



## RESEARCH ARTICLE

# Determination of the Relationship Between Personality Traits and Burnout Levels of Athletes from Different Branches

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### Abstract

This study aimed to reveal the relationship between the personality traits and burnout levels of athletes from different branches. The study was conducted with the relational research model among the quantitative research methods. The study group included 305 athletes consisting of 46 wrestlers, 91 boxers, 25 runners, 89 weightlifters, and 54 football players. The data were analyzed through SPSS 20 package software. The data analysis used descriptive statistical analysis and Pearson correlation analysis to determine the direction and severity of the relationship between the variables. As a result of the descriptive statistical analysis, it was determined that the boxers scored higher in the reduced sense of accomplishment, emotional and physical exhaustion, and depersonalization dimensions. It was concluded that athletes in the athletics branch had higher scores in the extrovert and neuroticism dimensions, and athletes in the weightlifting branch had higher scores in the psychoticism dimensions. According to the correlation analysis, it was found that there was no statistically significant relationship between the personality traits and burnout levels of athletes.

### Keywords

Burnout, Personality, Athlete

## INTRODUCTION

Personality has been examined and researched by many scientists since it is an essential factor indicating the place of human beings in society. Different theories have been introduced about personality as a result of these examinations. One of these theories is the "Theory of Structural Personality." This trend examines personality in terms of structure. It focuses on the development of consciousness, which constitutes the highest level of personality, and elements such as perception, thought, and will. Tichener is the leading defender of this personality movement

(Koknel, 1984). Another theory about personality is the "Theory of Social Learning Personality". A. Bandura, J. Rotter, and W. Mischel are the prominent representatives of this theory. This movement argues that human learning occurs in a social environment and that the most important learning of children occurs by observing the behaviors of others (Cuceloglu, 2002). This theory suggests that if personality is formed by learning, then it can also be changed through learning (Senerler, 1993). The common point of these definitions and theories is that personality involves everything that concerns a person, and that personality is a long and uninterrupted process that

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begins in the human uterus and continues until the end of life (Tazegul, 2012 and Cuceloglu, 2002). Eysenck, who conducts comprehensive studies on personality, evaluates personality structure through two independent two-pronged horizontal and vertical dimensions. One end of the horizontal dimension involves introversion, and the other involves extroversion. In the vertical dimension, there are neurotic types at the upper end and main types at the lower end. The personality structures of all people are located somewhere between these two dimensions. This location can be determined by observation, graded scales, and tests. The elements that compose the personality are located on four separate levels that are separate from each other, with a connection between them (Goodworth, 1988). Studies on sports and personality have generally determined that sports contribute positively to individuals' personality development. Hills and Argyle (1998) examined the positive emotional states developed by leisure time activities and their effects on personality. They found that all kinds of leisure time activities were the sources of positive emotional states. In addition, each of these activities was found to be associated with extrovert personality traits. The relationship between sports and extrovert personality traits has manifested itself especially in team sports (Pehlivan and Ada, 2011). According to the general profile of athletes, low neuroticism, high extroversion, and responsible personality traits are observed in athletes (Acar and Karavelioglu, 2022).

Many mental factors negatively affect the performance of athletes. Anxiety, stress, and burnout are among the factors that negatively affect the performance of athletes (Tazegul, 2013; Tazegul, 2012). Negative mental factors such as anxiety and stress affect the burnout levels of athletes.

The concept of "burnout", introduced by Freudenberger (1974) in the 1970s, emerged due to the changes in an individual and others caused by the intensive work pace. Freudenberger (1974) considered burnout as a psycho-social structure and explained it as a process that affected the productivity of an individual. In the following years, the concept of burnout, which was defined by Maslach and Jackson (1981) as a physical and mental dimensional syndrome that included the negative attitudes of the individual towards work, life, and other people, along with the feelings of

physical exhaustion, prolonged fatigue, helplessness, and hopelessness in humans, was started to be studied by Raedeke and Smith (2001) in the field of sports psychology after the 2000s.

Burnout is a prolonged physical, mental, and behavioral dysfunction that develops as a result of working under constant stress in individuals working in highly demanding jobs (Budak, 2003). In terms of sports, burnout has been defined as physical, emotional, and social withdrawal from previously enjoyed sports activities (Gould and Whitley, 2009). This withdrawal can be classified as emotional and physical exhaustion, reduced sense of accomplishment, and devaluation of sports. According to another definition, burnout is a condition that occurs as a result of chronic stress, motivational orientations, and changes in the athlete caused by perceived or fundamental imbalances between what is expected of the athlete physically, psychologically, and socially and the reaction capacity of the athlete (Gould and Weinberg, 2015). In many studies on burnout, burnout has attracted more attention than overtraining or exhaustion (Hanrahan and Andersen, 2010). The main characteristics of burnout are physical and emotional weakness, poor personal achievement, low self-esteem, and loss of personality (Raedeke and Smith, 2001). In sports, burnout is used differently from quitting sports because burnout includes psychological and emotional weakness, reacting negatively to others, poor self-esteem, and depression (Williams, 2006). Overtraining, which refers to short cycle training (lasting a few days or weeks) in which athletes expose themselves to excessive training loads at maximum or almost maximum capacity, is one of the sub-causes of burnout. On the other hand, excessive training also contributes to positive performance when exercised by the right athletes at the right time (Gould and Weinberg, 2015).

The main aim of this study was to reveal the relationship between the personality traits and burnout levels of athletes from different branches.

## MATERIALS AND METHODS

The study was conducted with the relational research model among the quantitative research methods. This study was conducted with ethical and informed consent in accordance with the rules stated in the Declaration of Helsinki

### Study Group

The study group included 305 athletes consisting of 46 wrestlers, 91 boxers, 25 runners, 89 weightlifters, and 54 football players.

### Data Collection Tools

#### *Revised Eysenck Personality Questionnaire - Short Form (EPT-RS)*

Francis et al. (1992) developed the EPT-RS by reviewing the Eysenck Personality Questionnaire (Eysenck, Eysenck 1975) and the short form of the same questionnaire (48 items) (Eysenck, Eysenck, Barrett 1985). The validity and reliability studies of the scale were conducted by Karanci et al. (2007). The internal consistency of the scale for the sub-scales was 0.78 for Extroversion, 0.65 for Neuroticism, and 0.42 for Psychoticism, respectively. The test-retest consistency was 0.84 for Extroversion, 0.82 for Neuroticism, and 0.69 for Psychoticism. In this questionnaire, each factor is evaluated with 6 items, and the participants are expected to respond to 24 questions as Yes (1) or No (0). The score that can be obtained for each personality trait varies between 0 and 6. The fact that the test used simple language increased the usage value of the test (Aydemir and Koroglu, 2009). The sub-scales of the Eysenck Personality Questionnaire and the description of these scales are as follows (Yildiz et al., 2008).

#### *Psychoticism*

A troublesome, disturbing personality that causes trouble for others. Extroversion: A sociable and cheerful personality.

#### *Neuroticism*

An anxious, grumpy, and resentful personality (Karanci et al., 2007).

#### *Athlete Burnout Questionnaire*

The Athlete Burnout Questionnaire, which was developed by Raedeke and Smith (2001), is a 5-point Likert-type questionnaire consisting of 3 sub-dimensions and 15 items. The scale was adapted to Turkish by Kelecek, Kara, Kazak, Cetinkalp, and Asci (2016). Two items were

removed due to low factor load; therefore, the scale was evaluated over 13 items. Emotional and physical exhaustion sub-dimension consists of 5 items, and the sub-dimensions of reduced sense of accomplishment and depersonalization consist of 4 items. The internal consistency coefficient of the reduced sense of accomplishment was calculated as 0.75, the internal consistency coefficient of emotional physical exhaustion was calculated as 0.87, and the internal consistency coefficient of depersonalization was calculated as 0.83. Within the scope of this study, Cronbach's Alpha values were 0.76 for the reduced sense of accomplishment, 0.79 for emotional physical exhaustion, and 0.60 for depersonalization.

#### *Data Analysis*

The data were analyzed through SPSS 20 package software. One-sample "Kolmogorov-Smirnov" test was administered to find out whether the data had a normal distribution, and the "ANOVA - Homogeneity of Variance" was applied to evaluate whether the data were homogeneous. In this first examination, it was determined that the data were distributed homogeneously and normally. In the analysis of the data, descriptive statistical analysis and Pearson correlation analysis were used to determine the direction and severity of the relationship between the variables.

## RESULTS

This part of the study included the findings obtained regarding the personality traits and burnout levels of athletes from different branches.

Table 1 showed that the scores of the boxers were  $\bar{X}= 10.65 \pm 2.30$  in the reduced sense of accomplishment,  $\bar{X}= 12.27 \pm 4.28$  in emotional and physical exhaustion, and  $\bar{X}=8.71 \pm 3.37$  in depersonalization, and they were higher compared to the other branches. It was determined that the scores of the athletes in the athletics branch were  $\bar{X}= 3.24 \pm 1.96$  in the extrovert and  $\bar{X}= 3.56 \pm 1.58$  in neuroticism, and the scores of the athletes in the weightlifting branch were  $\bar{X}= 2.61 \pm 1.16$  in psychoticism; they were higher compared to the other branches.

**Table 1.** Descriptive statistics findings

The scales	Branch	N	$\bar{X} \pm S.D.$
Reduced Sense of Accomplishment	Wrestling	46	10.52 ± 2.13
	Boxing	91	10.65 ± 2.30
	Athletics	25	10.20 ± 2.51
	Weight Lifting	89	10.49 ± 2.49
	Football	54	10.68 ± 2.40
Emotional Physical Exhaustion	Wrestling	46	11.54 ± 4.52
	Boxing	91	12.27 ± 4.28
	Athletics	25	11.12 ± 3.68
	Weight Lifting	89	10.47 ± 4.46
	Football	54	11.66 ± 4.29
Depersonalization	Wrestling	46	8.39 ± 3.66
	Boxing	91	8.71 ± 3.37
	Athletics	25	7.64 ± 3.38
	Weight Lifting	89	7.44 ± 3.56
	Football	54	8.05 ± 3.52
Extrovert	Wrestling	46	3.28 ± 1.32
	Boxing	91	3.19 ± 1.10
	Athletics	25	3.24 ± 1.96
	Weight Lifting	89	3.12 ± 1.17
	Football	54	3.38 ± 1.45
Neuroticism	Wrestling	46	3.15 ± 1.39
	Boxing	91	3.13 ± 1.51
	Athletics	25	3.56 ± 1.58
	Weight Lifting	89	3.28 ± 1.43
	Football	54	3.29 ± 1.73
Psychoticism	Wrestling	46	2.45 ± 0.93
	Boxing	91	2.51 ± 1.12
	Athletics	25	2.24 ± 0.72
	Weight Lifting	89	2.61 ± 1.16
	Football	54	2.48 ± 1.09

**Table 2.** Correlation analysis showing the relationship between personality dimensions and burnout dimensions

The scales		Extrovert	Neuroticism	Psychoticism
Reduced Sense of Accomplishment	PearsonCorrelation	0.047	0.033	0.049
	Sig. (2-tailed)	0.347	0.512	0.327
EmotionalPhysicalExhaustion	PearsonCorrelation	0.042	0.067	0.014
	Sig. (2-tailed)	0.400	0.183	0.787
Depersonalization	PearsonCorrelation	0.061	0.014	0.004
	Sig. (2-tailed)	0.228	0.785	0.941

According to Table 2, no statistically significant relationship was determined between the personality traits and burnout levels of the athletes as a result of the correlation analysis ( $p>0.05$ ).

## DISCUSSION

As a result of the descriptive statistical analysis, it was determined that the scores of the boxers were higher in the dimensions of reduced sense of accomplishment, emotional and physical exhaustion, and depersonalization. It was found that the athletes had high scores in the athletics branch in the extrovert and neuroticism dimension, and that the athletes in the weightlifting branch had high scores in the psychoticism dimension. According to these data, it can be argued that the boxers in the sample were more physically and emotionally exhausted and more prone to stress. One of the greatest factors in the physical and mental exhaustion of boxers is thought to be the fact that boxing is a difficult sport. Boxers may become physically and mentally exhausted more quickly as they constantly punch each other in training. In addition, it can be argued that athletes in the athletics branch in the sample were generally cheerful and sociable people. This is because people who develop extroverted personality traits are the types of people who like to communicate and are cheerful. Eysenck defined extroverts as follows: Typical extroversion refers to people who enjoy social entertainment and gatherings, act according to their motives at the time, like to make hurtful jokes, and are carefree, lymphatic, and self-indulgent (Koc, 1994). In addition to these characteristics of the athletes in the field of athletics, it can be argued that they were more fragile, resentful, and moody individuals since their neuroticism personality traits were more developed. The biggest reasons for the further development of the extroverted personality traits of athletes in the athletics branch included the fact that their economic status was good and they had achieved great success. This is because as the economic and sporting success of an athlete increases, the level of human relations and socialization also increases.

In a study conducted on 188 young athletes in Taiwan to examine the effect of the adaptive and maladaptive two-dimensional perfectionism model on the burnout levels of athletes, it was concluded that adaptive and maladaptive perfectionism did not have a significant effect on burnout (Chen, Kee, Tsai, 2009). In a study conducted with 202 professional and semi-professional rugby players, who continued their sports lives in the UK, a relationship was found

between perfectionism and burnout (Hill and Appleton, 2011). Kelecek and Gokturk conducted a study in 2017 and found the emotional/physical exhaustion scores of female football players as 1.55, their reduced sense of accomplishment scores as 2.08, and their depersonalization scores as 1.34. In their study conducted in 2020, Sari and Koleli reported the emotional physical exhaustion score of the athletes as 1.65, the reduced sense of accomplishment score as 2.08, and the depersonalization score as 1.48. Ozcosan conducted a study in 2018 and found that the burnout levels of female athletes were higher compared to the male participants. In their study conducted in 2016, Kang et al. stated that professional athletes experienced more burnout compared to non-professional athletes. Molinero et al. conducted a study in 2012 and determined that excessive training affected the burnout levels of athletes negatively. In a study by Berengui Gil et al., which was conducted in 2015, they found that female athletes had high levels of burnout. Lu et al. conducted a study in 2016 and reported that coach support positively affected the burnout levels of the athletes. A study on the effect of motivational climate and flexibility on burnout levels of young athletes, which was conducted with 87 young volleyball and basketball players aged between 15 and 18, concluded that task-oriented motivational climate and flexibility were positively related to competence and negatively related to the three dimensions of burnout. The performance-oriented motivational climate was found to be positively related to all three dimensions of burnout. Another result was that the task-oriented motivational environment significantly affected the decline and poor accomplishment dimensions of burnout in sports (Vitali, Bortoli, Bertinato, Robazza, and Schena, 2015).

In conclusion, it was determined that the athletes in the sample were more extroverted and sociable individuals. It was found that athletes in the boxing branch experienced more burnout. No statistically significant relationship was determined between the personality traits and burnout levels of the athletes in the sample. At the end of this section, emphasizing the limitations of the research and making suggestions for future research will improve the quality of the study.



### Conflict of Interests Statement

There are no conflicts of interest for the contributing author.

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### Ethics Statement

During the current research, "Higher Education Institutions Scientific Research and Publication Ethics Directive" and the relevant research was conducted at Istanbul Topkapı University, Academic Research and Publication Ethics Commission, E-49846378-050.01.04-2300010581

approved by the board decision.

### Author Contributions

Study Design, IY; Data Collection, CS and Statistical Analysis, UT; Data Interpretation, IY and FK; Manuscript Preparation, CS; Literature Search, IY and UT. All authors have read and agreed to the published version of the manuscript.

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