

The relationship between physical activity attitude and life satisfaction: A sample of university students in Turkey

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Abstract.

BACKGROUND: Physical activity is very important for a healthy life in the human existence, and regular physical activity and high attitudes towards physical activity can contribute to higher levels of life satisfaction of individuals.

OBJECTIVE: This study aimed to investigate the relationship between university students' attitudes towards physical activity and their life satisfaction levels.

METHODS: In the study, the Cognitive Behavioral Physical Activity Questionnaire was used to measure the participants' attitudes towards physical activity. In order to measure the participants' life satisfaction levels, The Satisfaction with Life Scale was used. Descriptive statistics, independent sample *t*-test, one-way ANOVA, Pearson correlation analysis, and regression analysis were used in the analysis of the obtained data.

RESULTS: According to gender, it was determined that there was a statistically significant difference both in the result expectation and self-regulation sub-dimensions of physical activity attitude and the total score of physical activity attitude. When the correlation analysis results were analyzed, the statistically significant positive relationship between life satisfaction and outcome expectation, self-regulation sub-dimensions of physical activity attitude, and the total score of physical activity attitude was determined. Also, it was found that the attitude towards physical activity explained approximately 6% of life satisfaction.

CONCLUSIONS: It was determined that as the attitudes of the participants towards physical activity increased, their life satisfaction increased.

Keywords: Physical activity, healthy life, subjective well-being, leisure benefits

1. Introduction

Moving has an important place in human life. However, the fact that people adopt a sedentary lifestyle together with the technological developments brings health problems by causing problems in the functions

of the organism. In parallel with the increasing age, the augmentation of health problems increases the need for physical activity [1]. However, in today's society, the sedentary lifestyle caused by individuals not having enough information about physical activity, intense workload, and not using time efficiently causes individuals to encounter various diseases. It is known that performing physical activity adequately and regularly has an important place in terms of mental and physical health [2, 3]. From this point, the

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attitudes of individuals towards physical activity are increasingly important for a healthy lifestyle.

Attitude is the individual's positive or negative evaluation of the situation, person, and objects he encountered in daily life [4–6]. Life experiences, socialization processes, level of knowledge, and geographical features of the region are determinant in the formation and shaping of the attitudes [7]. However, the attitude differs not only according to these variables but also in the process of participation in physical activity. The psychological, social, environmental, and emotional factors affect individuals' attitudes towards participation in physical activities [8]. Physical activity attitude may affect regular participation in the activity positively or negatively. Regular participation in physical activity is of great importance in terms of health and it provides many benefits with regards of physical, psychological, and physiological [9]. Therefore, it is beneficial for university students to participate in physical activity in their leisure time [10]. Universities encourage students to participate in physical activities as part of providing an academic experience. For students, participation in physical activity has become an important part of university life, which can directly lead to the improvement of physical and mental health [11]. Participation in physical activity can make students feel part of a team and lead to a sense of belonging. Being competent and confident about the individual's abilities in the participation process can contribute to increasing life satisfaction [12]. Life satisfaction, which has been the focus of attention of humanity for ages can be described in many ways such as the result obtained by comparing the expectations of the individual with those of he had [13, 14], the individual's positive assessment of his life according to his criteria [12, 15–17], the combination of beliefs and desires about life [18] and the combined cognitively of the concepts of happiness and subjective well-being [19].

According to the activity theory, both the frequency of participation and the attitude towards the activity affect life satisfaction. The more frequency of participation and attitude increases positively, the higher life satisfaction people get [20]. Accordingly, this study aimed to examine the relationship between university students' attitudes towards physical activity and life satisfaction levels and to determine whether these parameters differ in terms of various variables. In this context, the hypotheses of the current study are below.

H₁: There is a difference between the physical activity attitude and life satisfaction levels of

university students according to their gender, age, and income levels.

H₂: There is a relationship between the physical activity attitude and life satisfaction levels of university students.

2. Method

2.1. Research model

The research was carried out based on the quantitative research design. In a universe consisting of a large number of elements, to make a general judgment about the universe, the general screening model, in which the screening is performed on the entire universe or a sample to be taken from it, was used [21].

2.2. Research group

Turkey consists of seven different regions geographically. In order to generalize the results of this research, a total of 1636 students [766 females (46.8%) and 870 males (53.2%)] chosen by a convenience sampling method studying in 7 different universities (Gazi, Aydın Adnan Menderes, Elazığ Fırat, Sakarya, Karadeniz Teknik, Akdeniz, and Gaziantep Universities) from 7 different regions participated in the 2018–2019 academic year. Within the framework of the research, it was aimed to reach a certain part of the university students therefore, 2200 questionnaires were sent to the participants to apply with a face-to-face survey method. A total of 1705 questionnaires returned from the participants and after the missing and faulty ones were removed, a total of 1636 correct questionnaires were obtained.

2.3. Data collection tools

In the study, the Cognitive Behavioral Physical Activity Questionnaire (CBPAQ) developed by Schembre et al. [8] and adapted to Turkish by Eskiler et al. [22] was used to determine the participants' levels of attitude towards physical activity. The original form of the scale consists of 15 items and 3 sub-dimensions respectively outcome expectation, self-regulation, and personal barriers. All the statements are scored with a 5-point likert-type scale (1 strongly disagree, 5 strongly agree). In addition, in order to measure the global cognitive judgments of participants' life satisfaction, the Satisfaction with

Life Scale developed by Diener et al. [16] and adapted to Turkish by Köker [23] was used. The 7-point likert-type scale that ranges from 7 strongly agree to 1 strongly disagree was used to indicate the agreement levels of the participants.

2.4. Data analysis

SPSS package program was used to analyze the obtained data. For descriptive statistics, frequency (f) and percentage (%) distributions of variables were calculated. Skewness and Kurtosis values were checked to determine whether the data showed normal distribution. These values were checked (between +2 and -2) and evaluated [24]. As a result of this evaluation, it was seen that the data showed normal distribution. Accordingly, independent sample *t*-test, one-way ANOVA, pearson correlation analysis, regression analysis were used in the study. Examining Durbin-Watson coefficient values, bilateral correlations (binary $r < 0.80$), tolerance values ($1 - R^2 > 0.20$), variance inflation factor ($VIF = [1 / (1 - R^2)] < 10$) and the highest status index value ($CI < 0.30$) it was determined that there was no auto-correlation problem between variables [25, 26].

3. Results

When the results of the analysis were examined, it was determined that there was no statistically significant difference in personal barriers sub-dimension of physical activity attitude and life satisfaction variable according to gender ($p > 0.05$). On the other hand, it was concluded that there was a statistically significant difference in the sub-dimensions of outcome expectation and self-regulation also in the total score of physical activity attitude ($p < 0.05$; Table 1).

When Table 2 was examined, it was determined that there was no statistically significant difference in the total scores of physical activity attitude, outcome expectations, and personal barriers sub-dimensions of the physical activity attitude according to age ($p > 0.05$). On the other hand, it was determined that there was a statistically significant difference in the self-regulation sub-dimension of physical activity attitude ($p < 0.05$).

According to Table 3, no statistically significant difference was determined in terms of personal barriers and total score of physical activity attitude regarding income perception ($p > 0.05$). On the other hand, it was concluded that there was a statistically significant difference in the outcome expectations, self-regulation sub-dimensions of the physical activity attitude, and life satisfaction ($p < 0.05$).

When the results of the analysis were analyzed, it was determined that there was a positive relationship between life satisfaction and the outcome expectation, self-regulation sub-dimensions, and total score of physical activity attitude ($p < 0.001$). On the other hand, it was determined that there was no statistically significant relationship in the personal barriers sub-dimension and life satisfaction ($p > 0.05$; Table 4).

Linear regression analysis was used to determine the effect of participants' physical activity attitude levels on life satisfaction. As a result of the analysis, it was determined that physical activity attitude predicted life satisfaction by approximately 6% ($Adj.R^2 = 0.062$). In other words, independent variables were determined to affect the dependent variable positively and significantly ($p < 0.001$; Table 5).

4. Discussion

The findings obtained from this research conducted to determine the relationship between the participants' physical activity attitude and life satisfaction

Table 1
The Analysis Results of Physical Activity Attitude and Life Satisfaction Relation to Gender

Variables	Gender	N	\bar{X}	S.D.	t	p
Outcome Expectation	Male	766	4.00	0.75	2.332	0.020*
	Female	870	3.92	0.77		
Self-Regulation	Male	766	3.45	0.83	8.532	0.001**
	Female	870	3.09	0.86		
Personal Barriers	Male	766	3.11	0.85	0.275	0.783
	Female	870	3.10	0.81		
Total of Physical Activity Attitude	Male	766	4.34	1.59	5.456	0.001**
	Female	870	3.91	1.62		
Life Satisfaction	Male	766	4.03	1.37	-0.661	0.509
	Female	870	4.07	1.35		

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

Table 2
The Analysis Results of Physical Activity Attitude and Life Satisfaction Relation to Age

Variables	Age	N	\bar{X}	S.D.	F	p
Outcome Expectation	20 and below	491	3.99	0.73	0.872	0.455
	21–23	882	3.95	0.79		
	24–26	209	3.93	0.68		
	27 and above	54	3.85	0.81		
	Total	1636	3.96	0.76		
Self-Regulation	20 and below	491	3.18 ^b	0.85	5.952	0.001**
	21–23	882	3.27 ^b	0.88		
	24–26	209	3.47 ^a	0.79		
	27 and above	54	3.13 ^b	0.90		
	Total	1636	3.26	0.87		
Personal Barriers	20 and below	491	3.06	0.79	1.199	0.309
	21–23	882	3.11	0.84		
	24–26	209	3.19	0.86		
	27 and above	54	3.13	0.79		
	Total	1636	3.11	0.83		
Total of Physical Activity Attitude	20 and below	491	4.11	1.56	0.714	0.544
	21–23	882	4.11	1.66		
	24–26	209	4.21	1.61		
	27 and above	54	3.85	1.57		
	Total	1636	4.11	1.62		
Life Satisfaction	20 and below	491	4.03	1.34	0.080	0.971
	21–23	882	4.06	1.38		
	24–26	209	4.06	1.31		
	27 and above	54	4.08	1.38		
	Total	1636	4.05	1.36		

** $p < 0.01$; ab: The statistical difference between the groups were shown different letters.

levels and to examine them according to various variables are discussed and interpreted in this section.

When the findings obtained from the study were analyzed, it was concluded that there was a statistically significant difference in the total score of physical activity attitude and its sub-dimensions of outcome expectation, self-regulation. Accordingly, it was observed that male's attitude scores were higher than females. Besides, many studies have supported these results in the literature [27–30].

When the results of the analysis were analyzed, it was determined that there was a positive relationship between the participants' life satisfaction and the outcome expectation, self-regulation sub-dimensions of the physical activity attitude, and the total score of the physical activity attitude. According to these results, it can be said that as individuals' attitudes towards physical activity increased, their level of life satisfaction increased. In the related literature, studies are supporting these results [31–33]. A positive attitude towards physical activity contributes to the regular participation of individuals in the activity. Accordingly, regular physical activity has an important effect on both physical and psychological well-being. Besides, these activities increase the strength and self-confidence of individuals [34]. Accordingly, physical activity can be thought to

contribute positively to the life satisfaction levels of individuals.

On the other hand, it can be seen that the physical activity attitude positively affects life satisfaction. In the related literature, it has been concluded that physically active individuals are high self-confidence and have more pleasure from life than sedentary individuals [35–37]. Accordingly, the individuals who participate in physical activity will have a positive impact on their life satisfaction levels.

5. Conclusion

In line with the results of the research, it was concluded that the attitude towards physical activity had a positive effect on the life satisfaction levels of university students. Regular participation occurred as a result of the positive attitude towards physical activity can facilitate the development needs of university students in social relations and contribute to their identity as an important member of a group. In such activities, university students having the opportunity to be with other individuals, to cooperate with and respect them can make positive contributions to their life satisfaction levels. As a result, it is recommended that to increase students' participation with a positive

Table 3
The Analysis Results of Physical Activity Attitude and Life Satisfaction Regarding Income Perception

Variables		N	\bar{X}	S.D.	F	p
Outcome Expectation	Very bad	47	3.65 ^b	1.00	2.734	0.028*
	Bad	151	3.88 ^{ab}	0.76		
	Medium	834	3.98 ^a	0.76		
	Good	523	3.97 ^a	0.72		
	Very good	81	4.04 ^a	0.78		
	Total	1636	3.96	0.76		
Self-Regulation	Very bad	47	3.29 ^{ab}	0.89	2.384	0.049*
	Bad	151	3.32 ^{ab}	0.90		
	Medium	834	3.25 ^b	0.87		
	Good	523	3.23 ^b	0.86		
	Very good	81	3.53 ^a	0.76		
	Total	1636	3.26	0.87		
Personal Barriers	Very bad	47	3.12	0.98	2.033	0.087
	Bad	151	3.28	0.82		
	Medium	834	3.08	0.81		
	Good	523	3.10	0.83		
	Very good	81	3.12	0.89		
	Total	1636	3.11	0.83		
Total of Physical Activity Attitude	Very bad	47	3.82	1.70	1.928	0.103
	Bad	151	3.92	1.48		
	Medium	834	4.15	1.67		
	Good	523	4.09	1.58		
	Very good	81	4.45	1.54		
	Total	1636	4.11	1.62		
Life Satisfaction	Very bad	47	3.21 ^c	1.23	22.714	0.001**
	Bad	151	3.64 ^{bc}	1.47		
	Medium	834	3.91 ^b	1.28		
	Good	523	4.40 ^a	1.33		
	Very good	81	4.56 ^a	1.52		
	Total	1636	4.05	1.36		

* $p < 0.05$; ** $p < 0.01$; ab: The statistical difference between the groups were shown different letters.

Table 4
Correlation Analysis Results on Physical Activity Attitude and Life Satisfaction

Variables		1	2	3	4	5
Outcome Expectation (1)	r	1				
	p					
Self-Regulation (2)	r	0.450**	1			
	p	0.001				
Personal Barriers (3)	r	-0.024	0.002	1		
	p	0.322	0.928			
Total of Physical Activity Attitude(4)	r	0.721**	0.743**	-0.520**	1	
	p	0.001	0.001	0.001		
Life Satisfaction (5)	r	0.235**	0.283**	0.021	0.251**	1
	p	0.001	0.001	0.404	0.001	

** $p < 0.001$; $n = 1636$.

Table 5
Regression Analysis Results on Physical Activity Attitude and Life Satisfaction

Model	Variable	β	t	p	R ²	Adj. R ²	F
1	(Constant)		23.775	0.001	0.063	0.062	109.904
	Physical activity attitude	0.251	10.484	0.001			

Dependent Variable: Life Satisfaction. Method: Enter.

attitude towards the activities, the recreational activity facilities can be increased by the university authorities.

5.1. Limitations

As in many studies, this research also has certain limitations. The limitations found in this research can be a guide for future research. First, this study comprises the territory of Turkey, so comparisons can be made between two different countries. Secondly, in this study, only the variables of attitude towards participation in physical activity and life satisfaction were evaluated.

5.2. Suggestions for future research

In future studies, a model can be formed on attitude, satisfaction, and academic success. Besides, these factors can also focus on other parameters that contribute to the positive interaction of participation in physical activity on university students.

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Conflict of interest

None to report.

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