

## Relationship Between Psychological Adjustment and Athlete Mental Health Continuity Psikolojik Uyum ile Sporcu Ruh Sağlığı Sürekliliği Arasındaki İlişki

\*Muhammet Talha Han<sup>1</sup>

<sup>1</sup> Karabük Üniversitesi, Hasan Doğan Spor Bilimleri Fakültesi, muhammettalhan@karabuk.edu.tr, 0000-0003-4760-3485

### ABSTRACT

This study examines the relationship between athlete mental health continuity and psychological adjustment. In this study, a correlational survey model was used, aiming to determine the relationship between at least two or more variables. The Psychological Adjustment and Athlete Mental Health Continuity scales were employed, and a total of 400 participants, comprising 147 females and 253 males, volunteered. The factor structures of the scales were tested using IBM AMOS 24, and the study's hypothesis was examined using IBM SPSS 24. The effect sizes of independent variables on dependent variables were assessed using "Cohen's d". The results of Pearson correlation analysis indicate a positive and statistically significant relationship between psychological adjustment and athlete mental health continuity ( $r = .209, p < .01$ ). This finding suggests that an increase in psychological adjustment is associated with an increase in athlete mental health continuity. Consequently, it can be stated that psychological adjustment positively contributes to individuals' mental health continuity. This finding underscores the significance of regular exercise in psychological resilience and is consistent with the results of similar studies in literature.

**Keywords:** Sport, Athlete, Adjustment, Psychological Adjustment, Mental Health, Sport Psychology.

### ÖZET

Bu araştırma, sporcu ruh sağlığı sürekliliği ile psikolojik uyum arasındaki ilişkiyi incelemektedir. Bu çalışmada, en az iki veya daha fazla değişken arasındaki ilişkiyi belirlemeyi amaçlayan ilişkisel tarama modeli kullanılmıştır. Araştırmada, Psikolojik Uyum ve Sporcu Ruh Sağlığı Sürekliliği ölçekleri kullanılmış ve 147 kadın ve 253 erkek olmak üzere toplamda 400 kişi gönüllü olarak katılmıştır. Ölçeklerin faktör yapıları IBM AMOS 24 kullanılarak test edilmiş ve çalışmanın hipotezi IBM SPSS 24 ile incelenmiştir. Bağımsız değişkenlerin bağımlı değişkenler üzerindeki etki büyüklükleri "Cohen's d" ile değerlendirilmiştir. Pearson korelasyon analizi sonuçları, psikolojik uyum ile sporcu ruh sağlığı sürekliliği arasında pozitif yönlü ve istatistiksel olarak anlamlı bir ilişki olduğunu göstermektedir ( $r = .209, p < .01$ ). Bu bulgu, psikolojik uyumun artmasıyla birlikte sporcu ruh sağlığı sürekliliğinin de arttığını ortaya koymaktadır. Sonuç olarak, psikolojik uyumun bireylerin ruh sağlığı sürekliliğine olumlu katkıda bulunduğu söylenebilir. Bu bulgu, düzenli egzersizin psikolojik dayanıklılık açısından önemini vurgulamaktadır ve literatürdeki benzer çalışmaların sonuçlarıyla uyumlu bir bulgu olarak ortaya çıkmaktadır.

**Anahtar Kelimeler:** Spor, Sporcu, Uyum, Psikolojik Uyum, Ruh Sağlığı, Spor Psikolojisi.

**Citation:** Han, M.T. (2024).  
Relationship Between  
Psychological Adjustment and  
Athlete Mental Health Continuity,  
*Herkes için Spor ve Rekreasyon  
Dergisi*, 6(3), 323-333.

*Gönderme Tarihi/Received Date:*  
03.07.2024

*Kabul Tarihi/Accepted Date:*  
24.08.2024

*Yayımlanma Tarihi/Published Online:*  
30.09.2024

<https://doi.org/10.56639/jsar.1510036>

\*Corresponding author:  
muhammettalhan@karabuk.edu.tr

### INTRODUCTION

Various theories and approaches exist to explain the process of adaptation. One of Lazarus (1991) three models proposed to explain adaptation is the medical-biological model. According to this model, the success or failure of adaptation can be explained through genetic factors and inheritance. Another model, the sociogenic model, suggests that social relationships and culture play a critical role in adaptation. In the psychogenic model, the third model, adaptation is predicted to be disrupted when faced with stressful life events, leaving individuals vulnerable. Through these three models, adaptation is approached from biological, social, and psychological perspectives (Berry et al., 2006). At the individual level, both the psychological and sociocultural dimensions of adaptation are significant. Cross-cultural adaptation is generally divided into two categories: Psychological Adaptation (within the framework of stress and coping strategies) and Sociocultural Adaptation (within the framework of cultural learning) (Ward & Kennedy, 1992; Searle & Ward, 1990). Psychological adaptation refers to the state of psychological well-being of individuals transitioning across cultures (Ward & Kennedy, 1992). Research on psychological adaptation derived from the "Stress and Coping" theoretical framework is a concept that can be assessed with measures such as mood disorders or particularly depression. These studies indicate that factors such as personality traits, life events, and social support influence psychological adaptation (Ward & Kennedy, 1992).

The term psychological adaptation is used to denote positive psychological functioning, encompassing various sub-concepts in different studies. For instance, while Bergin and Pakenham (2015) define it as "well-being" concerning stress, Berry et al. (2006) use it for life satisfaction, self-esteem, and psychological problems. Psychological adaptation is defined as the individual's sense of personal distress and the degree of functionality in daily life (Cruz et al., 2019; Peterson, 2015). Additionally, it is characterized as the ability to effectively cope with the demands of environmental conditions and the stress they create (Seaton, 2009). According to another definition, it is the ability of an individual to return to their pre-stress functional state once the stress has ceased (Revenson, 2002). In short, it signifies the process of adapting to changing environmental conditions (Seaton, 2009). It has been suggested that psychological adaptation can generally be examined across four dimensions:

- Absence of symptoms of psychological distress,
- State of normalcy or being in the conditions of the majority,
- Individual's levels of positive adaptation, including factors such as flexibility and emotional intelligence,

- Positive indicators of adaptation such as self-confidence and life satisfaction, categorized as psychological well-being (Seaton, 2009).

The ability to adapt to changing conditions is vital for all living organisms. Populations that exhibit adaptation continue to thrive, while those that fail to adapt may face the risk of extinction (Lynch, 1958). In today's processes of economic globalization, the necessity to both adapt to existing conditions and overcome geographical, political, economic, and social barriers has increased the importance of the sports industry (Savić et al., 2018). Furthermore, the impact of sports is felt across various sectors; from the construction of sports facilities to the production of sports equipment, and from sports health services to sports organizations, there is a wide range of activities involved (Camy, 2006). The sports sector is becoming a growing industry, employing a significant number of people, contributing to both low and high-budget economic activities, and enhancing people's quality of life (Drakulevski et al., 2014). In this context, sports are defined as an area of growth that has the potential to create employment opportunities (Camy, 2006).

One of the factors that plays a significant role in the formation of an individual's personality and social integration is participation in sports activities. Sports not only ensure mental and physical health by facilitating the individual's social adjustment (Marris & Ross, 1976). Sports are not just physical activities; they are also a process of social interaction and societal integration. Today, the importance of engaging in sports as part of a healthy lifestyle is increasing. With improving living conditions, there has been an increase in interest and participation in leisure activities. Sports activities often bring together large groups of players or supporters, creating an environment of social interaction and solidarity. This is indicative of the societal impact of sports, influencing social life as a significant component of popular culture (Yoon & Choi 2005). It is widely acknowledged that sports are a universally accepted intervention that supports mental health and well-being across all age groups. Sports not only contribute to physical health but also have a positive impact on mental health. Through physical activity, we focus on our bodies, distancing ourselves from daily stressors and worries. This can enhance brain function and help prevent the onset of some psychological problems (Camiré, 2022). Promoting physical activity is a crucial component of providing global guidance to maximize its positive effects on mental health and well-being. Additionally, physical activity has the potential to contribute to the effective treatment of serious mental health issues (Stubbs et al., 2018).

Mental health is defined as a state of well-being in which an individual realizes their own potential, copes with the routine challenges of life, can work productively and effectively, and is able to contribute to their community (RSKT, 2017). Mental health disorders are often observed in elite endurance athletes who require high levels of aerobic performance (such as swimming, canoeing, rowing, cycling, long-distance running, etc.). Typically, individuals who engage in regular exercise perform continuous and moderate-intensity exercises. Such exercises are often referred to as submaximal endurance training and occur below the anaerobic threshold but are sufficient to increase aerobic capacity (Collingwood, 2000). However, the situation is different for elite athletes; they prefer the "high-intensity interval training" method over long-duration exercises to increase their aerobic capacity. For example, they engage in intermittent high-intensity interval training with many repetitions lasting between 10 seconds to 5 minutes, with inadequate rest intervals above the anaerobic threshold. The purpose of such training is to enable physiological systems to adapt to the significant stresses caused by endurance exercises (Laursen & Jenkins, 2002). As a result, the training season for high-level endurance athletes typically lasts 4-8 months and is divided into three different training periods: (1) the base preparation period, which includes gradually increasing submaximal endurance exercises; (2) high-intensity interval training in addition to submaximal endurance exercises; and (3) the transition period, which involves less training and lighter exercises to allow athletes to rest before competition. In elite athletes, worsening mood is often observed during the first and second periods and typically improves before the competition period (Peluso & De Andrade, 2005; Kuipers, 1998).

Psychological adaptation refers to an individual's ability to effectively adjust to environmental conditions. This can be approached through various dimensions such as the absence of symptoms of psychological distress, normalcy, level of adaptation, and positive indicators of adaptation. Sports not only promote social adjustment but also ensure the mental and physical health of individuals. As a societal activity, sports encourage people to come together and facilitate broad participation. Additionally, the positive effects of physical activity on mental health are well-known. Sports not only maintain physical well-being but also support mental health. Physical activity can enhance brain function and strengthen mental health by reducing stress. Therefore, the societal unifying power of sports and its positive impact on mental health are becoming increasingly important today. Particularly for elite endurance athletes, achieving physical and mental harmony is crucial. High-level training programs are designed to increase aerobic capacity and cope with stress for these athletes. However, it is also important to maintain the athletes' mental health during this process. Throughout the training season, especially during intense periods, balancing their mental states and maintaining their adaptation is important. This highlights that sports are not just a physical activity but also a significant component for individuals' mental health and overall adaptation. Consequently, the adaptation process is shaped by the interaction of biological, social, and psychological factors. Sports emerge as a significant tool where these factors converge, strengthening both individuals' physical and mental health. Based on this foundation, the hypothesis of the study is formulated as follows.

H1: There are significant positive linear relationship between Psychological Adaptation and Athlete Mental Health Continuity.

## METHOD

**Design of the Study:** In this study, a correlational survey model was used, aiming to determine the relationship between at least two or more variables. In this model, the existence and nature of the relationship between variables were examined, focusing on how variables change together (Christensen et al., 2014; Karasar, 2023).

**Population and Sample of the Research:** The population of the study consists of university students with athlete qualifications. "The scales used in the research were administered to students face-to-face on campus." In this research, the criterion sampling method was preferred based on the principle of voluntariness. The criterion sampling method involves examining all cases that meet a predetermined set of criteria. These criteria can be determined by the researcher or can be based on a prepared list (Marshall & Rossman, 2014). However, it is critical that the identified criteria are suitable for the purpose of the research (Creswell & Clark, 2016). The inclusion criteria for the study are as follows:

- Being a student of the Faculty of Sports Sciences or the School of Physical Education and Sports
- Holding an athlete license
- Volunteering for research

According to the Higher Education Information System, the number of university students is 6,401,149. Yazıcıoğlu and Erdoğan (2004) calculated sample sizes from different population sizes for sampling errors of  $\pm 0.03$ ,  $\pm 0.05$ , and  $\pm 0.10$  at  $\alpha = 0.05$  level. In this context, it was observed that a sample size of 384 is sufficient to represent the population in a universe of 100 million for a sampling error of  $\pm 0.05$ . Calculations using Raosoft (Sample Size Calculator) software determined that the minimum sample size at a 5% margin of error and 95% confidence level is 385 (Raosoft, 2024). Among the total of 400 individuals in the study sample, there are 147 females and 253 males. Of these individuals, 187 participate in individual sports while 213 participate in team sports. The average age of the participants is  $21.37 \pm 2.98$ , and the average age of starting sports is  $7.83 \pm 4.49$  (Table 1).

**Table 1.** Distribution of Sample Group

		n	%	
Gender	Female	147	36.8	
	Male	253	63.2	
Sport Type	Individual	187	46.7	
	Team	213	53.3	
	Total	400	100,0	
		n	$\bar{x}$	Ss.
Age		400	21.37	2.98
Age of Sports		400	7.83	4.49

### Measurement Tools

**Psychological Adjustment Scale:** Developed by Cruz et al. (2019), this scale was adapted to Turkish culture by Yıldırım and Solmaz (2021). The scale consists of 6 items with a 7-point Likert scale structure. The goodness of fit indices of the scale were calculated as follows ( $X^2 = 22.13$ ,  $df = 9$ ,  $p < .01$ ;  $X^2/DF = 2.46$ ,  $CFI = 0.97$ ,  $NNFI = 0.95$ ,  $RMSEA = 0.10$ ,  $SRMR = 0.04$ ).

**Athlete Mental Health Continuity Scale:** Keyes et al.'s (2008) Mental Health Continuum-Short Form was adapted and developed for the sports context by Foster and Chow (2019). Developed by Tingaz (2022), this scale consists of 14 items and 3 subscales. The goodness of fit indices of the scale were calculated as follows ( $X^2/df=2.764$ ,  $SRMR=.055$ ,  $RMSEA=.083$ ,  $CFI=.936$ ,  $AGFI=.850$ ,  $NFI=.904$ ).

**Validity and Reliability:** Confirmatory factor analysis (CFA) was conducted using AMOS 24 software to test the single-factor structures of the scales used in the study. The results indicated that the single-factor model structures of the scales were compatible with and acceptable for the data. The obtained values are presented in Table 2 (PA=Psychological Adjustment; AMHC=Athlete Mental Health Continuity).

**Table 2.** Fit Indices and Threshold Values Used in the SEM

Index	Good Fit	Acceptable	PA	AMHC
$X^2/df$	<3	<3( $X^2/df$ )<5	2.00	3.37
GFI	>.95	>.90	.98	.92
CFI	>.95	>.90	.99	.95
RMSEA	<.05	<.08	.03	.07
SRMR	<.05	<.08	.03	.04

$X^2/df$ ;  $X^2$ ;  $GFI$ ;  $CFI$ ;  $RMSEA$ ;  $SRMR$  (Byrne, 2016; Gürbüz, 2021).

To determine the reliability levels of the scales used in the study, Cronbach's alpha coefficients were calculated. The values obtained are presented in Table 3.

**Table 3.** Reliability Coefficients of the Scales Used

	Cronbach's Alpha	N of Items
Psychological Adjustment	.81	6
Athlete Mental Health Continuity	.94	14

As expressed by George and Mallery (2003), values less than 0.50 for Cronbach's alpha are not sufficient; values between 0.50 and 0.60 are considered weak reliability, values between 0.60 and 0.70 represent an acceptable level of reliability. Values between 0.70

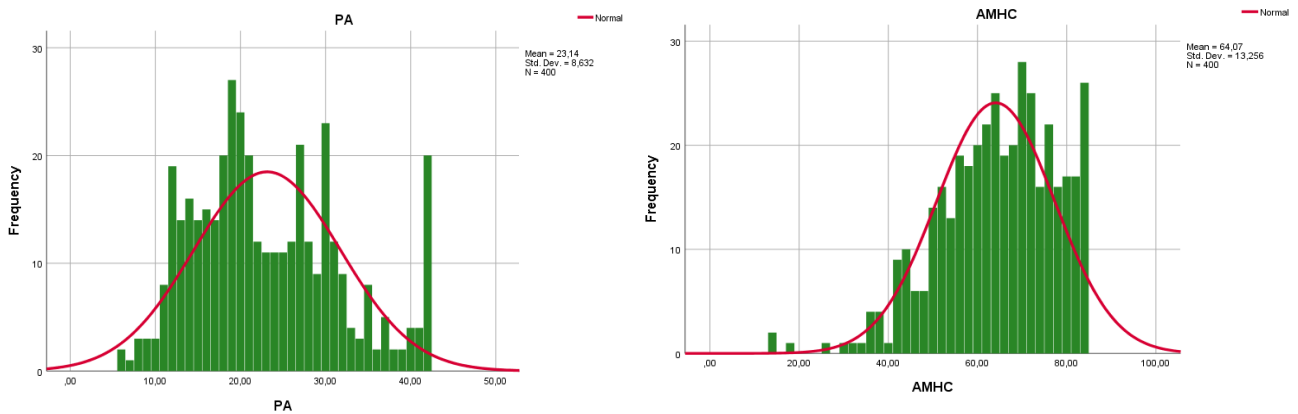
and 0.90 indicate good reliability, while values greater than 0.90 indicate excellent reliability. Examination of the values presented in Table 3 indicates that the reliability of the study is good.

**Statistical Analysis:** In the research, AMOS 24 software was used to test the factor structure of the measurement tools. After confirming the factor structure, SPSS 24 software was used to test the hypotheses of the study. Prior to data analysis, outliers and missing data were examined using IBM SPSS 24. Subsequently, the normality of the data was evaluated based on skewness and kurtosis values.

**Table 4.** Descriptive Analyses

	$\bar{x}$	Ss.	Skewness	Kurtosis
Psychological Adjustment	23.14	8.63	.489	-.449
Athlete Mental Health Continuity	64.07	13.25	-.654	.452

Skewness and kurtosis values between +1 and -1 indicate that the data are normally distributed (Hair et al., 2014). Upon examination of Table 4 and Graph 1, the coefficients provided fall within appropriate ranges, indicating that the data can be analyzed using parametric tests.



**Graph 1.** Frequency Distribution

To assess the relationship between dependent and independent variables in this normally distributed dataset, Pearson Correlation Analysis was performed. Additionally, independent samples t-test was used to determine differences between categorical variables and Psychological Adjustment and Athlete Mental Health Continuity. The effects of independent variables on dependent variables have been evaluated using "Cohen's d." Statistical significance indicates whether a result is due to random variations within the data. However, not every statistically significant result implies a large effect size. In fact, it can even describe a phenomenon that is unnoticeable in everyday life. Statistical significance primarily depends on sample size, the quality of the data, and the power of the statistical procedures used. As seen particularly in epidemiological studies or large-scale evaluations, very small effects can achieve statistical significance when large datasets are available. When effects have a meaningful magnitude, effect sizes are used to describe the strength of a phenomenon. The most used measure of effect size is undoubtedly Cohen's d (Cohen, 1988).

**Ethics Committee Approval:** The compliance of this study with ethical rules (Approval No. E. 338873) was approved unanimously by the Karabük University Social and Human Sciences Ethics Committee. Meeting Date: 29.05.2024 Meeting No: 2024/06

**RESULTS**

**Table 5.** Correlations between Variables

Variables	Psychological Adjustment	Athlete Mental Health Continuity
Psychological Adjustment	1	
Athlete Mental Health Continuity	.209**	1

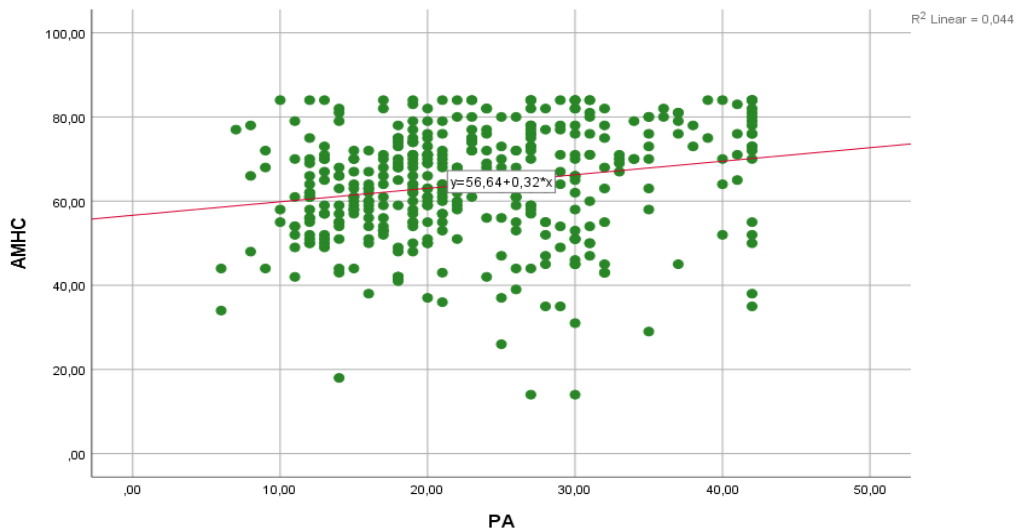
\* $p < .05$ , \*\* $p < .01$

As presented statistically in Table 5, significant correlations between the variables were found. It was observed that there were significant positive linear relationships between Psychological Adjustment and Athlete Mental Health Continuity ( $r = .209, p < .01$ ).

**Table 6.** Difference between Genders

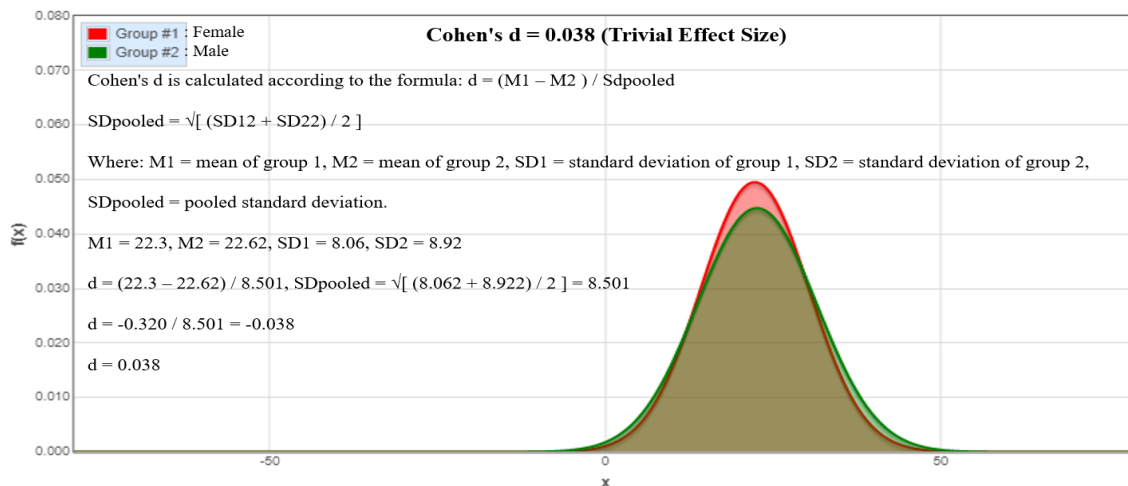
	Gender	n	$\bar{x}$	Ss.	T-Test		Cohen's d
					t	p	
Psychological Adjustment	Female	147	22.30	8.06	-1.478	.140	0.038
	Male	253	22.62	8.92			
Athlete Mental Health Continuity	Female	147	64.34	13.92	.318	.751	0.033
	Male	253	63.90	12.87			

Table 6 presents the t-test for the difference between genders in Psychological Adjustment and Athlete Mental Health Continuity. The results indicate that there were no significant differences between genders at the p;050 level, and it can be observed that males had higher mean scores in Psychological Adjustment, while female participants had higher mean scores in Athlete Mental Health Continuity.



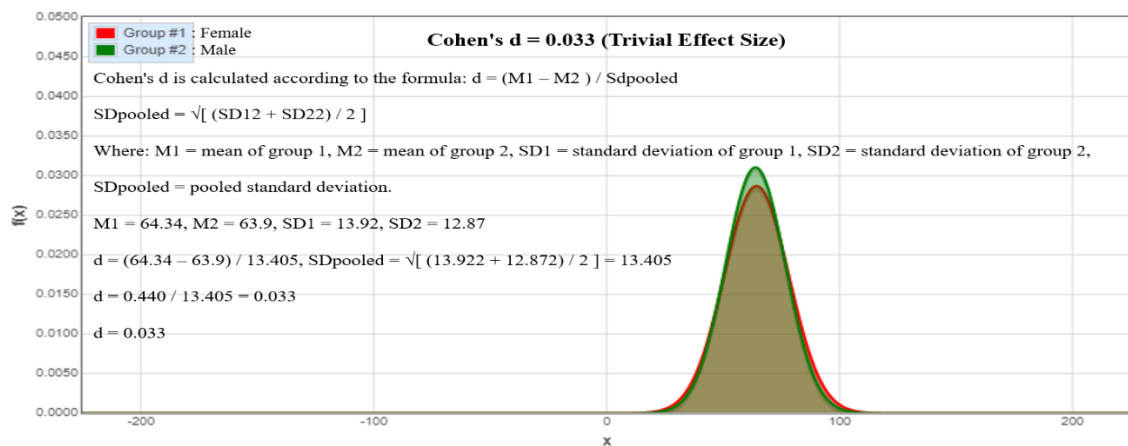
**Graph 2.** Correlation between Variables

Examining Graph 2, which represents the correlation between Psychological Adjustment and Athlete Mental Health Continuity, increasing Psychological Adjustment positively contributes to the linear increase in athlete mental health continuity.



Cohen's d:  $d < 0.2 =$  weak;  $d = 0.5 =$  medium;  $d > 0.8 =$  strong (Cohen, 1988).

**Graph 3.** The effect of Gender on Psychological Adjustment (Cohen's d)



Cohen's d:  $d < 0.2 =$  weak;  $d = 0.5 =$  medium;  $d > 0.8 =$  strong (Cohen, 1988).

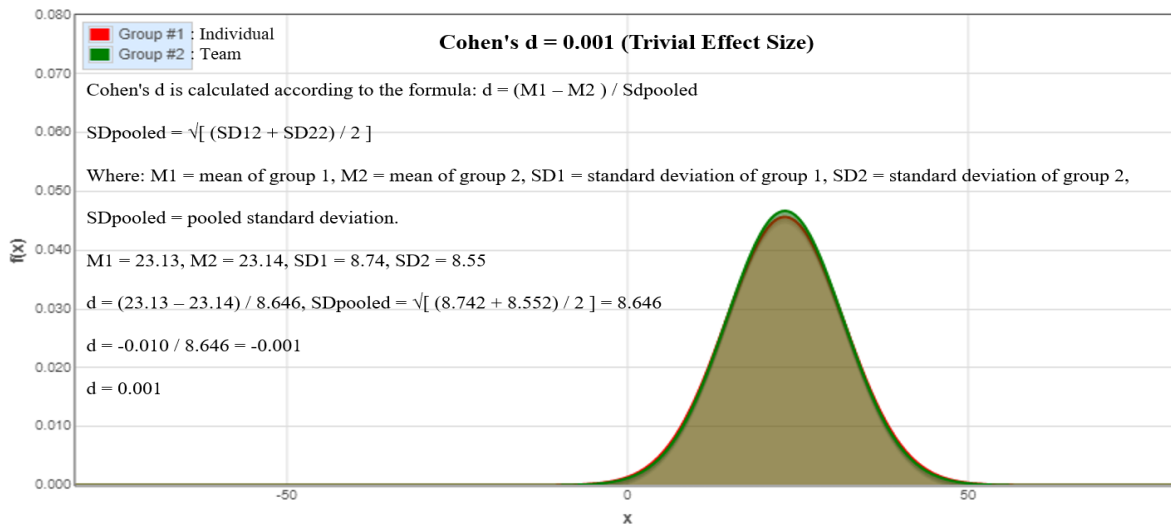
**Graph 4.** The effect of Gender on Athlete Mental Health Continuity (Cohen's d)

When examining the effects of Gender on Psychological Adjustment and Athlete Mental Health Continuity using Cohen's d values ( $d = 0.038$  and  $d = 0.033$ , respectively), the effects are observed to be weak (Graph 3; Graph 4).

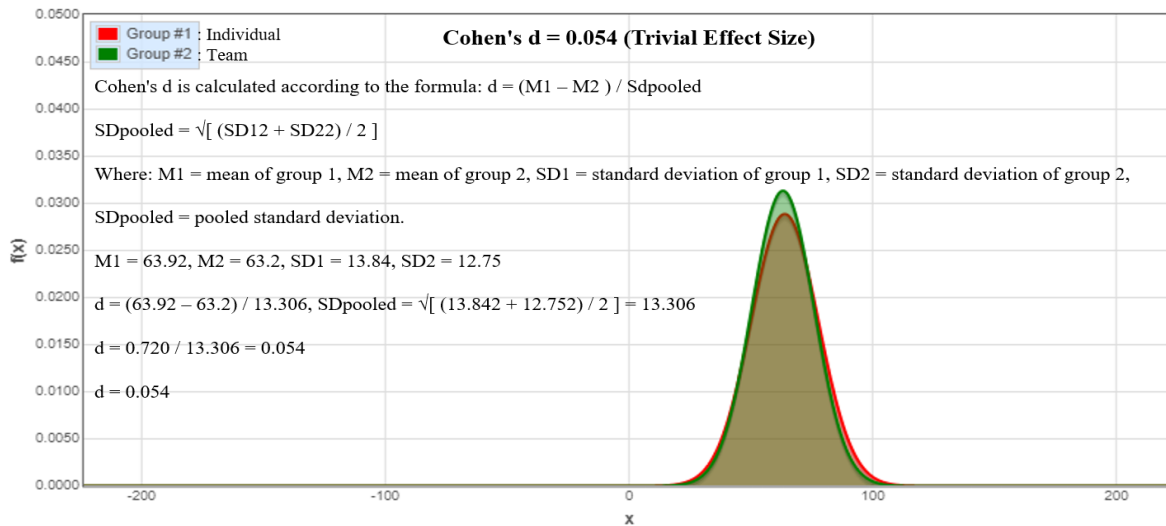
**Table 7.** Difference between Sports Categories

	Sport Type	n	$\bar{x}$	Ss.	T-Test	
					t	p
Psychological Adjustment	Individual	187	23.13	8.74	-.003	.998
	Team	213	23.14	8.55		
Athlete Mental Health Continuity	Individual	187	63.92	13.84	-.205	.838
	Team	213	63.20	12.75		

Table 7 presents the t-test for the difference between sports categories in Psychological Adjustment and Athlete Mental Health Continuity. The results indicate that there were no significant differences between sports categories at the  $p < .050$  level, and it can be observed that team athletes had higher mean scores in Psychological Adjustment, while individual athletes had higher mean scores in Athlete Mental Health Continuity.



*Cohen's d:  $d < 0.2$  = weak;  $d = 0.5$  = medium;  $d > 0.8$  = strong (Cohen, 1988).*  
**Graph 5.** The effect of Sport Type on Psychological Adjustment (Cohen's d)



*Cohen's d:  $d < 0.2$  = weak;  $d = 0.5$  = medium;  $d > 0.8$  = strong (Cohen, 1988).*  
**Graph 6.** The effect of Sport Type on Athlete Mental Health Continuity (Cohen's d)

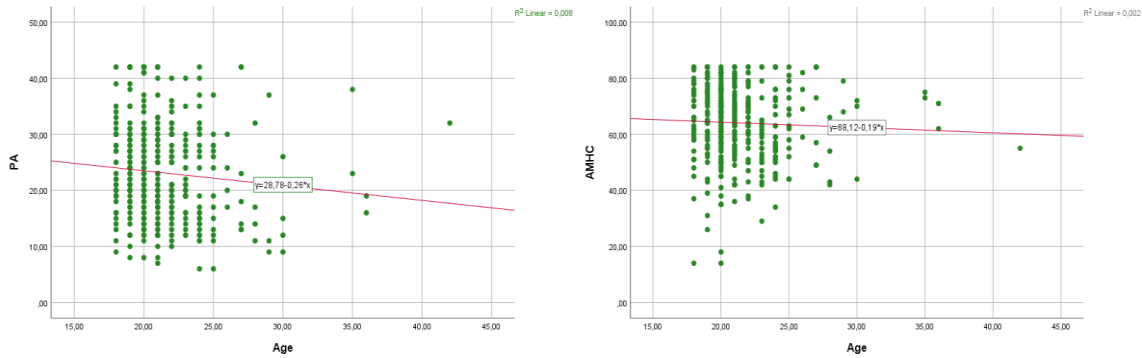
When examining the effects of Sport Type on Psychological Adjustment and Athlete Mental Health Continuity using Cohen's d values ( $d = 0.001$  and  $d = 0.054$ , respectively), the effects are observed to be weak (Graph 5; Graph 6).

**Table 8.** Correlations between Age Variable and Variables

	Age	Psychological Adjustment	Athlete Mental Health Continuity
Age	1		
Psychological Adjustment	-.091	1	
Athlete Mental Health Continuity	-.043	.209**	1

\* $p < .05$ , \*\* $p < .01$

Table 8 presents the statistical correlation between the Age variable and Psychological Adjustment and Athlete Mental Health Continuity. The table shows that there are insignificant negative correlations between Age and Psychological Adjustment, as well as between Age and Athlete Mental Health Continuity ( $r = -.091$ ,  $p > .05$ ;  $r = -.043$ ,  $p > .05$ ).



**Graph 7.** Correlation between Age Variable and Variables

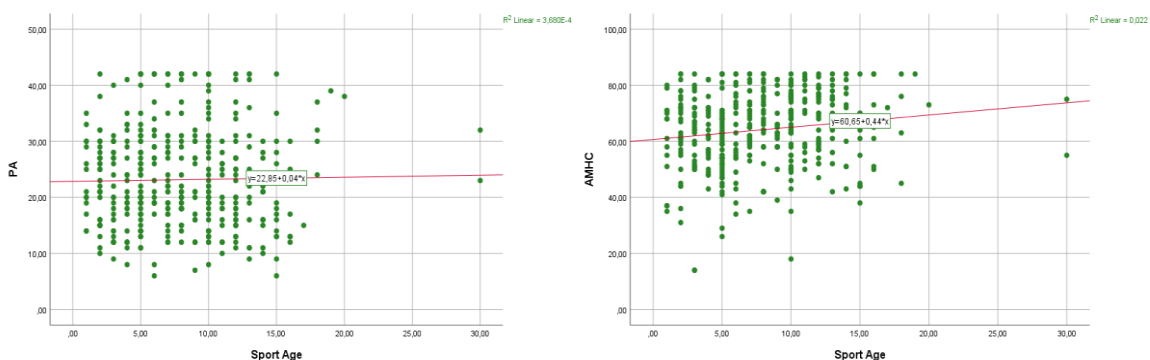
Graph 7 provides a visual representation of the correlation between Age and Psychological Adjustment, as well as Athlete Mental Health Continuity. It can be observed that increasing age negatively influences Psychological Adjustment and Athlete Mental Health Continuity in a linear manner, and this relationship is not statistically significant.

**Table 9.** Correlations between Sport Age Variable and Variables

	Sport Age	Psychological Adjustment	Athlete Mental Health Continuity
Sport Age	1		
Psychological Adjustment	.019	1	
Athlete Mental Health Continuity	.148**	.209**	1

\* $p < .05$ , \*\* $p < .01$

Table 9 presents the statistical correlation between the Sport Age variable and Psychological Adjustment, as well as Athlete Mental Health Continuity. The table indicates significant relationships between the variables. There is a significant positive correlation between Sport Age and Athlete Mental Health Continuity ( $r = .148$ ,  $p < .01$ ). However, there is an insignificant positive correlation between Sport Age and Psychological Adjustment ( $r = .019$ ,  $p > .05$ ).



**Graph 8.** Correlation between Sport Age Variable and Variables

Graph 8 illustrates the correlation between Sport Age and Psychological Adjustment, as well as Athlete Mental Health Continuity. It can be observed that increasing sporting age positively influences both Psychological Adjustment and Athlete Mental Health Continuity. However, while the relationship between Sport Age and Psychological Adjustment is not significant, the relationship between Sport Age and Athlete Mental Health Continuity is significant.

## DISCUSSION and CONCLUSION

This study aimed to investigate the relationship between Psychological Adjustment and athlete mental health continuity. The findings reveal a positive and linear relationship between Psychological Adjustment and Athlete Mental Health Continuity. In other words, an increase in Psychological Adjustment is associated with an increase in athlete mental health continuity. This relationship is statistically significant, and the reliability and validity of the scales used support the results of the study. These findings corroborate the hypothesis of the study.

**Table 10.** Results of Hypothesis Testing in the Study

Hypothesis	Result
H1: There are significant positive linear relationships between Psychological Adjustment and Athlete Mental Health Continuity.	Accepted ✓

The results indicate that an increase in Psychological Adjustment is associated with an increase in Athlete Mental Health Continuity. To examine this relationship, a series of linear regression analyses were conducted, with Psychological Adjustment as the independent variable and indicators of mental health as the dependent variables. The findings reveal that Psychological Adjustment explains 12% of life satisfaction, 30% of depression, 29% of anxiety, and 41% of stress (Yıldırım & Solmaz, 2021). Mental health encompasses a state of well-being that includes an individual's ability to realize their abilities, cope with daily stressors, and contribute to society (WHO, 2004). In this sense, mental health generally encompasses subjective, psychological, and social well-being (Keyes, 1998; Ryff & Singer, 1996). The concept of well-being is a cornerstone of positive psychology (Seligman, 2011), of which physical activity is a part. Regular physical activity can reduce depression and enhance life satisfaction and overall well-being (Scott & Stephane, 2018). Psychological well-being is a component that reflects an individual's mental health and relies on one's ability to be satisfied with oneself, develop a positive self-perception, and recognize and develop personal capacities despite environmental constraints (Huppert & So, 2013). Athlete psychological well-being includes self-acceptance, relationships with teammates and coaches, autonomy in sports, and personal development. Athlete social well-being, on the other hand, involves social acceptance, social accomplishment, social contribution, social adjustment, and social integration (Lundqvist, 2011). International literature shows an increasing number of studies on psychological well-being in recent years. Moreover, with research demonstrating the importance of sports as a predictor of psychological well-being, interest in this field is growing (Hefferon & Mutrie, 2012; Hefferon, 2013; Hone et al., 2014).

It is believed that individuals with high psychological adjustment have higher levels of positive functionality. Numerous studies provide scientific evidence linking poor psychological adjustment to increased psychopathology and higher prevalence rates of psychosocial problems among young adults (Bender et al., 2019; Freitas et al., 2013). For example, psychological adjustment has been shown to be associated with burnout (Samios, 2018), mental health disorders (Bantjes & Kagee, 2018), and quality of life and life satisfaction (Chambers et al., 2017). Research on individuals' positive traits, encompassing issues such as self-realization and functionality in life, originated with psychologists like Maslow and Rogers and has become increasingly widespread with the advent of positive psychology. The World Health Organization, in recent times, has emphasized individuals' positive traits when defining mental health. Well-being is defined as "being aware of one's abilities, coping with normal stresses of life, working productively and fruitfully, and contributing to one's community" (Westerhof & Keyes, 2010). Social skills are among the most critical components of an individual's behavioral, emotional, and various other functions. These skills enable individuals to adapt to and respond to complex environmental cues, cope with stressful experiences, and avoid interpersonal conflicts. Moreover, social skill is a system that enables individuals to establish social interactions and relationships necessary for their emotional health and psychological adjustment (Matson et al., 2006). In this context, the concept of mental well-being comprises three fundamental components: effective functionality in personal life and effective functionality in social life. There is increasing consensus that mental health is not just the absence of mental illness but also encompasses the presence of positive emotions (emotional well-being), psychological well-being in personal life, and social well-being in community life, all of which contribute to positive functionality (Lamers et al., 2010; Westerhof & Keyes, 2010). The relationship between well-being in sports and various psychological constructs has been examined. For instance, athletes with high psychological well-being have been reported to experience lower perceived stress (Malinauskas & Malinauskiene, 2018) and higher levels of motivation, perceived autonomy support, and need satisfaction (Stenling et al., 2015).

Demographic factors such as gender and sports discipline do not have a significant impact on psychological adjustment and athlete mental health continuity. Distinctions made between participants based on gender or sports disciplines do not show any differences in terms of psychological adjustment and athlete mental health continuity. This suggests that the psychological effects of sports can emerge independently of an individual's personal characteristics. In other words, the psychological benefits experienced by an individual during sports may not vary based on gender or sports discipline. Besides physical, sensory, and psychological processes, sports also play a significant role in the socialization process. Engaging in both team and individual sports activities helps individuals develop a sense of belonging within the team. Communication with other team members, experiencing love and recognition, support the process of socialization (Eime et al., 2013).

Age and the duration of involvement in sports, represented by sport age, are observed to have a significant impact on these relationships. It has been found that as the duration of engagement in sports, represented by sport age, increases, athlete mental health continuity also increases, and this increase is statistically significant. This suggests that the long-term effects of sports may be more pronounced, and regular engagement in sports may have more lasting and positive effects on mental health. However, no



significant relationship has been found between age and psychological adjustment and athlete mental health continuity. When sports are regularly practiced, the positive effects on quality of life and mental health are experienced continuously by individuals. This continuity may contribute to sports being more enduring and effective for health and mental well-being. Various research findings in the literature indicate the positive effects of sports participation on psychological well-being (Dishman et al., 2006; Babiss & Gangwisch, 2009). In a study conducted by Salar et al. 2012, the psychological characteristics of athletes interested in team and individual sports in the 15-18 age group were examined. It was found that individuals engaged in both team and individual sports showed similar levels of emotional well-being, and individuals who engaged in sports regularly for at least 3-4 days a week felt very good emotionally. According to the same study, it was stated that participation in both team and individual sports would be beneficial in improving the psychological health of young individuals.

In conclusion, the findings of this study demonstrate a positive linear relationship between Psychological Adjustment and Athlete Mental Health Continuity, consistent with existing literature. Additionally, the findings examining the impact of demographic factors such as gender and sport discipline suggest that the psychological effects of sports can emerge independently of individual characteristics. This finding aligns with results from similar studies in the literature.

**Recommendations:** The findings of this study highlight a positive linear relationship between Psychological Adjustment and Athlete Mental Health Continuity. Considering these findings, the following recommendations can be made to enhance the positive effects of sports on psychological health and support athletes' mental health continuity:

**Promotion of Sports Activities:** Various campaigns and programs can be organized to encourage participation in sports activities. Schools, sports clubs, and community centers can collaborate, especially to increase the habit of engaging in sports among youth and adults.

**Psychological Support Programs:** Special psychological support programs can be developed to support athletes' psychological health. These programs may include topics such as stress management, enhancing motivation, and achieving emotional balance.

**Education and Awareness:** Athletes and coaches can receive education and awareness about the psychological effects of sports. This emphasizes that sports are important not only for physical health but also for mental and emotional well-being.

**Strengthening Social Support Networks:** Establishing and strengthening social support networks among athletes is important. Teamwork and sports activities can enhance feelings of solidarity and support among athletes.

**Lifelong Sports Activities:** It should be emphasized that sports are important not only during youth but also throughout life. Promoting lifelong sports activities can help individuals maintain and improve their mental health continuity.

**Diversity and Accessibility:** Increasing the diversity and accessibility of sports activities is crucial. This encourages everyone to participate in sports activities that match their interests and abilities.

**Research and Evaluation:** More research should be conducted to better understand the psychological effects of sports. Such research can help identify the effects of sports on different groups, effective intervention methods, and best practice strategies.

Implementing these recommendations can enhance the positive effects of sports on psychological health and support athletes' mental health continuity. In this way, individuals can improve both their physical and mental health and enhance their quality of life.

## References

- Babiss, L. A., & Gangwisch, J. E. (2009). Sports participation as a protective factor against depression and suicidal ideation in adolescents as mediated by self-esteem and social support. *Journal of Developmental & Behavioral Pediatrics, 30*(5), 376-384. <https://doi.org/10.1097/DBP.0b013e3181b33659>
- Bantjes, J., & Kagee, A. (2018). Common mental disorders and psychological adjustment among individuals seeking HIV testing: A study protocol to explore implications for mental health care systems. *International Journal of Mental Health Systems, 12*(1), 16. <https://doi.org/10.1186/s13033-018-0196-0>
- Bender, M., van Osch, Y., Slegers, W., & Ye, M. (2019). Social support benefits psychological adjustment of international students: Evidence from a meta-analysis. *Journal of Cross-Cultural Psychology, 50*(7), 827-847. <https://doi.org/10.1177/0022022119861151>
- Bergin, A., & Pakenham, K. (2015). Law student stress: Relationships between academic demands, social isolation, career pressure, study/life imbalance and adjustment outcomes in law students. *Psychiatry, Psychology and Law, 22*(3), 388-406. <https://doi.org/10.1080/13218719.2014.960026>
- Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (2006). Immigrant youth: Acculturation, identity, and adaptation. *Applied Psychology, 55*(3), 303-332. <https://doi.org/10.1111/j.1464-0597.2006.00256.x>
- Byrne, B. M. (2016). *Structural equation modeling with AMOS*. New York: Routledge.
- Camiré, M. (2023). Proposing an ontological shift from intervention to intravention in sport and exercise psychology. *Psychology of Sport and Exercise, 64*, 102342. <https://doi.org/10.1016/j.psychsport.2022.102342>
- Camy, J. (2006). Employment opportunities in the sports sector: A review of the European situation. *Beyond the Scoreboard. Youth Employment Opportunities & Skills Development in the Sport Sector*, 85-104. [Access](#)

- Chambers, S. K., Ng, S. K., Baade, P., Aitken, J. F., Hyde, M. K., Wittert, G., ... & Dunn, J. (2017). Trajectories of quality of life, life satisfaction, and psychological adjustment after prostate cancer. *Psycho-oncology*, 26(10), 1576-1585. <https://doi.org/10.1002/pon.4342>
- Christensen, L. B., Johnson, B., & Turner, L. A. (2014). *Research methods, design, and analysis*. Global Edition.
- Cohen, D. (1998). *The analysis of variance*. In *Statistical Power Analysis for the Behavioral Sciences* (second ed.). Lawrence Erlbaum Associates. 274-87.
- Collingwood, T. R., Sunderlin, J., Reynolds, R., & Kohl III, H. W. (2000). Physical training as a substance abuse prevention intervention for youth. *Journal of drug education*, 30(4), 435-451. <https://doi.org/10.2190/RVUE-9XW7-TYRQ-EJRS>
- Creswell, J. W. & Clark, V. L. P. (2016). *Designing And Conducting Mixed Methods Research*. New York: Sage.
- Cruz, R. A., Peterson, A. P., Fagan, C., Black, W., & Cooper, L. (2020). Evaluation of the Brief Adjustment Scale–6 (BASE-6): A measure of general psychological adjustment for measurement-based care. *Psychological Services*, 17(3), 332. <https://doi.org/10.1037/ser0000366>
- Dishman, R. K., Hales, D. P., Pfeiffer, K. A., Felton, G. A., Saunders, R., Ward, D. S., ... & Pate, R. R. (2006). Physical self-concept and self-esteem mediate cross-sectional relations of physical activity and sport participation with depression symptoms among adolescent girls. *Health psychology*, 25(3), 396. <https://doi.org/10.1037/0278-6133.25.3.396>
- Drakulevski, L., Nakov, L., & Iliev, F. (2014). Sports management and opportunities for professional development. *Research in Physical Education, Sport & Health*, 3(1). [Access](#)
- Eime, R., Young, J., Harvey, J., & Payne, W. (2013). Psychological and social benefits of sport participation: The development of health through sport conceptual model. *Journal of Science and Medicine in Sport*, 16, e79-e80. <https://doi.org/10.1016/j.jsams.2013.10.190>
- Foster, B. J., ve Chow, G. M. (2019). Development of the Sport Mental Health Continuum Short Form (Sport MHC-SF). *Journal of Clinical Sport Psychology*, 13(4), 593-608. <https://doi.org/10.1123/jcsp.2017-0057>
- Freitas, I. R., Castro, M., Sarmiento, S. L., Moura, C., Viana, V., Areias, J. C., & Areias, M. E. G. (2013). A cohort study on psychosocial adjustment and psychopathology in adolescents and young adults with congenital heart disease. *BMJ open*, 3(1), e001138. <https://doi.org/10.1136/bmjopen-2012-001138>
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update (4 th ed.)*. Boston: Allyn & Bacon.
- Gürbüz, S. (2021). *Sosyal bilimlerde aracı, düzenleyici ve durumsal etki analizleri*. Ankara: Seçkin Yayıncılık.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis. 7th Edition*. Hawlow: Pearson.
- Hefferon, K. (2013). *Positive psychology and the body: The somatopsychic side to flourishing*. McGraw-Hill Education (UK).
- Hefferon, K., & Mutrie, N. (2012). Physical activity as a “stellar” positive psychology intervention. *Oxford handbook of exercise psychology*, 117-128. [Access](#)
- Hone, L.C., Jarden, A., Schofield, G.M., & Duncan, S. (2014). Measuring flourishing: The impact of operational definitions on the prevalence of high levels of wellbeing. *International Journal of Wellbeing*, 4(1), 62-90. <https://doi.org/10.5502/ijw.v4i1.4>
- Huppert, F. A., & So, T. T. (2013). Flourishing across Europe: Application of a new conceptual framework for defining well-being. *Social indicators research*, 110(3), 837-861. <https://doi.org/10.1007/s11205-011-9966-7>
- Karasar, N. (2023). *Bilimsel araştırma yöntemi: kavramlar, ilkeler, teknikler*. Ankara: Nobel Yayın Dağıtım.
- Keyes, C. L. M. (1998). Social well-being. *Social psychology quarterly*, 121-140. <https://doi.org/10.2307/2787065>
- Keyes, C. L., Wissing, M., Potgieter, J. P., Temane, M., Kruger, A., ve Van Rooy, S. (2008). Evaluation of the mental health continuum– short form (MHC–SF) in setswana- speaking South Africans. *Clinical Psychology ve Psychotherapy*, 15(3), 181-192. <https://doi.org/10.1002/cpp.572>
- Kuipers, H. (1998). Training and overtraining: an introduction. *Med Sci Sports Exerc*, 30(7),1137-1139. <https://doi.org/10.1097/00005768-199807000-00018>
- Lamers, S. M., Westerhof, G. J., Bohlmeijer, E. T., ten Klooster, P. M., & Keyes, C. L. (2011). Evaluating the psychometric properties of the mental health continuum-short form (MHC-SF). *Journal of clinical psychology*, 67(1), 99-110. <https://doi.org/10.1002/jclp.20741>
- Laursen, P. B., & Jenkins, D. G. (2002). The scientific basis for high-intensity interval training. *Sports medicine*, 32(1), 53-73. [Access](#)
- Lazarus, R. S. (1991). *Emotion and adaptation*. Oxford University Press. [Access](#)
- Lundqvist, C. (2011). Well-being in competitive sports—The feel-good factor? A review of conceptual considerations of well-being. *International review of sport and exercise psychology*, 4(2), 109-127. <https://doi.org/10.1080/1750984X.2011.584067>
- Lynch, K. (1958). Environmental adaptability. *Journal of the American Institute of Planners*, 24(1), 16-24. <https://doi.org/10.1080/01944365808978262>
- Malinauskas, R., & Malinauskiene, V. (2018). The mediation effect of perceived social support and perceived stress on the relationship between emotional intelligence and psychological wellbeing in male athletes. *Journal of human kinetics*, 65(1), 291-303. <https://doi.org/10.2478/hukin-2018-0017>
- Marris, M., & Ross, W. (1976). *Quines book of Olympic records*.
- Marshall, C., & Rossman, G. B. (2014). *Designing Qualitative Research*. Sage.
- Matson, J. L., Terlonge, C., González, M. L., & Rivet, T. (2006). An evaluation of social and adaptive skills in adults with bipolar disorder and severe/profound intellectual disability. *Research in developmental disabilities*, 27(6), 681-687. <https://doi.org/10.1016/j.ridd.2005.10.001>

- Peluso, M. A. M., & De Andrade, L. H. S. G. (2005). Physical activity and mental health: the association between exercise and mood. *Clinics*, 60(1), 61-70. <https://doi.org/10.1590/S1807-59322005000100012>
- Peterson, A. P. (2015). *Psychometric evaluation of the Brief Adjustment Scale-6 (BASE-6): A new measure of general psychological adjustment* (Doctoral dissertation). [Access](#)
- Raosoft, (2024). <http://www.raosoft.com/samplesize.html>
- Revenson, A. T. (2002). Chronic illness and adjustment. In J.Worell (Ed.), *Encyclopedia of womanand gender: Sex similarites and differences and the impact of society on gender*. California, Academic Press. <https://doi.org/10.1002/9780470753552>
- Ruh Sağlığı Kanun Teklifi (RSKT) (2017) Erişim Tarihi: 10.05.2024 Erişim: [Access](#)
- Ryff, C. D., & Singer, B. (1996). Psychological well-being: Meaning, measurement, and implications for psychotherapy research. *Psychotherapy and psychosomatics*, 65(1), 14-23. <https://doi.org/10.1159/000289026>
- Salar, B., Hekim, M., & Tokgöz, M. (2012). 15-18 yaş grubu takım ve ferdi spor yapan bireylerin duygusal durumlarının karşılaştırılması. *Mehmet Akif Ersoy Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, (6), 123-135. [Access](#)
- Samios, C. (2018). Burnout and psychological adjustment in mental health workers in rural Australia: The roles of mindfulness and compassion satisfaction. *Mindfulness*, 9(4), 1088-1099. <https://doi.org/10.1007/s12671-017-0844-5>
- Savić, Z., Randelović, N., Stojanović, N., Stanković, V., & Šiljak, V. (2018). The sports industry and achieving top sports results. *Facta Universitatis, Series: Physical Education and Sport*, 15(3), 513-522. <https://doi.org/10.22190/FUPES1703513S>
- Scott, K. P., & Stephane, L. D. (2018). *Her yönüyle fitness ve sağlıklı yaşam*. Üzel, M. (Ed). Nobel Akademi.
- Searle, W., & Ward, C. (1990). The prediction of psychological and sociocultural adjustment during cross-cultural transitions. *International journal of intercultural relations*, 14(4), 449-464. [https://doi.org/10.1016/0147-1767\(90\)90030-Z](https://doi.org/10.1016/0147-1767(90)90030-Z)
- Seaton, C. L. (2009). *Psychological Adjustment*. In S. Lopez (Ed.), *The Encyclopedia of Positive Psychology* (pp. 291-296). Chichester: Blackwell Publishing Ltd.
- Seligman, M.E.P. (2011) *Flourish: A Visionary New Understanding of Happiness and Well-Being*. Free Press, New York.
- Stenling, A., Lindwall, M., & Hassmén, P. (2015). Changes in perceived autonomy support, need satisfaction, motivation, and well-being in young elite athletes. *Sport, Exercise, and Performance Psychology*, 4(1), 5061. <https://doi.org/10.1037/spy0000027>
- Stubbs, B., Vancampfort, D., Hallgren, M., Firth, J., Veronese, N., Solmi, M., ... & Kahl, K. G. (2018). EPA guidance on physical activity as a treatment for severe mental illness: a meta-review of the evidence and Position Statement from the European Psychiatric Association (EPA), supported by the International Organization of Physical Therapists in Mental Health (IOPTMH). *European Psychiatry*, 54, 124-144. <http://dx.doi.org/10.1016/j.eurpsy.2018.07.004>
- Tingaz, E. O. (2022). Sporcu Ruh Sağlığı Sürekliliği-Kısa Formu: Türkçeye Uyarlanması ve Psikometrik Özelliklerinin İncelenmesi. *Spor Bilimleri Dergisi*, 33(1), 43-52. <https://doi.org/10.17644/sbd.948200>
- Ward, C., & Kennedy, A. (1992). Locus of control, mood disturbance, and social difficulty during cross-cultural transitions. *International journal of intercultural relations*, 16(2), 175-194. [https://doi.org/10.1016/0147-1767\(92\)90017-O](https://doi.org/10.1016/0147-1767(92)90017-O)
- Westerhof, G. J., & Keyes, C. L. (2010). Mental illness and mental health: The two continua model across the lifespan. *Journal of adult development*, 17, 110-119. <https://doi.org/10.1007/s10804-009-9082-y>
- World Health Organization. (2004). Promoting mental health: Concepts, emerging evidence, practice: Summary report. World Health Organization. [Access](#)
- Yazıcıoğlu, Y., & Erdoğan, S. (2014). *SPSS uygulamalı bilimsel araştırma yöntemleri*. Detay Yayıncılık.
- Yıldırım, M., & Solmaz, F. (2020). Testing a Turkish adaption of the Brief Psychological Adjustment Scale and assessing the relation to mental health. *Psikoloji Çalışmaları*, 41(1), 231-245. <https://doi.org/10.26650/SP2020-0032>
- Yoon, S. J., & Choi, Y. G. (2005). Determinants of successful sports advertisements: The effects of advertisement type, product type and sports model. *Journal of Brand Management*, 12, 191-205. [Access](#)