

Investigation of Psychological Resilience Levels of Boxing Sports

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Abstract

This study aims to examine the psychological resilience levels of athletes who do boxing in sports clubs in Istanbul according to various variables. In the study 315 (166 females, 149 males) athletes participated. To measure athletes' psychological resilience in the study, Ego-Resilience Scale, which was developed by Block and Kremen (1996) adapted into Turkish by Karairmak (2007), was used. In research statistics; Since the data showed normal distribution, independent samples t-test and ANOVA, which are parametric tests, were used ($\alpha=0.05$). According to the research results, in the comparisons made according to the gender variable, no significant difference was found between the groups ($p>0.05$). According to the study results, no significant difference was found between the groups in the comparison made according to the age variable of physical education teachers ($p>0.05$). However, it was determined a significant relationship between the sportsmen's active sports and their expressions in daily life and their psychological resilience ($p<0.05$). In line with the findings obtained; It has been determined that athletes' active sports and self-expression levels have a significant effect on their psychological resilience.

Keyword: Sports, Box, Psychology, Psychological Resilience

Introduction

It has been accepted by many studies that there are many factors affecting success in performance sports and that studies with a wide range of goals are required for success (Vast, et al., 2010). Psychological resilience stated that the individual should have psychological protective factors that can resist difficulties and troubles (Masten & Obradovic, 2006). These protective factors are defined as situations that alleviate or eliminate the effects of difficulties and improve their competencies. Studies have shown that skill can only emerge fully after the correct mental processes occur (Campo et al., 2011; Yan, 2010). This context has led to the thought that sportive competition cannot be done without reaching the necessary mental intensity. Therefore, it is necessary to compete with the right mind for proper performance. This study has been deemed necessary to bring the athletes' performance to the desired level and reveal the athletes' lives and current competencies/insufficiencies in their sportive life.

Today, psychological resilience, which is seen more and more, appears as a deficiency ignored by individuals but decreases life when it is not realized. This situation is considered as low morale and trauma in the life process (Hickey & Fricker, 1999). Recent studies show that elite athletes' psychological resilience tends to increase, necessitating a more detailed and analytical study of psychological resilience (Norville & Tofler, 2005).

When the literature is examined, it is seen that most of the studies on psychological resilience are aimed at individuals whose psychological resilience levels are found to be deficient, and sports practices are also included. When these studies are examined, it is stated that sports can be considered as an additional factor in eliminating the psychological resilience levels. However, when the literature is examined, a limited written descriptive study is found to determine the athletes' psychological resilience levels or the psychological resilience levels that should be shown at the appropriate performance level. With this study, it is planned to conduct an analytical examination of psychological resilience in terms of age, gender, active sports or not, how you feel in daily life. It is thought that this study can help increase the performance awareness and psychological resilience levels of athletes in the current situation.

Literature Review

Psychological Resilience

Post-WWII psychology has become a healing science based on the "disease model"; With this model, human strengths are ignored, and the focus is on repairing the damage (Seligman, 2002). However, a new era has begun in psychology with the idea that focusing on pathology will not be enough to help people use their full potential. In his 1998 presidential speech of the American Psychological Association (APA) and his article published in the American Psychologist, Seligman introduced the field of positive psychology as a way to increase the study of psychological characteristics that are supposed to be beneficial to general well-being (McNulty & Fincham, 2012). Thus, in the last 20 years, a strong effort has arisen to study psychological characteristics and processes that have been attributed as beneficial and positive for general well-being in the literature. Psychological resilience refers to dealing with stress or a negative situation or overcoming this process. Psychological resilience is a process that

includes the interaction of the individual's current life conditions and past life experiences, rather than being the personality trait of individuals (Meredith et al., 2011).

Psychological stability in the Western culture attempts to over the years, but new research areas studied in Turkey since the early 2000s. There is no consensus on how to translate the term "Resilience" into Turkish, and there are different expressions in the literature such as "resilience" (Öğülmüş, 2001), "psychological resilience" (Gizir, 2004), and "self-recovery" (Terzi, 2006). In this study, "psychological resilience" was preferred as the equivalent of the word resilience. Different researchers regarding psychological resilience put forward different definitions. Psychological resilience is used as a structure referring to positive adaptation in the face of disaster, stress, or trauma (Masten, 2001). Fraser, Richman, and Galinsky (1999) expressed psychological resilience as the ability to achieve positive and unexpected success under challenging conditions and to adapt to extraordinary conditions and situations. Psychological resilience is defined as a personality trait or a process in which personal, interpersonal, and environmental protection mechanisms are included. Studies that define psychological resilience as a personality trait leave its place in dynamic vision.

Although studies have tried to explain the relationship between psychological resilience and various factors, few studies have focused on understanding the underlying psychological resilience mechanisms. Tugade and Frederickson (2004) hypothesized that psychological resilience is related to the use of positive emotions. Psychological resilience is, in most cases, the result of the functioning of basic human adaptation mechanisms. Research on psychological resilience began with realizing that some individuals may manage the situation when exposed to setbacks, while others cannot manage the situation and exhibit psychopathology. As a result of research, there is an understanding that psychological resilience results from the complex interactions of personal characteristics and environmental conditions (Embury, 2010). What makes psychological resilience important is emotional resilience. He stated that the protective factors valid for individuals with high psychological resilience are personality traits, familial factors, and situational factors (Jaffe, 1998). In individuals with high psychological resilience, personality traits have characteristics such as easy adaptation, recovery ability immediately after sadness, positive thinking, high level of self-esteem and tolerance to frustration, and determination. In terms of family-related factors, these children can establish good relationships with their parents and receive support from other adults. In terms of situational factors, they also have support systems from the supportive school environment and outside the family.

According to Larsen (2010), protective factors supporting psychological resilience are examined in three main categories. These factors are; individual factors, family factors, and social factors. In another definition, psychological resilience is defined as individual qualities that enable the individual to develop despite adverse situations (Connor, & Davidson, 2003). Psychological resilience is a relatively stable personality trait that enables an individual to be resistant to adversities (Pavlovic et al., 2013). Researchers have investigated in which regions of the brain psychological resilience is functional. Accordingly, psychological resilience means coping with difficulties and adapting to the environment. It depends on the maturation level of the neuron circuits in the frontal region of the brain. According to this perspective,

psychological resilience uses neuron systems similar to the brain's executive functions (Martel et al., 2007). In this context, when the concept is examined, it is seen that there is a development in the definition of psychological resilience. While psychological resilience was a matter of concern only on an individual basis in the past, today, it is emphasized with different individual and environmental expressions.

Psychological Resilience in Sports

Sport has become one of the essential parts of societies in today's world. Many people actively or indirectly play sports, participate in sports activities or follow sports events (Li et al., 2001). It is seen that much researches have been done on the concept of resilience in recent years. These studies considering it is noteworthy that the concept of resilience is defined in different ways. The concept of psychological resilience is defined so differently from each other is not the difference of researchers, but the change in individuals' psychological resilience due to different situations and reactions. Since each individual's psychological state is unique to the person, there are also differences in each person's psychological resilience level. Because every individual gives an unusual reaction to stress and stressors, their characteristics and skills interact with their environmental lives that cause people to react and behave differently. Some people are better able to cope with stress and all the factors of stress at certain times. These people are defined as "people with high psychological resilience" (Mumford, 2001).

In their study titled Psychological Resilience in Athletes: Investigation of Stressors and Protective Factors, they stated that athletes with good psychological resilience in sports could use several mental features better to withstand the pressures they experience (Sarkar & Fletcher, 2014). Another study examining the mental well-being of individual and team athletes is that it can be said that the results obtained from university athlete students, who can be considered as the higher age group, cannot be supported by the current study (Demir et al., 2018).

When the literature was examined, it was determined that there is no relationship between sports experience (sports age) and psychological resilience (Grgurinović & Sindik, 2015; Solomon, 2015). In the research of Desai (2017), it was found that male participants had a significantly higher score than female participants. Kajbafnezhad et al. (2012) found a significant relationship between psychological skills, self-esteem, motivation for success, and performance. Martinek and Hellison (1997) stated that sport is a very suitable tool for improving young people's psychological resilience. It improves their social competence and instills hope and optimism in young people. This information encountered in the literature review determined that psychological resilience is one of the parameters that affect athlete performance.

Methodology

Research Goal

The research is a study in the scanning model. Scanning models are research approaches that aim to describe a past or present situation as it exists. The event, individual, or object subject

to research is tried to be defined in its conditions and as it is. No effort is made to change or influence them in any way. What is wanted to be known exists and is there. The important thing is to be able to “observe” it appropriately (Büyüköztürk et al., 2012; Karasar, 2005).

Sample and Data Collection

The study group of the study consists of 166 females, 149 males, totally 315 boxing athletes in different sports clubs in Istanbul.

Ego-Resilience Scale / Psychological Resilience Scale

The Ego-Resilience Scale was developed by Block and Kremen (1996). The adaptation study of the scale into Turkish was done by Kararımak (2007). The scale, which consists of 14 items, is graded in a 4-point Likert type. The scale has a triple factor structure called personal strengths for recovery, positive evaluations towards oneself, and openness to innovations. The variance rate explained in the scale was reported as 47%. Three sub-dimensions obtained from explanatory factor analysis were supported by confirmatory factor analysis. The scores the individual gets from the scale constitute the total psychological resilience score. High scores from the scale indicate a high level of psychological resilience. It is recommended to use the total score obtained from the scale instead of sub-dimension scores.

The internal consistency coefficient of the scale was tested using Cronbach's alpha and test-retest methods. The Cronbach alpha value obtained from the scale items was found to be 0.80. The test-retest internal reliability coefficient, performed three weeks apart, was reported as 0.76.

Analyzing of Data

Within the research scope, the data obtained from the measurements were tried to be evaluated by using the SPSS 25.0 program. The frequency distribution of the athletes in the research group and their psychological soundness scores were evaluated by considering the data's characteristics in line with the independent variables. In this context, t-test with independent samples for groups with two different independent variables and ONE-WAY ANOVA test for groups with three or more independent variables.

Findings

The findings obtained from the study were evaluated by the psychological resilience scale used in the study, and investigations were made according to the variables accepted as independent variables. Accordingly, the findings are cited in four subtitles.

Tablo 1. Demographic characteristics of the participants

Variables	Category	N	%
Gender	Female	166	52,7
	Male	149	47,3
Age	13-18	100	31,7
	19-25	86	27,3
	26-30	37	11,7
	31-39	39	12,4
	40 and over	53	16,8
Active Sport	Yes	218	69,2

How to Feel Yourself in Daily Life	No	97	30,8
	Quiet	85	27,0
	Social	163	51,7
	Angry/Aggressive	20	6,3
	Inward-oriented	18	5,7
	Hyperactive	29	9,2

When Table 1 is examined, 31.7% of athletes participating in the study are 13-18 years old, 27.3% are 19-25 years old, 11.7% are 26-30 years old, and 12.4% of them are 31-39 years old. It was determined that 16.8% were 40 and over. The gender distribution determined that 52.7% were 166 women and 47.3% were men. It is determined that 69.2% of 218 people answered yes, and 30.8% of 97 answered no. To the question of how you define yourself in daily life, 27.0% of the group '85 people are calm, 51.7% of them are 163 people, 6.3% of them are 20 are angry and aggressive, 5.7% of them are 18 are introverted, and It was determined that 9.2% of the 29 people were hyperactive.

The psychological resilience levels of the athletes participating in the research are given below, according to the gender variable.

Table 2. Psychological Resilience Test Independent Samples T-Test Results According to the Gender Variable of the Athletes Participating in the Research

	Gender	N	\bar{X}	SD	t	p
Psychological Resilience	Female	166	39,0783	4,9750	,747	,237
	Male	149	39,7919	5,7106		

When Table 2 is examined, psychological resilience $\bar{X} = 39.07 + 4.975$ of female athletes (N=166) and male athletes (N=149) were determined as $\bar{X} = 39.79 + 5.710$. When Table 2 is examined, no significant difference was found between the groups according to the athletes' scores in the study on the gender variable of the athletes' psychological resilience scale (t = ,747; p> 0.05).

According to the active sports variable, the psychological resilience levels of the athletes participating in the research are indicated below.

Table 3. Psychological Resilience Test Independent Samples T-Test Results According to the Active Sports Variable of the Athletes Participating in the Research

	Active Sport	N	\bar{X}	SD.	t	p
Psychological Resilience	Yes	218	39,9954	5,3645	1,697	,004*
	No	97	38,1134	5,0700		

When Table 3 is analyzed, if the individuals participating in the study do active sports (N=218) yes ($\bar{X} = 39.99 \pm 5,364$ if no (N=97), the person is active $\bar{X} = 38,11 \pm 5,070$ between the status of the sport of the athletes participating in the research and their psychological resilience levels significant differences were detected (t=1.697; p <0.05).

Psychological resilience levels are given below according to the age variable included in the study.

Table 4. Psychological Resilience Subtest According to Age Variable Participating in the Research ANOVA Test Results

	Age	N	\bar{X}	SD	F	p
Psychological Resilience	13-18	100	39,5100	5,6129	1,348	,252
	19-25	86	39,2209	5,4823		
	26-30	37	38,6757	5,2071		
	31-39	39	38,4872	4,4890		
	40 and over	53	40,7547	5,1549		
	Total	315	39,4159	5,3389		

According to the scores obtained by the athletes participating in the study on the psychological resilience scale by age variable ($F=1,348$; $p> 0.05$), there was no significant difference between the groups.

The psychological resilience levels of the athletes participating in the research are indicated below according to how you define yourself in daily life.

Table 5. How to Define Yourself in Daily Life of Athletes Participating in the Study Psychological Resilience Subtest ANOVA Test Results

	How to Express Yourself in Daily Life	N	\bar{X}	SD	F	p
Psychological Resilience	Quiet	85	37,6824	5,8538	9,369	,000*
	Social	163	40,8528	4,5095		
	Angry / Aggressive	20	37,3500	5,1224		
	Inward-oriented	18	35,5556	4,0032		
	Hyperactive	29	40,2414	6,0983		
	Total	315	39,4159	5,3389		

Significant differences were found between the psychological resilience levels of the athletes participating in the study according to how you define yourself in daily life ($p < 0.05$).

Discussion and Conclusion

According to the findings of the research results obtained in this section's study results and some suggestions. Compared with research findings related areas in line with the study's hypothesis and reviewed possible reasons for the findings.

This study, it is aimed to examine the psychological resilience levels of athletes who box in sports clubs in Istanbul according to various variables.

When the study results were examined, there was no significant difference between the groups according to the gender variable of the athletes participating in the study and the athletes' scores on the psychological robustness scale. This research determined no significant difference between male and female athletes in the overall psychological endurance level (Çelik, 2018). Kumar, Singh, and Mitra concluded that the participants' mental endurance levels did not differ by gender (Kumar et al., 2016). Hosseini and Besharat stated no significant difference between male and female athletes (Hosseini & Besharat, 2010). Saka and Ceylan's research found that female adolescents had significantly higher psychological

endurance scores than male adolescents (Saka & Ceylan, 2018). Desai's research showed that male participants had significantly higher scores than female participants (Desai, 2017).

In an analysis conducted by the variable still doing active sports in the study, significant differences were detected with resilience. In the literature, Grgurinović, sports, and Solomon Sindik experience research and have determined an association between psychological resistance (Grgurinović, Sindik, & Solomon, 2015). From the perspective of these two levels of resilience, research results show similarities with current research results. In contrast to the present study results, Sar determined that her psychological endurance increased as sports duration increased (Sar, 2016). Their scores on the scale resilience of the athletes participating in the survey showed no significant difference among the variables according to age groups. Considering the results of other studies, it appears that there are different results from existing research results. Gooding, Hurst, Johnson, and Tarrier, have concluded that young people's resilience is higher than the level of the elderly in the study (Gooding, Hurst, Johnson, & Tarrier, 2012). Range and small, have studied female resilience of the national boxer and has identified the young national athletes and national sports star to be higher than that by the resilience (Erim, & Küçük, 2017). It decreased with increasing age resilience in the present investigation, a transition period of adolescence as a cause of hormonal changes that may be due to reveal some weaknesses from a psychological perspective. However, a statistically significant and positive relationship between age variables with resilience was found in the study by waste (Atik, 2013). How the athletes participating in the study's daily lives were significant differences between resilience levels by the variables you define the question.

When the findings obtained from the research are evaluated, psychological resilience is an influential factor for performance, and psychological resilience does not significantly affect female and male groups. According to the age variable, there was no significant difference between the groups according to the athletes' scores participating in the study on the psychological resilience scale. In the study, significant differences were determined between the psychological resilience of active sports and how you define yourself in athletes' daily lives.

In this context, the results of research;

Psychological variables as perceived robustness should be involved in a training program. More detailed studies on the effectiveness of mental training work should be done. Psych systematically examining the robustness should be enriched with work areas according to different environments and athletes. On the other hand, a limited number of variables in this study were discussed. Different variables associated with resilience for future research (section, class, such as branches) can be examined.

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