

THE EFFECT OF THE COVID-19 PANDEMIC ON TRAIT ANGER-ANGER EXPRESSION STYLE IN INDIVIDUAL ATHLETES: THE PREDICTIVE ROLE OF PSYCHOLOGICAL RESILIENCE

O EFEITO DA PANDEMIA COVID-19 SOBRE O ESTILO DE EXPRESSÃO DA RAIVA EM ATLETAS INDIVIDUAIS: O PAPEL PREDITIVO DA RESILIÊNCIA PSICOLÓGICA*

YUNUS SINAN BİRİCİK

ATATÜRK UNIVERSITY, SPORT SCIENCE FACULTY, TURKEY
sinan.biricik@atauni.edu.tr

MEHMET HALUK SİVRİKAYA

ATATÜRK UNIVERSITY, SPORT SCIENCE FACULTY, TURKEY
haluk@atauni.edu.tr

Abstract: The aim of this research is to examine the effect of the COVID-19 pandemic on trait anger-anger expression styles in individual athletes and to determine the relationship with psychological resilience. The study is a correlational research and a descriptive research. Correlational research is a research which aims to determine whether there is and/or what level is a common change in two or more variables. The data were obtained from a total of 421 athletes, 169 women and 252 men, from different sports branches (taekwondo, athletics, boxing). In the data collection process, trait anger and anger expression scale and psychological resilience short scale adapted to Turkish culture were used. Multivariate analysis of variance (MANOVA), correlation analysis and regression analysis were used in the analysis of the data obtained in the study. According to the findings, although the COVID-19 pandemic puts pressure on anger in athletes, resilience has a protective function. The results of the research revealed that psychological resilience has a positive predictor on the trait anger and anger expression styles of the athletes.

Keywords: Covid-19. Resilience. Trait anger. Anger expression style.

Resumo: O objetivo desta pesquisa é examinar o efeito da pandemia da COVID-19 sobre os estilos de expressão de raiva em atletas individuais e determinar a relação com a resiliência psicológica. O estudo é uma pesquisa correlacional e uma pesquisa descritiva. A pesquisa correlacional é uma pesquisa que visa determinar se existe e/ou que nível é uma mudança comum em duas ou mais variáveis. Os dados foram obtidos de um total de 421 atletas, 169 mulheres e 252 homens, de diferentes ramos esportivos (taekwondo, atletismo, boxe). No processo de coleta de dados, foram utilizadas escalas de raiva e expressão de raiva e resiliência psicológica de curta escala adaptadas à cultura turca. Análise multivariada de variância (MANOVA), análise de correlação e análise de regressão foram utilizadas na análise dos dados obtidos no estudo. De acordo com os resultados, embora a pandemia COVID-19 pressione a raiva dos atletas, a resiliência tem uma função protetora. Os resultados da pesquisa revelaram que a resiliência psicológica tem um preditor positivo sobre os traços de raiva e os estilos de expressão da raiva dos atletas.

* Artigo recebido em 24/03/2022 e aprovado para publicação pelo Conselho Editorial em 15/06/2022.

Palavras-chave: Covid-19. Resiliência. Traço de raiva. Estilo de expressão da raiva.

1. INTRODUCTION

Since the beginning of 2020, the global COVID-19 epidemic, which was detected in Wuhan, China and caused serious diseases and deaths, started to affect the whole society health, social and economic. The epidemic, which suddenly and inevitably affects daily life around the world, has caused major global changes in all parts of the world, including quarantine and lockdown, social distancing and the cessation of most activities (Taylor, 2021; Samuel et al. 2020). These changes (restrictions, quarantine, etc.) have caused undesirable consequences such as health-related behavioral changes, decrease in physical activity, and poor mental health. (Hall et al., 2020; Dagnall et al., 2021; Standon et al., 2020; Meyer et al., 2020). Contrary to the reactions given to extremely stressful situations, this disease, which is life-threatening and causes many deaths, is experienced at a higher level of anxiety and fear (Roy et al. 2020; Brooks et al., 2020). This situation causes many mental and psychological problems in society (Ahorsu et al., 2020; Yıldırım and Güler, 2021).

The COVID-19 pandemic has also had a significant impact on global sport. Many international tournaments were postponed or cancelled, athletes were unable to train and compete, and there were significant changes in their lifestyle, personal relationships, self-realization and career goals, and financial situation. Although some athletes have successfully adapted to this epidemic process, many have had difficulties in adapting to this process. This process has caused psychological complications such as anger, stress, anxiety and depression in athletes (Woods et al., 2022; Di Fronso et al., 2022). Thus, while there is no doubt that the pandemic has disrupted every aspect of normal life, in the context of sport it can be seen as a transitional period that disrupts the quality and intensity of athletic participation (Samuel et al., 2020).

Studies in the literature on the psychological state of athletes during the COVID-19 crisis focused on negative mood, depression, stress, anxiety (Aghababa et al., 2021), perceived stress, and psychosocial (Di Fronso et al., 2022). Considering the harmful effects of turbulent times on the emotional and bodily experience of the individual (Weinberg and Cooper, 2012), this worrying and stressful situation causes negative effects on the emotional experiences and mental states of the athletes as well as their performance. From the perspective of elite athletes, these athletes generally suffer from many mental health symptoms and disorders (Henriksen et al., 2020). In addition to losing daily workout

routines, a general uncertainty and anxiety about the future can cause or worsen some mental health symptoms. Also, athletes are accustomed to some degree of high physical activity that is suddenly reduced or interrupted. However, this long-term interruption of physical activity during the epidemic may significantly worsen mental health alone, apart from the depressive effects of physical activity (Maugeri et al., 2020).

One of the types of reactions likely to occur due to fear of COVID-19 is anger. According to most definitions, anger includes a combination of cognitive, behavioral and emotional responses to threat and is functionalized in many ways (Ronan et al., 2013). Anger has been thought to play an inseparable role from depression since the early stages of psychoanalytic theorizing about this disorder (Busch et al., 2004). Trait anger is a personality structure that expresses stable individual differences in the tendency to feel anger in daily life (Owen, 2011, Spielberger et al., 1983). It is defined as a dispositional trait in which a person experiences anger of varying intensity (for example, mild irritability, intense anger), often accompanied by related negative emotions such as jealousy, resentment, hatred, and disgust (Siegman and Smith, 2013). Trait anger increases the possibility of aggression when faced with a severe negative situation (Bondü and Richter, 2016; Maldonado et al., 2015; Shorey et al., 2011). Considering the nature of the pandemic and the impact of social reactions, it is thought that the risk of developing mental behavior disorders such as anger, aggression, anxiety, and stress is quite likely. Therefore, the anger that the pandemic can cause in athletes may carry the risk of behavior leading to a destructive eruption in the long term rather than a mild tension. For this reason, it is very important to predict, monitor and provide support for emotional states that will negatively affect athletes such as anger, stress and anxiety associated with the COVID-19 epidemic process. Anger expression styles appear in different forms in individuals. These; anger inward, express anger, and anger control (Starner and Peters 2004; Lerner 2007; Sung, Puskar, and Sereika 2006; Tambağ and Öz 2005; Spielberger et al. 1983). Anger inward (anger in); It is the suppression tendency used by the person against the existing anger factors by hiding or suppressing the thoughts and feelings that cause anger (Starner and Peters 2004). Expression of anger (anger out); It is an adaptive reaction to the tendency to show aggressive behavior towards people or objects in the environment and to cope with the negative situation that this situation creates. Anger control, on the other hand, reflects the extent to which one has the ability to control anger expression or life.

The concept of resilience includes the individual's adaptation to the change in his life, which can be defined as being able to remain difficult in the face of negative

experiences (Fletcher & Sarkar, 2013; Jackson et al, 2007) and in the process that occurs as a result of the interaction of risk factors and protective factors when faced with a negative situation (Fletcher & Sarkar, 2013; Jackson et al., 2007). Masten, 2002; Karairmak, 2006). Resilience refers to a dynamic developmental process associated with maintaining positive adjustment under life-threatening conditions (Luthar et al., 2000; Masten et al., 1999). The American Psychological Association (2014) defines resilience as the process of adaptation to adversity, trauma, tragedy, threat, and significant stressors. According to the resource conservation theory, resilience is an important personal resource in coping with stressful and challenging situations (Avey et al., 2010). Theorists report that resilience is associated with symptoms of anxiety and depression (Masten, 2001; Foureur et al., 2013). In addition, resilience is seen as an individual's ability to consistently protect and manage their psychological and physiological health against negative, severe, threatening and destructive situations and to adapt to these situations (Windle, 2011). Studies on this subject have shown that people with strong psychological resilience are more successful in coping with situations that can put them under pressure and continue to improve themselves (Bonanno et al., 2005; Luthans et al., 2006). When considered in the context of sports, resilience is a dynamic process that shows the metacognitive-emotional-behavioral capacities of the athlete in order to maintain the positive balance and successfully adapt to various negativities that he will encounter in his life (Gupta and McCarthy, 2021).

Research on the effect of this unexpected epidemic process on athletes and their endurance levels in coping with it has been limited. In addition, we currently have limited understanding of how athletes evaluate this change event and its relationship with possible predictive variables. In this direction, the aim of this study is to examine whether the scores of the trait anger-anger expression styles of the athletes of the COVID-19 pandemic show a significant difference according to their gender, branch and sports age. In addition, it is to determine the possible predictive effect of psychological resilience on trait anger-anger expression styles. For this purpose, the following hypotheses were tested during the research process.

1. The trait anger-anger expression style scores of individual athletes differ significantly according to their genders.
2. The interaction of branch and sports age causes a significant difference in the trait anger-anger expression styles of individual athletes.
3. There is a significant relationship between psychological resilience and trait anger-anger expression style.

4. Psychological resilience is a significant predictor of trait anger-anger expression style.

2. METHODOLOGY

2.1. Participants

A total of 421 individual athletes, aged between 17 and 32 (average =23.60, SD = .938), actively engaged in sports in athletics, boxing and taekwondo branches, participated in the research. Of the participants, 40% were females and 59% were males. During the research, a two-stage process was followed in the determination of the participants. Since the normalization process started in Turkey and the curfews were relaxed, the data collection process was carried out face-to-face and online. In this context, data were collected from a total of 421 individual athletes who could be reached by convenience sampling method. The sample group consists of individuals who are active in athletics (28%), boxing 33.3% and taekwondo 38.7%. Again, 34.7% of them are 4 years and below, 30.2% are 5-8 years, 15.9% are 9-12 years and 19.2% are individuals with 13 years and above sports age. Considering the sports age distribution of the athletes; 34.7% are 4 years or less, 30.2% are 5-8 years, 15.9% are 9-12 years, 19.2% are over 13 years.

2.2. Data Collection Tools

2.3.1. Brief Resilience Scale

Brief Resilience Scale is a four-point likert type (never, rarely, often, and always) assessment tool developed by Smith et al. (2008) and adapted to Turkish culture by Doğan (2015). The scale has 6 items and consists of one dimension. The scores that can be obtained from the scale range from 6 to 24 (Sample questions are: “I can recover quickly after difficult times, and I have difficulty coping with stressful events.”). As a result of exploratory and confirmatory factor analysis, a single factor structure was obtained that explained 54% of the total variance. In the reliability analysis conducted in this study, the Cronbach-Alpha reliability coefficient was obtained as .80. In order to determine the suitability of the scale for sampling, confirmatory factor analysis (CFA) was performed using research data and it was determined that six items and a one-dimensional structure were preserved in the original version ($\chi^2/SD = 2.08$, REMSEA: .044, RMR: .041, SRMR: .038, CFI: .96).

2.3.2. Trait Anger-Anger Expression Style Scale

Trait Anger - Anger Expression Style Scale was developed by Spielberger et al. (1983) and adapted to Turkish culture by Özer (1994). It is a 34-item and 4-point Likert

type scale. The first 10 items of the scale measure trait anger, and the next 24 items measure anger expression styles. Trait anger expresses how the person generally feels and how much anger he or she experiences. The lowest score that can be obtained from the trait anger scale is 10, and the highest score is 40. Anger expression style scale consists of three subgroups: anger-in, anger-out, and anger control. The Cronbach Alpha value of the original scale is between .77 and .88. The data on the construct validity of the scale ($\chi^2/SD = 2.66$; REMSEA = 0.053, RMR = 0.039, CFI = 0.88) showed that the three-factor structure with 24 items had a good fit level and internal consistency coefficient Cronbach alpha = 0.82 were determined to be sufficient (Sample questions are: “I can stop myself before my anger gets out of control, and I can't control my nerves.”). High scores from trait anger indicate high level of anger, high scores from anger control indicate that anger can be controlled, high scores from anger expression indicate that anger can be expressed easily, and high scores from anger-out show that anger is suppressed.

2.4. Procedure and Data Analysis

The research initiated with obtaining permission to conduct the research from Atatürk University Sports Sciences Ethics Committee, Then, necessary permissions were obtained from local club managers. Due to the continuation of the COVID-19 epidemic but the relaxation of the curfews, data collection was carried out both face-to-face and online. The questionnaire prepared on Google forms was delivered to the athletes via e-mail and instant messaging applications. In addition, the questionnaire was applied physically. The data collection process was completed within 30 days. The data collected physically and online were analyzed. In 12 of the physically prepared questionnaires, missing data was detected and removed. In the online questionnaires, there was no missing data since each question required an answer. For this reason, extreme value, normality and homogeneity tests were applied directly. At the last stage, normality values were examined using LISREL 9 software and it was determined that the data set showed a normal and homogeneous distribution without any transformation.

After it was determined that the data set met the univariate and multivariate normality criteria required for parametric tests, statistical analyzes were carried out using the SPSS 22.00 package program. The relationships between the psychological resilience levels of individual athletes and their trait anger-anger expression styles in the COVID-19 process were determined by the Pearson moment product correlation coefficient. One-way and two-way MANOVA analysis was performed to determine whether the trait anger-anger expression style differed significantly according to gender, branch and sports age

variables. Post Hoc “Tukey b” test, one of the multiple comparison tests, was used to determine the source of possible differences between the variables. In addition, the effect of psychological resilience on trait anger-anger expression styles was determined using regression analysis.

3. RESULTS

The findings obtained as a result of the analysis of the data in the research are explained below depending on the research problems.

3.1. Investigation of Trait Anger-Anger Expression Style Scores of Individual Athletes in Terms of Gender

One-way MANOVA analysis was conducted to determine the effect of gender on the trait anger-anger expression styles of individual athletes during the Covid-19 outbreak. When the basic assumptions of this analysis were checked, it was determined that the homogeneity assumption of the spread matrix was provided according to Box's M statistics ($F_{6-877459}=.964$, $p=.056$). In addition, it was found that the variance homogeneity criterion was fulfilled in all three sub-dimensions according to the Levene test results (Trait Anger; $F=844$, $p=.159$, Anger/Inside; $F=667$, $p=.197$, Anger/Outward; $F=756$, $p=.186$, Anger/Control; $F=910$, $p=.316$).

One-way MANOVA analysis was applied to determine whether there was a significant difference between the trait anger-anger expression style scores of individual athletes according to their gender, and the results are given in Table 1.

Table 1. Results of One-way MANOVA Test Regarding Gender Variable

Effect	Variable	Wilks Lambda (λ)	F	p	Hypothesis df	Error df	η^2 (eta)
Gender	Trait anger	.98	1,245	,265	1	419	.003
	Anger in		2,444	,119	1	419	.006
	Anger out		1,179	,278	1	419	.003
	Anger control		,272	,602	1	419	.001

When Table 1 is examined, the values between the trait anger-anger expression style scores of individual athletes according to the One-way MANOVA result; trait anger sub-dimension (Wilks Lambda (λ)=.98, $F(1-419)= 1.245$, $p=.265$, $\eta^2=.003$), anger/inside sub-dimension (Wilks Lambda (λ)=.98, $F(1-419)= 2.444$, $p=.116$, $\eta^2=.006$), anger/out subscale (Wilks Lambda (λ)=.98, $F(1-419)= 1.179$, $p=.278$, $\eta^2=.003$) and anger/control sub-

dimension (Wilks Lambda (λ)=.98, $F(1-419)=.272$, $p=.602$, $\eta^2=.001$). In this context, it is seen that there is no significant difference.

3.2. Investigation of Trait Anger-Anger Expression Styles of Individual Athletes According to the Interaction of Branch and Sports Age

Multi-factor MANOVA analysis was performed to determine the joint effect of Branch and Sports Age on the trait anger-anger expression levels of the athletes. When the basic assumptions of this analysis were checked, it was determined that the homogeneity assumption of the spread matrix was provided according to Box's M statistic ($F(66-118954)=.959$, $p=.132$). In addition, it was found that the criterion of homogeneity of variance was fulfilled in all 4 sub-dimensions according to the Levene test results (Trait anger; $F=282$ $p=.089$, Anger in; $F=593$, $p=.067$, Anger out; $F=853$, $p=.587$, Anger control; $F=954$, $p=.066$).

Table 2. MANOVA Results on the Interaction of Trait Anger-Anger Expression Styles of Individual Athletes with Branch and Sports Age

Effect	Variable	Wilks Lambda (λ)	F	p	Hypothesis Sd	Error sd.	η^2 (eta)
Branch	Trait anger	.96	1,585	,206	2	418	.008
	Anger in		6,644	,001	2	418	.031
	Anger out		3,061	,048	2	418	.015
	Anger control		,755	,470	2	418	.004
Sports Age	Trait anger	.97	5,159	,002	3	418	.036
	Anger in		1,895	,130	3	418	.014
	Anger out		3,190	,024	3	418	.023
	Anger control		,458	,712	3	418	.003
Branch-Sports Age	Trait anger	.96	1,573	,154	6	418	.023
	Anger in		,680	,666	6	418	.010
	Anger out		1,357	,231	6	418	.020
	Anger control		1,001	,424	6	418	.014

When the results of the multi-factor analysis of variance MANOVA given in Table 2 were examined, it was found that the trait anger-anger expression style scores of the individual athletes did not differ significantly according to the common interaction of the Branch-Sport Age.

As a result of MANOVA analysis, it was found that there was a significant difference in anger/inside sub-dimension (Wilks Lambda (λ)=.96, $F(2-418)=6.644$, $p=.001$, $\eta^2=.031$) and anger/outward sub-dimension (Wilks Lambda (λ)=.96, $F(2-418)=$

3.061, $p=.048$, $\eta^2=.015$) between trait anger-anger expression style scores of individual athletes according to their branch levels. In addition, branch level explains 3.1% of the variance in the anger/in sub-dimension (η^2) and 1.5% of the variance in the anger/out sub-dimension (η^2). It can be said that the obtained effect size values have a low level of effect on the anger/inside and anger/outside sub-dimensions of the branch level. Tukey b analysis was performed to determine the source of the difference in terms of branch variable. As a result of the analysis, it was determined that the anger expression styles of taekwondo athletes were higher than boxing and athletics athletes in both anger/inside and anger/outside sub-dimensions. In the anger control sub-dimension, no significant difference was found according to the branch level.

It was found that there was a significant difference in trait anger (Wilks Lambda (λ)=.97, $F(3-418)= 5.159$, $p=.002$, $\eta^2=.036$) and anger/outward sub-dimensions (Wilks Lambda (λ)=.97, $F(3-418)= 3.190$, $p=.024$, $\eta^2=.023$) between trait anger-anger expression style scores according to sports age variable. In the sports age variable, it explains 3.6% of the variance in the trait anger sub-dimension (η^2) and 2.3% of the variance in the anger/outward sub-dimension (η^2), and it seems to have a low level of effect. According to the results of the Tukey b analysis, the trait anger levels of the athletes with 5-8 years of sports experience were found to be higher than those with 4 years or less and 13 years or more of sports experience. In the anger out sub-dimension, the average of the athletes with 4 years or less of sports experience was found to be lower than the average of the athletes with sports experience between 5-8 years and 9-12 years.

3.3. Relationships Between Trait Anger/Anger Expression Style and Psychological Resilience

Pearson product moment correlation was used to determine the relationships between trait anger/anger expression style scores of individual athletes and psychological resilience, and the results are given in Table 3.

Table 3. Relationships between Trait Anger/Anger Expression Style and Psychological Resilience

	Trait anger	Anger in	Anger out	Anger control
Psychological resilience	-.282	-.184	-.195	.201
Arithmetic mean	2.24	2.41	2.16	2.70
Standard deviation	.683	.611	.711	.729

When Table 3 is examined, it is seen that trait anger, anger/inside, anger/outside and anger control sub-dimensions have significant relationships with psychological resilience. After determining the significant relationships between trait anger-anger expression style and resilience, multiple regression analysis was performed to determine whether resilience is a significant predictor of trait anger-anger expression styles in individual athletes.

Table 4: Multiple Regression Analysis of the Prediction of Resilience to Trait Anger and Anger Expression Style

Independent variable	B	Std. Hata	β	t	p
Constant	3,919	,176		19,749	,000*
Trait anger	-,299	,062	-,167	-2,873	,004*
Anger in	-,206	,073	-,174	-2,822	,005*
Anger out	,148	,105	,013	1,501	,134
Anger control	,245	,051	,246	4,795	,001*
R=.359	R2=.129	F=20.55	*p<.05		

As a result of the analysis, it was seen that psychological resilience significantly predicted trait anger, anger-in and anger control ($R=.359$, $R2=.129$, $F= 20.55$, $p = <.05$) and explained the variance by 13%. In addition, when the standardized regression coefficients were examined, it was observed that the order of importance of the independent variables on the explanation of the psychological resilience of the participants was trait anger ($\beta =-.299$, $p <.05$), anger control ($\beta = .245$, $p <.05$) and anger inward ($\beta =-.206$, $p <.05$). It was observed that psychological resilience did not significantly predict anger out.

4. DISCUSSION

In this study, it is aimed to examine whether the trait anger-anger expression styles of individual athletes differ significantly in terms of gender, branch and sport age interaction during the COVID-19 pandemic and the relationships between psychological resilience and trait anger-anger expression style.

The first finding obtained from the study is that the trait anger-anger expression style scores of individual athletes in terms of gender did not show a significant difference in trait anger, anger-in, anger-out, and anger-control sub-dimensions. This finding shows that the research hypothesis of "individual athletes' trait anger-anger expression levels differ significantly according to their genders" is not confirmed. In the related literature, it has been observed that there are inconsistencies between the research findings dealing with the relationship between the trait anger-anger expression style and gender in athletes. While some research findings show that the trait anger and anger expression styles of athletes differ significantly according to gender (Karadağ, 2018; Yamak et al., 2019; Baykan, 2018; Bozkurt, 2017), some research findings show that they do not differ significantly (Certel and Bahadır 2012; Demir et al., 2017; Cihan & Baykan, 2018; İnallı, Zekioglu & Tatar, 2020; Akdeniz et al., 2017). In the literature, there are studies in which men are more likely to express anger and engage in acts of aggression than women, even if their anger experience is similar (Bartlett et al., 2018). It is thought that women do not experience anger similarly to men based on biological differences and cultural and social factors play a role in this situation (Tremblay and Cote, 2019). Because, in general, while there is no negative judgment in the society in the expression of anger of men, there is less difference in the expression of anger of women and it causes negative evaluation by the society in the expression of anger (İbrahim, 2018). Although some classes of anger have been noted to be more prevalent in males, it is believed that the shared experience of anger may be attributable to the nature of the sport, as competition regardless of gender is a common theme. However, considering the process in which the study was conducted, it can be thought that the anger situation that can be experienced due to the negative moods that may be caused by factors such as fear, stress and anxiety experienced by the athletes, regardless of male or female, during the COVID-19 pandemic can make less difference.

The second finding obtained from the study is that the trait anger-anger expression style scores of the athletes do not show a significant difference in terms of the common interaction of the branch and sports age. This finding shows that the research hypothesis, which was established as "the level of trait anger-anger expression style of individual athletes differs significantly according to the common interaction of branch-sport age" is not confirmed. As a result of the Manova analysis, the branch and sports age variables were analyzed separately and the source of the difference was examined. In this direction, the third finding obtained from the study is that the trait anger-anger expression style scores of individual athletes differ significantly in anger/inside and anger/outside sub-dimensions in

terms of branch. According to the results of the analysis to determine the source of the difference, the anger expression styles of taekwondo athletes in both anger/inside and anger/outside sub-dimensions are higher than boxing and athletics athletes. Lapa et al., (2013) concluded that taekwondo athletes have a moderate score for trait anger and anger expression, but the highest correlation between anger level occurs in the anger/outside sub-dimension. Zengin (2010) stated that the internal and external anger of taekwondo athletes is higher than the athletes participating in the research from other sports branches. Although anger is generally seen as a danger in sports, there are those who interpret their competitive anger as beneficial to sports performance for athletes participating in physical contact sports (Madden et al., 2021; Robazza and Bortoli, 2007). Athletes view anger as helping to activate behavior. Although there is no difference in the boxing branch that includes physical contact, it is thought that this is due to the sample difference.

The fourth finding obtained from the study is that trait anger-anger expression style scores of individual athletes differ significantly in trait anger and anger/outside sub-dimensions in terms of sports age variable. As a result of the analysis, the anger levels of the athletes with a sports age of 5-8 years in the constant anger sub-dimension are higher than the athletes with a sports age of 4 years and below and 13 years and above. Anger can sometimes be short-lived, mild or moderate. It can sometimes even provide a useful state of arousal. However, if it occurs frequently and with high intensity, it can lead to very destructive and harmful results (Uğurlu 2009). Although anger in general seems dangerous in sports, there are also those who interpret competitive anger as beneficial for sports performance (Robazza and Bortoli, 2007). On the other hand, the literature indicates a decrease in anger levels as people age (Schieman, 2010). In the anger out sub-dimension, the average of the athletes with a sports age of 4 years and below is lower than the average of the athletes with a sports age of 5-8 years and 9-12 years. Considering age, studies in adults show a notable trend. Studies have shown that while young adolescents direct their anger outward less, adults turn their anger outward more (Olmus, 2001). While young athletes appear calmer in their behaviors and daily routines against negative situations, older athletes react to negative conditions with anxiety, ego, anger, restlessness and withdrawal (Imran et al. 2017, Alaeddinoglu, 2020). But there is also evidence that psychological distress emerges at a young age (Kessler, et al. 2007). However, while there are situations where constructive anger-activated energy can increase performance or social behavior (Lazarus, 2000), the assumption that anger is always harmful is not valid (Robazza & Bortoli, 2007).

Another finding obtained from the study is the relationship between psychological resilience and trait anger-anger expression style. Research findings show that there is a positive relationship between resilience and trait anger, negative relationship with anger/inside and anger/outside, and positive relationship with anger control. Afterwards, it has determined that psychological resilience is a significant predictor of trait anger, anger introspection and anger control in individual athletes, but it is not significantly predict anger expression. Regression analysis results show that resilience explains 13% of the variance in trait anger-anger expression style. High levels of resilience in both team and individual sports are associated with lower emotional depression, anxiety, stress, and other indicators of poor mental health (McGarry et al. 2013; Drew and Matthews, 2019). Personal characteristics and individual differences related to resilience are accepted as other explanations for positive results in athletes. This positive trait encourages positive adaptation and behavioral adaptation, helping athletes increase their probability of success (Davis et al., 2009). A high level of resilience helps an individual use positive emotions to pass negative experiences and return to a normal state. Positive psychological characteristics simultaneously affect mental health indicators. This case, in this article, revealed that the increase in the psychological resilience level of the athletes, the decrease in the levels of trait anger and anger expression, and the positive relationship in anger control.

5.CONCLUSION

As a result, the positive effects of sports on mental health are known worldwide. It leads to the acquisition of the skills of managing anger, anxiety and self-control in daily life, where athletes usually deal with stressful situations such as competitive events (Edenfield and Blumenthal, 2011). However, in addition to the fact that the athletes spend most of their daily lives in training and competitions, the COVID-19 process can also cause stress, anger and negative cognitive evaluations, which can affect the mental state especially in elite athletes (Şenışık et al., 2021). Because factors such as the inability of the athletes to train during the pandemic, the cancellation of the competitions, and the reduced social interaction have significantly impaired the psychological state of the athletes. This has led to situations such as stress, anger, anxiety and depression in athletes. The need to support athletes in coping with the stress of a pandemic is highlighted by many researchers (Mehrsafar et al., 2020; Yang et al., 2020). Likewise, although anger, one of the emotions that pose a risk for athletes, is a natural emotion; For an athlete, it causes an increase in success when it is controlled, and when it is uncontrollable and continuous, it causes

irreparable events and failures (Karagün and Çağlayan, 2014). Therefore, endurance; It is an important buffer for stress, anger, or a traumatic event and can defend against psychological distress. Therefore, assessment of resilience can help predict mental health status. In the light of all this information, the ability to adapt to the variable conditions that sports bring with it shows that athletes can direct anger in a positive way.

REFERENCES

- Aghababa, A., Badicu, G., Fathirezaie, Z., Rohani, H., Nabilpour, M., Zamani Sani, S. H., & Khodadadeh, E. (2021). Different Effects of the COVID-19 Pandemic on Exercise Indexes and Mood States Based on Sport Types, Exercise Dependency and Individual Characteristics. *Children*, 8(6), 438.
- Ahorsu, D. K., Lin, C. Y., Imani, V., Saffari, M., Griffiths, M. D., & Pakpour, A. H. (2020). The fear of COVID-19 scale: development and initial validation. *International journal of mental health and addiction*, 1-9.
- Akdeniz H, Demirci D, Sekban G, Yurtsever Y. (2017). Üniversite öğrencilerinin öfke düzeylerinin karşılaştırılması (Kocaeli Üniversitesi örneği). *Muş Alparslan Üniversitesi Uluslararası Spor Bilimleri Dergisi*, 1(1): 46-60.
- American Psychological Association. (2004). The road to resilience. <http://helping.apa.org/resilience/>.
- Avey, J. B., Luthans, F., & Youssef, C. M. (2010). The additive value of positive psychological capital in predicting work attitudes and behaviors. *Journal of management*, 36(2), 430-452.
- Bartlett ML, Abrams M, Byrd M, Treankler AS, Houston-Norton R. (2018). Advancing the Assessment of Anger in Sports: Gender Differences and STAXI-2 Normative Data for College Athletes. *Journal of Clinical Sport Psychology*. 12(2):114-128.
- Baykan, E. (2018). Y ve Z nesil taekwondocuların sürekli öfke düzeylerinin saptanması ve ilişkili faktörlerin incelenmesi (Yüksek Lisans Tezi). Bozok Üniversitesi Sağlık Bilimleri Enstitüsü, Yozgat.
- Bonanno, G. A., Rennie, C., & Dekel, S. (2005). Self-enhancement among high-exposure survivors of the September 11th terrorist attack: Resilience or social maladjustment?. *Journal of personality and social psychology*, 88(6), 984.
- Bondü, R., & Richter, P. (2016). Interrelations of justice, rejection, provocation, and moral disgust sensitivity and their links with the hostile attribution bias, trait anger, and aggression. *Frontiers in Psychology*, 7, 795.
- Bozkurt, B. (2017). Genç kategorisindeki bireysel ve takım sporcularının öfke kontrollerinin değerlendirilmesi (Yüksek Lisans Tezi). Haliç Üniversitesi Sağlık Bilimleri Enstitüsü, İstanbul.
- Bridewell BW, Change E. (1997). Distinguishing between anxiety, depression and hostility: relations to anger, anger-out and anger control. *Pers Individ Dif*. 22(4);587-90.
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The lancet*, 395(10227), 912-920.
- Busch, FN, Rudden, M, Shapiro, T (2004). *Psychodynamic Treatment of Depression*. American Psychiatric Press.
- Certel, Z., & Bahadır, Z. (2012). Takım sporu yapan sporcularda benlik saygısı ve sürekli öfke ve öfke ifade tarz ilişkisinin incelenmesi. *Selçuk Üniversitesi Beden Eğitimi ve Spor Bilim Dergisi*, 14(2), 157-164.

- Cihan, B.B., & Baykan, E. (2018). Y Ve Z Nesil Taekwondocuların Sürekli Öfke Düzeylerinin Saptanması Ve İlişkili Faktörlerin İncelenmesi. *Social Sciences*, 13(26), 267-280.
- Dagnall, N., Drinkwater, K. G., Denovan, A., & Walsh, S. (2021). The potential benefits of non-skills training (mental toughness) for elite athletes: Coping with the negative psychological effects of the COVID-19 pandemic. *Frontiers in Sports and Active Living*, 273.
- Davis, M. C., Luecken, L., & Lemery-Chalfant, K. (2009). Resilience in common life: Introduction to the special issue. *Journal of Personality*, 77, 1637-1644
- Demir, H., Sezan, T., Demirel, H., Yalçın, Y. G., & Altın, M. (2017). Sporcuların Öfke İfade Tarzları. *Mehmet Akif Ersoy Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 9(19), 408-414.
- Di Fronso, S., Costa, S., Montesano, C., Di Gruttola, F., Ciofi, E. G., Morgilli, L., ... & Bertollo, M. (2022). The effects of COVID-19 pandemic on perceived stress and psychobiosocial states in Italian athletes. *International Journal of Sport and Exercise Psychology*, 20(1), 79-91.
- Doğan, T. (2015). Kısa psikolojik sağlamlık ölçeği'nin Türkçe uyarlaması: Geçerlik ve güvenilirlik çalışması. *The Journal of Happiness & Well-Being*, 3(1), 93-102.
- Drew, B., & Matthews, J. (2019). The prevalence of depressive and anxiety symptoms in student-athletes and the relationship with resilience and help-seeking behavior. *Journal of Clinical Sport Psychology*, 13(3), 421-439.
- Edenfield, T. M., & Blumenthal, J. A. (2011). Exercise and stress reduction.
- Fletcher, D., & Sarkar, M. (2013). Psychological resilience: A review and critique of definitions, concepts, and theory. *European psychologist*, 18(1), 12.
- Foureur, M., Besley, K., Burton, G., Yu, N., & Crisp, J. (2013). Enhancing the resilience of nurses and midwives: Pilot of a mindfulnessbased program for increased health, sense of coherence and decreased depression, anxiety and stress. *Contemporary nurse*, 45(1), 114-125.
- Gupta, S., & McCarthy, P. J. (2021). Sporting Resilience During COVID-19: What Is the Nature of This Adversity and How Are Competitive Elite Athletes Adapting?. *Frontiers in psychology*, 12, 611261. <https://doi.org/10.3389/fpsyg.2021.611261>
- Hall G, Laddu DR, Phillips SA, Lavie CJ, Arena R.(2020). A tale of two pandemics: How will COVID-19 and global trends in physical inactivity and sedentary behavior affect one another? *Prog Cardiovasc*. doi: 10.1016/j.pcad.2020.04.005.
- Henriksen, K., Schinke, R., McCann, S., Durand-Bush, N., Moesch, K., Parham, W. D., ... & Hunziker, J. (2020). Athlete mental health in the Olympic/Paralympic quadrennium: a multi-societal consensus statement. *International journal of sport and exercise psychology*, 18(3), 391-408.
- Imran, N., Haider, I. I., & Azeem, M. W. (2017). Generalized anxiety disorder in children and adolescents: An update. *Psychiatric Annals*, 47(10), 497-501.
- İbrahim İMS. (2018). Irak ve Türkiyede öğrenim gören üniversite öğrencilerinin öfke ifade tarzları (Doctoral dissertation, Selçuk Üniversitesi Sağlık Bilimleri Enstitüsü).
- İnalı, Ç., Zekioğlu, A., & Tatar, A. (2020). Su Sporlarıyla Uğraşan Sporcuların Beş Faktör Kişilik Yapıları Ve Öfke İfade Tarzları Arasındaki İlişki. *Humanistic Perspective*, 2(2), 81-107.
- Jackson, D., Firtko, A., & Edenborough, M. (2007). Personal resilience as a strategy for surviving and thriving in the face of workplace adversity: A literature review. *Journal of advanced nursing*, 60(1), 1-9.
- Karadağ, M. (2018). Examination The Anger Management Levels Of The Athletes in Kickbox Teams, *Journal of History School (JOHS)*, Year 11, Issue XXXIII, pp. 1157-1175.

- Karagün, E., & Çağlayan, Ç. (2014). Sporcuların şiddete maruz kalma durumları ile öfke düzeylerinin değerlendirilmesi. *Kocaeli Üniversitesi Sosyal Bilimler Dergisi*, (28), 113-127.
- Kararımak, Ö. (2006). Psikolojik sağlamlık, risk faktörleri ve koruyucu faktörler. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 3(26), 129-142.
- Kessler, R. C., Amminger, G. P., Aguilar-Gaxiola, S., Alonso, J., Lee, S., & Ustun, T. B. (2007). Age of onset of mental disorders: a review of recent literature. *Current opinion in psychiatry*, 20(4), 359.
- Lapa, T. Y., Aksoy, D., Certel, Z., Özçelik, E. Ç. M. A., & Çelik, G. (2013). Evaluation of trait anger and anger expression in taekwondo athletes in relation to gender and success. *Procedia-Social and Behavioral Sciences*, 93, 1976-1979.
- Lazarus, R. S. (2000). How emotions influence performance in competitive sports. *The sport psychologist*.
- Lerner H (2007). *Öfke Dansı*. 7.Basım. İstanbul: Varlık Yayınları, 8-9. (Çeviren: S Gül).
- Luthans, F., Vogelgesang, G. R., & Lester, P. B. (2006). Developing the psychological capital of resiliency. *Human resource development review*, 5(1), 25-44.
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child development*, 71(3), 543-562.
- Madden, R., Winkelmann, Z. K., Weber, S. R., Moore, E. M., & Torres-McGehee, T. M. (2021). Examination of Anger Prevalence in NCAA Division I Student-Athletes. *Journal of Sports Medicine and Allied Health Sciences: Official Journal of the Ohio Athletic Trainers Association*, 6(3), 1.
- Maldonado, R. C., Watkins, L. E., & DiLillo, D. (2015). The interplay of trait anger, childhood physical abuse, and alcohol consumption in predicting intimate partner aggression. *Journal of Interpersonal Violence*, 30(7), 1112-1127.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American psychologist*, 56(3), 227.
- Masten, A. S. (2002). Resilience comes of age. In *resilience and development* (pp. 281-296). Springer, Boston, MA.
- Masten, A. S., Hubbard, J. J., Gest, S. D., Tellegen, A., Garmezy, N., & Ramirez, M. (1999). Competence in the context of adversity: Pathways to resilience and maladaptation from childhood to late adolescence. *Development and psychopathology*, 11(1), 143-169.
- Maugeri, G., Castrogiovanni, P., Battaglia, G., Pippi, R., D'Agata, V., Palma, A., ... & Musumeci, G. (2020). The impact of physical activity on psychological health during Covid-19 pandemic in Italy. *Heliyon*, 6(6), e04315.
- McGarry, S., Girdler, S., McDonald, A., Valentine, J., Lee, S. L., Blair, E., ... & Elliott, C. (2013). Paediatric health-care professionals: Relationships between psychological distress, resilience and coping skills. *Journal of paediatrics and child health*, 49(9), 725-732.
- Mehrsafar, A. H., Gazerani, P., Zadeh, A. M., & Sánchez, J. C. J. (2020). Addressing potential impact of COVID-19 pandemic on physical and mental health of elite athletes. *Brain, behavior, and immunity*, 87, 147.
- Meyer J, McDowell C, Lansing J, Brower C, Smith L, Tully M, et al. (2020). Changes in physical activity and sedentary behavior in response to COVID-19 and their associations with mental health in 3052 US adults. *Int J Environ Res Public Health*. 17:6469. doi: 10.3390/ijerph17186469
- Olmuş, G. Ö. (2001). Ergenlerin, aile içi psikolojik örüntülere göre sürekli öfke ve öfke ifade tarzlarının incelenmesi. Doctoral dissertation, Marmara Üniversitesi in Turkey.
- Owen, J. M. (2011). Transdiagnostic cognitive processes in high trait anger. *Clinical Psychology Review*, 31(2), 193-202.
- Özer, A. K. (1994). "Sürekli Öfke (SL-ÖFKE) ve Öfke İfade Tarzı (ÖFKE-TARZ) Ölçekleri Ön Çalışması", *Türk Psikoloji Dergisi*, 9, (31), 26-35.

- resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15, 194–200.
- Robazza, C., & Bortoli, L. (2007). Perceived impact of anger and anxiety on sporting performance in rugby players. *Psychology of sport and exercise*, 8(6), 875-896.
- Ronan, G. F., Dreer, L., Maurelli, K., Ronan, D., & Gerhart, J. (2013). *Practitioner's guide to empirically supported measures of anger, aggression, and violence*. Springer Science & Business Media.
- Roy, D., Tripathy, S., Kar, S. K., Sharma, N., Verma, S. K., & Kaushal, V. (2020). Study of knowledge, attitude, anxiety & perceived mental healthcare need in Indian population during COVID-19 pandemic. *Asian journal of psychiatry*, 51, 102083.
- Samuel, R. D., Tenenbaum, G., & Galily, Y. (2020). The 2020 Coronavirus pandemic as a change-event in sport performers' careers: conceptual and applied practice considerations. *Frontiers in Psychology*, 11.
- Schieman, S. (2010). The sociological study of anger: Basic social patterns and contexts. In *International handbook of anger* (pp. 329-347). Springer, New York, NY.
- Shorey, R. C., Brasfield, H., Febres, J., & Stuart, G. L. (2011). The association between impulsivity, trait anger, and the perpetration of intimate partner and general violence among women arrested for domestic violence. *Journal of Interpersonal Violence*, 26(13), 2681-2697.
- Siegmán, A. W., & Smith, T. W. (2013). *Anger, hostility, and the heart*. Psychology Press.
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Jennifer Bernard, J. (2008). The brief
- Spielberger, C. D., Jacobs, G., Russell, S., & Crane, R. S. (1983). Assessment of anger: The state-trait anger scale. *Advances in personality assessment*, 2, 161-189.
- Standon R, To QG, Khalesi S, Williams SL, Alley SJ, Thwaite TL, et al. (2020). Depression, anxiety, and stress during COVID-19: Associations with changes in physical activity, sleep, tobacco, and alcohol use in Australian adults. *Int J Environ Res Public Health*. 17:4065. doi: 10.3390/ijerph17114065
- Starner TM, Peters RM (2004). Anger expression and blood pressure in adolescents. *The Journal of School Nursing*, 20 (6): 335-342.
- Sung KM, Puskar KR, Sereika S (2006). Psikososyal faktörler ve gençlerin baş etme stratejileri bir kırsal Pennsylvania Yüksek Okulu. *Halk Sağlığı Hemşireliği*, 23 (6): 523-529.
- Şenışık, S., Denerel, N., Köyağasıoğlu, O., & Tunç, S. (2021). The effect of isolation on athletes' mental health during the COVID-19 pandemic. *The Physician and sportsmedicine*, 49(2), 187-193.
- Tambağ, H., Öz, F. (2005). Aileleri ile birlikte ve yetiştirme yurtlarında yaşayan ergenlerin öfke ifade etme biçimleri. *Kriz Dergisi*, 13 (1): 11-21.
- Taylor, D. B. (2021). A Timeline of the Coronavirus Pandemic. *The New York Times*.
- Tremblay RE, Cote SM. (2019). Sex differences in the development of physical aggression: An intergenerational perspective and implications for preventive interventions. *Infant Mental Health Journal*. 40(1):129-140.
- Uğurlu, M. (2009). Sosyal anksiyete bozukluğu olan hastalarda öfke düzeyi ve öfke düzeyinin komorbidite ve işlevsellik üzerine etkisi. *Uzmanlık tezi, Ankara Üniversitesi Tıp Fakültesi, Ankara*, 87s.
- Vahdet, A. (2020). During the Pandemic Period, the Determination and Relationship of Curling Athletes with Their Task and Ego Orientation and Personality Situations and the Remote Support Situations They Received. *Journal of Educational Issues*, 6(2), 297-320.
- Weinberg, A., & Cooper, C. (2012). The nature of stress in turbulent times. In *Stress in turbulent times* (pp. 39-61). Palgrave Macmillan, London.

- Windle, G. (2011). What is resilience? A review and concept analysis. *Reviews in clinical gerontology*, 21(2), 152-169.
- Woods, S., Dunne, S., Gallagher, P., & Harney, S. (2022). Is a pandemic as good as a rest? Comparing athlete burnout and stress before and after the suspension of organised team sport due to Covid-19 restrictions, and investigating the impact of athletes' responses to this period. *Psychology of sport and exercise*, 60, 102168.
- Yamak, B., İmamoğlu, O., Elizö, M., Çebi, M. ve İslamoğlu, İ. (2019). Investigation of Anger and Aggression Levels of Sports High School and Sports Science Faculty Students, *International Journal of Society Researches*, 14 (20), 314-332.
- Yang, J., Tong, J., Meng, F., Feng, Q., Ma, H., Shi, C., ... & Kang, C. (2020). Characteristics and challenges of psychological first aid in China during the COVID-19 outbreak. *Brain, behavior, and immunity*, 87, 113.
- Yıldırım, M., & Güler, A. (2021). Positivity explains how COVID-19 perceived risk increases death distress and reduces happiness. *Personality and Individual Differences*, 168, 110347.
- Zengin, Ö. (2010). Bireysel mücadele sporlarındaki (taekwondo, judo, güreş) elit sporcuların kişilik özellikleri ile öfke düzeyleri arasındaki ilişkinin incelenmesi. Gazi Üniversitesi, Sağlık Bilimleri Enstitüsü, Yüksek Lisans Tezi, Ankara.