Original Article

Examination of Sports Motivation and Exercise Addiction Levels of Kickboxing Athletes and Individuals Who Do Kickboxing as Recreational Activity

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Abstract

This study aimed to examine the motivation and exercise addiction levels of kickboxers and individuals who do kickboxing recreationally based on various variables. While the research universe consisted of male and female individuals who do kickboxing, the sample consisted of 828 participants, 505 males, and 323 females, who actively engage in kickboxing, national, competitor, and recreational kickboxing. In addition to the "Demographic Information Form", the "Sports Motivation Scale" (SMS) and the "Exercise Addiction Scale" (EAS) were used as data collection tools. The data checked whether it showed a normal distribution or not and it was seen that they did not have a normal distribution. In this context, non-parametric analyzes were applied. Mann Whitney U, Kruskal Walls, and Correlation Analysis were applied as statistical analysis. As a result, differences were found between the sports motivation levels of the individuals who do kickboxing, the athletic levels of the participants, their motivation levels in sports, and their sub-factors. No significant differences were found according to gender and age. In the examination of exercise addiction, there was no significant difference according to gender, but there was a difference in the variable of age and athletic levels. In our analysis of the relationship between motivation in sports and the level of exercise addiction, positive, moderate, and weak significant relationships were found. Therefore, as the level of motivation in sports increased, the level of exercise addiction also increased, and it was shown that they were related to each other.

Keywords: Kickboxing, Recreational, Sports Motivation, Exercise Addiction.

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INTRODUCTION

Recently, combat sports such as boxing and kickboxing have become professionally practiced in our country as well as all over the world, and the interest in sports branches that can be called combat sports has increased. This situation also increases the scientific studies on martial arts (Tekin, Aykora, Bozacı, & Eliöz, 2010). Kickboxing, which is one of the defense and combat sports, is a performance sport in which competitions and matches are held both professionally and amateur. In addition, interest in kickboxing, which is used for recreational purposes (health, hobby, leisure time, etc.), is increasing day by day.

In many areas of human life such as business, health, education, sports, etc., motivation has great importance to ensure continuity, a sense of motivation, which we think has an important role, to achieve success in performance athletes, and individuals who do sports recreationally also have great importance in the continuation of the habit of doing sports. On the one hand, it is known that the emergence of this behavior as an exercise addiction with these factors and its transformation into a phenomenon that harms the person in terms of physiological, psychological, and social aspects is also important for the mental health of individuals.

While the interest of society in sports branches is increasing day by day, sports are also becoming a self-developing phenomenon (Deryahanoğlu, 2014). While defining sports, in addition to its physical, competitive, and institutional features, it is necessary to take into account how the sport is shaped by its social and cultural effects. In terms of popular culture, the answer to the question of "what is sports" may change over time, because the events and activities of sports are in continuous development. While it is observed that some sports branches lose their effect, it appears in new sports. At first, the activities, which are recreational activities, can turn into a sport over time by determining the competition and the rules. For example; football, skateboarding, wrestling, and boxing (Tekin, Tekin, & Calisir, 2017).

Nowadays, with the rapid development of sports, athletes can start sports for recreational, leisure, or health reasons and continue to the elite level. In this case, the needs of the athletes at each level differ. While the concern of individuals who do sports for health is to lose weight, performance athletes can go to the upper limits that push the

limits of people (Deaner and Silve, 2002; cited in Karagözoğlu, 2005).

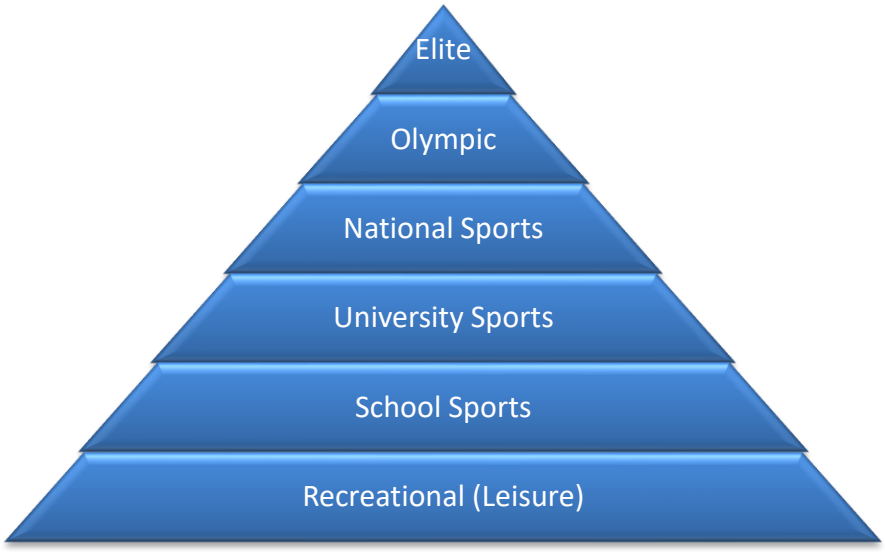

Figure 1. Personality and Performance Pyramid
(Deaner and Silve, 2002; cited by Karagözoğlu, 2005).

The concept of recreation is to protect and maintain physical and mental health, which is affected by people's routine lives and negative environmental effects as a result of their hard work, and to obtain pleasure, and personal satisfaction provided, in leisure, excluding the times reserved for working and compulsory needs, voluntary and the activities that he/she does individually or by choosing from different groups are called recreation (Karaküçük, 1995).

While sports provide an important sports activity area to meet the recreational needs of individuals, recreational activities also play an important role in the social dissemination of sports and the success of sports branches. With the increase in leisure, participation in sports and individual sports activities have also increased. The high rate of active participation in sports activities in the spare time of individuals is thought to have personal and social characteristics for the development of the individual (Tütüncü et al. 2011).

Recreation and sports are in interact with each other. While sports meet the recreational needs of people, recreation has also contributed to the success of individuals in sports, which started as an amateur activity with the increase of individuals doing sports, by continuing professionally over time (Şahin, 1997).

Kickboxing is a popular combat sport consisting of punches and kicks, developed from karate, Muaythai and boxing branches for general self-defense purposes, and emerged by blending these techniques in a unique way (Kickboks.gov.tr, 2021). In another definition, Gümüşay (2021) described Kickboxing as a sport that includes performance in terms of game rules and energy metabolism, both on the floor and on the ring. Today, kickboxing is practiced by athletes at a licensed professional and amateur level, while it is preferred by individuals for hobby, health, leisure, and recreation purposes.

According to the Amateur Competition Regulations of the Turkish Kickboxing Federation, kickboxing competitions are held in 7 sub-styles, including ring and tatami styles (Kickboks Amt, 2021).

- Full Contact Style
- Low Kick Style
- K-1 Rules Style
- Point Fighting Style
- Light Contact Style
- Kick Light Style
- Musical Form Style (Kickboks.gov.tr, 2021).

The term motive comes from the Latin word “movere”, which is actually used to mean “to move”, and it describes the strong internal force that directs it directly toward behavior in a given situation (Karageorghis & Terry, 2017). Motives are expressed as internal and external factors that lead the organism to behave. In another diagnosis, it is “the tendency to show activity to meet the needs of the organism” (Baymur, 1976). Motivation is all of the internal events that lead the human organism to certain behaviors (Koç, 1994).

Intrinsic motivation is expressed as the type of motivational behavior that results from the internal factors and factors of people's behavior (Wu, 2003). Intrinsic motivation is the reason for the continuation of the behavior in the absence of any external stimulus as reinforcement for the individual.

An example of this is the hobby activities that individuals participate in (Cengiz, 2017). Carroll and Alexandris, on the other hand, have stated that the activities that the individual participated in to evaluate his/her leisure are caused by internal factors rather than external factors (Carroll & Alexandris, 1997).

Extrinsic motivation behavior, on the other hand, is a type of motivation in which individuals are influenced by external factors and the environment. The causality of the extrinsic motivation behavior that arises here is that it occurs outside the will of the person. In the emergence of this type of motivation, rewards, punishments, material elements with monetary value, as well as elements with spiritual value, such as the appreciation and praise of the individual by people around whom he/she is modeled, such as teachers, managers, are expressed as factors that trigger external motivation (Wu, 2003).

The state of being amotivated, which is seen as another dimension of motivation other than intrinsic and extrinsic motivation, is expressed as a lack of control situation. Individuals who cannot be motivated cannot perceive the bond formed after the consequences of their behaviors (Kazak, 2004). Amotivation can also occur as a result of not providing external and internal motivation, and as a result of individuals feeling inadequate in situations such as continuous negative feedback about their general performance, repeated failures, or ineffective efforts to achieve the results they want (Deci & Ryan, 1985; Deci & Ryan, 1985). Ryan, 2000).

Exercise is expressed as body movements that are repeated at regular intervals, aiming to increase the physical fitness levels of individuals within a determined plan and program or to maintain the existing physical fitness level (Bircher et al, 2017).

The definition of addiction as a type of behavior is expressed in a complex way. In this case, it is very difficult to explain addictive behaviors. In the past, behaviors that showed signs of addiction included only substance addiction such as alcohol and drugs. However, nowadays, the scope of addiction has expanded considerably and different addiction situations such as exercise, sexuality, internet, gambling, and various video games have emerged (Terry, Szabo, & Griffiths, 2004).

Exercise Addiction, which plays an important role in people's physical, mental and social health, can cause some negative consequences such as addictive behavior instead of the expected benefit (Demir, Hazar, & Cicioğlu, 2004). 2018). Exercise addiction behavior, which was defined by Veale for the first time in the literature, is excessive exercise behavior that cannot be controlled over time when participating in exercise for the purpose of entertainment (Veale, 1995). Exercise addiction results in physiological (development of tolerance) or psychological (sadness, depression, stress) symptoms (Koruç, 2014).

Hausenblas and Downs (2002) have suggested that exercise addiction behavior can be measured as a multidimensionally impaired exercise behavior pattern that causes clinically significant impairment and distress with the occurrence of three or more of the items listed below.

- **Tolerance:** Describes the need for a markedly increased amount of exercise to achieve the desired effect or the reduced effect after continued use of the same level of exercise.
- **Deprivation:** Manifested by symptoms of exercise deprivation (anxiety, burnout) or by doing the same (or closely related) amount of exercise to relax and prevent symptoms.
- **Target reactions:** Exercise is often performed in larger amounts or for longer than planned.
- **Loss of control:** There is an effort or an unsuccessful effort to control or reduce the desire for strenuous exercise.
- **Time:** Spending too much time on activities to exercise.
- **Incompatibility:** Important social, occupational, or recreational activities are abandoned or reduced because of exercise.
- **Persistence:** Exercise is continued despite knowing the existence of persistent and recurrent physical and psychological problems that are caused by exercise or have a high probability of being increased as a result of it (Hausenblas & Downs, 2002).

As a result of the literature review, it is thought that this study, which we have performed following the above-mentioned issues, will contribute to the field of defense and combat sports, recreation, and sports sciences, since no study has been found related to Motivation in Sports and Exercise Addiction.

METHOD

In this research, demographic information such as gender, age, and athletic level of those who did Kick Boxing as national athletes, competitors, and recreationally were determined. Afterward, motivation in sports and exercise addiction scales were applied to the contestants and recreational kickboxers. Demographic information and our SMS/EAS scales were examined by using statistical methods, their levels of difference, and their relational status.

Research Model

In this research, the descriptive screening model was used in the research to reveal the existing situation. The descriptive survey model is expressed as a research model approach that aims to describe a past or present situation as it is. The subject of the research, the individual or the object is tried to be defined as it exists in its conditions. What is wanted to be

known exists and it is there. No attempt is shown to alter or influence in any way. The important thing here is to be able to define this existing situation by observing appropriately. The relational screening model is a research model that aims to determine the existence or degree of change between two or more variables (Karasar, 2005).

Universe and Sample of the Research

The universe of our research consisted of individuals who did kickboxing. The sample of the study consisted of individuals who were national athletes in kickboxing, participate in competitions to become a national athlete, and did kickboxing as a recreational sport. Our sample group consisted of 828 athletes, 323 (39%) females and 505 (61%) males. To be included in the research sample, it was necessary to still be actively doing kickboxing.

Data Collection

In this research, in addition to the demographic information form created by the researcher to collect data, "the Sport Motivation Scale" developed by Pelletier et al. (1995) and adapted into Turkish by Kazak (2004) was used. The Sport Motivation Scale consisted of 28 items and sub-dimensions of intrinsic motivation, extrinsic motivation, and lack of motivation measured the situations and reasons that lead individuals to do sports. The Exercise Addiction scale consisted of a total of 17 items and 3 sub-factors, and there were no negative question items on the scale. A 5-point Likert-type exercise addiction scale was used (Demir, Hazar, & Cicioğlu, 2018).

Data Analysis

The data obtained in the research were analyzed with the SPSS 22.0 statistical program. The arithmetic mean and standard deviation values of the data as descriptive statistical methods of continuous variables controlled for data quality and categorical variables were expressed as frequency (number) and percentage.

Within the scope of our research, it was seen that the data did not have a normal distribution and non-parametric analyzes were applied. Statistical analysis, Mann Whitney U test, Kruskal Walls test and Correlation Analysis were performed.

RESULTS

Table 1: Evaluation of Sports Motivation and Exercise Addiction Levels of Participants by Gender

	Gender	N	Rank mean	Rank Sum	U	P
Intrinsic Motivation to Know and Achieve	Female	323	425,49	137434,00	78007,00	,272
	Male	505	407,47	205772,00		
Intrinsic Motivation to Experience Stimulation	Female	323	396,42	128043,00	75717,00	,073
	Male	505	426,07	215163,00		
Intrinsic Motivation	Female	323	403,29	130262,00	77936,00	,277
	Male	505	421,67	212944,00		
External Regulation	Female	323	389,51	125812,00	73486,00	,015*
	Male	505	430,48	217394,00		
Identification	Female	323	389,50	125808,00	73482,00	,014*
	Male	505	430,49	217398,00		
Introjection	Female	323	410,00	132431,00	80105,00	,646
	Male	505	417,38	210775,00		
Extrinsic Motivation	Female	323	388,89	125611,50	73285,50	,014*
	Male	505	430,88	217594,50		
Amotivation	Female	323	358,99	115953,50	63627,50	,000**
	Male	505	450,00	227252,50		
Sports Motivation Total	Female	323	389,87	125926,50	73600,50	,018*
	Male	505	430,26	217279,50		
Excessive Focus and Emotion Change	Female	323	411,39	132879,50	80553,50	,763
	Male	505	416,49	210326,50		
Postponement of Individual-Social Needs and Conflict	Female	323	394,69	127484,00	75158,00	,056
	Male	505	427,17	215722,00		
Tolerance Development and Passion	Female	323	402,95	130151,50	77825,50	,264
	Male	505	421,89	213054,50		
Exercise Addiction Total	Female	323	400,88	129485,50	77159,50	,190
	Male	505	423,21	213720,50		

*P<0,05; **P<0,01

In Table 1, a statistically significant difference was determined in the dimensions of sports motivation, external regulation, identification, extrinsic motivation, amotivation and the total score of sports motivation according to the gender of the participants. When exercise addiction was evaluated, no statistically significant difference was determined in the general score and sub-dimensions of exercise addiction according to the gender factor (p>0.05).

Table 2: Evaluation of Participants' Sports Motivation Levels by Age

	Age	N	Rank mean	sd	X^2	p	Difference
Intrinsic Motivation to Know and Achieve	16-18[1]	311	399,37	6	6,824	,337	-
	19-22[2]	145	446,85				
	23-26[3]	92	417,87				
	27-30[4]	62	423,19				
	31-35[5]	66	406,67				
	36-40[6]	45	457,16				
	41 and older[7]	107	393,59				
Intrinsic Motivation to Experience Stimulation	16-18[1]	311	387,33		10,303	,112	-
	19-22[2]	145	404,59				
	23-26[3]	92	450,16				
	27-30[4]	62	426,73				
	31-35[5]	66	454,65				
	36-40[6]	45	448,22				
	41 and older[7]	107	430,21				
Intrinsic Motivation	16-18[1]	311	396,93		4,849	,563	-
	19-22[2]	145	421,86				
	23-26[3]	92	426,15				
	27-30[4]	62	413,31				
	31-35[5]	66	432,78				
	36-40[6]	45	469,10				
	41 and older[7]	107	412,03				
External Regulation	16-18[1]	311	396,39		8,333	,215	-
	19-22[2]	145	435,26				
	23-26[3]	92	406,23				
	27-30[4]	62	380,09				
	31-35[5]	66	435,89				
	36-40[6]	45	477,69				
	41 and older[7]	107	426,28				
Identification	16-18[1]	311	392,18		6,563	,363	-
	19-22[2]	145	427,16				
	23-26[3]	92	414,83				
	27-30[4]	62	410,13				
	31-35[5]	66	423,86				
	36-40[6]	45	468,59				
	41 and older[7]	107	435,93				
Introjection	16-18[1]	311	370,05		2,920	,101	-
	19-22[2]	145	428,99				
	23-26[3]	92	431,03				
	27-30[4]	62	429,44				
	31-35[5]	66	438,97				
	36-40[6]	45	493,50				
	41 and older[7]	107	452,88				
Extrinsic Motivation	16-18[1]	311	383,55		10,999	,053	-
	19-22[2]	145	434,54				
	23-26[3]	92	415,35				
	27-30[4]	62	399,32				
	31-35[5]	66	432,58				
	36-40[6]	45	491,90				
	41 and older[7]	107	441,65				
Amotivation	16-18[1]	311	404,54		11,315	,079	-
	19-22[2]	145	377,19				
	23-26[3]	92	420,44				
	27-30[4]	62	406,98				
	31-35[5]	66	476,71				
	36-40[6]	45	454,83				
	41 and older[7]	107	437,93				
Sports Motivation Total	16-18[1]	311	386,80		10,570	,103	-
	19-22[2]	145	435,13				
	23-26[3]	92	419,95				
	27-30[4]	62	399,33				
	31-35[5]	66	440,87				
	36-40[6]	45	485,83				
	41 and older[7]	107	424,88				

*P<0,05; **P<0,01

When Table 2 was evaluated, no statistically significant difference was determined in the general score and sub-dimensions of the sports motivation scale according to the age of the research participants (p>0.05).

Table 3: Evaluation of Exercise Addiction Levels of Participants by Age

	Age	**N**	**Rank Mean**	**sd**	**X^2**	**p**	**Difference**
Excessive Focus and Emotion Change	16-18[1]	311	366,37	6	22,919	,001*	1-2 1-7
	19-22[2]	145	447,15				
	23-26[3]	92	446,83				
	27-30[4]	62	413,88				
	31-35[5]	66	439,30				
	36-40[6]	45	418,39				
	41 and older[7]	107	465,78				
Postponement of Individual-Social Needs and Conflict	16-18[1]	311	415,28		14,682	,023*	1-2 1-7
	19-22[2]	145	449,49				
	23-26[3]	92	431,78				
	27-30[4]	62	426,50				
	31-35[5]	66	437,51				
	36-40[6]	45	377,60				
	41 and older[7]	107	344,33				
Tolerance Development and Passion	16-18[1]	311	403,54		5,371	,497	-
	19-22[2]	145	414,75				
	23-26[3]	92	450,83				
	27-30[4]	62	398,97				
	31-35[5]	66	455,24				
	36-40[6]	45	409,53				
	41 and older[7]	107	400,74				
Exercise Addiction Total	16-18[1]	311	389,72		11,184	,083	-
	19-22[2]	145	447,14				
	23-26[3]	92	454,46				
	27-30[4]	62	421,42				
	31-35[5]	66	446,65				
	36-40[6]	45	402,63				
	41 and older[7]	107	389,08				

*P<0,05; **P<0,01

When Table 3 was evaluated, a statistically significant difference was determined in the dimensions of exercise addiction level, Excessive Focus and Emotion Change, and Postponement of Individual-Social Needs and Conflict according to the age of the participants (p<0.05). It was seen that this situation arose from the difference between the ages of 16-18 and 19-22 and between the ages of 16-18 and 41 and older. In other sub-dimensions, no statistically significant difference was detected according to the age variable (p>0.05).

Table 4: Evaluation of Participants' Sports Motivation Levels According to their Athletic Levels

	Athletic Levels	**N**	**Mean Rank**	**sd**	**X^2**	**p**	**Difference**
Intrinsic Motivation to Know and Achieve	National Athlete[1]	118	428,09	2	9,833	,007*	2-3
	Competitor Athlete Trying to Become National[2]	389	436,24				
	Recreational, Leisure, Hobby, etc.[3]	321	383,17				
Intrinsic Motivation to Experience Stimulation	National Athlete[1]	118	482,96		16,188	,000**	1-2 1-3
	Competitor Athlete Trying to Become National[2]	389	419,32				
	Recreational, Leisure, Hobby, etc.[3]	321	383,49				
Intrinsic Motivation	National Athlete[1]	118	452,23		11,820	,003	2-3
	Competitor Athlete Trying to Become National[2]	389	431,61				
	Recreational, Leisure, Hobby, etc.[3]	321	379,90				
External Regulation	National Athlete[1]	118	525,27		63,162	,000*	1-2 1-3 2-3
	Competitor Athlete Trying to Become National[2]	389	442,65				
	Recreational, Leisure, Hobby, etc.[3]	321	339,66				
Identification	National Athlete[1]	118	506,37		27,542	,000**	1-2 1-3 2-3
	Competitor Athlete Trying to Become National[2]	389	420,08				
	Recreational, Leisure, Hobby, etc.[3]	321	373,97				
Introjection	National Athlete[1]	118	451,78		3,823	,148	-
	Competitor Athlete Trying to Become National[2]	389	410,04				
	Recreational, Leisure, Hobby, etc.[3]	321	406,20				
Extrinsic Motivation	National Athlete[1]	118	520,89		43,287	,000**	1-2 1-3 2-3
	Competitor Athlete Trying to Become National[2]	389	429,30				
	Recreational, Leisure, Hobby, etc.[3]	321	357,45				
Amotivation	National Athlete[1]	118	454,90		4,267	,118	-
	Competitor Athlete Trying to Become National[2]	389	404,08				
	Recreational, Leisure, Hobby, etc.[3]	321	412,27				
Sports Motivation Total	National Athlete[1]	118	496,73		32,063	,000	1-2 1-3 2-3
	Competitor Athlete Trying to Become National[2]	389	433,19				
	Recreational, Leisure, Hobby, etc.[3]	321	361,62				

*P<0,05; **P<0,01

When Table 4 was examined, a statistically significant difference was found in the total score of the participant's level of amotivation in sports, intrinsic motivation to know and achieve, intrinsic motivation to experience stimulation, external regulation, identification, extrinsic motivation, and sports motivation, according to the athletic levels of the participants (p<0, 05). It was seen that this situation arose from the difference between intrinsic motivation to know and achieve and intrinsic motivation sub-dimensions of a competitive athlete trying to become national and the individuals who did boxing as recreation, leisure, hobby, etc. Intrinsic motivation to experience stimulation, external regulation, identification, extrinsic motivation, and sports

motivation total score indicated that this situation was related to the national athlete and the competitor trying to be national, recreational, leisure time hobby, etc. It was understood that this was due to the difference between individuals with a goal. There was no statistically significant difference in the dimensions of inclusion and amotivation (p>0.05).

Table 5: Evaluation of Exercise Addiction Levels According to Participants' Athletic Levels

	Athletic Levels	**N**	**Rank Mean**	**sd**	**X^2**	**p**	**Difference**
Excessive Focus and Emotion Change	National Athlete[1]	118	489,12	2	20,503	,000**	1-2 1-3 2-3
	Competitor Athlete Trying to Become National[2]	389	423,42				
	Recreational, Leisure, Hobby, etc.[3]	321	376,26				
Postponement of Individual-Social Needs and Conflict	National Athlete[1]	118	451,41		50,498	,000**	1-2 1-3 2-3
	Competitor Athlete Trying to Become National[2]	389	464,30				
	Recreational, Leisure, Hobby, etc.[3]	321	340,58				
Tolerance Development and Passion	National Athlete[1]	118	450,42		27,905	,000**	1-2 1-3 2-3
	Competitor Athlete Trying to Become National[2]	389	448,94				
	Recreational, Leisure, Hobby, etc.[3]	321	359,55				
Exercise Addiction Total	National Athlete[1]	118	475,02		50,400	,000**	1-2 1-3 2-3
	Competitor Athlete Trying to Become National[2]	389	456,99				
	Recreational, Leisure, Hobby, etc.[3]	321	340,76				

*P<0,05; **P<0,01

When Table 5 was examined, a statistically significant difference was found in the total score and sub-dimensions of the level of exercise addiction according to the athletic levels of the participants (p<0.05). It was seen that this situation caused by the difference between the athletic level of the national athlete and the competing athlete trying to become a national, recreational, leisure time hobby, etc.

Table 6. Evaluation of the Relationship Between Sports Motivation and the Level of Exercise Addiction

		Excessive Focus and Emotion Change	Postponement of Individual-Social Needs and Conflict	Tolerance Development and Passion	**Exercise Addiction Total**
Intrinsic Motivation to Know and Achieve	r	,449**	,075*	,441**	,526**
	p	,000	,130	,000	,000
Intrinsic Motivation to Experience Stimulation	r	,410**	,478**	,404**	,435**
	p	,000	,000	,000	,000
Intrinsic Motivation	r	,487**	,432**	,430**	,449**
	p	,000	,000	,000	,000
External Regulation	r	,352**	,304**	,288**	,381**
	p	,000	,000	,000	,000
Identification	r	,352**	,288**	,285**	,318**
	p	,000	,000	,000	,000
Introjection	r	,489**	,459**	,498**	,472**
	p	,000	,000	,000	,000
Extrinsic Motivation	r	,452**	,470**	,437**	,419**
	p	,000	,000	,000	,000
Amotivation	r	,067	,260**	,148**	,241**
	p	,052	,000	,000	,000
Sports Motivation Total	r	,516**	,470**	,419**	,490**
	p	,000	,000	,000	,000

*P<0,05; **P<0,01

When Table 6 was examined, a moderate positive level was found between the Intrinsic motivation to know and achieve, excessive focus and emotion change, tolerance development and passion and exercise addiction general score, and Intrinsic motivation to experience stimulation and excessive focus and emotion change, postponement of individual-social needs and conflict. Moreover, a moderate positive correlation was found between the tolerance development and the total score of passion and exercise addiction. A moderate positive correlation was found between intrinsic motivation and excessive focus and change of emotions, postponement of individual-social needs and conflict, tolerance development, and passion and exercise addiction total score. A weak positive correlation was found between identification and excessive focus and emotion change, Postponement of Individual-Social Needs and Conflict, tolerance development and passion and exercise addiction total score. Besides, a moderate positive correlation was determined between introjection and excessive focus and emotion change, Postponement of Individual-Social Needs and Conflict, tolerance development and passion and exercise addiction total score. A moderate positive correlation was found between extrinsic motivation and excessive focus and emotion change, Postponement of Individual-Social Needs and Conflict, tolerance development and passion and exercise addiction total score. A weak positive correlation was determined between amotivation and excessive focus and emotion change, Postponement of Individual-Social Needs and Conflict, tolerance development and passion and exercise addiction total score. A moderate positive correlation was found between the total score of sports motivation and the total score of excessive focus and emotion change, Postponement of Individual-Social Needs and Conflict, tolerance development and passion and exercise addiction.

DISCUSSION

This study was conducted to determine the motivation and exercise addiction levels of kickboxers and individuals who do kickboxing recreationally, according to the results of the data obtained from 828 kickboxing 323 female and 505 male individuals. When the motivation scores in sports were analyzed according to their gender, a statistically significant difference was detected in the dimensions of external regulation, identification, extrinsic motivation, amotivation, the total score of motivation in sports, and the level of motivation in sports was found to be higher. Demir (2020) conducted a study titled “Investigation of the Relationship Between Elite Level Boxers' in Sports Motivation, Aggression and Anger Levels" with 177 athletes, 40.7% of whom were females and 59.3% of whom were males. In the results obtained, the Extrinsic motivation scores from the sub-dimensions showed a significant difference according to gender ($t=2.61$; $p<0.05$). External regulation scores of female athletes were significantly higher than the scores of male athletes. It was observed that the sub-dimension scores of intrinsic motivation levels, introversion, extrinsic motivation, identity, amotivation, and sports motivation scores did not differ according to gender. In the study conducted by Satılmış (2021), it was seen that the mean scores obtained by males were higher than females in the introjection factor in the motivation sub-dimensions on the gender variable in the results of the Analysis of the Imagination, Motivation, and Anxiety Levels of the Athletes Engaged in Combat Sports ($p<0.05$). Cengiz (2017) observed that the levels of motivation, extrinsic motivation, and amotivation, which were sub-dimensions of motivation in sports, of Aikido trainers and other martial arts trainers did not differ significantly according to the gender variable. In this case, considering our and other studies, it was seen that there were differences regarding the gender variable of martial arts trainers and athletes.

Considering the gender variable of our study, no statistically significant difference was determined in the exercise addiction general score and sub-dimensions of the Exercise Addiction levels according to the gender variable ($p>0.05$). Studies supporting our study in the literature were as follows; Uzun (2019) concluded that there was no statistically significant difference in exercise addiction levels of individuals participating in the research in terms of gender variable. Arslanoglu et al. (2021), on the other hand, no significant difference was found in the total scores of exercise addiction and sub-dimensions of male and female participants, excluding the individual social needs of the participants, which is the sub-dimension of Exercise Addiction, and the conflict score, according to the gender variable ($p>0.05$). Sadıq (2018) stated that there was no significant difference in the levels of exercise addiction according to the gender variable in the study named "Examination of Exercise Addiction in Kickboxing, Taekwondo, and Muaythai Athletes". In a study conducted by Balci (2021), as a result of the comparison of the students' exercise addiction scale mean scores by gender, it was found that the exercise addiction scores did not differ significantly by gender. In some studies on exercise addiction in the literature, different results were encountered. In these studies, some differences were found in the sub-dimensions of exercise addiction. In the study conducted by Demir, Ö. (2021), the mean scores of the participants in the exercise addiction scale were compared with the gender variable, and according to the results obtained (t value = 4,914), the difference between the means was found to be significant since the P value was less than 0.05. The mean scores of males were higher than the females' mean scores. In the study conducted by İskender (2021), on veteran athletes, a significant difference was found in the reduction of other activities in the exercise addiction sub-dimension and the gender variable in the continuity sub-dimension. When this difference was

examined, men's scores were found to be significantly higher than women's scores in the reduction of other activities sub-dimension, and male's scores in the continuity sub-dimension were significantly higher than women's scores ($p<0.01$). In general, although there was information in the literature that the gender variable did not affect exercise addiction levels, in some studies, the exercise addiction scores of males were higher than females.

In our study, no statistically significant difference was determined in the general score of the sports motivation scale and other sub-dimensions according to the age of the participants ($p>0.05$). Demir (2020) found that there was no significant difference in sports motivation scores according to age groups in the study on boxers ($p>0.05$). In the study of Mimaroğlu (2021), the identification levels and motivation levels of the participants differ significantly according to their ages. It was observed that the identification levels of the participants aged 18-22 were significantly lower than the participants aged 38 and older, and the motivation scores of the participants aged 23-27 were significantly higher than the participants aged 33-37. On the other hand, when Özaslan (2019) compared the motivation levels of the study group in terms of the age variable, no difference was found in the sub-dimensions of motivation to know and internalization ($p>0.05$), while a significant difference was observed in the other sub-dimensions. In the sub-dimensions of motivation to achieve and experience stimulation and external regulation sub-dimensions, it was determined that the 24 years old group got higher scores than the others, while the 21-23 age group got higher scores in the 18-20 age group. In Akman's (2017) study, among the scores of students in different age groups on motivation in sports and its subscales, it was determined that there was no significant difference at the P;0.05 level. Kaya (2019) did not show any significant difference in the sports motivation scale mean scores of the athletes except for the identification sub-dimension according to their age ($p>0.05$). Female football players in the 22-26 age group had higher scores on the identification sub-dimension of the motivation scale in sports compared to the female football players in the 27-32 age group. Kusan (2014) found the following results in another study on combat athletes. When the success motivations of the individuals who performed elite-level wrestling, boxing, and taekwondo sports were compared with age, it was seen that there was a significant difference between the athletes over the age of 24 compared to the athletes under the age of 24 and their motivation for success increased as the age of the athletes increased. It was stated that the age-related difference may be due to the fact that the athletes have more training levels and competition experiences as the age difference increases (Kusan, 2014).

In the examination of the exercise addiction levels of the kickboxing athletes in our study, a statistically significant difference was determined in the exercise addiction level, Excessive Focus and Emotion Change, and Postponement of Individual-Social Needs and Conflict dimensions according to the age of the participants ($p<0.05$). This situation arose from the difference between the ages of 16-18 and 19-22, and between the ages of 16-18 and 41 and older. In other sub-dimensions, no statistically significant difference was detected according to the age variable ($p>0.05$). In the study conducted by Konuş (2019), no significant difference was detected in the exercise addiction scale and its sub-dimensions according to the age variable of the participants who stopped doing active sports and the participants continuing active sports. In Demirel's (2019) study, in the analysis of the relationship between the age variable of the participants and the sub-dimensions of the exercise addiction scale and the total scores of the scales, no statistically significant relationship was found between the scores 'Excessive Focus and Emotion Change, Postponement of Individual-Social Needs and Conflict, Tolerance Development and Passion' sub-factors and age and the total scores of the scale. Birgönül (2019) found that there was no statistically significant difference in the exercise addiction scale between age groups ($p >0.05$) (Birgönül, 2019). In Uzun's (2019) study involving students studying in Sports Sciences, no relationship was found at the level of Exercise Addiction according to the age variable. In the study conducted by Master and Lambert (1989) using a running questionnaire, no significant difference was found between age groups (Masters & Lambert, 1989). It was seen that there were differences between these studies and some sub-dimensions of our study. Sadıq (2018) "Examination of Exercise Addiction of Kickboxing, Taekwondo, and Muaythai Athletes" included kickboxing athletes (n= 76), taekwondo athletes (n=28), and Muaythai athletes (n=37). In the study, it was seen that there was no significant difference in the examination of the levels of Exercise Addiction according to the age of the athletes, which was one of the demographic variables. In the study of Paksoy (2021), a statistically significant difference was found in the excessive focus and emotion change sub-dimension, which is one of the sub-dimensions of exercise addiction, according to the age variable of the participants. It was determined that this difference was higher in exercise addiction scores of individuals aged 18-22 compared to individuals aged 28-32. In the other sub-factors of the scale, the difference was not statistically significant. This study and our study also show similarities considering one of the sub-factors, excessive focus and emotion change sub-dimension, in terms of age variable.

When we analyzed the participants according to their athleticism levels, statistically significant differences were found in the total scores of amotivation in sports, intrinsic motivation to know and achieve, intrinsic motivation to experience stimulation, external regulation, identification, extrinsic motivation, and sports motivation ($p<0.05$). When this difference was examined, it was seen that the extrinsic motivation level scores of especially national athletes were higher than those who do kickboxing recreationally. This was thought to be due to the motivation variables that

encourage national athletes to represent our country abroad. In the study conducted by Demir (2020), it was found that national athletes had higher external regulation scores compared to non-national athletes. In another study, Özaslan (2019) examined the motivation levels of team and individual athletes, and the motivation levels of a national athlete in the research group were compared. In the results obtained, significant differences were found in the sub-dimensions of motivation to know, motivation to achieve, external regulation, and amotivation ($p<0.05$).

In the evaluation of the exercise addiction levels of the participants according to their athletic levels, it was observed that there was a statistically significant difference in the total score of exercise addiction and its sub-dimensions ($p<0.05$). It was seen that this situation arose from the differences between a national athlete in kickboxing and a competitor athlete trying to become a national and individuals who do kickboxing as a recreational activity, leisure, hobby, etc. Differences in exercise addiction and sub-factors of national athletes, their desire to preserve their national athlete status, and their desire to represent our country again, can be interpreted as triggered by their desire to have our national anthem and flag hoisting. Another difference that emerged was that there was a difference in exercise addiction and sub-dimensions of the Competitors compared to those who were national athletes and those who did kickboxing recreationally. In this case, we can say that the preference of competing athletes to train more in this process to become national athletes increased their level of exercise addiction. On the other hand, those who did kickboxing recreationally for leisure, health, and hobby activities can be explained as a decrease in their exercise addiction levels compared to other athletes' levels. Cicioglu et al. (2019), in their study titled "Exercise Addiction Levels among Elite Level Athletes and Students of Sports Sciences Faculty", a significant difference was found in the exercise addiction levels of the participants. According to the results, it was found that the mean score of exercise addiction of elite athletes was significantly higher than the mean of sports science students. This result, which emerged in this study, supports our study. It was seen that elite athletes did sports regularly and their desire to gain success over time, increased their exercise addiction levels and lead them to increase their level of exercise addiction. Batu and Aydın (2020) conducted a study titled "Examination of Exercise Addiction Levels of Elite Swimming Athletes", and a total of 137 elite athletes consisting of 82 female swimmers and 55 male swimmers who were licensed and active athletes in the Turkish Swimming Federation. No significant differences were found between the participants' genders, sports ages, rates of exercise, and the exercise addiction scale and sub-factors. In this study, it was concluded that the individuals who practice swimming as an elite were in the dependent group in the scoring of exercise addiction levels. This study was parallel to our study. It was seen that the fact that the athletes were competitive and elite increased their level of exercise addiction.

Relationship between Sports Motivation and Exercise Addiction

In our analysis of the relationship between Sports Motivation and Exercise Addiction, Intrinsic motivation to know and achieve sub-dimension was found to be positively moderately correlated with excessive focus and emotion change, tolerance development and passion, and a general score of exercise addiction. Considering that individuals with high intrinsic motivation were individuals who enjoy their sports more, we think that they tend to turn to sports and exercise when they feel bad. Our analysis results supported this idea. In another sub-factor, it was determined that there was a moderate positive correlation between intrinsic motivation to experience stimulation and excessive focus and emotion change, postponement of individual-social needs and conflict, tolerance development, and passion and exercise addiction total score. According to these results, it can be interpreted according to our analysis results that, according to their intrinsic motivation levels, kickboxers tend to enjoy their sport and to postpone external factors such as social life, family, and environment at the point of continuing this sport, or to continue the sport they do even at the expense of conflict.

Conclusion and Recommendations

A total of 828 athletes, 505 males, and 323 females, participated in our research, in which we aimed to reveal the motivation and exercise addiction levels and relationships of kickboxers and individuals who do kickboxing recreationally.

While there were differences in the motivation levels of the athletes according to their genders, no statistical difference was seen in the age variable.

It was observed that there were differences in the athletic levels of our participants and their motivation levels in sports. The extrinsic motivation levels of the national athletes were found to be higher than the individuals who did sports recreationally.

Kickboxers and individuals who do kickboxing recreationally had exercise addiction levels. According to the result, National athletes had higher exercise addiction scores than other athletes and people who do kickboxing recreationally.

We tried to find an answer to the question of whether there was a relationship between Sports Motivation and Exercise Addiction scales. According to the correlation analysis between Sports Motivation and Exercise Addiction, positive moderate and weak positive correlations were found.

In different research.

- For team sports, motivation in Sports Motivation and Exercise Addiction scales can be used.
- Sports motivation levels can be investigated for children who perform school sports.
- Sports motivation and exercise addiction scales can be applied to different defense and combat sports.
- The levels of sports motivation and exercise addiction of athletes of defense and combat sports and other individual sports branches can be compared.
- Research can be conducted on the exercise addiction of national athletes who have quitted active sports.
- In addition, research on sports motivation and exercise addiction can be conducted on different sports branches that are performed as a recreational activities.

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