THE EFFECT OF REGULAR PHYSICAL ACTIVITY ON WOMEN'S SELF-CONFIDENCE LEVELS: AN EXPLORATORY RESEARCH

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ABSTRACT

Introduction: *It is known that physical activity is good for many diseases such as obesity, heart diseases, various types of cancer, musculoskeletal disorders. Compared to men, women's participation in physical activity is more limited. Physical activity, on the other hand, contributes to both the increase in the quality of life and the socialization of people. In this context, the aim of this study is to determine the self-confidence levels of women who regularly participate in physical activity.*

Method*: In the research, besides the personal information form prepared by the researchers, the self-confidence scale was used. The sample population survey in Turkey Kocaeli province has created 408 women participating regularly in physical activity. In the analysis of the data, arithmetic means, frequency and percentage values were taken. As a result of the normality test, it was seen that it showed a normal distribution. Accordingly, independent sample t-test was used in the analysis of paired groups and one way Anova tests were used in the analysis of multiple groups.*

Results*: As a result of the analysis, no significant difference was found in any sub-dimension according to the marital status variable. Significant differences were observed in the sub-dimensions of the scale according to the variables of income level, physical activity duration, education level and age.*

Conclusion*: It has been observed that as the duration of physical activity increases, the level of self-confidence increases. In addition, it was concluded that age and educational status were directly related to self-confidence, and as education level and age increased, self-confidence increased.*

Keywords: *women, self confidence, physical activity, regular.*

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Introduction

Physical activity is one of the most basic functions of human beings[(1)]. Physical activity is defined as any body movement performed with skeletal muscles that causes energy expenditure[(2, 3)]. Regular physical activity has a positive relationship with health, physical fitness and posture[(4-7)]. It is like an effective antidote when applied regularly and correctly. It is known that physical activities performed for 20-30 minutes three times a week have many psychological and physiological effects on human health[(8)]. Physical activity is known to treat many diseases such as heart, obesity, type 2 diabetes, colon cancer, breast cancer, musculoskeletal disorders and depression. Research shows that individuals who are not physically active are at great risk[(9-11)]. Many women around the world suffer from disease processes associated with inadequate participation in physical activity. It is known that diseases frequently seen especially in women such as cardiovascular diseases, diabetes, osteoporosis, breast cancer can be reduced by physical activity practice[(12, 13)]. Studies show that the participation rates of women in physical activity are low compared to men[(14-16)]. Therefore, women's participation in physical activity is important.

Self-confidence as defined by Bandura[(17)], can be explained "as an agreement with one's own self and with surrounding people, courage and bravery"[(18)]. In addition, self-confidence expresses people's "beliefs that they can perform a certain task or achieve a de-

sired goal"[19]. Self-confidence is an important force that helps individuals feel better and be more courageous[20]. Gacar in 2013[21], conceptualized self-confidence as the main motivation of human behavior and gradual satisfaction of people. This concept is a mental competence as well as a physical condition. According to Mckay and Fanning[22], self-confidence is the value that the person places on himself. So self-confidence is the trusting of one's own body, ability, body language and mood.

Many factors are an obstacle to women's participation in physical activity. Women generally lead a more sedentary life in their social lives due to cultural expectations. There are many studies especially on the effects and elimination of sedentary life in women[23,24]. It has been suggested that physical activity can contribute to creating self-confidence and self-confidencemay reduce stress, anxiety and depression levels and providing a tool for social integration and equality for women in society[25,26].

Therefore, the aim of this study is to determine the self-confidence levels of women participating in physical activity.

Methods

Participants

The sample of the research consists of women participating in regular physical activity. in the Kocaeli Municipality, Turkey. The sample of the study consisted of 408 women who voluntarily agreed to participate in the study. The average age of women participating in the study is 35, the average height is 1.61, and the average weight is 72. Descriptive scanning method was used in this research. This method is used to determine beliefs, thoughts and opinions of the determined group[27]. In the personal information form prepared for the research, it includes questions including age, marital status, educational status, sports training duration and income level. The self-confidence scale developed by Akın[28] was adopted.The scale is composed of 33 items which consists of 5-point likert type and two sub-dimensions, internal self-confidence and external self-confidence.

Protocol

Before the study, the participants were informed about the activities to be done in the narrative of the study. As a result of the briefing, a consent form was signed to those who voluntarily agreed to participate in the study. To be included the women had to be active and this was considered if:

- had at least 8 weeks of training,
- an average weekly frequency of 3 training sessions.

Moderate-intensity step-aerobics, pilates and zumba were the practied activities of the women who agreed to participate in the study. All the activities were performed under supervision of specialist coaches.The average training session duration was of 45 minutes.

Statistical analysis

Personal information forms, averages in scale and sub-dimensions, percentage, frequency, arithmetic mean, independent sample t test in binary variables, One Way ANOVA tests were used for multiple variables. LSD test was used in Post Hoc test to find out which variables favored the difference.

Results

According to Table 1, it is seen that 43.4% of the participants are in the 26-35 age group, 65.2% are married, 67.6% have an income level of 251-400 €.

Personal Information	Sub Groups	Frequency(f)	Percent (%)
Age	≥25 years	49	12.0
	26-35 years	177	43.4
	36-45 years	109	26.7
	≥46 years	73	17.9
Marital Status	Married	266	65.2
	Single	142	34.8
Education Status	Primary Education	128	31.4
	High School	119	29.2
	Associate Degree	38	9.3
	License	100	24.5
	Graduate	23	5.6
Sports Training Time	1 Hour	62	15.2
	2 Hour	103	25.2
	3 Hour	214	52.5
	4 Hour and Under	29	7.1
Income Rate	0-250 €	88	21.6
	251-400 €	276	67.6
	401 € and +	44	10.8

Table 1: Demographic characteristics of the participants.

Skewness-Kurtosis values were examined in order to determine whether the data showed normal distribution. Skewness-Kurtosis values were found between -2 <X <+2 both in the scale and in the sub-dimensions. According to the Kolmogorov-Smirnov Z test data, it was decided to perform parametric tests. For the safety of the scale, Cronbach Alpha internal consistency coefficient was examined. Cronbach Alpha values were found to be high in both scale and sub-dimensions.

When we examined the self-confidence levels of women participating in the physical activityin Table 2 according to the age variable, a significant difference was found in the average of self-confidence, internal self-confidence and external self-confidence sub-dimensions. LSD test, one of the Post Hoc tests, was used to determine differences between groups. A statistically significant difference in the self-confidence and internal self-confidence and external self-confidence sub-dimensions between the ages of 25 and under, and between the ages of 26-35 and 36-45, was found to be significant in favor of the age group 25 and below. We can say that women in the 25 and under andin the 46 and above groups have higher self-esteem levels, women have increased their self-confidence levels compared to previous age groups.

Factors	Age	N	$\bar{x}$	Sd	F	P	LSD
Self-Confidence Average	≥25 (a)	49	4.17	60	3.19	.024	a>b,c
	26-35 (b)	177	3.91	58			
	36-45 (c)	109	3.94	69			
	≥46 (d)	73	4.09	58			
Internal Self-Confidence	≥25 (a)	49	4.16	60	3.05	.028	a>b,c
	26-35 (b)	177	3.93	60			
	36-45 (c)	109	3.91	68			
	≥46 (d)	73	4.09	53			
External Confidence	≥25 (a)	49	4.17	67	3.17	.024	a>b,c
	26-35 (b)	177	3.89	60			
	36-45 (c)	109	3.97	72			
	≥46 (d)	73	4.09	70			

Table 2: Anova test of self confidence levels regarding age variable of women attending physical activity (p<0.05).

When we examine the self-confidence levels of the women participating in the physical activity according to the marital status variable, there was no significant difference in the self-confidence average, internal self-confidence and external self-confidence sub-dimensions. We can say that the marital status of women is not a variable that determines their self-confidence levels.

When we examine the self-confidence levels of women participating in physical activityin Table 3 according to the educational status variable, there was a significant difference in the self-confidenceaverage, internal self-confidence and external self-confidence sub-dimensions. The statistical difference between associate, undergraduate and graduate graduates and Primary education graduates is significant in favor of associate, undergraduate and graduate graduates. It can be said that the level of self-confidence increases as the education level of women participating in physical activity increases.

In Table 4, when we examine the self-confidence levels of women participating in the physical activity according to the physical activitytime variable, there was a significant difference in the self-confidence average, internal self-confidence and external self-confidence sub-dimensions. In terms of self-confidence and internal self-confidence and external self-confidence sub-dimensions, there was a statistically significant difference between those with a 3-hour training period and those with a 1-hour and 2-hour training period. It can be considered as a normal situation that women who participate in physical activityfor a longer period of time have higher self-confidence levels.

Factors	Education Status	N	$\bar{x}$	Sd	F	P	LSD
Self-Confidence Average	Primary Education(a)	128	3.85	.63	3.44	.009	a<c,d,e
	High School (b)	119	3.95	.63			
	Associate Degree (c)	38	4.12	.54			
	License (d)	100	4.09	.63			
	Graduate (e)	23	4.17	.35			
Internal Self-Confidence	Primary Education (a)	128	3.85	.73	2.96	.020	a<c,d,e
	High School (b)	119	3.94	.64			
	Associate Degree (c)	38	4.14	.67			
	License (d)	100	4.09	.62			
	Graduate (e)	23	4.16	.38			
External Confidence	Primary Education (a)	128	3.84	.73	2.96	.021	a<c,d,e
	High School (b)	119	3.93	.64			
	Associate Degree (c)	38	4.42	.67			
	License (d)	100	4.09	.62			
	Graduate (e)	23	4.01	.38			

Table 3: Anova test regarding the self confidence levels of women attending physical activity according to the education status variable (p<0.05).

Factors	Physical Activity Time	N	$\bar{x}$	Sd	F	P	LSD
Internal self-confidence	1 Hour (a)	62	3.74	.68	8.82	.000	a,b<c
	2 Hour (b)	103	3.82	.78			
	3 Hour (c)	214	4.13	.59			
	4 Hour +(d)	29	3.95	.37			
Self-confidence Average	1 Hour (a)	62	3.78	.61	9.16	.000	a,b<c
	2 Hour (b)	103	3.81	.67			
	3 Hour (c)	214	4.12	.59			
	4 Hour + (d)	29	3.97	.33			
External Confidence	1 Hour (a)	62	3.81	.60	8.46	.000	a,b<c
	2 Hour (b)	103	3.80	.61			
	3 Hour (c)	214	4.12	.62			
	4 Hour + (d)	29	4.00	.34			

Table 4: Anova test regarding self confidence levels of women attending physical activity according to physical activity time variable (p<0.05).

Factors	Income	N	$\bar{x}$	Sd	F	P	LSD
Self-Confidence Average	0-250 € (a)	88	3.94	.55	12.38	.000	a,b>c
	251-400€(b)	276	4.06	.60			
	401€+(c)	44	3.57	.69			
Internal Self-Confidence	0-250 € (a)	88	3.96	.54	12.59	.000	a,b>c
	251-400€ (b)	276	4.05	.60			
	401€+ (c)	44	3.56	.67			
External Confidence	0-250 € (a)	88	3.92	.57	10.71	.000	a,b>c
	251-400€ (b)	276	4.06	.66			
	401€+ (c)	44	3.58	.74			

Table 5: Anova test regarding self confidence levels of women attending physical activity according to income variable (p<0.05).

When we examined the self-confidence levels of women participating in the physical activity in Table 5, there is a significant difference in the

self-confidence average, internal self-confidence and external self-confidence sub-dimensions. Statistically difference between 0-250 € and those with income between 251-400 € and those with income of 401 €+ and above was found significant.

Discussion and conclusion

The effect of age parameter on self-confidence has been known for a long time[29]. In the study conducted by Want and Kleitman[30] it was observed that young people had higher self-confidence levels compared to the elderly. The results of our study are similar to this study. However, when we look at the literature, there are studies that do not differ significantly between self-confidence level and age[31, 32]. Therefore, it is not possible to talk about a consistent relationship between self-confidence level and age parameters.

In the study conducted by Spanier and Allison[33], in order to determine the relationship between general social support and physical activity, it was found that marital status was effective on physical activity and that individuals who were married spend less time participanting in physical activities. Wen et al[9], in a study conducted to promote physical activity in women, found no significant difference between marital status and participation in physical activity.In addition, Gell and Wadsworth[34], did not find any relationship between marital status and physical activity levels. The results of our study are similar to those of Wen et.al[9] and Gell and Wadsworth[34].

In their study, Matsushima and Shiomi[35], contradicts this study, which states that the secondary school students' self-esteem level is higher than that of high school students. Gökkaya and Biçer[36], did not find a significant relationship between age and self-confidence in their studies. Bostancı et.al[37]), did not find a significant difference between the age variable and self-confidence levels. In addition, in the study conducted by Wen et.al(9), to promote physical activity in women, no significant difference was found between age and level of participation in physical activity.

It can be said that the level of self-confidence increases as the education level of women participating in physical activity increases.In the study of Lee et.al[38], no significant difference was found between age and physical activity level in the study conducted to determine the physical activity levels of adult women living in rural areas.In a study conducted by Esentaş et.al[39], with the aim of determining the self-confidence levels of female youth leader candidates in Turkey, no significant difference was found between the education variable and self-confidence. Also, Chomistek et. al[13], in a study conducted to determine the effect of cultural individualism on self-confidence, no significant difference was found between education level and self-confidence. However, in a stud$^{y\ co}$nducted by Daesung et.al[40], patient evaluation performances of emergency medical technician students were measured before and after education, and a significant difference was found between students' self-confidence levels before and after education. The results of our study are similar to those performed by Daesung et.al[40]. However, it is not possible to talk about a consistent relationship between the educational situation variable and self-confidence. Sun et.al.[41], concluded that socio-economic status is effective on participation in physical activity, especially women with high family income levels are more likely to remain physically active. In addition, it has been found that the income level variable is an important factor, not only in adults, but also in the participation of children in physical activity and that the families of high income families have a higher tendency for their children to engage in physical activities[42]. In the study by Biddle et.al[43], the socioeconomic situation is a factor which was seen to influece participation in physical activityin adolescent girls'.In the study of Dogru[44], the department of physical education and sports education stated that students' income level of their families increased their self-confidence. In this study, the fact that those with low income levels had higher self-confidence levels contradicts with the studies in the literature. As a result, it was concluded that women participating in physical activity have a self-confidence levels increase as the age increases, women who participate in physical activity for a long time have higher self-confidence levels, and high educational status is a variable that increases women's self-confidence levels.

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