

## The Investigation of Elite Athletes' Psychological Resilience

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### Abstract

The performances of the athletes can change from competition to competition under the pressure of heavy exercise and success anxiety during the season. The help obtained from sports psychology in order to minimize these fluctuations in the performance of the athlete is an important component in increasing the psychological resilience of the athlete. The aim of this study is to examine the psychological resilience of elite athletes in terms of various variables. This research is a descriptive survey model study in terms of defining psychological resilience levels of elite athletes. In this study, the Psychological Resilience Scale developed by Friborg et al. (2005) and adapted to Turkey by Basim and Çetin (2011), and the personal data form developed by the researcher for collecting personal information were used to determine the psychological resilience of elite athletes. The data of the research was collected from 147 national athletes in different branches, including 79 males and 68 females. SPSS 21.00 statistical package program was used in data analysis. Descriptive statistics, independent groups t-test, one-way variance analysis, correlation and regression analyses were used in data analysis. As a result of the study, it was found that the psychological resilience of elite athletes differed according to the athlete's gender, sports branch, their tendency to use doping, whether the athletes make self-talk or not, but did not differ according to the athlete's age, sports experience, and smoking and alcohol use.

**Keywords:** elite athletes, psychological resilience

### 1. Introduction

Human beings today may experience different levels of difficulty in different periods of their lives (loss of one who is close, difficult working conditions, heavy training, sudden changes in life, natural disasters, failure etc.). In such cases, the individual has to leave their existing living conditions and create a balance according to these new conditions by adapting to them. The determinant factor in this balancing process is the psychological resilience level of the individual. High level of psychological resilience makes this process be overcome in the fastest and most effective way.

Psychological resilience can be defined as the capacity of the individual to cope with the tough living conditions, the speed and strength of self-recovery after the uneasiness experienced. According to Walsh (2006), psychological resilience expresses the potential of getting stronger and deriving profit from a situation when faced with a difficulty in life (as cited in Akdoğan & Yalçın, 2018).

The individual's strength of self-recovery and the positive perspective they develop in order to revert back against the challenges created by the negative events they face with in life is the indicator of their psychological resilience (Luthans, 2002).

Friborg et al. (2005) explained psychological resilience in five categories as individual competence, social competence, family cohesion, social resources, and structural style. Individual competence involves self-perception dimension expressing the self-confidence and competence of the individual, and future perception dimension expressing the adaptation of the individual to life and their future dreams. Social competence refers to the individual's social cohesion, how outgoing they are and how eager they are to participate in social activities. Structural style is the ability of the individual to plan their life. Family cohesion, which defines the family support that the individual feels and social resources, which expresses the support that the individual feels of their friends are the other dimensions of psychological resilience (Friborg et al., 2005). According to the definition of American Psychological Association (APA), psychological resilience is the adaptation process of the individual towards the stressors that involve problematic issues (Dündar, 2016). While Ungar and Pery (2012) defines psychological resilience as the individual's process of reverting back to normal living conditions by using all the resources they have after the bad life experience, Gruber et al. (2015) defined psychological resilience as a dynamic psychosocial adaptation process that involves the efforts of the individual against challenges.

Masten (2004) defined resilience as the successful demonstration of the resistance required against risky situations in life. According to Masten et al. (1990), psychological resilience should be examined in three basic categories; the first one is the achievement of the individual to survive and improve albeit all negative living conditions. People who have been successful despite their negative living conditions can be considered as examples. The second is the individual's adaptation to the stressful living conditions and fulfillment of the behaviors that the conditions require. A successful performance of the individual during a competition under the pressure of the stress caused by the competition can be considered as an example. The last psychological resilience characteristic refers to the ability of the individual to cope with the effects of trauma (loss of someone who is close, natural disasters etc.) and to be able to get rid of the impact of the situation quickly when they face with life experiences that may cause trauma.

According to Richardson et al.'s (1990) psychological resilience model, while dealing with the problems experienced in life in the process of psychological resilience, they form protective individual and environmental support elements that will let them create better solutions and help them defend themselves against these problems. The stronger these elements are, the better their ability to cope with these problems. Otherwise, the individual falls into the process of collapse, their level of self-esteem decreases and they even face with a dysfunctional conclusion like crime or drug addiction which decreases their coping capacity. In this process, if the individual is reintegrated by benefiting from the individual and environmental support mechanisms, they can be rebalanced and their psychological resilience capacity can be increased. This circular process refers to a functioning mechanism that improves the individual's psychological resilience to life.

Individuals react differently towards the challenges of everyday life. This difference stems from the individual' personality traits and intelligence capacity, which distinguishes them from others (McCrae, 2001; Can et al., 2006; Schmitt et al., 2007). Psychological resilience is one of these differences among individuals.

Individuals with low psychological resilience avoid struggling against negative experiences and while they have low resistance to difficult situations, they, at the same time, are highly anxious individuals about stress.

Psychologically resistant individuals are more resistant to stress and have higher levels of active adaptation, social competence, communication and problem solving skills. At the same time, they are more target-oriented individuals with optimistic future perceptions and positive self-perception. Their sense of humor and empathy skills are extremely improved (Gürgan, 2006; Toprak, 2014; Yılmaz & Sipahioğlu, 2012; Izgar et al., 2014; Bulut, 2016; Tanyeri, 2016). Haynes (2005) emphasized the necessity of addressing the personality traits of the individuals with high psychological resilience in three categories as social, affective and cognitive/academic skills.

The fact that some choose to give up when they face with a problem and some others choose to struggle without giving up can be considered as the most remarkable indicator of this difference. It is observed that the individuals who choose to struggle with problems becomes stronger, and their self-confidence and thus, their motivation of success increase as they keep on coping. According to Diener (2000), because of all these reasons, the individuals with these personality traits are more resilient, stronger and happier than other individuals both in their social lives and in their professional lives. Hence, there are many studies revealing that psychological resilience affects job satisfaction and thus, job performance (Basim & Çetin, 2011; Smith & Smith, 2015; Rani & Midha, 2014; Youngblom et al., 2014; Batan & Ayten, 2015; Tümlü & Recepoglu, 2013).

Athletes experience plenty of emotions in sports environment such as winning, losing, struggle, ambition, happiness, unhappiness and competition. For example, while the athlete is experiencing both the happiness of advantage and the anxiety of losing this advantage in struggling against the opponent in the competition process, they will try to perform successfully by providing the necessary technic, tactic and condition related to the game. Under such pressure, the fact that the athlete is only physically strong and trained is insufficient for success.

Success in sports necessitates effective performance, which requires the athlete to be prepared technically, tactically, conditionally and psychologically. For this reason, athletes make preparations to strengthen themselves both physically and psychologically before the competition.

This challenging structure in everyday life also offers many advantages in professional sports like not being afraid of defeat, stability in training, consistency regarding success in life, determination, etc. Indeed, according to Jones et al. (1991), sports events may cause the athlete to feel under stress. Sports performance of the athlete under severe stress can also be affected negatively. Athletes facing high performance expectations can be overwhelmed with this expectation. Besides, there may also be pressure on athletes both in-game oriented sources such as referee mistakes, injuries, etc. or off-game oriented sources such as competition atmosphere, the attitude of media, supporters, sports executives. According to Dugdale et al. (2002), the athletes under stress should recognize the stress they are experiencing, choose and use the coping strategies that will enable them to cope with stress effectively. This ability is closely related to the capacity of the psychological resilience that the athlete has. Hence, it is expected that an athlete

with a high stress threshold is able to cope with the competition atmosphere and crisis effect created by the competition more easily, experience less burnout, and have a high level of success motivation, which is reflected in their sports performance as success. Psychological resilience process for elite athletes can be expressed as follows;

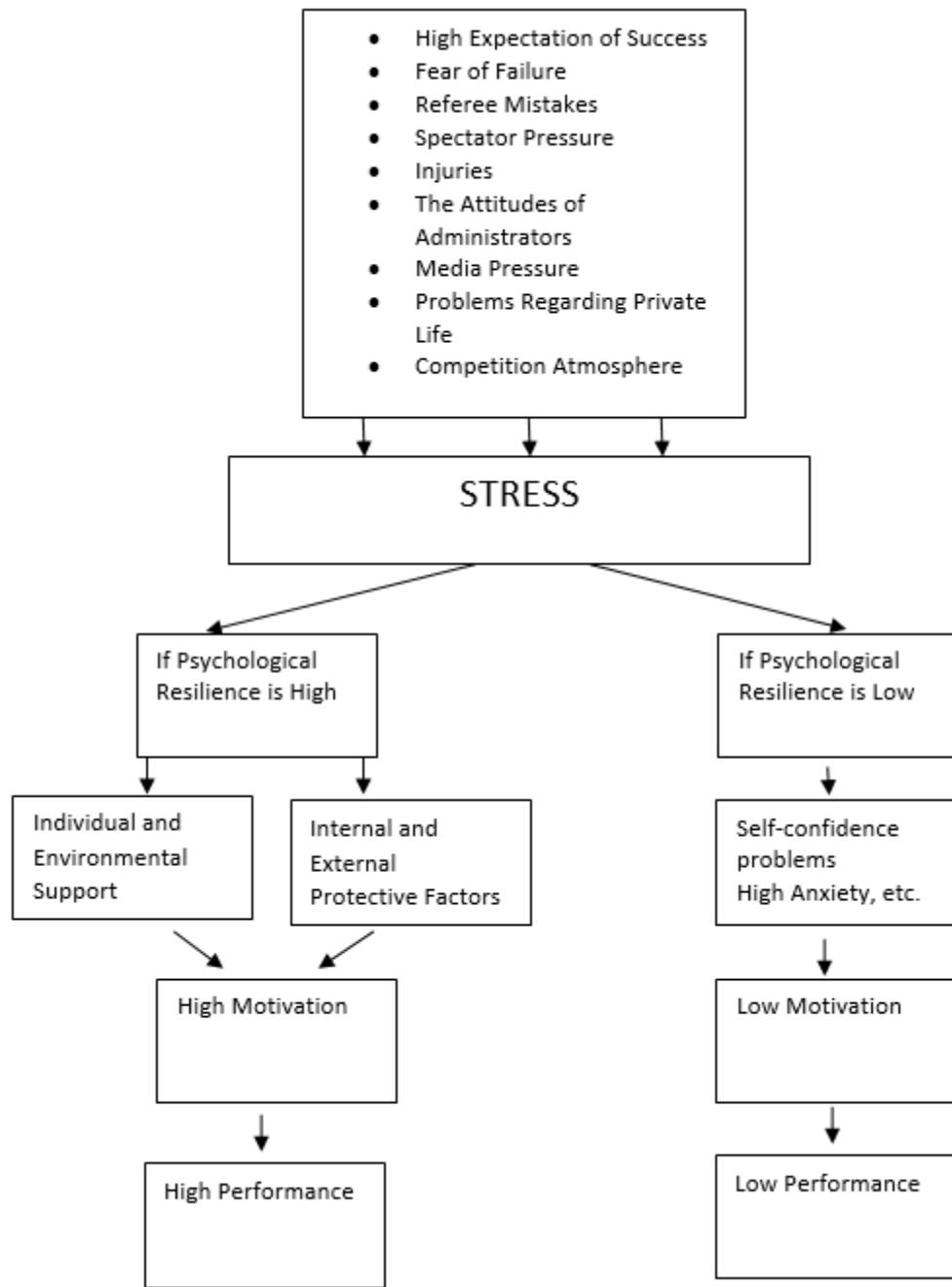


Figure 1. Psychological Resilience Process in the Athletes

An elite athlete with high level of psychological resilience can estimate the risk factors in life (social, personal, family-related) and take necessary measures. Therefore, the fluctuations in the performance of the athlete created by possible risk factors are expected to be less. As the internal and external protective factors, which are another component of psychological resilience, support the athlete's feeling of being in a safe social atmosphere, the performance of the athlete is expected to be high, too. Hence, the careers of many successful elite athletes end before the expected time due to psychological factors such as low motivation level, stress, high anxiety and self-confidence problems which the athletes have difficulty to cope with.

According to Ercan (2013), while experiencing the mentioned problems at a level that do not influence the athlete's performance can be regarded as normal, experiencing them for such a long time that they prevent the athlete from exhibiting good performance is an undesirable result. Therefore, elite athletes need to develop a strong psychological structure in order to cope with problems without giving up and pursue high performance. One of the important tools for developing this psychological structure is to reveal the variables predicting the psychological resilience of elite athletes. Defining the components of psychological resilience in elite athletes, in other words, defining its character will not only make it possible to create positive conditions that will increase the performance of the athlete but it will also help to take measures in order to eliminate the factors decreasing performance. It is thought that raising awareness both in the athletes and in the managers regarding the factors affecting the psychological resilience of the athletes will enable the athletes to increase their psychological resilience and thus, their performance. From this point of view, the aim of this study is to investigate the psychological resilience of elite athletes in terms of various variables. In accordance with this aim, the following questions are aimed to be answered:

- What is the psychological resilience level of elite athletes?
- Does the psychological resilience level of elite athletes differ according to gender?
- Does the psychological resilience level of elite athletes differ according to doping use?
- Does the psychological resilience level of elite athletes differ according to branch?
- Does the psychological resilience level of elite athletes differ according to doing self-talk before the competition?

## **2. Method**

### **Research Model**

The research is a descriptive screening model study in terms of defining the psychological resilience levels of elite athletes. Screening model studies are the ones aiming to describe the present situation with all its details (Karasar, 2005).

### **Sample**

The categories of elite athletes involved in the scope of the research were selected by considering the age category in which the Psychological Resilience Scale could be used. In this context, the population of the research was composed of football, basketball, volleyball and gymnastics branch athletes over the age of 17 who participated in international competitions in adult, young, U18, U19, U20 and U21 categories. The sample of the research was composed of 147 elite (professional) athletes, 79 males and 68 females who voluntarily participated in the research.

### **Data Collection Process**

In the research process, the purpose of the research and the research procedure were explained to the athletes during the face-to-face interviews with elite athletes. Personal information form, which included socio-demographic information and Psychological Resilience Scale were applied to adult elite athletes aged 18 and over who had voluntarily accepted to participate in the research.

### **Data Collection Tools**

In the research, Psychological Resilience Scale developed by Friborg et al. (2005) and adapted into Turkish language by Basim and Çetin (2011) was used to determine the psychological resilience of elite athletes and personal information form developed by the researcher was used to collect the personal information of participants.

#### *Psychological Resilience Scale*

Psychological Resilience Scale developed by Friborg et al. (2005) was used in collecting the data of the research. The Turkish adaptation of the scale was performed by Basim and Çetin (2011). Psychological Resilience Scale, which is a 5-point-Likert scale, is composed of 33 items and 6 sub-dimensions. As a result of the reliability analysis performed in the Turkish adaptation process, while the (Cronbach's Alpha) reliability coefficient for the overall scale was r.86, the reliability coefficient values of the sub-dimensions of the scale were calculated as; r.72 for self-perception, r.75 for future perception, r.78 for social competence, r.81 for family cohesion, r.77 for social resources, and r.68 for structural style.

### **Data Analysis**

For data analysis, SPSS 21.00 statistical package program was used. Descriptive statistics, independent groups t-test and one-way variance analysis statistical were used in the data analysis.

### 3. Findings

#### 1<sup>st</sup> Sub-problem: What is the psychological resilience level of elite athletes?

In the research, psychological resilience capacities of elite athletes were examined by using descriptive statistical techniques and the results of the analysis were given in Table 1.

Table 1. Descriptive Statistics Regarding the Psychological Resilience of Elite Athletes

Sub-dimensions	N	Min.	Max.	X	S
<b>Structural Style Dimension</b>	<b>147</b>	<b>1.06</b>	<b>3.81</b>	<b>2.09</b>	<b>.52</b>
<b>Future Dimension</b>	<b>147</b>	<b>.94</b>	<b>3.25</b>	<b>1.89</b>	<b>.54</b>
<b>Self Dimension</b>	<b>147</b>	<b>1.50</b>	<b>4.50</b>	<b>3.19</b>	<b>.49</b>
<b>Social Competence Dimension</b>	<b>147</b>	<b>1.58</b>	<b>3.78</b>	<b>2.54</b>	<b>.38</b>
<b>Social Resources Dimension</b>	<b>147</b>	<b>1.88</b>	<b>4.02</b>	<b>2.59</b>	<b>.39</b>
<b>Family Cohesion Dimension</b>	<b>147</b>	<b>1.19</b>	<b>3.78</b>	<b>2.49</b>	<b>.40</b>

When Table 1 was examined, it was found that psychological resilience of elite athletes in the self dimension of the scale was at moderate level, and that psychological resilience of elite athletes in the social competence, structural style, future, social resources and family cohesion dimensions was below moderate level.

#### 2<sup>nd</sup> Sub-problem: Does the psychological resilience level of elite athletes differ according to gender?

In the research, whether psychological resilience of elite athletes differed according to gender was examined by t-test analysis and the results of the analysis were given in Table 2.

Table 2. T-test Analysis Results of Elite Athletes' Psychological Resilience According to Gender Variable

Sub-dimensions	Gender	N	X	S	T	P
<b>Structural Style Dimension</b>	Female	68	2.08	.52	.16	.86
	Male	79	2.09	.52		
<b>Future Dimension</b>	Female	68	1.86	.56	.73	.46
	Male	79	1.92	.52		
<b>Self Dimension</b>	Female	68	2.52	.40	2.01	.04
	Male	79	2.66	.36		
<b>Social Competence Dimension</b>	Female	68	2.54	.36	.12	.90
	Male	79	2.55	.41		
<b>Social Resources Dimension</b>	Female	68	2.58	.34	.47	.63
	Male	79	2.61	.44		
<b>Family Cohesion Dimension</b>	Female	68	2.47	.41	.62	.53
	Male	79	2.52	.40		

P<.05

When Table 2 was examined, it was revealed that psychological resilience of elite athletes in the self dimension of the scale differed according to gender variable. In this regard, it was observed that psychological resilience of male elite athletes in the self dimension were higher than female athletes. This result is statistically significant.

#### 3<sup>rd</sup> Sub-problem: Does the psychological resilience level of elite athletes differ according to doping use?

In the research, whether psychological resilience of elite athletes differed according to doping use variable was examined by t-test analysis and the results of the analysis were given in Table 3.

Table 3. T-test Results of Elite Athletes' Psychological Resilience According to Doping Use

Sub-dimension	Doping Use	N	X	S	T	P
Structural Dimension	Yes	90	2.86	.60	.44	.65
	No	57	2.81	.63		
Future Dimension	Yes	90	2.67	.51	.64	.51
	No	57	2.60	.64		
Self Dimension	Yes	90	3.24	.45	1.58	.11
	No	57	3.11	.53		
Social Competence Dimension	Yes	90	3.16	.35	2.76	.00
	No	57	2.97	.47		
Social Resources Dimension	Yes	90	2.86	.46	.74	.45
	No	57	2.81	.44		
Family Cohesion Dimension	Yes	90	2.49	.37	.24	.80
	No	57	2.50	.45		

P&lt;.05

When Table 3 was examined, it was seen that psychological resilience of elite athletes in social competence sub-dimension differed according to doping use variable. According to this result, it was observed that the elite athletes who used doping had higher psychological resilience in social competence sub-dimension than those who did not.

#### 4<sup>th</sup> Sub-problem: Does the psychological resilience level of elite athletes differ according to branch?

In the research, whether psychological resilience of elite athletes differed according to sports branch variable was examined by ANOVA analysis and the results of the analysis were given in Table 4.

Table 4. ANOVA Test Results of Elite Athletes' Psychological Resilience According to the Branch of the Athlete

Sub-dimension	Sports Branch	N	Mean	SD	F	P	LSD
Structural Dimension	Athletics	47	2.16	.59	1.34	.25	----
	Football	18	2.18	.49			
	Basketball	20	1.90	.32			
	Volleyball	20	1.97	.67			
	Gymnastics	42	2.11	.42			
Future Dimension	Athletics	47	2.70	.54	3.52	.00	F/ABVC
	Football	18	2.84	.45			
	Basketball	20	2.27	.43			
	Volleyball	20	2.52	.65			
	Gymnastics	42	2.73	.59			
Self Dimension	Athletics	47	2.81	.49	9.76	.00	F-B/AVC
	Football	18	3.39	.32			
	Basketball	20	3.31	.23			
	Volleyball	20	2.96	.64			
	Gymnastics	42	2.73	.36			
Social Competence Dimension	Athletics	47	3.01	.41	2.99	.02	F/ABVC
	Football	18	3.24	.35			
	Basketball	20	2.96	.38			
	Volleyball	20	2.86	.51			
	Gymnastics	42	3.05	.35			
Social Resources Dimension	Athletics	47	2.74	.47	12.15	.00	F-V/BCA
	Football	18	3.16	.53			
	Basketball	20	2.75	.22			
	Volleyball	20	3.28	.26			
	Gymnastics	42	2.65	.45			
Family Cohesion Dimension	Athletics	47	2.42	.40	2.29	.06	-----
	Football	18	2.73	.54			
	Basketball	20	2.47	.20			
	Volleyball	20	2.41	.55			
	Gymnastics	42	2.53	.29			

P&lt;.05

When Table 4 was examined, it was seen that psychological resilience of elite athletes differed in the future, self, social competence, and social resources dimensions according to sports branch variable. According to this finding, it was observed that psychological resilience of elite athletes in football branch was higher in the future and social competence dimensions of the scale than those of elite athletes in athletics, basketball, volleyball and gymnastics branches. In the self dimension of the scale, it was found that psychological resilience of elite athletes in football and basketball branches was higher than those of elite athletes in athletics, volleyball and gymnastics branches. In the social resources dimension of the scale, it was observed that psychological resilience of elite athletes in football and volleyball branches

was higher than those of elite athletes in athletics, basketball and gymnastics branches.

**5<sup>th</sup> Sub-problem: Does the psychological resilience level of elite athletes differ according to doing self-talk before the competition?**

In the research, whether psychological resilience of elite athletes differed according to doing self-talk variable was examined by t-test analysis and the results of the analysis were given in Table 5.

Table 5. T-test Results of Elite Athletes' Psychological Resilience According to Doing Self-talk

Sub-dimension	Doing Self-talk	N	X	S	T	P
<b>Structural Style Dimension</b>	<b>Yes</b>	<b>35</b>	<b>2.82</b>	<b>.75</b>	<b>.22</b>	<b>.82</b>
	<b>No</b>	<b>112</b>	<b>2.85</b>	<b>.57</b>		
<b>Future Dimension</b>	<b>Yes</b>	<b>35</b>	<b>2.62</b>	<b>.48</b>	<b>.31</b>	<b>.75</b>
	<b>No</b>	<b>112</b>	<b>2.65</b>	<b>.59</b>		
<b>Self Dimension</b>	<b>Yes</b>	<b>35</b>	<b>3.27</b>	<b>.53</b>	<b>1.09</b>	<b>.27</b>
	<b>No</b>	<b>112</b>	<b>3.17</b>	<b>.47</b>		
<b>Social Competence Dimension</b>	<b>Yes</b>	<b>35</b>	<b>3.08</b>	<b>.44</b>	<b>.11</b>	<b>.90</b>
	<b>No</b>	<b>112</b>	<b>3.09</b>	<b>.40</b>		
<b>Social Resources Dimension</b>	<b>Yes</b>	<b>35</b>	<b>2.77</b>	<b>.44</b>	<b>1.00</b>	<b>.31</b>
	<b>No</b>	<b>112</b>	<b>2.86</b>	<b>.46</b>		
<b>Family Cohesion Dimension</b>	<b>Yes</b>	<b>35</b>	<b>2.33</b>	<b>.51</b>	<b>2.78</b>	<b>.00</b>
	<b>No</b>	<b>112</b>	<b>2.54</b>	<b>.35</b>		

P<.05

When Table 5 was examined, it was found that psychological resilience of elite athletes in the family cohesion sub-dimension of the scale differed according to doing self-talk variable. According to this result, it was observed that psychological resilience of elite athletes doing self-talk in the family cohesion sub-dimension was lower than those who did not.

It was found that psychological resilience of elite athletes did not differ according to the athlete's age, sports experience, smoking and alcohol use variables.

#### 4. Discussion

The performances of the athletes may vary from competition to competition under the pressure of heavy training and success anxiety going on throughout the season. It is necessary for the athlete to improve the level of psychological resilience in order to minimize these performance fluctuations, cope with the challenges specific to sports and eventually be successful (Sheard, 2013). In fact, it can be said that in the present circumstances today that the trainings done to increase the athletes' sporting capacities and resilience are insufficient in the increasing competitive environment. What is distinguishing for the performances of the athletes today is their psychological resilience because it is expected from an athlete with high psychological resilience to have high subjective well-being, self-esteem, stress threshold (Savi Çakar & Tagay, 2017; Akdoğan & Yalçın, 2018; Doğan & Eryılmaz, 2013; Kamya, 2000). Today, everyone is able to access to the best training methods, proper nutrition principles and physical facilities in sports. Therefore, what makes an athlete elite and distinguishes them from others is the fact that they can make the best possible combination of the right psychological and mental profile, hard work and ability. It can be expected that elite athletes can make the best possible combination due to their sports-specific superior ability, in other words, that their psychological resilience is high in parallel with their performance. Despite the fact that there is such an expectation regarding the psychological resilience of elite athletes, it was observed as a result of the research that the athletes had a moderate level of psychological resilience in the self dimension of the scale; whereas they had psychological resilience below the moderate level in the social competence, structural style, future, social resources and family cohesion dimensions. Contrary to the findings mentioned above, in the study conducted by Erim and Küçük (2017) on elite boxers, it was revealed that psychological resilience levels of the boxers were above the moderate level in all the dimensions of the scale.

Elite athletes are the individuals that are highly appreciated and respected within society. Therefore, they are the individuals whose needs of being loved and respected are met to a large extent, as defined in Maslow's hierarchy of needs, and who have made certain progress on their path to self-actualization. The individuals who realized their self-actualization are expected to have a healthy psychological resilience that can enable them to overcome difficulties (Mirzeoglu & Cetinkanat, 2005; Kauss, 1980). De Venzio (1997) stated that elite athletes had high self-confidence without any reason. Therefore, the fact that psychological resilience of elite athletes is at moderate level or below the moderate level can be said to be a conclusion contrary to what is expected. It is noteworthy to observe that psychological resilience levels of elite athletes were at the lowest level in the future dimension of the scale. This result is thought to be related to the anxiety that the athletes feel for the future despite the fact that they have a high level of

ability. Furthermore, the fact that psychological resilience of elite athletes regarding the future elements was low can be explained by their anxiety to protect their top achievements they have acquired in their branches. Taking the talented and successful athletes from other nations, which is one of the realities of the globalizing world in sports, can be regarded as an element that leads elite athletes to feel threatened. A sports policy that regards sports only as success and that reduces it to achieving medals causes to invest insufficiently in the training of elite athletes and leads the athletes to perceive themselves as an object that can be easily overlooked. Therefore, elite athletes are crushed under this pressure of success and they do not feel confident enough about the future, which also reduces their psychological resilience levels regarding their future.

In the study, it was revealed that psychological resilience levels of elite athletes differed in the self dimension of the scale according to the gender of athletes. This difference was found to be due to higher psychological resilience level on behalf of male athletes. Even though there was not a significant difference between the mean scores of male athletes' self-perception and those of female athletes, it was seen that male athletes had higher self-perception scores. This result is thought to stem from the social gender perceptions of athletes. It can be said that the socio-cultural pre-learnings regarding the place of women in sports which have been formed since the early years of childhood (the false beliefs that sports involve masculine codes, that sports is not a job appropriate for women, and that some sports branches such as weight lifting and bodybuilding are closed to women) cause female athletes to have lower self-perception compared to male athletes.

Another conclusion obtained in the study is that psychological resilience levels of elite athletes differed significantly according to whether the athlete used doping or not. Elite athletes are the individuals who do the sport for performance, who have the feeling of high responsibility because of high expectations of success and who have become financially independent to a great extent (Tuzcuogullari & Abakay, 2017). In order for the athlete to sustain this success achieved at an early age and to carry the responsibility brought by success, the athlete has to have a high level of psychological resilience. An elite athlete may feel the need to try different ways to deal with the high expectations of the environment and win at any cost with the responsibility brought by this success. One of these ways is the doping use, which is one of the consequences created by unhealthy and exaggerated success motivation. The fact that the athlete uses doping by taking the risk of the serious side effects on their health or the high penalty they will get in case of being caught for the sake of sustaining the success in sports and thus, not giving up the gains they will make or avoiding from the unhappiness and shame that will be experienced because of failure may be considered the most remarkable indicator of their passion to win at any cost. In order to better understand the passion for winning, the impact the athlete has created on their social environment and the social status provided should be taken into account. As a result of the study, the finding that the athletes who used doping had higher levels of psychological resilience than those who did not use doping can be explained by the increase in the self-confidence and therefore, the feeling of social competence that doping use creates in the athlete.

As a result of the research, it was seen that psychological resilience levels of elite athletes differed significantly according to sports branches. It is noteworthy to conclude that the psychological resilience of elite athletes in football branch were higher than those of the athletes in other branches in all the sub-dimensions where the difference was observed. This conclusion is thought to stem from the conditions specific to football. Just as in every branch, there are also specific conditions and difficulties in football not only physically and physiologically but also psychologically, and these conditions have gradually been getting harder and harder. In football competitions today, which are played faster and with high intensity, the need for such physical performance parameters as power, speed and stamina is felt at the highest level. Therefore, in order to fulfill this requirement, doing only physical training during the preparation process to competition by the athlete remains insufficient and psychological training plays an important complementary role for a successful performance. As a result of the study conducted by Belem et al. (2014) on elite volleyball players, they expressed that the characteristics peculiar to the branch influenced the athlete's psychological resilience level. Furthermore, in the study by Erim and Küçük (2017) on elite boxers, similar results were revealed, too.

Another result of this study is that psychological resilience of elite athletes in the family cohesion sub-dimension of the scale differed according to doing self-talk variable. According to this result, it was observed that psychological resilience mean scores of elite athletes doing self-talk in the family cohesion sub-dimension were lower than those who did not. It is noteworthy to conclude that elite athletes with low psychological resilience levels in the family cohesion dimension needed to do self-talk before the competition. Athletes may need the support of those who are close to them so as to be able to cope with the psychological pressure they experience before the competition. In cases when the athletes do not feel enough support from their families, they may feel the need to do self-talk in order to get rid of the emotional void they feel because the condition of good performance in sports is to provide the best integration of the elements related to technical, tactical and psychological factors (Robert et al., 1999). These psychological factors involve the imagination that allows us to control all the elements of physical performance. Imagination is a mental

preparation and helps the physical implementation of the learning process and skill, the lessening of time spent and to set up links between the parts of the skill because although the skill is based on movement, the organization and coordination of all the components of movement takes place in mind. The athlete who does self-talk and imagines success by using the magic of language visualizes the details regarding the skill. Therefore, it can be said that they reduce the pressure created by the atmosphere of the competition. Hence, it was revealed in the studies conducted that self-talk and imagination increased performance and facilitated learning (Hatzigeorgiadis et al., 2011; Beauchamp et al., 2002; Grushko et al., 2016).

## 5. Conclusion and Suggestions

In conclusion, it was found that psychological resilience levels of elite athletes from different branches were at moderate level and below the moderate level. It was observed that male elite athletes had higher levels of psychological resilience compared to female elite athletes, and that the elite athletes whose branch was football had higher levels of psychological resilience compared to the athletes from other branches. Moreover, it was another conclusion as a result of the research that the elite athletes who did not do self-talk before the competition had higher levels of psychological resilience compared to those who did self-talk before the competition, and that the elite athletes who used doping had higher levels of psychological resilience compared to those who did not use doping. Developing the psychological resilience of the athlete is an important part of the pre-competition preparation process. An elite athlete must have the psychological resilience to withstand the short-term high-density or long-term low-density intensive training during the preparation process. For success, the athlete must be able to cope with all the stresses that this process brings because the elite athlete will be able to increase their success to the extent that they can effectively cope with the pressure created by the preparation and competition process. Both high psychological resilience and low psychological resilience have a cyclic process in themselves. The athlete will have higher psychological resilience to the extent that they can increase their psychological resilience. The finding of the research regarding doping use is, in fact, the expression of this situation. For athletes, doping use can be regarded as an indicator of how desperate they have been feeling regarding the capacity to improve their performance. In other words, they need an external and unethical contribution like doping in order to be able to cope with the pressure created by the competition preparation process. This can be considered as an expression of the athlete's incompetency in terms of performance and improving performance through training. One of the tools for the athletes to cope with this psychological challenge may be to include psychological skills training in their training process. Indeed, in the study by Miçoğulları and Ekmekçi (2017), it was revealed that psychological skills training in sports can improve both the athletes' psychological resilience perceptions and their overall psychological strength. Furthermore, including the mental training activities in order for athletes to improve their capacity of visualizing and leading them to master this capacity can be used as another tool to improve their psychological resilience.

With the help of the studies to be conducted on the topic in the forthcoming process, the development of both sports and athletes can be supported by describing the different characteristics of elite athletes. Different aspects of the topic can be described in-depth through the qualitative research to be carried out.

The development of athletes regarding their psychological resilience levels can be examined by implementing training programs to improve the psychological resilience levels in elite athletes.

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