

The Effect of Social Appearance Anxiety on Psychological Well-Being: A Study on Women Doing Regular Pilates Activities

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ABSTRACT

Aim: The aim of this study is to investigate the effect of social appearance anxiety on women's psychological well-being.

Methods: In this study, a relational screening model was used as one of the quantitative research methods. The study group was selected by convenience sampling method, which is one of the non-random sampling methods. The universe of this research consists of women who do pilates, while the sample consists of a total of 382 women who participated in the pilates exercise program in Istanbul, Izmir, Muğla, Hatay and Malatya provinces of Turkey. Participants with less than 1 year of sports experience were not included in this study. The study was based on voluntary participation. As data collection tools, social appearance anxiety and psychological well-being scale were used. A questionnaire was applied to the pilates participants participating in the research through electronic communication tools. Data obtained from participants were analyzed using SPSS and Amos 20.0. In the research, descriptive statistics, correlation, confirmatory factor analysis, and hierarchical regression analysis were performed.

Results: According to the research findings, it was determined that there is a significant and negative relationship between social appearance anxiety and psychological well-being ($r = -.250$; $p < 0.01$). In addition, it has been found that social appearance anxiety has a significant and negative effect on psychological well-being ($\beta = -.253$; $p < 0.001$).

Conclusion: As a result of this study, it was determined that Pilates exercises reduce social appearance anxiety and increase psychological well-being. It can be said that when women who do regular pilates exercises develop a positive physical image, they are more at peace with themselves and increase their psychological well-being.

Keywords: Pilates, women, social appearance anxiety, psychological well-being, regular activities

INTRODUCTION

Participation in physical activity is becoming increasingly important for individuals as a recreational and health activity ¹. It has been proven that regular physical activity has important effects in the prevention of non-communicable diseases (such as heart disease, hypertension, stroke, diabetes, cancer). In addition to helping to maintain ideal weight, it supports mental health, quality of life and psychological well-being ². Studies show that regularly participating in physical activity or exercise programs can benefit psychological well-being as well as physical health benefits ³. Social appearance anxiety, which is defined as a type of social anxiety, is defined as the anxiety and tension that individuals experience in relation to the evaluation of their physical appearance by others. Social appearance anxiety is defined as "the fear of being negatively evaluated because of one's appearance" ⁴. In other words, it is the emotional reaction that people experience to the evaluation of their physical image by others ⁵. Social appearance anxiety is associated with many concepts such as body image and self-esteem in the literature ⁶. It can be said that a person's healthy lifestyle skills affect their perception of social appearance, and physical activity also plays an important role in the formation of this perception ⁷. Therefore, it can be said that because individuals who participate in exercise programs make it a habit to play sports in order to maintain their health in everyday life, the physical and mental benefits that individuals receive from sports activities make them more at peace with themselves ⁸. Regular and moderate exercise neutralizes stress hormones and activates the

hormone endorphin, known as the happiness hormone, which contributes to making a person feel happier and more energetic. This shows us that sports and various activities relax individuals and provide them with both happiness and fitness ⁹. Social appearance anxiety is more common in individuals with a low level of physical activity. In particular, women have less participation in physical activities than men ¹⁰. Therefore, it has also been found that people with high social appearance anxiety experience a high level of body dissatisfaction ¹¹. On the other hand, social anxiety levels of female students were found to be higher than male students at the level of social anxiety ¹². Çepikkurt & Coşkun ¹³ found that university female dancers were not at peace with themselves and experienced a negative emotion compared to male dancers in terms of their physical appearance. Delfabro et al. ¹⁴ examined body image and psychological well-being in their study of 1281 adolescents. They found that female students had a significantly higher negative body image than male students ¹⁵. Women's positive and negative thoughts about physical appearance affect their body perceptions. Physiological characteristics of women affect psychological states ¹⁶. In light of the prevalence of inactivity, efforts to understand how relevant psychological factors such as body image may be associated with physical activity or sport are of paramount importance ¹⁷. It can be said that one of these efforts is exercise. As a matter of fact, exercise has an important contribution to achieving a healthy and beautiful body. Therefore, positive changes in body image as a result of regular exercises can encourage the individual to exercise regularly ¹⁸. Especially, social appearance anxiety is mostly seen in adolescence, a

developmental period in which physical and hormonal changes are experienced¹⁵. It is well known that puberty is often associated with an increase in body weight for women¹⁹. It has been found that losing weight, keeping the weight in balance and having a beautiful appearance serve the purpose of women to have a good appearance and be healthy²⁰.

Regular physical activities such as pilates, which contribute significantly to the harmonious development of body image and psychological well-being²¹, help individuals stay at peace with their own bodies and be healthy³. When the studies were examined, it was determined that Pilates exercises have positive effects on the overall health and quality of life dimensions^{22,23}. It has been reported that regular Yoga-Pilates exercise is effective in strengthening mental, physical and social-cultural harmony. The pilates method, which has taken its place among the fitness systems and popular exercises today, has a significant effect on shaping the body¹⁸. In this context, it can be thought that individuals who participate in regular pilates exercises may have a positive improvement in body weight, muscle structure and flexibility levels²⁴. It has been observed that the goals of women for the purposes of women's participation in physical activity differ. It has been determined that the health factor is of primary importance in participation in physical activity. Women support health with a good appearance, describing these two factors as complementary elements²⁰. Healthy living behaviors are a way of life and if an individual can acquire these behaviors, they can maintain their health status, bring their health status to a better level, improve their quality of life and easily cope with anxiety²⁵. Most of the literature on body image, it is focused on testing how physical activity and sport are associated with more positive body image, or how sports and physical activity interventions can be used to improve body image¹⁷. When we look at the literature, there are many studies that deal with social appearance anxiety^{26,27,28,29,8,30} and psychological well-being^{31,32,33, 34,35,36,37,38,39} with different variables in the context of sports. However, no study has been found in which the relationship between social appearance anxiety and psychological well-being is discussed together in the context of pilates. Based on this idea, in this study, it is aimed to examine the effect of social appearance anxiety on psychological well-being of women who do regular pilates exercises.

MATERIAL AND METHODS

In this study, a relational screening model was used as one of the quantitative research methods. The relational screening model is a research model that aims to determine the level of variability and relationship between two or more variables⁴⁰.

The study group of the research consists of a total of 382 women who regularly participate in pilates activities in Istanbul, Izmir, Muğla, Hatay and Malatya provinces of Turkey and are selected by convenience sampling method from non-random sampling methods. Participants with less than 1 year of sports experience were not included in this study. The study was based on voluntary participation. A questionnaire was applied to the participants participating in the research with electronic communication tools. It was

determined that 394 questionnaire forms were filled. However, 12 of the scale forms were excluded from the study due to their extreme values. The remaining 382 forms were found suitable for analysis.

As a data collection tool, the social appearance anxiety scale, which was developed by Hart et al.⁴ and adapted into Turkish by Doğan⁴¹, was used to measure social appearance anxiety, to measure socio-psychological well-being, the Psychological Well-Being Scale developed by Diener et al.⁴² and adapted to Turkish by Telef⁴³ was used. The Social Appearance Anxiety Scale consists of 16 items and is one-dimensional. Expressions in the Social Appearance Anxiety Scale were measured with a 5-point Likert scale (in the range of 1 = Not at all Appropriate, 5 = Totally Appropriate). The total score to be taken from the scale is between 16 and 80; high scores indicate high appearance anxiety. Psychological Well-Being Scale consists of 8 items. The items are answered on a scale of 1 to 7 as "I strongly disagree (1)" to "I strongly agree (7)". All items are expressed positively. Scores range from 8 (strongly disagree to all items) to 56 (strongly agree to all items). A high score indicates that the person has many psychological resources and strengths.

In statistical terms, frequency and percentage calculations were made to reveal the demographic characteristics of the participants. In order to confirm the construct validity of the scales, confirmatory factor analysis was applied via SPSS and Amos 20.0 program and reliability coefficients were examined. In addition, correlation analysis was conducted to determine the direction and strength of the relationship between the variables, and hierarchical regression analysis was conducted to test the effect of social appearance anxiety on psychological well-being of women participating in regular pilates activities.

RESULTS

As seen in Table 1, 26.70% of the participants are between the ages of 35-39, 69.1% are married, 60.2% are undergraduates, and 36.4% have 9 years or more of regular exercise. 80.4% of the participants have an exercise frequency of at least 3 days and 42.4% have a daily exercise duration. Its participants with less than a year of sports experience were not included in this study.

Validity and Reliability Analysis: According to the results of confirmatory factor analysis used to confirm the construct validity of the scales, X^2/df values of the scales and the values of other indices had acceptable compatibility⁴⁴⁻⁴⁶. Moreover, Cronbach's alpha coefficients showed that the social appearance anxiety scale were highly reliable, while the psychological well-being scale was quite reliable^{47,48}.

Among the control variables, age and psychological well-being ($r = -.113$) has a significant and negative relationship. Educational status of participants; has a meaningful and positive relationship with regular exercise year ($r = .786$), weekly exercise frequency ($r = .171$), daily exercise time ($r = .333$). In the relationship between social appearance anxiety and psychological well-being is a significant and negative relationship ($r = -.250$; $p < 0.001$) (Table 3).

Table 1: Descriptive statistics of participants in terms of age, marital, educational status, year of regular exercise, weekly exercise frequency and daily exercise duration

Variables		f	%
Age	25 years and under	52	13.61
	26-29 years	64	16.75
	30-34 years	87	22.77
	35-39 years	102	26.70
	40 years and over	77	20.16
	Total	382	100.0
Marital status	Married	264	69.1
	Single	118	30.9
	Total	382	100.0
Educational Status	High school	80	20.9
	Undergraduate	230	60.2
	Postgraduate	72	18.8
	Total	382	100.0
Year of Regular Exercise	1-2 years	98	25.7
	3-4 years	57	14.9
	5-6 years	52	13.6
	7-8 years	36	9.4
	9 years and over	139	36.4
	Total	382	100.0
Weekly Exercise Frequency	At least 3 days	307	80.4
	4 - 5 days	46	12.0
	6-7 days	29	7.6
	Total	382	100.0
Daily Exercise Time	30 min and less	162	42.4
	30-60 min	157	41.1
	60-90 min	44	11.5
	90-120 min	14	3.7
	120 min and over	5	1.3
	Total	382	100.0

Table 2: Validity and reliability results of the scales

Variables	X ²	df	CMIN/DF	GFI	AGFI	CFI	NFI	RMSEA	Cronbacha Alpha
Social Appearance Anxiety	304.193	101	3.012	.908	.876	.903	.863	.07	.845
Psychological Well-Being	45.595	20	2.280	.969	.944	.926	.879	.05	.724

Note: Goodness of fit value ranges is arranged according to acceptable standards

Table 3: Correlation analysis results

Variables	1	2	3	4	5	6	7	8
1. Gender	1							
2. Marital Status	-.052	1						
3. Age	.460*	-.175**	1					
4. Education Status	-.065	.101*	-.048	1				
5. Year of Regular Exercise	-.080	.053	-.040	.786*	1			
6. Weekly Exercise Frequency	-.013	.028	-.082	.171*	.181*	1		
7. Daily Exercise Time	-.076	.014	-.089	.333*	.314*	.432*	1	
8. Social Appearance Anxiety	.051	.083	-.067	-.091	-.131*	-.075	-.065	1
9. Psychological Well-Being	-.100	.052	-.113*	-.000	-.008	.000	-.015	-.250**

**p<0.001 ; *p<0.05

Hierarchical Regression: A two-step analysis of hierarchical regression was conducted in which psychological well-being was the dependent variable, with control variables and social appearance anxiety as the

independent variable. As a result of the analysis, social appearance anxiety has a significant and negative effect on psychological well-being ($\beta = -.253$; $p < 0.001$), and it also shows that it has an explanatory power of 57%. On the other hand, there is no significant effect between control variables and psychological well-being (Table, 4).

Table 4: Hierarchical regression analysis results to determine the relationship between social appearance anxiety and psychological well-being

Independent variables	Step 1			Step 2		
	Beta	t	p	Beta	t	p
1. Gender	-.063	-1.074	.284	-.085	-1.501	.134
2. Age	-.081	-1.376	.170	-.055	-.963	.336
3. Marital Status	.035	.664	.507	.016	.311	.756
4. Educational Status	.016	.184	.854	.011	.131	.896
5. Year of Regular Exercise	-.023	-.271	.787	.012	.142	.887
6. Weekly Exercise Frequency	.005	.091	.927	.021	.373	.709
7. Daily Exercise Time	-.028	-.476	.634	-.027	-.471	.638
Social Appearance Anxiety	-	-	-	.253**	4.987	.000
F		.854		3.572		
R ²		.018		.080		
Adjusted R ²		-.003		.057		

Note: Standardized beta values have been used. **p<0.001 *p<0.05

DISCUSSION

The aim of this study is to determine the effect of social appearance anxiety on psychological well-being of women who regularly participate in pilates activities. Among the psychological well-being of social appearance anxiety is a significant and negative relationship ($r = -.250$; $p < 0.001$). In addition, social appearance anxiety has a significant and negative effect on psychological well-being ($\beta = -.253$; $p < 0.001$). Thus, social appearance anxiety has the power to explain psychological well-being at the 57% level. Women who do pilates appear to have increased psychological well-being as their social anxiety decreased. Engaging in regular pilates activities can be said to reduce physical anxiety and positively support mental and spiritual. A study of Elmas et al.⁴⁹ found that physical activity increased the psychological well-being levels of university students. Kiran⁵⁰ national professional sports athletes who ended their lives in a study of retired athletes who participated in physical activity according to those who refuse to participate in physical activities, psychological well-being of a higher level, has been found to lower levels of depression. Kusan⁵¹ it was observed that as a result of the decline in children's weight after participation in 12 weeks of physical activities administered for boys aged 13-15 years obese, pleasantries for their own bodies increased and levels of psychological well-being increased. Thøgersen-Ntoumani et al.⁵² stated that social appearance anxiety can occur due to weight in a study of university female students. Çelik and Tolan¹¹ found that weight and height satisfaction decreased as the level of social appearance anxiety increased. While the body weight and BMI of women (CrossFit, Plates, Zumba) who participated in the 30-70 minute experimental mixed exercise program

(50-60% target heart rate), including 4 days a week for the 12 weeks they performed on 80 (45 experiments 35 checks) women, their body regions were significantly improved. Body parts satisfaction of women with weight loss has been found to be increasing⁵³. Rodrigues et al.⁵⁴ investigated the effects of pilates exercises on mental health in older women and concluded that performing such exercises over an 8-week period can affect mental health and anxiety reduction. As a result of the 12-week pilates & yoga complex exercise program conducted by Kim & Sul⁵⁵ on 21 female university students, it was determined that young women had a positive effect on skeletal muscle mass, basal metabolism and body satisfaction. Şener et al.⁵⁶ in a study conducted on the symptoms of patients with lymphedema, Clinical Pilates exercises were found to be more effective than standard lymphedema exercises. Lim & Hyun⁵⁷ found that pilates and yoga helped gain health-promoting behaviors in participants and formed positive beliefs about subjective health conditions in an experimental study they conducted on a total of 90 adult subjects between the ages of 30 and 49 who participated in an 8-week pilates and yoga exercise program. In a study conducted by Leite et al.⁵⁸ on women treated for breast cancer, it was determined that pilates exercise method gave more positive results than belly dance. Martínez-García et al.⁵⁹ found that pilates exercises applied 3 times a week for 10 consecutive weeks in girls and adolescents with anorexia nervosa decreased body image dissatisfaction and increased physical satisfaction. There are also findings in the literature that are not parallel to our study. The results of the study of Segal et al.⁶⁰ showed that pilates exercises do not affect general and physical health in men and women older than 18 years. In Australia, Kuo⁶¹ also found that doing Pilates exercises for ten weeks would not affect physical and mental health in individuals over the age of sixty⁶².

CONCLUSION

As a result, according to the findings of this study, it was concluded that pilates exercises reduce social appearance anxiety and increase psychological well-being. It can be said that women who do regular Pilates exercises are more at peace with themselves and increase their psychological well-being when they develop a positive physical image. It shows that Pilates has positive outcomes on women both physically and psychologically. In particular, encouraging programs can be organized to help housewives and pregnant women participate in pilates exercises to protect, improve, and improve their physical health. This study is regularly limited to women participating in the pilates exercise program. Due to both the sample size and the focus on women only, the results of this study cannot be generalized to all women who do pilates exercises. In order to determine whether the results obtained are general and whether they are consistent in different samples, it may be recommended that researchers conduct experimental research in exercise programs different from pilates or in other sports branches in future studies.

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