



Investigation of The Relationship Between Communication Skills, Achievement Motivation, and Anxiety in Exercising and Non-Exercise Women

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Abstract

The aim of this study is to examine the differences in communication skills, sport-specific achievement motivation, and anxiety levels among women who engage in regular exercise, those who have recently started exercising (sedentary + exercise), and sedentary women. A total of 537 women residing in Istanbul participated in the study and were divided into three groups: 158 women who regularly engage in sports, 227 sedentary women, and 152 women who attended one-hour fitness sessions three times a week for the past eight weeks (sedentary + exercise group). The data collection instruments included a personal information form, the Communication Skills Inventory, the Sport-Specific Achievement Motivation Scale, and the Beck Anxiety Inventory. The analysis results showed that women's communication skills, achievement motivation, and anxiety levels differed significantly depending on their exercise status. Women who exercised regularly had significantly higher communication skills and achievement motivation compared to both sedentary women and those in the sedentary + exercise group ($p < .05$). In contrast, sedentary women exhibited higher anxiety levels than participants in the other two groups. Although the women in the sedentary + exercise group had higher communication and motivation scores than sedentary women, their scores were still lower than those of regularly exercising women. In conclusion, exercise habits appear to have a pronounced effect on women's psychological and communicational characteristics. Participation in regular physical activity enhances women's communication skills and achievement motivation while reducing their anxiety levels. These findings demonstrate that exercise is an important factor that supports women's psychological well-being and social interaction skills.

Keywords: Anxiety, Achievement Motivation, Exercise, Communication Skills.

Özet

Egzersiz Yapan ve Yapmayan Kadınlarda İletişim Becerileri, Başarı Motivasyonu ve Kaygı Arasındaki İlişkinin İncelenmesi

Bu çalışmanın amacı, düzenli egzersiz yapan, egzersize yeni başlayan (sedanter + egzersiz) ve sedanter kadınlar arasında iletişim becerileri, spora özgü başarı motivasyonu ve kaygı düzeyleri açısından farklılıkları

incelemektir. İstanbul'da ikamet eden toplam 537 kadın çalışmaya katılmış ve üç gruba ayrılmıştır: aktif olarak spor yapan 158 kadın, sedanter 227 kadın ve son sekiz hafta boyunca haftada üç kez birer saatlik fitness egzersizlerine katılan 152 kadın (sedanter + egzersiz grubu). Veri toplama araçları olarak kişisel bilgi formu, İletişim Becerileri Envanteri, Spora Özgü Başarı Motivasyonu Ölçeği ve Beck Anksiyete Ölçeği kullanılmıştır. Analiz sonuçları, egzersiz durumuna göre kadınların iletişim becerileri, başarı motivasyonu ve kaygı düzeylerinde anlamlı farklılıklar bulunduğunu göstermiştir. Düzenli olarak egzersiz yapan kadınların iletişim becerileri ve başarı motivasyonu düzeyleri hem sedanter hem de sedanter + egzersiz grubundaki katılımcılardan anlamlı düzeyde yüksektir ($p < .05$). Buna karşılık, sedanter kadınların kaygı düzeyleri her iki gruba kıyasla daha yüksek bulunmuştur. Sedanter + egzersiz grubundaki katılımcıların iletişim ve motivasyon puanları, sedanter kadınlara göre daha yüksek olmakla birlikte, aktif egzersiz yapan kadınlardan daha düşüktür. Sonuç olarak, egzersiz alışkanlığının kadınların psikolojik ve iletişimsel özellikleri üzerinde belirgin bir etkisi olduğu görülmektedir. Düzenli fiziksel aktiviteye katılım, kadınların iletişim becerilerini ve başarı motivasyonunu artırırken, kaygı düzeylerini azaltmaktadır. Bu bulgular, egzersizin kadınların ruhsal iyilik hali ve sosyal etkileşim becerilerini destekleyen önemli bir unsur olduğunu göstermektedir.

Anahtar Kelimeler: Anksiyete, Başarı Motivasyonu, Egzersiz, İletişim Becerileri.

INTRODUCTION

In contemporary society, healthy living, physical activity, and mental well-being are among the key determinants of individuals' overall quality of life. Numerous scientific studies have clearly demonstrated that physical activity contributes not only to physical health but also to mental well-being. McInman and Berger (19) observed a marked decrease in psychological problems such as anxiety, depression, and stress, along with a significant increase in energy levels following physical exercise. Similarly, Downs and Strachan (8) indicated that physical activities at the high school level can positively influence individuals' overall levels of physical activity by enhancing their emotional self-efficacy. Furthermore, Lightsey et al. (17) demonstrated that emotional self-efficacy is a critical factor in determining an individual's ability to effectively regulate emotional states. Emotional self-efficacy plays an important role in reducing tension, maintaining emotional regulation, and improving mental health. These studies reveal that exercise not only improves physical health but also yields positive outcomes in cognitive, emotional, and social domains. Regular exercise enhances individuals' ability to cope with stress, facilitates emotional balance, and contributes to the improvement of overall life quality.

It has become increasingly recognized that physical activity plays a vital role not only in maintaining physical health but also in enhancing mental and emotional well-being. In addition to its physiological benefits, regular exercise contributes to emotional regulation, stress management, and strengthening self-perception, which are key components of psychological health. Research indicates that individuals who engage in regular physical activity demonstrate higher levels of motivation, emotional balance, and self-confidence compared to sedentary individuals (2, 28).

Beyond its therapeutic effects on mental health, exercise has also been shown to produce positive outcomes in several psychosocial domains, including achievement motivation, communication skills, and anxiety. Participation in exercise promotes self-discipline, goal orientation, and persistence fundamental aspects of achievement motivation (7). Furthermore, physical activity settings often involve interpersonal interaction, cooperation, and effective communication, thereby supporting the development of individuals' social and communication skills (4). Regular physical activity has also been found to reduce anxiety levels by increasing endorphin release, lowering stress hormones, and improving overall mood regulation (6).

From this perspective, exercise can be viewed as a multidimensional behavioral tool that enhances both psychological and social well-being. Understanding how physical activity habits influence communication skills, achievement motivation, and anxiety is essential for developing strategies aimed at improving women's quality of life. Accordingly, the present study aims to examine the relationships between communication skills, sport-specific achievement motivation, and anxiety among women who do and do not participate in regular physical activity. Communication is a fundamental component that directly influences individuals' social and emotional well-being. Effective communication skills enable individuals to cope with stress, maintain emotional balance, and utilize social support mechanisms more efficiently. Research has shown that

individuals with strong communication skills are better able to manage emotional difficulties and tend to exhibit lower levels of anxiety (3). Moreover, healthy communication contributes to the formation of strong social bonds, enhances interpersonal harmony, and facilitates more efficient handling of stressful situations (9). Exercise is known not only to improve physical health but also to enhance social interactions and communication skills. Regular physical activity has been found to improve individuals' empathy, help them express themselves more effectively, and promote greater openness and competence in social contexts (22). In this regard, it can be argued that the benefits of physical activity extend beyond physical well-being, positively influencing both communication competencies and mental health. Women, in particular, face a range of challenges in terms of both physical and psychological health, stemming from societal and cultural factors. Work and family responsibilities, societal norms, and gender-based role expectations can significantly affect women's quality of life, contributing to psychological issues such as stress, anxiety, and depression. Additionally, women's participation in physical activity tends to be lower due to social and familial obligations (26). This often results in limited time allocated for exercise and a tendency to neglect physical activity altogether.

The primary aim of this study is to examine the relationship between communication skills, achievement motivation, and anxiety in women who engage in exercise and those who do not. Rather than experimentally testing the effects of an intervention, the study descriptively compares these psychological and social variables across groups with different exercise participation statuses. By identifying how exercise habits are associated with communication competence, motivation, and anxiety, this research aims to contribute to a deeper understanding of how physical activity relates to women's psychological and social well-being. The findings are expected to provide insight into the potential benefits of exercise for improving emotional balance, motivation, and interpersonal effectiveness in women.

In line with the purpose of the study, the research focused on examining whether communication skills, sport-specific achievement motivation, and anxiety levels differ according to various demographic and participation-related variables among women with different exercise habits. Specifically, the study investigated whether there were significant differences in these variables based on body weight, marital status, age, educational status, weekly training frequency, and sports experience within the groups of physically active, sedentary, and sedentary + exercise participants. Additionally, for the physically active group, differences according to the type of sport performed were analyzed. Beyond group comparisons, the study also examined the relationships between communication skills, sport-specific achievement motivation, and anxiety levels. Furthermore, predictive analyses were conducted to determine whether anxiety significantly predicted communication skills and sport-specific achievement motivation, and whether achievement motivation predicted communication skills among women participants.

METHOD

Research design

This study adopted the relational survey model, one of the quantitative research methods. The relational survey model is a research design that seeks to analyze the interaction between variables and allows for the examination of how two or more variables change together and in what direction (12). This approach is appropriate for identifying and analyzing the strength and direction of the relationships among communication skills, achievement motivation, and anxiety levels in women with different exercise habits. The model not only reveals whether a relationship exists among the variables but also provides insight into the degree and nature of these relationships. Within the scope of this research, the effects of exercise habits on women's psychological and socio-emotional states will be assessed, and the reflections of these effects on overall quality of life will be discussed. The findings of this study are expected to contribute to the scientific literature by providing evidence supporting the positive effects of sports and physical activity on individuals, particularly by revealing the relationship between women's levels of physical activity and their psychosocial well-being.

Participants

In this study, participants were selected using a purposeful sampling method based on voluntary participation among women residing in Istanbul, Türkiye. The study was limited to three districts within Istanbul: Zeytinburnu, Gaziosmanpaşa, and Küçükçekmece. Three distinct groups were formed for the purposes of the research: (1) 158 women who engage in physical activity (active exercisers), (2) 227 sedentary women who do not participate in any form of physical activity, and (3) 152 women who had recently begun participating in structured exercise programs.

The inclusion of the third group was intentional to represent women in the transitional phase from a sedentary lifestyle to active participation. Examining this group allows for the observation of early psychological and behavioral changes that may occur as women begin exercising, providing a more comprehensive understanding of how exercise participation affects communication skills, achievement motivation, and anxiety. In total, 537 female participants were included in the study.

The determination of sample size was made by taking into account the population of women who are actively involved in sports or enrolled in exercise programs in the selected districts of Istanbul. The sample size calculation was based on the sampling size table provided by Yazıcıoğlu and Erdoğan (30), which offers guidance on determining appropriate sample sizes within a specified confidence interval and margin of error for a given population.

Table 1. Demographic Characteristics of the Participants

Variable	Category	Exercising Women (n=158)	Non-Exercising Women (n=227)	Sedentary + Exercise (n=152)	Total (n=537)
Age	18–30 years	145 (91.8%)	136 (59.9%)	57 (37.5%)	338 (62.9%)
	Over 31 years	13 (8.2%)	91 (40.1%)	95 (62.5%)	199 (37.1%)
Body Weight	55 kg or below	77 (48.7%)	44 (19.4%)	16 (10.5%)	137 (25.5%)
	56–65 kg	61 (38.6%)	72 (31.7%)	57 (37.5%)	190 (35.4%)
	66 kg or above	20 (12.7%)	111 (48.9%)	79 (52.0%)	210 (39.1%)
Marital Status	Married	12 (7.6%)	89 (39.2%)	90 (59.2%)	191 (35.6%)
	Single	146 (92.4%)	138 (60.8%)	62 (40.8%)	346 (64.4%)
Education Level	Primary School	1 (0.6%)	26 (11.5%)	19 (12.5%)	46 (8.6%)
	Middle School	3 (1.9%)	14 (6.2%)	12 (7.9%)	29 (5.4%)
	High School	49 (31.0%)	79 (34.8%)	53 (34.9%)	181 (33.7%)
	Associate Degree	21 (13.3%)	40 (17.6%)	20 (13.2%)	81 (15.1%)
	Bachelor's Degree	73 (46.2%)	61 (26.9%)	46 (30.3%)	180 (33.5%)
	Master's Degree	11 (7.0%)	7 (3.1%)	2 (1.3%)	20 (3.7%)

Participants in the sedentary + exercise group were women who had recently started participating in structured exercise programs. The program consisted of one-hour sessions conducted three times per week in the districts of Gaziosmanpaşa, Zeytinburnu, and Küçükçekmece in Istanbul, taking place on Mondays, Wednesdays, and Fridays. Each session included fitness exercises structured with specific sets, repetitions, and rest intervals. All training procedures were observed as part of the study and were not implemented by the researcher.

Participants in the active exerciser group continued their individual training programs three to four times per week, with each session lasting approximately 1.5 hours. In contrast, participants in the sedentary group did not engage in any form of exercise program and maintained their usual daily routines.

All participants voluntarily completed the questionnaires.

This study was conducted in accordance with the decision of the Non-Interventional Clinical Research Ethics Committee of Selçuk University, Faculty of Sport Sciences, dated 09.11.2022 and numbered 146.

Data collection tools

Within the scope of the research, data were collected using a personal information form, the Communication Skills Evaluation Scale, the Sport-Specific Achievement Motivation Scale, and the Beck Anxiety Inventory. The data collection process was conducted through face-to-face interviews by the researcher, and participants were provided with the necessary explanations before the implementation of the tools.

Personal Information Form: A personal information form developed by the researcher was used to determine the participants' basic demographic characteristics. This form included questions regarding age, weight, marital status, education level, type of sport (individual or team sport), weekly training frequency, and sporting background.

Communication Skills Assessment Scale (CSAS): The scale used to measure communication skills was originally developed by Korkut (14) and later revised by Korkut Owen and Bugay (15) under the title "Communication Skills Assessment Scale." The scale is based on a 5-point Likert-type response format, ranging from "never" to "always," and aims to assess individuals' level of communication skills. It consists of 25 items and four sub-dimensions: Principles and Basic Skills of Communication, Self-Expression, Willingness to Initiate Communication, and Active Listening and Nonverbal Communication. The validity and reliability analyses of the scale yielded a Cronbach's alpha coefficient of 0.90. In this study, the Cronbach's alpha coefficient was found to be 0.88. Higher scores on the scale indicate higher levels of communication skills.

Sport-Specific Achievement Motivation Scale (SSAMS): Originally developed by Willis (29) and adapted into Turkish by Tiryaki and Gödelek (23), the Sport-Specific Achievement Motivation Scale aims to measure individuals' motivation for success within the context of sports. The scale consists of 40 items and is used to evaluate participants' motivation related to sports. It comprises three sub-dimensions:

- **Tendency to Demonstrate Power:** Reflects the individual's desire to achieve physical and psychological superiority.
- **Focus on Success:** Measures the athlete's motivation to achieve personal goals.
- **Fear of Failure:** Addresses the individual's anxiety about failing and the emotional responses associated with it.

The items in the scale are rated using a 5-point Likert-type scoring method. Higher scores in the "Demonstration of Power" and "Focus on Success" dimensions indicate a high level of achievement motivation related to sports. Conversely, higher scores in the "Fear of Failure" sub-dimension indicate a higher level of anxiety in the participant. The reliability coefficient of the scale was calculated as 0.89 in the original studies and found to be 0.91 in the analyses conducted within the scope of this research.

Beck Anxiety Inventory (BAI): Developed by Beck et al. (1), the Beck Anxiety Inventory is an assessment tool designed to measure individuals' levels of anxiety. It is composed of 21 items, each describing a different anxiety symptom, and is aimed at identifying the anxiety symptoms experienced by participants over the past week. Each item is rated on a scale from 0 to 3, and the total score determines the individual's level of anxiety.

Anxiety levels are classified as follows:

- **Mild Anxiety:** 8–15 points
- **Moderate Anxiety:** 16–25 points
- **Severe Anxiety:** 26 points and above

The Turkish adaptation of the scale was performed by Hisli (10), and validity and reliability studies were carried out by Ulusoy (25). The internal consistency (Cronbach's alpha) of the scale was calculated as 0.93, and the test-retest reliability was 0.75. Factor analyses revealed two sub-factors: Cognitive Symptoms and Somatic Symptoms. In the current study, the reliability coefficient of the scale was found to be 0.89.

Data analysis

The statistical analyses in this study were conducted using SPSS 25.0 software. Frequency analysis was applied to examine the demographic data of the participants, and the data from all individuals included in the

study were analyzed. Since data collection was conducted through face-to-face interviews, there were no missing or incorrect data.

To assess whether the data conformed to a normal distribution, skewness and kurtosis coefficients were examined. Normal distribution was considered to be met if these coefficients fell within the range of ± 1 . For sample sizes greater than 35, the Kolmogorov-Smirnov test was used, while the Shapiro-Wilk test was applied for smaller sample sizes. A p value greater than 0.05 in these tests indicated that the data were normally distributed (20). However, for the present study, the data were found to deviate from a normal distribution; therefore, non-parametric tests were employed.

The Mann-Whitney U test was used to compare two groups, and the Kruskal-Wallis test was applied for comparisons involving more than two groups. In cases where the Kruskal-Wallis test did not reveal a significant difference, pairwise group comparisons were conducted using the Mann-Whitney U test. In addition, Spearman's correlation analysis was performed to examine the relationships between communication skills, achievement motivation, and anxiety levels. Furthermore, multiple regression analyses were conducted to determine the predictive relationships among these variables. For all statistical tests, the level of significance was set at $p < 0.05$.

FINDINGS

This section compares the communication skills (CSAS), sport-specific achievement motivation (SAMQ), and anxiety levels (Beck) of active athletes, sedentary individuals, and sedentary+exercise participants. Furthermore, the relationships between the relevant scales and the regression analyses are examined. For the study, only the differences between the groups, the relationships between the variables, and the regression analysis findings are presented.

Variable	Group	N	Rank Avg.	X ²	p	Difference
Communication Principles and Basic Skills	Active Sports	158	241.64	16,171	.000*	1 < 3, 2 < 3
	Sedentary	227	260.69			
	Sedentary+Exercise	152	309.86			
Self-Expression	Active Sports	158	241.68	17,486	.000*	1 < 3, 2 < 3
	Sedentary	227	259.49			
	Sedentary+Exercise	152	311.60			
Active Listening and Nonverbal Communication	Active Sports	158	247.74	12,832	.002*	1 < 3, 2 < 3
	Sedentary	227	258.82			
	Sedentary+Exercise	152	306.30			
Willingness to Communicate	Active Sports	158	251.28	11,789	.003*	1 < 3, 2 < 3
	Sedentary	227	257.07			
	Sedentary+Exercise	152	305.24			
Total IBS	Active Sports	158	240.17	19,611	.000*	1 < 3, 2 < 3
	Sedentary	227	258.55			
	Sedentary+Exercise	152	314.57			
Showing Power	Active Sports	158	310.64	159,554	.000*	2 < 3
	Sedentary	227	173.88			
	Sedentary+Exercise	152	367.77			
Approaching Success	Active Sports	158	327.03	160,060	.000*	2 < 3
	Sedentary	227	171.12			
	Sedentary+Exercise	152	354.85			
Avoiding Failure	Active Sports	158	316.84	135,166	.000*	2 < 3
	Sedentary	227	179.79			
	Sedentary+Exercise	152	352.50			
Total SÖBMÖ	Active Sports	158	316.11	165,989	.000*	2 < 3
	Sedentary	227	170.97			
	Sedentary+Exercise	152	366.44			
Subjective Symptoms	Active Sports	158	315.30	107,730	.000*	1 > 3, 2 > 3
	Sedentary	227	310.64			

Somatic Symptoms	Sedentary+Exercise	152	158.69	72,471	.000*	1 > 3, 2 > 3
	Active Sports	158	305.93			
	Sedentary	227	303.58			
Beck Total	Sedentary+Exercise	152	178.97	104,015	.000*	1 > 3, 2 > 3
	Active Sports	158	314.39			
	Sedentary	227	310.07			
	Sedentary+Exercise	152	160.48			

- 1 = Active athletes, 2 = Sedentary, 3 = Sedentary + Exercise Group
- Communication Skills Assessment Scale
- SÖBMÖ = Sport-Specific Achievement Motivation Scale
- p < .05

Presents comparisons of communication skills, sport-specific achievement motivation, and anxiety levels among the active sports, sedentary, and sedentary+exercise groups. Analysis results revealed statistically significant differences between the groups in all sub-dimensions of communication skills (communication principles and basic skills, self-expression, active listening and nonverbal communication, and willingness to communicate) (p < 0.05). Difference analyses indicate that the sedentary+exercise group had higher communication skills than both groups.

Significant differences were found between the groups in the total score and all subscales of the Sport-Specific Achievement Motivation Scale (SSMMS) (p < 0.05). The Sedentary+Exercise group was found to have higher levels of achievement motivation, particularly compared to the sedentary group.

Significant differences were also observed in subjective symptoms, somatic symptoms, and total Beck scores related to anxiety levels (p < 0.05). These findings indicate that the sedentary+exercise group had lower anxiety levels compared to both the sedentary and active exercise groups.

In general, the results of Table 2 reveal that the sedentary+exercise group, which had just started exercising, had higher scores in terms of communication skills and success motivation, and lower scores in terms of anxiety levels.

Table 3. Relationship Between Scales

		Showing Power	Approaching Success	Avoiding Failure	Total SÖBMÖ	Subjective Symptoms	Somatic Symptoms	Beck Total
Communication principles and basic skills	r	.238 **	.281 **	.081 *	.210 **	-.229 **	-.193 **	-.230 **
	p	.000	.000	.034	.000	.000	.000	.000
Self-expression	r	.204 **	.253 **	-.010	.149 **	-.311 **	-.278 **	-.313 **
	p	.000	.000	.785	.000	.000	.000	.000
Active Listening and Nonverbal Communication	r	.275 **	.329 **	.122 **	.260 **	-.229 **	-.225 **	-.240 **
	p	.000	.000	.001	.000	.000	.000	.000
Willingness to Communicate	r	.275 **	.298 **	.126 **	.249 **	-.190 **	-.149 **	-.187 **
	p	.000	.000	.001	.000	.000	.000	.000
Total IBS	r	.291 **	.346 **	.095 *	.257 **	-.282 **	-.243 **	-.283 **
	p	.000	.000	.012	.000	.000	.000	.000
Showing Power	r	1,000	.774 **	.672 **	.867 **	-.157 **	-.118 **	-.149 **
	p	.	.000	.000	.000	.000	.002	.000
Approaching Success	r	.774 **	1,000	.653 **	.890 **	-.228 **	-.157 **	-.213 **
	p	.000	.	.000	.000	.000	.000	.000
Avoiding Failure	r	.672 **	.653 **	1,000	.885 **	.011	.015	.014
	p	.000	.000	.	.000	.766	.700	.705
Total SÖBMÖ	r	.867 **	.890 **	.885 **	1,000	-.123 **	-.090 *	-.117 **
	p	.000	.000	.000	.	.001	.018	.002

The Spearman correlation analysis in Table 3, positive and significant relationships were found between the total score of the Communication Skills Assessment Scale (CASS) and the total score and sub-dimensions

of the Sport-Specific Achievement Motivation Scale (SASMS) ($p < 0.01$). The relationship between the total score of the CASS and the SASMS is low and positive ($r = 0.257$). This result suggests that as achievement motivation increases, communication skills tend to increase as well.

On the other hand, significant negative correlations were found between the total score of the LOSS and the subjective symptoms, somatic symptoms, and total score of the Beck Anxiety Inventory ($p < 0.01$). These correlations were low, indicating that communication skills decreased as anxiety levels increased (e.g., $r = -0.283$ for the Beck total score).

Low-level, negatively significant correlations were found between sport-specific achievement motivation (SSMAM) and Beck anxiety scores ($p < 0.05$). Significant negative correlations were observed with anxiety, particularly in the subscales of power play and approaching success. These results suggest that as anxiety increases, achievement motivation levels decrease somewhat.

Table 4. Regression Analysis Examining the Effect of DSQ on DSQ

Variable	B	Std . Error	β	t	F	p	R ²
Still	91,823	1,671	-	54,966	36,274	0.000*	0.063
SÖBMÖ	0.083	0.014	0.252	6,023			

- Dependent variable: Communication Skills Assessment Scale (CSAS)

Regression analysis results indicate that Sport-Specific Achievement Motivation Scale (SAMMS) scores are a significant predictor of communication skills ($p < .05$). An increase in SAMMS scores positively and slightly increases SASQ scores. The variance explained by the model is low ($R^2 = .063$). This result suggests that achievement motivation contributes to communication skills, but its effect is limited.

Table 5. Regression Analysis Examining the Effect of Beck Anxiety Level on LOSS

Variable	B	Std . Error	β	t	F	p	R ²
Still	105,373	0.837	-	125,920	44,627	0.000*	0.077
Beck	-0.301	0.045	-0.277	-6,680			

- Dependent variable: Communication Skills Assessment Scale (CSAS)

Beck Anxiety Inventory scores were found to have a significant effect on the LOSS ($p < 0.05$). Findings indicate that communication skills decrease as anxiety levels increase. While the effect size is low, the model is significant ($R^2 = 0.077$). This suggests that individuals experiencing high anxiety may exhibit lower levels of communication skills.

Table 6. Regression Analysis Examining the Effect of Beck Anxiety Level on SPMQ

Variable	B	Std . Error	β	t	F	p	R ²
Still	118,617	2,643	-	44,885	4,934	0.000*	0.009
Beck	-0.316	0.142	-0.096	-2,221			

- Dependent variable: SÖBMÖ (Sport-Specific Achievement Motivation Scale)

Beck Anxiety Inventory scores appear to have a significant effect on the DSAS ($p < .05$). As anxiety levels increase, achievement motivation decreases slightly. The variance explained by the model is quite low (0.9% ; $R^2 = .009$), indicating that anxiety has only a small effect on achievement motivation.

DISCUSSION

This study examined the communication skills, sport-specific achievement motivation, and anxiety levels of women who were active in sports, sedentary, and new to exercise, and evaluated the impact of exercise habits on the women's psychosocial profile from a broad perspective. The study results showed that regular exercise improved both communication skills and achievement motivation, while reducing anxiety levels, while sedentary individuals were at a disadvantage in these areas. These results are largely consistent with the literature on the effects of physical activity on psychological and behavioral outcomes.

According to the findings, the sedentary + exercise group had significantly better communication skills and achievement motivation than the sedentary group, although not as high as the active sports group. This result demonstrates that even a new exercise program can have positive effects on communication skills and motivation in a short period of time. Chen et al.'s (5) meta-analysis examining the effects of body-mind-based

exercise on anxiety in women revealed that 8–12-week exercise programs, in particular, improved psychological well-being. This may be one of the primary mechanisms explaining the observed improvements in communication skills and motivation observed in our study due to the sedentary + exercise group's participation in the 8-week program. Similarly, Yue et al.'s (31) findings that physical activity reduces symptoms of depression and anxiety in menopausal women support the notion that exercise has a universally enhancing effect on overall mood.

The results obtained in terms of communication skills indicate that sports environments provide a natural basis for interaction between individuals. In environments such as the gym, teamwork, or group exercise, individuals' social contact increases, contributing to the development of communicative competence. A study conducted by Kaya and Sunay (13) on women exercising in Kırşehir reported that communication skills significantly improved as exercise duration increased. These results suggest that the improvement in communication skills of individuals who began exercising in the current study may become more pronounced as exercise duration increases.

The findings regarding motivation are particularly noteworthy, particularly regarding the higher achievement motivation in the sedentary + exercise group. This can be explained by the fact that structured exercise programs trigger mechanisms such as goal setting, self-regulation, and self-confidence in individuals. Vučković and Đurić's (27) study found that individuals who exercised with a personal trainer had higher health-based motivation, while intrinsic motivation was more prominent in those who exercised individually. These findings suggest that the increased motivation in the sedentary + exercise group in our study may be related to the novelty effect seen in novice individuals and the supportive nature of the group environment. Murray et al.'s (21) findings that social identity and physical self-perception increase motivation in young female athletes indicate that the exercise process is not only a physical but also a social process. In this context, social support environments become a critical factor for the sustainability of motivation for individuals new to exercise.

In terms of anxiety levels, the higher anxiety observed in sedentary individuals may be explained by the effects of physical activity on anxiety regulation mechanisms. Regular exercise increases endorphin release and reduces anxiety by triggering physiological relaxation responses. A large-scale meta-analysis by Li et al. (16) examining the dose-response relationship between physical activity level and anxiety risk showed that 10–20 MET-hours of physical activity per week significantly reduced anxiety, while vigorous activity did not outweigh the benefits. In the current study, the lower anxiety levels in the sedentary + exercise group support the psychological benefits of moderate-intensity exercise programs conducted in this dose range. Furthermore, McDowell et al.'s (18) meta-analysis demonstrates that physical activity reduces the risk of long-term anxiety disorders directly aligns with the findings in our study.

The findings regarding age and education level are also consistent with literature. Various studies have supported the notion that young women have higher motivation and lower anxiety (11, 24). The impact of education level on communication skills is consistent with theoretical explanations that it increases an individual's social awareness and self-expression skills. However, the lack of an education-related difference in the sedentary + exercise group may be due to the fact that this group had just begun the exercise process and had not experienced sufficient social exposure to develop communication skills.

In conclusion, physical activity appears to have multifaceted effects not only on physical health but also on psychological well-being, social communication, motivation, and anxiety regulation. The findings of this study suggest that supporting women's exercise habits can contribute to psychosocial development. When evaluated alongside domestic and international studies in literature, it is concluded that exercise is an important lifestyle element that strengthens individuals' mental health, communication skills, and motivation levels. Both short-term and long-term effects of regular physical activity are observed to be positive; therefore, it is recommended that policies aimed at improving public health be designed to increase exercise participation.

CONCLUSION

Overall, the findings confirm the comprehensive and multifaceted impact of exercise on psychosocial functioning. These findings support the notion that regular physical activity improves communication skills, strengthens achievement motivation, and reduces anxiety levels. Consistence with extensive research in literature strengthens the scientific validity of the study's results. Conclusion and Recommendations

Regular physical activity appears to have significant effects on communication skills, achievement motivation, and anxiety in women. Research findings indicate that women who actively exercise have higher communication skills and achievement motivation than sedentary individuals. Sedentary women, on the other hand, have been found to experience higher levels of anxiety compared to both those who exercise regularly and those who are new to an exercise program. Conversely, even short-term exercise participation in women new to exercise has been found to increase communication skills and achievement motivation while simultaneously reducing anxiety levels. Furthermore, achievement motivation is a significant predictor of communication skills, while anxiety negatively impacts both communication skills and achievement motivation. A key conclusion of this study is that physical activity has multifaceted positive outcomes on psychological, social, and emotional functions.

In this regard, it is recommended that programs be developed to increase women's participation in exercise and that community-based exercise projects be supported, given that even short-term exercise interventions can be effective. Physical activity modules can be incorporated into educational programs aimed at improving communication skills, and integrating exercise-based interventions into psychological counseling processes for individuals with high anxiety may be beneficial. Furthermore, future research is recommended to more comprehensively examine the effects of long-term exercise programs and the role of different sports on psychological variables.

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