



Determining The Relationship Between Exercise Dependence And Narcissism Levels Of Athletes

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Abstract: There exist a positive relationship between exercise and narcissistic personality. Athletes who develop narcissistic personality traits wanted to be trained continuously to be successful. As a result, they become addicted to exercise. Athletes with narcissistic personalities should seek help from experts so that they do not become addicted to exercise. Narcissistic people tend to be addicted to exercise. Narcissistic athletes should be constantly checked by their trainers to prevent them from becoming exercise addicts. There are currently limited investigations that have examined the relationship between narcissistic personality traits and exercise dependence. The purpose of the present study was to explore the relationship between exercise dependence levels and narcissistic personalities of male athletes in wrestling, weight lifting, and body building. In this study, narcissistic personality inventory and exercise dependence scale were used as a data collection tool. Statistical software (SPSS 20 version) was used to analyze the data. It was observed that the data is normally distributed and homogeneous. Descriptive statistical analysis and Spearman correlation analysis were used to determine the direction and severity of the relationship between the variables. The study group consisted of 25 wrestlers, 23 weight-lifters, and 14 bodybuilders who achieved the first 3 ranks in Turkey Championships. As a result of descriptive statistical analysis, dropping exercise scores of athletes were as 3.866, sustainability scores were as 2.806, tolerance scores were as 4.634, lack of control scores was as 1.634, decrease in other activities scores was as 1.581, duration scores were as 4.796, intention effect scores were as 2.753, total exercise addiction scores were as 3.153 and narcissism scores were determined as 8,048. At the end of the study, it was determined that the athletes under the sample had a relationship between narcissism and exercise addiction levels. According to descriptive statistical analysis, wrestlers were observed to get the highest scores in lack of control, sustainability, dropping exercise sub-dimensions.

Keywords: Narcissistic Personality, Exercise Addiction, Bodybuilding, Wrestler, Weightlifter.

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1. INTRODUCTION

There exist a positive relationship between exercise addiction and narcissistic personality. From early studies, individuals with narcissistic personalities were "exercise addicts," and these individuals participate in extreme sports where they can exhibit themselves.^{1,2} In addition, one of the most important points which lead to exercise addiction in athletes is physical dissatisfaction.² In case athletes don't reach ideal physical body perception in their minds, they choose more training.³ Addiction is defined as a passionate desire towards a thing or object even though it may hurt individuals mentally or physically.² Addiction is mostly assessed under two titles essentially physical and mental.¹⁻³ Situations establishing happiness and satisfaction in an individual are defined as a mental addiction. Substance addiction and exercise addiction can be demonstrated as an example for this mental addiction. Desiring a material or a thing physiologically is defined as physical addiction.¹ With exercises, the self-respect of individuals increases, and one can cope with the situations thus managing the stress better, their anxiety levels decrease, and there are also many positive mental contributions of exercise.² It was understood that not only regular exercise contributes benefits to individuals from many aspects but also excessive exercise may lead an individual to many negative situations.⁴⁻⁷ The terminology used for those who exercise a lot is defined as exercise addicts. Exercise addiction is generally defined as a passionate desire to participate in physical exercises.⁸ There are some significant points in determining exercise addiction; the exercise duration, increases in velocity and frequency of exercises, getting away from family and friends because of physical activity are an indicator of exercise addiction. Exercise addiction was discussed in the literature under two titles; if someone exercises to overcome the difficulties in his/her life, this is defined as a positive addiction. If someone experiences depression, anxiety, and several mental problems from exercise, it shows that there is an increased amount of exercise addiction.³ Individuals who are exercise addicts believe that they need to exercise every day, otherwise they become affected negatively unless they participate in physical exercise.⁸ At the end of research related to exercise addiction, it was reported that there was a relationship between exercise addiction and personality.^{8,9} It was seen in literature that there was an association of Obsessive-Compulsive disorder, perfectionism, narcissistic personality, and introvert personality traits with exercise. In their study, they reported that individuals who exercise at high velocity, frequency, and duration are "exercise addicts".⁹ A narcissistic personality is defined as a passionate desire situation of an individual to his/her thoughts and body.¹⁰⁻¹² One of the most impressive traits of narcissist individuals is the belief that they are different. They see themselves as superior to others, and they believe that they are the best and special ones. Narcissist individuals love themselves a lot, both physically and mentally.¹⁰ Narcissist individuals love their physical and mental traits more and are proud of them. Narcissistic individuals see exercise as a means for an aesthetic appearance and a beautiful physical perception. Therefore, exercise addiction can be observed more in narcissistic individuals.^{11,12} The main intention of narcissistic individuals in human relations is to see others as a means for reaching their goals in their lives.¹² A social environment is important for being an area where they satisfy their passionate desires towards potential and important achievements.¹¹ As narcissist individuals see others as a

means, they are not able to set close relationships with others. For this reason, they face some difficulties to meet their needs in their close relationships.¹¹ Otto Rank used narcissism to admire oneself and describe sexual self-love.¹² This study aims to determine the relationship between exercise dependence levels and narcissistic personalities of male athletes in wrestling, weight lifting, and body building. In this study, narcissistic personality inventory which was valid and reliable by Salim Atay in Turkish, and exercise dependence scale which includes validity and reliability by Yeltepe was used as a data collection tool.^{12,13}

2. MATERIALS AND METHODS

In this study, correlational surveying models for qualitative research models were used. Before starting the study, the athletes were informed about the study and the scales to be used in the study. It was stated that the athletes who were willing to participate in the study were included in the study and the athletes who were not willing to answer the scale questions were excluded from the study.

2.1 Ethical Clearance

An ethical committee approval for this study was obtained from the Iğdır University Scientific Research and Publication Ethics Committee on 09.04.2021 prior to data collection. Written consent was taken from the participant.

2.2 Study Group

The study group consisted of 25 wrestlers, 23 weight-lifters, and 14 body builders who achieved the first 3 ranks in Turkey Championships. A total of 62 athletes participated in the study. The age range of the athletes participating in the study was 18-25.

2.3 Data Collection Tools

2.3.1 Exercise Addiction Scale-21

The Exercise Addiction Scale was developed by Heather A. Hausenblas and Daniel Symons Downs in 2002.³ This scale can be applied individually to people aged 18 or above. The scale consists of 21 questions, 7 sub-dimensions, and each dimension is measured with 3 questions. Sub-dimensions of scale are tolerance, withdrawal, purpose, lack of control, duration, dropouts from other activities, and sustainability. In case, an individual gets 5-6 scores from each question, they are classified as exercise addicts. Similarly, when individuals get 3-4 scores from each question, they are classified as symptomatic, so these individuals can be considered at risk of exercise addiction. Individuals who get 1-2 scores are classified as asymptomatic.¹³ determined by Cronbach values as 0.96,18 in the first application, and in the second application, Cronbach was determined as 0.97,19. The lowest score that can be obtained from the Exercise Addiction scale is 21, and the highest score is 126. When total scores obtained were divided into question numbers, then their asymptomatic, symptomatic, and addiction status can be revealed.

2.3.1.1 Tolerance

Determination of exercise tolerance measures satisfaction and benefits from exercise on the same level when duration,

velocity, and frequency of exercise are increased. Desired effects only can be provided by increasing the amount of exercise.¹³

2.3.1.2 . The Effect of Stopping Exercise

These are the unpleasant mental issues such as anxiety, insomnia, and headaches which occur when exercise programs is discontinued due to several causes.¹³

2.3.1.3 . Intention effect

Intention effect denotes increase in the velocity of the exercise program by an individual with extended duration and frequency of the exercise program.¹³

2.3.1.4 . Losing Control

It is a result of having failed at each attempt in controlling or dropping exercise as a result of a desire to control or drop exercise continuously.¹³

2.3.1.5 . Duration

It refers to spending a lot of time on sports or exercise.

2.3.1.6 . Decreasing Other Activities

This occurs when one takes exercise in the center of their

lives by getting away from their social environment without spending enough time with their family and friends. They don't participate in social activities for exercise for the sake of exercise.¹³

2.3.1.7 . Sustaining

Despite they are aware of a physical or physiological problem and prohibition of the practitioner from exercise, individuals continue to exercise (i.e. keep running despite injuries).^{13,14,15}

2.3.2. Narcissistic Personality Inventory

Narcissistic Personality Inventory is a scale employed to measure narcissistic personality traits.. The validity and reliability study of the scale was made by Salim Atay in 2009^{16,12}

3. STATISTICAL ANALYSIS

The analysis of the data was made via SPSS 20.0 program. Since normal distribution was not achieved, the analyses were made via nonparametric statistical tests. Moreover, the between-variables relationships were examined via Spearman's rank correlation coefficient. Descriptive statistics and correlation analysis were used in the analysis of the data.

4. RESULTS

Table 1. Descriptive Statistical Analysis	
	Mean±SD
Effects of Dropping Exercise	3.866 ±0.374
Sustainability	2.806±0.394
Tolerance	4.634 ±0.482
Lack of Control	1.634 ±0.275
Decrease in Other Activities	1.581 ±0.330
Duration	4.796 ±0.411
Intention Effect	2.753 ±0.386
Total Exercise Addiction	3.153 ±0.159
Narcissism	8.048 ±2.445

The values are expressed as mean±SD; (n=62)

As a result of descriptive statistics analysis, dropping exercise scores of athletes were as 3.866, sustainability scores were as 2.806, tolerance scores were as 4.634, lack of control scores was as 1.634, decrease in other activities scores was

as 1.581, duration scores were as 4.796, intention effect scores were as 2.753, total exercise addiction scores were as 3.153 and narcissism scores were determined as 8,048. (Table 1)

Table 2. Descriptive Statistics Results According to Sports Branches				
		n	Mean	±SD
Effects of Dropping Exercise	Body-Building	14	3.8810	0.40525
	Wrestling	25	3.8800	0.38345
	Weight Lifting	23	3.8406	0.36055
Sustainability	Body-Building	14	2.7857	0.40525
	Wrestling	25	2.8133	0.39768
	Weight Lifting	23	2.8116	0.39982
Tolerance	Body-Building	14	4.6190	0.48670
	Wrestling	25	4.5733	0.47648
	Weight Lifting	23	4.7101	0.49548
Lack of Control	Body-Building	14	1.6190	0.28815
	Wrestling	25	1.6667	0.27217
	Weight Lifting	23	1.6087	0.27802

Decrease in Other Activities	Body-Building	14	1.5000	0.36398
	Wrestling	25	1.5867	0.33720
	Weight Lifting	23	1.6232	0.30657
Duration	Body-Building	14	4.5952	0.45627
	Wrestling	25	4.8000	0.44096
	Weight Lifting	23	4.9130	0.30513
Intention Effect	Body-Building	14	2.9048	0.40146
	Wrestling	25	2.7333	0.40825
	Weight Lifting	23	2.6812	0.34050
Total Exercise Addiction	Body-Building	14	3.1293	0.16329
	Wrestling	25	3.1505	0.16012
	Weight Lifting	23	3.1698	0.16169
Narcissism	Body-Building	14	7.5000	1.95133
	Wrestling	25	8.0400	2.71539
	Weight Lifting	23	8.3913	2.44464

The values are expressed as mean±SD; (n=62)

As a result of descriptive statistics, wrestlers were seen to get the highest scores in lack of control, sustainability, bodybuilders were seen to get the highest scores in dropping exercise, sustainability, intention effect sub-dimensions, weightlifters were seen to get the highest scores to decrease in other activities, duration, total exercise addiction, and narcissistic personality. (Table 2)

Table 3. Correlation Analysis		
		Narcissism
Effects of Dropping Exercise	Pearson Correlation	0.395**
	P	0.001
Sustainability	Pearson Correlation	0.498**
	P	0.000
Tolerance	Pearson Correlation	0.312*
	P	0.014
Lack of Control	Pearson Correlation	0.263*
	P	0.039
Duration	Pearson Correlation	0.385**
	P	0.002
Total Exercise Addiction	Pearson Correlation	0.619**
	P	0.000

*The values are expressed as mean±SD; (n=62), *p<0.05 has been considered as statistically significant*

As a result of correlation analysis, there were positive ways of significant relationships between narcissism and total exercise addiction, sustainability, tolerance, lack of control, decrease in other activities, and also, there were positive ways of significant relationships between duration and narcissistic personality. (Table 3)

5. DISCUSSION

As a result of descriptive statistics analysis, dropping exercise scores of athletes were 3.866, sustainability scores were 2.806, tolerance scores were 4.634, lack of control scores were 1.634, decrease in other activities scores were 1.581, duration scores were 4.796, intention effect scores were 2.753, total exercise addiction scores were 3.153 and narcissism scores were determined as 8.048. According to these statistical results, athletes included in the study were seen to be symptomatic and have the risk of being exercise addicts. When these statistical values were assessed according to sub-dimensions of exercise addiction, it can be suggested that to satisfy with exercises from those who are satisfied with exercises they participate obtain 3 scores from the tolerance sub-dimension, and they tend to increase

velocity, frequency, and duration of exercise. For athletes who obtained 3 or more scores from the effects of dropping exercise sub-dimension, it can be said that they experience anxiety and stress, headache, insomnia and, behave aggressively. It can be said that athletes who obtained 3 scores or above from the duration sub-dimension exercise more than they were recommended. It can be said that athletes who obtained 3 scores and above from decreasing other activities sub-dimension, decrease recreational activities related to work they used to engage in or leave them. It can also be said that athletes who obtained 3 scores or above from the sustainability sub-dimension tend to exercise knowing they might be injured. When exercise addiction and narcissism scores were evaluated according to sports branches, it was determined that the highest scores were obtained from sustainability, and lack of control dimension by wrestlers, and the highest scores from tolerance, duration, and decreasing other activities dimensions were obtained by weight-lifters, and the highest scores from intention effect dimension were obtained by body-builders, and the highest scores from total exercise addiction and narcissistic personality were obtained by weight-lifters. These results revealed that all the athletes,

especially weight-lifters included in our study, have risks of becoming exercise addicts. The most significant factor affecting the risk of being an exercise addict for weight lifters was thought to arise from the sports branch itself. Because an athlete who wants to be successful needs to increase his/her strength. Weight-lifting does not include strategies and tactics as wrestling does. Therefore, athletes' performances can increase to the top-end through training performed continuously. Orhan et al.¹⁷ in their study in 2019 investigated addiction levels of individuals regularly going to the gym. As a result of their study, they determined that 10 individuals were asymptomatic, 352 individuals were symptomatic and 29 individuals were addicted to exercise. Vardar et al.¹⁴ investigated exercise addictions of individuals who do exercise regularly. As a result of their study, they determined that 14 individuals had "exercise addiction", 71 individuals were symptomatic, and 30 individuals were asymptomatic. Cicioğlu et al.¹¹ in their study in 2019 determined that there was a positive way and medium level of significance between sports age and exercise addiction. Smith and Hale¹⁸ found that competitive bodybuilders had higher addiction levels than non-competitive bodybuilders. As a result of correlation analysis, there was a statistically significant relationship between total exercise addiction and narcissism. Also, there was a statistically significant relationship between tolerance, lack of control, decreasing other activities, duration, and total exercise addiction. When this statistical data is evaluated about narcissistic personality traits and exercise addiction concepts, it can be suggested that the result was normal. Because, narcissistic individuals target perfectionism all the time, and they spend most of their time with their works. For this reason, athletes who tend to be narcissistic could be an expected consequence. Hagan and Hausenblas¹⁹ reported that the perfectionism score of individuals who had high exercise addiction was more than those who had low-level exercise addiction. Spano²⁰ investigated the relationship between exercise and anxiety, obsessive-compulsive disorder, and narcissism. As a result of his study, he determined the narcissism score as 15.63. He determined a low-level positive correlation between OCD and exercise addiction and also determined a low-level correlation between narcissism and physical activity. Hill et al.,²¹ determined a positive correlation between perfectionism and exercise addiction in 248 bodybuilders. Miller and Mesano²² found that the narcissism score of individuals who exercise regularly is 16.65. In addition, they determined a positive correlation between exercise addiction and perfectionism. Bruno et al.²³ found that narcissism scores of bodybuilders who were exercise

addicts were 20.2 and those who had low-level exercise addiction had 14.6 scores. Parnell²⁴ determined a correlation between body dissatisfaction and exercise addiction. Individuals with narcissistic personalities always want to be at the forefront. They aim to be the best at what they do. At the end of these aspirations and desires, they devote their lives to the work they do. Athletes who develop narcissistic personality traits are more likely to become addicted.²⁵ When narcissistic athletes train excessively, they feel happier and more peaceful because every training brings them closer to the championship. In addition, narcissistic individuals are more prone to exercise addiction because they always want to be at the forefront of society, to be appreciated and praised.²⁵ As in this study, many studies have shown that athletes with developed narcissistic personality traits are "exercise addicts".

6. CONCLUSION

The purpose of the current study was to explore the relationship between narcissistic personality traits and exercise dependence. The study revealed that the athletes under the sample had a relationship between narcissism and exercise addiction levels. In different studies, it was observed that the level of exercise dependence of narcissistic individuals is high. The findings from the present study indicates that the Narcissistic athletes become addicted to exercise because they want to be perfect coaches would make the athletes to take personality tests and as a result of this test, psychological support should be given to athletes with high narcissistic personality traits. The coach should explain the negative effects of exercise addiction to the athlete. In addition, the coach should supervise the athlete and prevent him from overtraining. The research findings showed that this study gives sufficient information to athletes and coaches and will be an example for more comprehensive studies.

7. AUTHORS CONTRIBUTION STATEMENT

Dr. Abdullah Altunhan and Doç.Dr. Ünsal Tazegül; Designed this article. Dr. Abdullah Altunhan; Study design, Data collection; Doç.Dr. Ünsal Tazegül; Statistical analysis, Manuscript Preparation, and Funds Collection.

8. CONFLICT OF INTEREST

Conflict of interest declared none.

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