		
Pain	Married	73	23.58989±23.58	-2.270	0.023
	Single	37	22.40345±22.40		
General health	Married	73	15.69939±15.69	-.904	0.366
	Single	37	14.91467±14.91		

p<0.05

Examination of Table 6 shows that, when compared by marital status, no statistically significant difference was found in the mean scores of the quality of life sub-dimensions, except for a significant difference only in the pain sub-dimension (p<0.05).

Table 7. Comparison of quality of life according to age

	Age	N	Mean±SD	Z	p
Physical functioning	21-40 years	49	77.7551±16.5221	-2.058	0.040
	41 years and older	61	84.2623±15.0232		
Role limitations due to	21-40 years	49	83.1633±24.6790	-.010	0.992

physical health	41 years and older	61	82.7869±25.2244		
Role limitations due to emotional problems	21-40 years	49	71.5102±34.0368	-1.030	0.303
	41 years and older	61	77.6393±30.8917		
Energy vitalite	21-40 years	49	55.4082±19.7862	-2.114	0.035
	41 years and older	61	61.9672±17.1823		
Mental health	21-40 years	49	57.8776±20.6090	-1.056	0.291
	41 years and older	61	62.3607±17.6238		
Social functioning	21-40 years	49	61.7347±24.2609	-1.586	0.113
	41 years and older	61	68.8525±21.7254		
Pain	21-40 years	49	63.4184±24.0317	-2.145	0.032
	41 years and older	61	72.9508±22,5023		
General health	21-40 years	49	66.9388±15.2348	-.983	0.326
	41 years and older	61	70.3279±15.5421		

p<0.05

When Table 7 was examined, it was found that there was a significant difference in the mean scores of the quality of life sub-dimensions according to the age range in the Physical functioning, energy/vitality, and pain (p<0.05).

Table 8. Comparison of quality of life according to educational status

	Education status	N	Mean±SD	Z	p
Physical functioning	Bachelor	86	81.6279±15.3860	-.011	0.991
	Master	24	80.4167±18.2326		
Role limitations due to physical health	Bachelor	86	82.5581±23.3483	-1.138	0.255
	Master	24	84.3750±30.2278		
Role limitations due to emotional problems	Bachelor	86	73.3023±33.1002	-.922	0.357
	Master	24	80.6667±29.2970		
Energy vitalite	Bachelor	86	58.4302±18.1377	-.363	0.716
	Master	24	61.2500±20.3902		
Mental health	Bachelor	86	60.3721±18.4646	.000	1.000
	Master	24	60.3333±21.4570		

Social functioning	Bachelor	86	64.8256±23.3666	-.668	0.504
	Master	24	68.7500±22.1162		
Pain	Bachelor	86	68.7791±22.7219	-.113	0.910
	Master	24	68.4375±26.9340		
General health	Bachelor	86	67.7907±15.8226	-1.270	0.204
	Master	24	72.500±13.59340		

p<0.05

When Table 8 is examined, it is concluded that there is no significant difference in the mean scores of quality of life sub-dimensions according to educational status ($p>0.05$).

Table 9. Comparison of quality of life according to cigarette smoking status

	Cigarette smoking	N	Mean±SD	Z	p
Physical functioning	No	77	82.0779±16.6296	-1.167	0.243
	Yes	33	79.6970±14.4124		
Role limitations due to physical health	No	77	85.0649±21.5591	-.795	0.427
	Yes	33	78.0303±31.0981		
Role limitations due to emotional problems	No	77	73.6623±32.1663	-.874	0.382
	Yes	33	77.8182±33.0023		
Energy vitalite	No	77	60.0000±18.2994	-.655	0.512
	Yes	33	56.8182±19.3575		
Mental health	No	77	60.0000±19.7457	-.458	0.647
	Yes	33	61.2121±17.5921		
Social functioning	No	77	65.4221±22.8424	-.023	0.982
	Yes	33	66.2879±23.8985		
Pain	No	77	70.4221±23.1357	-.891	0.373
	Yes	33	64.6970 ±24.4530		
General health	No	77	69.5455±15.7943	-1.073	0.283
	Yes	33	67.1212±14.6324		

p<0.05

When Table 9 was examined, it was found that there was no significant difference in the mean scores of the quality of life sub-dimensions according to smoking status ($p>0.05$).

Table 10. Quality of life comparison according to duration of being an administrator

	Duration of being an administrator	N	Mean±SD	Chi-Square	df	p
Physical functioning	1-10 years	35	79.5714±17.6723	0.840	3	0.840
	11-20 years	39	81.7949 ±14.7115			
	21-30 years	28	84.1071±13.1974			
	31 years and more	8	77.5000±23.2992			
	Total	110	81.3636±15.9688			
Role limitations due to physical health	1-10 years	35	82.1429±26.1299	4.526	3	0.210
	11-20 years	39	85.8974 ±24.1941			
	21-30 years	28	83.0357±25.5074			
	31 years and more	8	71.8750±20.8630			
	Total	110	82.9545±24.8693			
Role limitations due to emotional problems	1-10 years	35	70.5143±36.8776	2.154	3	0.541
	11-20 years	39	72.7179±33.2438			
	21-30 years	28	79.8571±26.1813			
	31 years and more	8	87.5000±24.8653			
	Total	110	74.9091±32.3239			
Energy vitalite	1-10 years	35	57.0000±20.9059	6.175	3	0.103
	11-20 years	39	55.7692±18.0474			
	21-30 years	28	55.7692±18.0474			
	31 years and more	8	68.1250±18.5043			
	Total	110	59.0455±18.5914			
Mental health	1-10 years	35	59.2000±21.4047	2.641	3	0.450
	11-20 years	39	58.2564±19.4404			
	21-30 years	28	63.4286±16.3558			
	31 years and more	8	65.0000±15.8204			
	Total	110	60.3636±19.0531			
Social functioning	1-10 years	35	66.4286±22.8428	2.756	3	0.431
	11-20 years	39	61.2179±23.2610			

Pain	21-30 years	28	69.1964±21.6458	1.820	3	0.611
	31 years and more	8	71.8750±28.1497			
	Total	110	65.6818±23.0573			
	1-10 years	35	67.7143±26.5848			
	11-20 years	39	68.2692±18.7359			
	21-30 years	28	69.1964±21.6458			
General health	31 years and more	8	71.8750±28.1497	2.121	3	0.548
	Total	110	71.8750±28.1497			
	1-10 years	35	70.5714±15.9858			
	11-20 years	39	66.2692±18.7359			
	21-30 years	28	67.4107±27.2291			
	31 years and more	8	73.7500±19.9553			
	Total	110	79.6875±17.4457			

p<0.05

When Table 10 is examined, there is no significant difference in the mean scores of quality of life sub-dimensions according to seniority (p>0.05).

Table 11. Comparison of quality of life according to weight

	Weight	N	Mean±SD	Chi-Square	df	p
Physical functioning	51-60 kg	26	77.5000± 15.6365	5.272	4	0.260
	61-70 kg	41	84.1463 ±15.1617			
	71-80 kg	30	81.6667± 16.4176			
	81-90 kg	7	72.1429 ±21.3809			
	91 kg and more	6	88.3333± 8.16497			
	Total	110	81.3636± 15.9688			
Role limitations due to physical health	51-60 kg	26	87.5000 ±19.0394	2.318	4	0.677
	61-70 kg	41	84.7561 ±24.2886			
	71-80 kg	30	79.1667± 27.1357			
	81-90 kg	7	75.0000 ±38.1881			

Role limitations due to emotional problems	91 kg and more	6	79.1667±24.5798	5.406	4	0.248
	Total	110	82.9545± 24.8693			
	51-60 kg	26	87.2692 ±18.9600			
	61-70 kg	41	73.2195 ±35.1571			
	71-80 kg	30	71.2000 ±34.7328			
	81-90 kg	7	71.4286±30.1156			
	91 kg and more	6	55.5000±40.4610			
Energy vitalite	Total	110	74.9091±32.3239	11.822	4	0.019
	51-60 kg	26	57.5000±18.9868			
	61-70 kg	41	54.6341±18.0412			
	71-80 kg	30	67.3333±16.4910			
	81-90 kg	7	52.1429±8.59125			
	91 kg and more	6	62.5000±28.2400			
	Total	110	59.0455±18.5914			
Mental health	51-60 kg	26	65.8667 ±22.1775	5.462	4	0.243
	61-70 kg	41	58.285± 8.9015			
	71-80 kg	30	65.8667±22.1775			
	81-90 kg	7	60.3636± 19.0531			
	91 kg and more	6	61.3636 ±18.0531			
	Total	110	60.3636±19.0531			
	51-60 kg	26	62.5000±25.4951	2.508	4	0.643

Social functioning	61-70 kg	41	64.329 ±20.4559			
	71-80 kg	30	70.4167±22.3807			
	81-90 kg	7	58.9286 ±30.3746			
	91 kg and more	6	72.9167±25.5155			
	Total	110	65.6818±23.0573			
Pain	51-60 kg	26	69.2308±20.5154	2.554	4	0.635
	61-70 kg	41	64.3900±26.3734			
	71-80 kg	30	72.7500 ±23.4093			
	81-90 kg	7	66.7857±24.6100			
	91 kg and more	6	77.9167±13.4551			
General health	Total	110	68.7045±23.5733	2.859	4	0.582
	51-60 kg	26	72.1154±12.0144			
	61-70 kg	41	67.5610 ±16.3600			
	71-80 kg	30	69.6667±16.2381			
	81-90 kg	7	65.0000±11.5470			
	91 kg and more	6	63.3333±22.5092			
	Total	110	68.8182±15.4285			

p<0.05

Examination of Table 11 concluded that the mean scores of the quality of life sub-dimensions showed a significant difference (p<0.05) only in the energy sub-dimension when grouped by weight, but not in the other sub-dimensions (p>0.05).

Table 12. IPAQ and quality of life relations

		IPAQ	1	2	3	4	5	6	7	8
IPAQ	r	1								
	p	.	0.000	0.083	0.069	0.000	0.000	0.000	0.000	0.000
Physical functioning (1)	r	.372**	1							
	p	0.000	.	0.288	0.584	0.000	0.000	0.000	0.000	0.000
Role limitations due to physical health (2)	r	0.166	0.102	1						
	p	0.083	0.288	.	0.000	0.726	0.984	0.405	0.208	0.042
Role limitations due to emotional problems (3)	r	0.174	0.053	.334**	1					
	p	0.069	0.584	0.000	.	0.015	0.016	0.011	0.081	0.001
Energy Vitalite (4)	r	.480**	.478**	-0.034	.232*	1				
	p	0.000	0.000	0.726	0.015	.	0.000	0.000	0.000	0.000
Mental health (5)	r	.553**	.494**	-0.002	.230*	.789**	1			
	p	0.000	0.000	0.984	0.016	0.000	.	0.000	0.000	0.000
Social functioning (6)	r	.615**	.487**	0.08	.242*	.679**	.701**	1		
	p	0.000	0.000	0.405	0.011	0.000	0.000	.	0.000	0.000
Pain (7)	r	.574**	.441**	0.121	0.167	.640**	.698**	.600**	1	
	p	0.000	0.000	0.208	0.081	0.000	0.000	0.000	.	0.000
General health (8)	r	.497**	.380**	.194*	.310**	.626**	.618**	.557**	.624**	1
	p	0.000	0.000	0.042	0.001	0.000	0.000	0.000	0.000	.

p<0.05 p<0.01

When Table 12 is examined, there is a significant positive relationship between the mean physical activity score (IPAQ) and quality of life components (p<0.05).

DISCUSSION AND CONCLUSION

This study aimed to examine the physical activity levels and quality of life of the participants. The mean weekly total physical activity score of the participants according to IPAQ was examined, and it was found to be 1772.3664 MET-min/week. In the study by Vural et al. (2010) on desk workers, the general average was higher at 2249.62 ± 2253.91 MET-min/week. Similarly, in this study, the highest average occurs in the sitting sub-dimension, while the lowest average is observed in the vigorous activity level. In a conducted study it was determined that the average IPAQ value of the administrative staff working at the university was 1829.4 Met, while the average IPAQ value of the academic staff was 1549.7 Met. (Buluter & Özkan, 2023). In another study examining the physical activity levels of desk

workers, it was reported that the participants had an average of 1088.33 ± 1278.05 Met-min/week (Erdoğan & Güvenç, 2018).

In the study, it was observed that 60% of the participants had a moderate level of physical activity. Another study conducted in parallel observed the physical activity levels of administrative and academic staff working at the university were moderate (Buluter ve Özkan, 2023). Erdoğan and Güvenç (2018) found that the physical activity levels of the participants were low in their research on desk-based working individuals.

When female and male participants are compared in terms of physical activity level, there is a significant difference between them. In a study conducted by Ölçücü et al. (2015) on a middle-aged group, a similar result was obtained, and it was concluded that men were more active than women. Similar results were observed in another study (Akbal & Göktaş, 2023). However, Buluter and Özkan (2023) reported that the IPAQ levels of women among academic staff were higher than those of men.

As a result of the research, there is a significant difference between the physical activity levels and quality of life of the managers; men have a higher average than women. Taşkın and Horata (2024) reported in their study that there was a difference in the physical activity levels of the participants when compared in terms of gender. Taşkın and Ergin (2024) stated in their study that the physical activity levels of employees were different with respect to gender and age. In Vural's (2010) study conducted on desk workers and applied to 313 people, it is stated that levels of significance emerge according to gender and age groups. In Vural's study (2010), it is stated that people with low physical activity levels also have low quality of life, but the direct reason for this may not be physical activity (Vural, 2010). A study conducted by Sağlam (2015) on the physical activity levels and quality of life of teachers found that the highest average belonged to the highly active group with 3906.30 ± 796.59 MET-min/week. A study conducted by Goldbeck et al. (2007) on the decline in quality of life in adulthood found a difference in quality of life between genders and reported that life satisfaction measurements were higher in women compared to men.

Although there is no significant difference between married and single people, it is concluded that single people are more active. The fact that married people have less free time and more responsibilities may be effective in such a result. When the IPAQ is analyzed in terms of age range, it is seen that there is no significant difference between the groups; the average of the 41 and older age group is slightly higher. Sağlam (2015) found significant differences between age groups in his study and concluded that the 26-30 year age group had the highest mean. In another study, it was reported that there was a difference marital status, but there was no difference according to age. However, Taşkın and Horata (2024) found no difference in their study.

In terms of education level, there is no significant difference between bachelor's and master's degree graduates, but observers note that managers with master's degrees are more active than bachelor's degree graduates. In Özüdoğru's (2013) study on university personnel, although there was no significant difference in terms of educational level, it was concluded that those with postgraduate education were more active. The higher the level of education, the more

physically active managers may be. Similarly, Taşkın and Horata (2024) found no difference in physical activity levels among different education levels in their study.

When the IPAQ was analyzed according to smoking status, it was observed that although there was no significant difference between smokers and non-smokers non-smokers were more active. The fact that non-smoking managers pay more attention to their health may be one of the reasons for such a result. In a study conducted by Savcı et al. (2006) on university students, it was concluded that smokers had higher MET-min/week scores than non-smokers. In another study, it was found that there was no statistically significant difference between smokers and non-smokers in terms of physical activity score (Ünver, 2023).

When IPAQ is analyzed, it is seen that although there is no significant difference, the highest average belongs to managers with 1-10 years of seniority. Managers with lower seniority can be considered more mobile because they are younger and have fewer personal responsibilities. When the participants are analyzed in terms of their weight that the highest average belongs to managers between 71–80 kilograms, although there is no significant difference between the groups.

People in this weight range are generally healthier in terms of height-weight balance, and they may be the ones who pay more attention to their health. The study by Demiral et al. (2006) on the norm values of the SF-36 quality of life scale for the Turkish population found that the average quality of life sub-dimensions in this study are slightly below the expected values. Although the mean quality of life scores are slightly lower, the higher the mean score indicates that a person is more physically and mentally active and healthier, and that this lifestyle offers a better quality of life compared to those with lower scores. The research reveals that the sub-dimensions of the quality of life of school administrators with high physical activity levels are also high. Similar to the results of this research, it was concluded in the study conducted by An et al. (2020) that, after controlling for demographic characteristics, participants with high and moderate activity levels had significantly higher life satisfaction and happiness. Physical activity is significantly associated with life satisfaction and happiness in young, middle-aged, and older adults. It is also seen that life satisfaction and happiness increase as physical activity increases. The results obtained support the promotion of physical activity for quality of life and satisfaction (An et al., 2020).

When the mean quality of life scores were examined in our study, it was concluded that there was a significant difference only in physical functioning, energy/vitality, and pain sub-dimensions in terms of age groups. A study conducted by Maher et al. (2015) on 150 individuals contributes to the accumulating evidence that daily fluctuations in physical activity have significant effects on well-being independent of age. They concluded that developmental differences in life satisfaction dynamics, which can inform strategies to increase life satisfaction, have been clarified and that physical activity has positive effects on quality of life.

When the quality of life results are examined, men generally have a higher average, and there is a significant difference between men and women in five sub-dimensions of quality of life. In another study, a gender difference was observed in the quality of life of young adults. It was stated that this difference was in favor of men (Genç et al., 2011).

In terms of marital status, it is seen that there is a significant difference only in the pain sub-dimension of the quality of life scale. There is no significant difference in the other sub-dimensions, but singles have higher averages. Busing et al. (2016), in their study on the relationship between gender and quality of life, confirmed previous findings that there was no difference between genders and quality of life, and mentioned a positive relationship between physical activity level and quality of life. Although there is no significant difference between the quality of life sub-dimensions in terms of education level, managers with master's degrees demonstrate higher averages. Again, there were no significant results concerning the sub-dimensions of smoking status and seniority. In terms of weight range, a significant difference was found only in the vitality sub-dimension.

It was concluded that there was a significant relationship between physical activity level and quality of life sub-dimensions. The correlation analysis revealed a significant relationship between physical activity level and quality of life sub-dimensions, which increase in the same direction. When managers are evaluated, it is revealed that they are generally inactive. Similarly, Kiliç's (2020) study on managers concluded that managers are generally inactive. Such studies conducted on educators and administrators, concluded that increased physical activity resulted in significant improvements in people's physical and psychological health (Tekkanat, 2008). In a study, it was reported that there was a positive relationship between quality of life and physical activity levels in working people (Puciato et al., 2018). Taşkan and Ergin (2024) found a significant relationship between physical activity level and life satisfaction. This research, which was intended for managers, indicates that there is a strong relationship between physical activity level and quality of life. In another study, no relationship was found between physical activity scores and quality of life scores (Eren et al. 2023).

As a result, it was determined that the physical activity level of school administrators was at a moderate level. Male participants had a higher physical activity level than female participants. There was a difference in quality of life with respect to gender, marital status, age, and weight status. The quality of life also increased as the physical activity level increased. In light of this information, it can be recommended that incentive plans for school administrators to do various exercises to increase their physical activity levels can be recommended. In addition, to instill a culture of physical activity in children at an early age, school administrators, who are one of the main actors of the education community, can be made aware of physical activity. Online seminars, such as webinars, can be conducted to help them gain physical activity habits and culture.

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