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# Investigation of Stress, Anxiety, Depression and Psychological Well-Being Levels of Individuals who Regularly Play Tennis

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## Abstract

This research was carried out to examine the stress, anxiety, depression and psychological well-being levels of individuals who regularly play tennis. The research group consisted of 450 individuals. In the study, “Depression, Anxiety and Stress Scale,” “Spielberger State-Trait Anxiety Inventory” and “Psychological Well-Being Scale” were used as data collection tools. In the analysis of the data the normality test of the data was carried out by applying the Kolmogorov-Smirnov technique and the Skewness-Kurtosis coefficients. T-test was used to determine whether the stress, anxiety, depression and psychological well-being levels of individuals differ in terms of gender variable. One-way analysis of variance (Anova) technique was used to determine whether they differed in terms of tennis playing time. Pearson correlation coefficient analysis technique was used to examine the relationship between stress, anxiety, depression and psychological well-being. In addition, multiple regression analysis was applied to test how stress is a predictor of anxiety, depression and psychological well-being. According to the results obtained in the study, while there was no significant difference in the levels of stress, anxiety, depression and psychological well-being in terms of the gender variable ( $p>0.05$ ), there was a significant difference in terms of the duration of playing tennis ( $p<0.05$ ). While a positive and significant relationship was observed between stress, anxiety and depression, it was observed that there was a negative significant relationship between psychological well-being and stress, anxiety and depression. It has also been found that stress is a strong predictor of anxiety, depression and psychological well-being.

**Keywords:** Stress, Anxiety, Depression and Psychological Well-Being

## 1. Introduction

Stress is a negative emotional state that negatively affects the daily lives of individuals and causes different psychological and physiological diseases in the long run. Disputes between individuals, feeling of loneliness, negative experiences in the past, worries about the future, diseases, economic problems, social violence and work-

related problems are known as the most important causes of stress (World Health Organization, 2020). Selye (1952) defined stress as an organism's response to a set of stimuli.

Although stress is stated as a negative emotional state, it can also be considered as a positive situation for individuals if it is perceived at an optimal level or provides an individual gain (Robbins, DeCenzo, & Coulter, 2013). However, excessive and uncontrolled stress can cause health problems such as high blood pressure, heart attack, headaches and stomachaches, and even bring individuals face to face with undesirable situations such as anxiety, depression and poor performance (Alpertonga, Unsar, & Akin-Koldere, 2016). Individuals can experience stress quite often in sports environments, as in all areas of life.

Stress causes athletes to see themselves as inadequate by damaging their physical energy and self-confidence. In addition, it can prevent the skills gained by working for many years, as well as cause injuries, which are the biggest fear of athletes (Ozdevecioglu & Yalcin, 2010). Therefore, it is extremely important for athletes to be aware of negative emotional states such as stress and to know the necessary practices on how to deal with stress in order to perform successfully. Because stress causes physiologically increased blood pressure, heart rate and muscle tension, mental insecurity, loss of concentration, restlessness and feelings of inadequacy in athletes, resulting in coordination disorder and errors in technical and tactical skills (Altungul, 2006). Another emotional state that has a respectful and nervous basis intertwined with stress is anxiety (Daviu, Bruchas, Moghaddam, Sandi, & Beyeler, 2019).

Anxiety is a leading concept in psychology. It is expressed as an emotional state that occurs in individuals depending on internal and external factors (Spielberger, 1966). It has also been the subject of many studies, especially since it has an effect that can increase or decrease performance in sports (Ramakrishnan, Sathya, & Ghelani, 2015).

It is a negative emotional state that is generally defined as anxiety, worry, anxiety and nervousness and is associated with the arousal of the body (Weinberg & Gould, 2011). Anxiety in sports environments is defined as an unpleasant psychological response to stress caused by task performance under pressure (Cheng, Hardy, & Markland, 2009). If anxiety is felt at a disproportionate level, it causes serious mental disorders in individuals (Kapur, 2020). It can affect the quality of life and relationships of individuals negatively, as well as cause a decrease in the performance of the athletes who struggle in sports environments, which is the most important factor in reaching their goals (Khan et al., 2017; Palazzolo, 2019; Sahin, 2019). Therefore, it is thought that the optimal level of anxiety, which can be seen especially in athletes, is an important issue for them to perform well.

Basically, anxiety is expressed as state and trait anxiety (Martens et al., 1990; Oner & Le Compte, 1983). While state anxiety expresses stimuli for threats existing in the environment in a certain time period depending on any situation, trait anxiety is expressed as a tendency to perceive stimuli as worrying depending on personal experiences (Oner & Le Compte, 1983). As it can be understood from the expressions, individuals can experience anxiety depending on any situation, as well as show a tendency to worry for a long time. Another mood disorder that is frequently seen in the community and primary health care services, such as anxiety, is depression (Adwas, Jbiral, & Azab, 2019).

Depression is a serious mental disorder that can be seen in individuals of all ages and negatively affects the productivity and ability of getting along with others (Kisch, Leino, & Silverman, 2005; Pratt & Brody, 2008). Depression is a syndrome with symptoms such as constant sadness, stagnation, unwillingness, feeling of worthlessness, sadness, inadequacy, pessimism, and physiological slowdown in functioning (Goodwin, 2006). It is expressed as a social health problem in that it becomes chronic in individuals and has a high probability of recurrence (Kivrak et al., 2016). Therefore, it is thought that some measures should be taken in order to minimize the negative effects of depression and to prevent especially healthy individuals from falling into depression. It can be said that it is at the forefront of these measures in participation in sports. Because it is known that regular participation in sports reduces the risk of depression and contributes to the psychological well-being of individuals (Cicek et al., 2015; Matamoros-Catalan et al., 2016; Schuch et al., 2016).

Psychological well-being is expressed as maintaining meaningful goals, personal development, establishing quality relationships with others, self-actualization when faced with difficulties, being fully functional, and living a meaningful life (Deniz et al., 2017; Keyes, Shmotkin, & Ryff, 2002). How individuals evaluate themselves or the quality of their life is also explained as psychological well-being (Ryff, Magee, Kling, & Wing, 1999). Özen (2010) states that psychological well-being is within the responsibility of the individual. It can be mentioned about a concept consisting of good developments in terms of people taking all the responsibilities of their lives and the acceptability of their preferences.

Ryff (1989) states that there are six sub-dimensions in the concept of psychological well-being. These sub-dimensions include self-respect, establishing positive relationships with other people, personal development, domain dominance, and autonomy. Psychological well-being provides a number of positive contributions to people's lives. It is stated that these contributions include maintaining a healthy and longer life, having more functional social relationships, and positive increases in individuals' work lives and performances. Diener & Chan (2011) stated that psychological well-being has an important contribution to individuals' living a healthier and longer life, which is discussed and examined in relational, experimental and quasi-experimental studies.

Ryan & Deci (2001) explained that well-being is related to psychological needs. Autonomy, competence and establishing relationships are stated to be basic psychological needs. It has been argued that the ability to meet these explains well-being. It has been stated that individuals' psychological well-being will make them happier (Ryan & Deci, 2001).

Forgeard, Jayawickreme, Kern, & Seligman (2011) stated that psychological well-being is characterized by living well and doing good things rather than feeling good. Therefore, it is possible to say that participation in sports activities has some positive effects on the psychological structure of individuals. In different studies in the literature, it is stated that participation in sports activities has positive effects on psychological health (Arslan et al., 2011; Aytan, 2010).

Sport is expressed as a pedagogical and social effort that develops mental, spiritual and social behaviors, keeping the competition among individuals in the foreground within certain rules (Sunay, 2010). Sports are all kinds of physical activities aimed at improving physical fitness, mental health and social interaction between individuals through organized participation (Sutula, 2018). World Health Organization (2018) stated that regular sports have an important effect on preventing and controlling diseases that threaten human life such as heart disease, stroke, diabetes, cancer and hypertension, and improving quality of life and mental health; stated that physical inactivity negatively affects the health system, quality of life and mental health. A counter-approach can be made to a positive assessment of the situation for further evaluation of the sport.

World Health Organization (2013) stated that there is an important relationship between physical activity and mental health. Heggelund, Kleppe, Morken, & Vedul-Kjelsas (2014) stated that regular physical activity could be a treatment method for preventing psychological disorders that develop in individuals. Schultchen et al. (2019) stated that individuals who do sports experience less stress and have less negative emotions. Ekeland, Heian, Hagen, & Coren (2005) stated that sports activities have positive effects on individuals' self-esteem and some psychological characteristics. The effect of sport on psychological characteristics may differ according to the sport branch of the individual. The type of sport can affect the psychological and emotional state of the individual in different ways due to some psychological characteristics it contains (Salar, Hekim, & Tokgoz, 2012). It is thought that tennis is one of these sports branches. Tennis is a sport that individuals often prefer as a daily activity, as it can be played outdoors and with two people. These features of tennis lead individuals to play tennis regularly and thus help them meet the daily physical activity needs recommended by experts in order to become a healthier individuals. Therefore, it contributes significantly to the preservation of people's physical and psychological health.

Tennis is an individual sport played with a racket on a court that is divided into two with a net and requires intense strength, speed, endurance, mobility and skill (Coskun & Eyuboglu, 2020; Sar, Yuksek, & Ayan, 2020). Although tennis is stated as an individual sport, it has become one of the most preferred sports branches by people in terms

of being played by two people against each other and being a sport that individuals can play in their spare time, both indoors and outdoors, apart from professional tennis (Buyukergun, 2020). It has become a widely played sport, especially since it allows the athletes to develop their technical tactical skills by playing only with their partners without the help of a trainer (Unierzyski & Crespo, 2007).

As in every branch, there is a struggle to prevail against the opponent in tennis. Tennis is expressed as a racquet sport that includes short rallies, each game usually lasts 4-12 seconds and rest times vary between 20-90 seconds (Ozkatar-Kaya & Karahan, 2019). Therefore, the ability of the athletes to make the right decisions about the game is as important as the strategic and tactical approaches during the game for a good performance (Turner, 2003). Depending on the fact that it is an individual sport, the athletes in the tennis branch have to make different decisions during the game, and accordingly, the athletes need to provide emotional and mental control in order not to be mentally disconnected from the game. Because athletes may feel pressure depending on the demands of the environment, they may be afraid of failing and they may lose interest in being successful. Therefore, athletes may be exposed to such emotional states that can negatively affect their performance and cause them to break away from their goals. Stress, anxiety and depression are some of these emotional states.

It is thought that the game of tennis has a positive effect on human health in many aspects, as well as psychologically, and especially reduces negative mood states such as stress, anxiety and depression. For this reason, it is thought that it is important to examine stress, anxiety, depression and psychological well-being in individuals playing tennis. Therefore, the aim of this study was to examine the stress, anxiety, depression and psychological well-being levels of individuals who regularly play tennis.

## 2. Method

### 2.1 Research Model

The research was designed in a screening model in order to examine the stress, anxiety, depression and psychological well-being levels of individuals who play tennis regularly. The scanning model is a model that aims to describe a situation that existed in the past or that is still ongoing (Karasar, 2013).

### 2.2 Research Group

The research group consisted of a total of 450 individuals, 220 (48.9%) female and 230 (51.1%) male, who live in different provinces of Turkey and play tennis regularly. When the distribution of the individuals participating in the study according to the duration of playing tennis was examined, it was seen that 163 (36.2%) played tennis 1-2 days a week, 155 (34.4%) played tennis 3-4 days a week, and 132 (29.3%) played tennis 5-6 days a week. It was determined that there was no one who played tennis 7 days a week among the participants. The distribution of individuals according to independent variables is shown in Table 1.

Table 1: Distribution of the Research Group According to Independent Variables

<b><i>Gender</i></b>	<b><i>f</i></b>	<b><i>%</i></b>
Female	220	48.9
Male	230	51.1
<b>Total</b>	<b>450</b>	<b>100</b>
<b><i>Tennis Playing Duration</i></b>	<b><i>f</i></b>	<b><i>%</i></b>
1-2 days a week	163	36.3
3-4 days a week	155	34.4
5-6 days a week	132	29.3
<b>Total</b>	<b>450</b>	<b>100</b>

### 2.3 Data Collection Tools

The personal information form created by the researcher was used in the collection of data in order to determine the characteristics of individuals such as gender and tennis playing time. In addition, "Depression, Anxiety and Stress Scale," "Spielberger State-Trait Anxiety Inventory" and "Psychological Well-Being Scale" were used in the study.

#### 2.3.1 Personal Information Form

It was created by the researcher in order to determine the characteristics of the individuals in the research group, such as gender and duration of playing tennis. In the personal information form, which includes the variables that are thought to affect individuals' stress, anxiety, depression and psychological well-being levels, questions about your gender and duration of playing tennis were asked

#### 2.3.2 Depression, Anxiety and Stress Scale (DASS)

In the study, the Depression, Anxiety and Stress Scale (DASS) was used to determine the stress and depression levels of individuals. DASS was developed by Lovibond & Lovibond (1995) and adapted into Turkish by Yildirim, Boysan, & Kefeli (2018). It is a three-dimensional scale: depression, anxiety, and stress. In this study, the sub-dimensions of stress and depression were discussed. The scale is a 21-item scale, with 3, 5, 10, 13, 16, 17, and 21 items depression, 2, 4, 7, 9, 15, 19, and 20 items anxiety, 1, 6, 8, the 11th, 12th, 14th and 18th items measure stress. The scale, which consists of never (0), sometimes (1), quite often (2), and always (3) statements, is a 4-point likert type scale. In the study, the total Cronbach's alpha reliability coefficient for the scale was calculated as 0.89. Cronbach's alpha reliability coefficient was calculated as 0.83 for stress, which is the sub-dimensions of the scale, and 0.85 for depression.

#### 2.3.3 Spielberger State-Trait Anxiety Inventory (STAI)

The State-Trait Anxiety Inventory (STAI) was used to determine the anxiety levels of the individuals participating in the research. STAI was developed by Spielberger, Gorsuch, & Lushene (1970) and adapted into Turkish by Oner & LeCompte (1983). In this study, in which state and trait anxiety inventory was used, trait anxiety was discussed. The scale is a 20-item scale and consists of two different statements, direct statements and reversed statements. 22, 23, 24, 25, 28, 29, 31, 32, 34, 35, 37, 38 and 40 items of the scale are direct statements, 21, 26, 27, 30, 33, 36 and 39 items are reverse statements. The scale, which consists of almost never (1), sometimes (2), often (3) and almost always (4) statements, is a 4-point likert type scale. In the study, the total Cronbach's alpha reliability coefficient for the scale was calculated as 0.81

#### 2.3.4 Psychological Well-Being Scale

In the study, Psychological Well-Being Scale was used to determine the psychological well-being levels of individuals. Psychological Well-Being Scale was developed by Diener, Wirtz, Tov, Kim-Prieto, Choi, Oishi, & Biswas-Diener (2010) and adapted into Turkish by Telef (2013). The scale is a total of 8 items and there is no reverse item. The scale, which consists of strongly disagree (1), disagree (2), somewhat disagree (3), undecided (4), somewhat agree (5), agree (6) and strongly agree (7), is a 7-point likert type scale. In the study, the total Cronbach's alpha reliability coefficient for the scale was calculated as 0.84.

### 2.4 Research Publication Ethics

This study was carried out considering ethical rules. The necessary ethical approval was obtained with the letter of Aksaray University Human Research Ethics Committee dated 21.12.2021 and numbered 2021/08-05.

### 2.5 Analysis of Data

In the research, firstly, the measurement tools used were examined and incomplete or incorrectly filled questionnaires were not included in the analysis. SPSS 21 package program was used in the analysis of the data and the significance level was accepted as 0.05. In order to test normality, Kolmogorov-Smirnov (K-S) test was used and Skewness-Kurtosis (S-K) coefficients were applied. Tabachnick & Fidell (2013) stated that if the S-K coefficients are between -1.5, +1.5, and George & Mallery (2010) are between -2,+2, it can be assumed that the data are normally distributed. As a result of the examinations, it was seen that the data were distributed normally ( $p>0.05$ ), and the S-K coefficients were found to be within the specified ranges for stress (0.845; 0.775), anxiety (0.014; 0.100), depression (0.083; 0.116) and psychological well-being (0.095; 0.119). Arithmetic mean and standard deviation techniques from descriptive statistics were used to determine the stress, anxiety, depression and psychological well-being levels of individuals who play tennis regularly. The t-test was used to determine whether there was a significant difference in terms of gender variable, and one-way analysis of variance (Anova) technique was used to determine whether it differed significantly in terms of tennis playing duration. Tukey test was used to examine the source of variance. In addition, Pearson correlation coefficient analysis technique was used to examine the relationship between individuals' stress, anxiety, depression and psychological well-being levels. Multiple regression technique was used to determine how stress is a predictor on anxiety, depression and psychological well-being.

### 3. Results

In this section, the findings obtained from the research and the tables with the interpretations of these findings are given. Table 2 shows the mean scores obtained from the depression, anxiety and stress scale, trait anxiety inventory and psychological well-being scale of individuals who play tennis regularly.

Table 2: Stress, Anxiety, Depression and Psychological Well-Being Levels of Individuals who Play Tennis Regularly

	N	M	S*
Stress	450	8.96	1.44
Anxiety	450	23.10	2.77
Depression	450	8.96	1.44
Psychological Well-Being	450	49.61	3.77

\*Standard Deviation

The results of stress, anxiety, depression and psychological well-being of individuals who regularly play tennis are given in Table 2. Accordingly, individuals' stress levels were calculated as  $M=8.96\pm 1.44$ , anxiety levels as  $M=23.10\pm 2.77$ , depression levels as  $M=8.96\pm 1.44$ , and psychological well-being levels as  $M=49.61\pm 3.77$ .

Table 3: Individuals' Levels of Stress, Anxiety, Depression and Psychological Well-Being in Terms of Gender

	Gender	N	M	S	t	sd	p
Stress	Female	220	9.03	1.58	0.901	448	0.368
	Male	230	8.90	1.30			
Anxiety	Female	220	22.52	2.80	0.413	448	0.438
	Male	230	23.65	2.64			
Depression	Female	220	9.03	1.58	0.901	448	0.368
	Male	230	8.90	1.30			
Psychological Well-Being	Female	220	49.68	3.95	0.400	448	0.689
	Male	230	49.54	3.61			

In Table 3, the t-test was applied to examine whether there was a significant difference in the levels of stress, anxiety, depression and psychological well-being of the individuals in the research group in terms of gender. As a

result of the examinations, no significant difference was found in the levels of stress, anxiety, depression and psychological well-being in terms of gender ( $p>0.05$ ).

Table 4: Individuals' Levels of Stress, Anxiety, Depression and Psychological Well-Being in Terms of Tennis Playing Duration

	*T.P.D.	N	M	S	F	sd	p	Tukey
Stress	1-2 days a week	163	10.52	0.501	2563.61	2 447 449	0.010	I-II I-III II-III
	3-4 days a week	155	8.94	0.318				
	5-6 days a week	132	7.07	0.383				
	Total	450	8.96	1.448				
Anxiety	1-2 days a week	163	26.34	1.403	1183.31	2 447 449	0.020	I-II I-III II-III
	3-4 days a week	155	22.07	1.128				
	5-6 days a week	132	20.30	0.523				
	Total	450	23.10	2.779				
Depression	1-2 days a week	163	10.52	0.501	2563.61	2 447 449	0.010	I-II I-III II-III
	3-4 days a week	155	8.94	0.318				
	5-6 days a week	132	7.07	0.383				
	Total	450	8.96	1.448				
Psychological Well-Being	1-2 days a week	163	46.46	1.182	1414.91	2 447 449	0.005	I-II I-III II-III
	3-4 days a week	155	48.41	1.220				
	5-6 days a week	132	54.90	1.788				
	Total	450	49.61	3.779				

\*Tennis Playing Duration

In Table 4, one-way analysis of variance (Anova) technique was applied to examine whether there is a significant difference in the levels of stress, anxiety, depression and psychological well-being of individuals who regularly play tennis in terms of the duration of tennis. As a result of the examinations, it was observed that there was a significant difference in the levels of stress, anxiety, depression and psychological well-being in terms of the duration of playing tennis ( $p<0.05$ ). It was determined that those who spend 5-6 days a week for tennis have lower levels of stress, anxiety and depression, and higher levels of psychological well-being than those who spend 1-2 and 3-4 days a week for tennis (Table 4).

Table 5: The Relationship Between Individuals' Levels of Stress, Anxiety, Depression and Psychological Well-Being

		Stress	Anxiety	Depression	Psychological Well-Being
Stress	R	-	0.858**	0.941**	-0.865**
	p		0.000	0.000	0.000
Anxiety	R	0.858**	-	0.829**	-0.763**
	p	0.000		0.000	0.000
Depression	R	0.941**	0.829**	-	-0.865**
	p	0.000	0.000		0.000
Psychological Well-Being	R	-0.865**	-0.763**	-0.865**	-
	p	0.000	0.000	0.000	

\*\*Correlation is significant at the 0.01 level.

In Table 5, the relationship between stress, anxiety, depression and psychological well-being levels of the individuals in the research group was examined. Pearson correlation coefficient analysis technique was used to determine the relationship between them. In the study, it was determined that there is a strong positive relationship between stress and anxiety ( $r=0.858$ ;  $p<0.05$ ), between stress and depression ( $r=0.941$ ;  $p<0.05$ ), and between



anxiety and depression ( $r=0.829$ ;  $p<0.05$ ). In addition, it was concluded that there is a strong negative relationship between stress and psychological well-being ( $r=-0.865$ ;  $p<0.05$ ), between anxiety and psychological well-being ( $r=-0.763$ ;  $p<0.05$ ), and between depression and psychological well-being ( $r=-0.865$ ;  $p<0.05$ ).

Table 6: The effects of individuals' stress levels on anxiety, depression and psychological well-being

Stress	R	R <sup>2</sup>	B	Std. Error	$\beta$	t	F	p	Part r	Partial r
<i>Constant</i>			-1.00	0.321		-3.126		0.002		
Anxiety	0.858	0.736	0.432	0.014	0.858	31.317	98.075	0.000	0.858	0.858
<i>Constant</i>			3.65	0.178		62.758		0.003		
Depression	0.941	0.885	0.343	0.005	0.941	34.563	75.782	0.000	0.941	0.941
<i>Constant</i>			2.54	0.452		56.189		0.001		
Psyc. Well Being	0.865	0.748	-.331	0.009	-.865	-36.459	13.292	0.000	-.865	-.865

In Table 6, the predictor of individuals' stress levels on anxiety, depression and psychological well-being was examined. Multiple regression analysis technique was used to determine the predictiveness of each other and the analysis was found to be statistically significant ( $p<0.05$ ). It was concluded that stress is a strong predictor of anxiety ( $F=98.075$ ;  $R^2=0.736$ ), depression ( $F=75.782$ ;  $R^2=0.885$ ) and psychological well-being ( $F=13.292$ ;  $R^2=0.748$ ).

#### 4. Discussion

In the study, the stress, anxiety, depression and psychological well-being levels of individuals who regularly play tennis were examined. In addition, the stress, anxiety, depression and psychological well-being levels of the individuals participating in the research were discussed in terms of both gender and duration of playing tennis. On the other hand, the relationship between stress, anxiety, depression and psychological well-being levels of individuals was examined in the study and the predictor of stress on anxiety, depression and psychological well-being was tested.

In the study, stress, anxiety, depression and psychological well-being levels of individuals who regularly play tennis were examined in terms of gender, and no significant difference was observed in the study ( $p>0.05$ ). In a study examining the stress levels of individuals who do and do not do sports, similar results were found and it was concluded that the stress levels of individuals who actively do sports do not differ according to gender (Mumcu, 2019). In another study examining the anxiety levels of athletes, it was determined that there was no significant difference in the anxiety levels of individuals in terms of gender (Karabulut & Mavi-Var, 2019). In a different study examining the depression status of individuals who regularly participate in sports, it was concluded that the level of depression did not differ in terms of gender (Frost, Hoyt, Chung, & Adam, 2015). In another study examining the psychological well-being levels of individuals, it was determined that there was no difference in the psychological well-being levels of individuals according to gender (Kermen, Ilcin Tosun, & Dogan, 2016). According to the results obtained in the study, it was thought that the fact that female and male had similar feelings was effective in the absence of any difference in terms of gender variable in the levels of stress, anxiety, depression and psychological well-being of individuals.

In the study, stress, anxiety, depression and psychological well-being levels of individuals who regularly play tennis were examined in terms of the variable of tennis playing duration, and it was observed that there was a significant difference in favor of those who spent 5-6 days a week for tennis ( $p<0.05$ ). According to the results, it was determined that as the duration of playing tennis increased, the stress, anxiety and depression levels of individuals decreased and their psychological well-being levels increased. On the other hand, when the studies in the literature are examined, it is seen that there is no research finding that compares the stress, anxiety, depression and psychological well-being levels of individuals in terms of the variable of tennis playing duration. In this context, it is thought that research findings on stress, anxiety, depression and psychological well-being are needed in terms of tennis playing time.

In the study, the relationship between stress, anxiety, depression and psychological well-being levels of individuals who play tennis regularly was examined, and the predictor of stress on anxiety, depression and psychological well-being was tested. In the examination, it was seen that there was a positive and significant relationship between stress, anxiety and depression; It has been determined that there is a negative significant relationship between stress, anxiety, depression and psychological well-being. In addition, it was concluded that stress is a strong predictor of anxiety, depression and psychological well-being. A similar result was seen in the study examining the stress and anxiety levels of individuals, and it was concluded that there was a positive and significant relationship between stress and anxiety (Poursadeghiyan et al., 2016). Konstantopoulou et al. (2020) stated in their research that there is a positive relationship between stress and anxiety. In another study examining the stress and depression levels of individuals, Killinger et al. (2017) stated that there is a positive and significant relationship between stress and depression. Esigül & Cenkseven Onder (2017) examined the stress and psychological well-being of individuals in their study and concluded that there is a negative significant relationship between stress and psychological well-being.

## 5. Conclusion

As a result, this research was carried out to examine the stress, anxiety, depression and psychological well-being levels of individuals who regularly play tennis. In the study, it was observed that individuals' stress, anxiety and depression levels were low and their psychological well-being levels were high. From this point of view, it was concluded that playing tennis regularly reduces negative emotional states such as stress, anxiety and depression, and increases psychological well-being. Therefore, it has been seen that playing tennis regularly has an extremely important place in reducing stress, anxiety and depression, and in making individuals feel better psychologically. In the study, it was seen that the stress, anxiety, depression and psychological well-being levels of female and male who regularly play tennis were similar to each other and there was no significant difference between them. It has been determined that female and male have similar emotional states. In another result obtained from the study, it was seen that those who play tennis 5-6 days a week have lower levels of stress, anxiety and depression, and higher levels of psychological well-being than those who play tennis 1-2 to 3-4 days a week. It has been determined that individuals experience less stress, anxiety, depression and feel better psychologically as the number of days they play tennis increases. In the study, it was observed that there was a positive and significant relationship between individuals' stress, anxiety and depression levels; It has been determined that there is a negative significant relationship between stress, anxiety, depression and psychological well-being levels. It was concluded that as stress, anxiety and depression decrease in individuals, psychological well-being increases. In the study, it was also seen that the stress levels of individuals who regularly play tennis are a strong predictor of anxiety, depression and psychological well-being. Stress has been found to have a significant effect on anxiety, depression and psychological well-being.

In this study, the stress, anxiety, depression and psychological well-being levels of individuals who play tennis regularly are clearly stated. Therefore, according to the results obtained from the research, it is suggested that individuals should make playing tennis a lifestyle so that they can continue their lives in a mentally healthier way. In addition, individuals interested in different branches can be included in similar studies to be carried out in the future and how it affects the psychological state of individuals in different branches can be examined.

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