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Investigation of Relationship Between Personality Characteristics and Leisure Time Involvement in Elite Athletes*

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Abstract

The purpose of this study is to examine the relationship between the personality characteristics of elite athletes and their leisure time involvement. The population of the research consists of athletes who are actively pursuing their careers in various sports. A participants group of 439 elite athletes, including 301 males and 138 females, was selected using a purposive sampling method. The data collection tools used in the study were the Personal Information Form, the Leisure Involvement Scale (LIS), and the Adjective-Based Personality Test (ABPT). Independent T-test was used for pairwise comparisons, and One-Way Anova was used for comparison of multiple variables. According to the LIS and ABPT scores, it was found that participants aged above 21 had higher total and sub-dimension scores on the LIS compared to those under 21. In the ABPT, women scored higher than men on the agreeableness subscale, while national athletes scored higher than non-national athletes in the subscales of responsibility, openness to experience, and total scores. Additionally, athletes with more years of sports experience had higher scores in the openness to experience and responsibility sub-dimensions compared to those with fewer years of experience. Moreover, a low-level positive correlation was found between the total and sub-dimension scores of the LIS and ABPT. These findings suggest there is a significant relationship between the personality characteristic of elite athletes and their leisure involvement.

Keywords: Leisure, Involvement, Personality, Athlete

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Elit Sporcuların Kişilik Özellikleri ile Serbest Zaman İlgiilenimleri Arasındaki İlişkinin İncelenmesi

Öz

Çalışmanın amacı elit sporcuların kişilik özellikleri ile serbest zaman ilgilenimleri arasındaki ilişki ve bu özelliklerin farklı değişkenler açısından incelenmesidir. Araştırmada verilerin toplanması için genel tarama ve ilişkisel tarama modelleri kullanılmıştır. Araştırmanın evreni farklı spor branşlarında sporculuk kariyerine devam eden sporcular oluşturmaktadır. Bu evren grubu içerisinden seçkin örnekleme seçme yöntemi kullanılarak belirlenmiş olan örneklem grubunu 301 erkek 138 kadın olmak üzere toplam 439 elit sporcu oluşturmaktadır. Araştırmada Kişisel Bilgi Formu, Serbest Zaman İlgiilenim Ölçeği (SZİÖ) ve Sıfatlara Dayalı Kişilik Testi (SDKT) kullanılmıştır. İkili karşılaştırmalarda bağımsız T-testi, çoklu değişkenlerin karşılaştırmasında ise One-Way Anova kullanılmıştır. SZİÖ ve SDKT Puanlarına göre, SZİÖ toplam puan ve alt boyut puanlarının 21 yaş üstü katılımcıların 21 yaş altı katılımcılara göre daha yüksek olduğu saptanmıştır. SDKT yumuşak başlılık alt boyutunda kadınların erkeklere göre daha yüksek puana sahip olduğu; sorumluluk, deneyime açıklık ve toplam puanda milli sporcuların olmayanlara göre daha yüksek puana sahip olduğu; deneyime açıklık ve sorumluluk alt boyutlarında ise spor yaşı fazla olanların az olanlara göre daha yüksek puana sahip olduğu belirlenmiştir. SZİÖ ile SDKT toplam ve alt boyut puanları (Dışadönüklük/Yumuşak Başlılık-Kendini İfade ve Yumuşak Başlılık-Çekicilik hariç) arasında düşük düzeyde pozitif yönlü bir ilişkinin olduğu belirlenmiştir.

Anahtar kelimeler: Serbest Zaman, İlgiilenim, Kişilik, Sporcu

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Introduction

Humanity has constantly changed and developed. Due to the rapid advancement of technology, new needs of individuals have emerged. (Haller, and Kaup 2013). These needs, in particular, appeared after the industrial revolution (Tolan, 1980). After the industrial revolution, working hours increased, and people sought new ways to cope with challenges. As a result of this search, they discovered the concept of leisure time (Torkildsen, 2005). The concept of leisure time, which holds an important place in people's lives, is embraced by societies due to its satisfying and integrative characteristics (Cordes and Hutson, 2015). Leisure time and leisure activities represent the time in which individuals express themselves and have fun, spend quality time and relax, achieve personal development through the actions performed, and develop feelings of togetherness from a cultural and social perspective (Beard and Mounir, 1980; Song and Ahn, 2023).

Leisure activities are highly diverse (Aydın and Yaşartürk, 2016). This diversity has led to the emergence of the concept of leisure involvement (Jamrozy et al., 1996; Barnett, 2013). Involvement is defined as the importance or attention shown to a stimulus (Kyle and Chick, 2002). Leisure involvement can be described as the motivation, connection, and sense of integration within the activity that influences individuals' choice of a leisure activity (Selin and Howard, 1988). Studies in the literature reveal several factors that affect individuals' selection of leisure activities. One of these factors is the personality types of individuals, which can also influence their leisure involvement (Donnelly et al., 1986; Kerins et al., 2007).

Personality is a subfield of psychology (Bono et al., 2002; Tatar et al., 2013). The formation of personality is a hereditary, environmental, social, and cultural process that individuals receive from both their genes and their surroundings (Pervin, 2002; Robert et al., 2006; Thomas et al., 2013; Syed, et al., 2015). According to Feshbach and Weiner (1991), personality is physiological and is a human trait that is also shaped by the socio-cultural environment (Hong et al., 2014). The concept of sports has also found its place in human life. Sports are naturally related to the course of social life. Sports have become an institution all over the world. The phenomenon of sport, with its various characteristics, has become a fundamental element of social societies as it is a part of individuals' daily lives. Additionally, sports play an important role in helping individuals discover their personalities and express and develop themselves (Yuldashov et al., 2021). Athletes who have been active in any sport for 5-10 years (Wylleman et al., 2004) and who have competed at national or international levels are referred to as elite athletes (Wu et al., 2013).

Looking at the literature, Viktorija and Antanas (2023) found significant relationships between memory performance of older adults and the relationship between personality types and leisure

activities. In another study by Bağlam and Eskiler (2023), the leisure involvements and recreational flow experiences of extreme sport participants were examined. According to the findings, it was determined that individuals' levels of leisure involvement affected their recreational flow experiences. In another study, Çelik et al. (2024) examined the relationship between personality types and mental toughness in elite wrestlers. The results indicated that the extraversion and openness to experience subdimensions of personality had a positive relationship with mental toughness. Similarly, in many studies in the literature, personality traits and other variables have been compared. The findings show that personality plays a significant role in variables such as risk-taking, sensation-seeking, perceived performance, positive social behavior, sports self-confidence, perceived group cohesion, and sportsmanship orientation (Kurşun et al., 2024; Kuper et al., 2023; Işık, 2023 Naude et al., 2016; Kekäläinen et al., 2021).

Each person has a unique personality type (Soto and Jackson, 2013), which influences their choice of leisure activities (Sato et al., 2018). Therefore, it is believed that leisure involvements vary according to individuals' personality types. However, when reviewing the literature, it is evident that there are limited studies on personality types and leisure involvement. Additionally, while many factors related to personality types have been associated with sports and athletes, there is a lack of research on leisure involvements. This research is expected to contribute to the literature and serve as a pioneering study for future studies due to its unique focus. The aim of this study is to explore the relationship between the personality traits and leisure involvement levels of elite athletes who are actively continuing their sports careers in different branches. Additionally, gender, age, sports age, sport type, weekly training frequency, national athlete status, leisure activity preferences, and social media usage frequency have been compared in terms of both personality traits and leisure involvement levels.

Method

Research Design

In the study, both the general survey and relational survey models were used. The general survey model is an approach aimed at obtaining general results based on data gathered from a large group of participants, either from the entire population or a specific sample. The relational survey model, on the other hand, is a method used to determine the existence and strength of the relationship between multiple variables (Jatana et al., 2012). Both models were utilized to generalize and correlate the data obtained from the research.

The action was taken within the framework of the “Higher Education Institutions Scientific Research and Publication Ethics Directive”.

Participants

G*power analysis was performed to determine the number of samples. As a result of G*power analysis, the sample group was determined as 411 participants. A total of 492 participants were included in the study. However, 53 participants were excluded from the study because their data were incomplete or incorrect. A total of 439 elite athletes, including 301 men and 138 women, were selected as the research group using the purposive sampling method. The population of the study consisted of individuals who are actively continuing their sports careers in various sports branches.

Data Collection

Data was collected from the participants in the sample group using three different measurement tools: the Personal Information Form, Leisure Involvement Scale, and the Adjective-Based Personality Test.

Personal Information Form

Demographic characteristics and personal information of the participants were collected through a form prepared by the researcher. The form contained a total of 8 questions, which covered topics such as age, gender, sports branch, sports career, national athlete status, income source, leisure activities, and types of events the participants engage in during these activities.

Leisure Involvement Scale

To determine the participants' level of leisure involvement, the Leisure Involvement Scale (LIS) developed by Kyle et al. (2007) and adapted into Turkish with validity and reliability studies conducted by Gürbüz et al. (2015) was used. This scale, which has a 5-point Likert type structure, consists of 15 items and 5 subdimensions. The subdimensions of the scale are: Social Bonding, Attraction, Identity Affirmation, Centrality, and Identity-expression. Each subdimension includes three items. The Attraction subdimension is represented by items 5, 9, and 12; the Centrality subdimension by items 1, 2, and 4; the Social Bonding subdimension by items 6, 11, and 14; the Identity Affirmation subdimension by items 3, 7, and 10; and the Identity-expression subdimension by items 8, 13, and 15. According to the reliability study by Gürbüz et al. (2015), the Cronbach Alpha coefficients for the subdimensions of the scale ranged from 0.58 to 0.80, and the overall reliability coefficient of the scale was found to be 0.89.

Personality Test of Adjectives

The Adjective-Based Personality Test developed by Bacanlı et al. (2009) was used collecting data on the participants' personality traits. This inventory consists of 40 items, each comprising bipolar and contrasting adjective pairs (e.g., good-bad; patient-impatient). The test is designed with

a bipolar structure and is answered using a 7-point Likert-type scale. The response options range from "very appropriate" (1) to "not appropriate at all" (7). The scale measures five subdimensions: "Extraversion," "Agreeableness," "Conscientiousness," "Neuroticism," and "Openness to Experience." The subdimensions are measured with 9 items for Extraversion, 9 items for Agreeableness, 7 items for Conscientiousness, 7 items for Neuroticism, and 8 items for Openness to Experience. The reliability analysis revealed the following Cronbach Alpha coefficients: 0.89 for Extraversion, 0.87 for Agreeableness, 0.88 for Conscientiousness, 0.73 for Neuroticism, and 0.80 for Openness to Experience.

Statistical Analysis

The statistical analysis of the data obtained from the participants was performed using SPSS v25.0 software. Data related to demographic and personal characteristics were obtained from the personal information form and tabulated using minimum-maximum values, mean, and standard deviation. These data were supported by descriptive statistics and presented with frequency and percentage distributions. The Kolmogorov-Smirnov test was used to examine the normal distribution properties of the data. The test results indicated that the data followed a normal distribution, and appropriate statistical analysis methods were employed accordingly. The Independent T-Test was used for binary comparisons, while One-Way ANOVA was preferred for comparing data with three or more variables. In multiple comparisons, the Pairwise Multiple Comparison Test was applied to identify the source of differences. Additionally, Pearson Correlation Test was used to analyze the relationships between variables. A significance level of 95% confidence interval ($p < 0.05$) was set for all analyses.

Results

Table 1

Demographic and Descriptive Characteristics

Factor	N	%
Age	<i>Under 21</i>	277
	<i>Above 21</i>	162
Gender	<i>Male</i>	301
	<i>Female</i>	138
Sports	<i>Team Sports</i>	264
	<i>Individual Sports</i>	175
National Team	<i>National Athlete</i>	198
	<i>Non-National Athlete</i>	241
Sports Age	<i>≤5 years</i>	135
	<i>Between 5-10 years</i>	117
	<i>≥10 years</i>	187
The Number of Training in Week	<i>1-2 times a week</i>	130
	<i>3-4 times a week</i>	164
	<i>≥5 times a week</i>	145
Social Media Usage Frequency	<i>1-3 hours</i>	203

	<i>4-6 hours</i>	136	31,0
	<i>6 hours and more</i>	100	22,8
Leisure Time Activities	<i>Sports Events</i>	250	56,9
	<i>Social/Cultural/Artistic Events</i>	189	43,1
Toplam:		439	100

When Table 2 is examined, it is seen that 63.1% (277 people) of the athletes participating in the study are under the age of 21, and 36.9% (162 people) are over the age of 21. When the gender distribution of the participants is examined, it is determined that 68.6% (301 people) are male and 31.4% (138 people) are female. When the participants are evaluated according to their sports branches, it is determined that 60.1% (264 people) are in team sports, and 39.9% (175 people) are in individual sports. In the analyses regarding sports ages, it is determined that 30.8% (135 people) have been doing sports for 5 years or less, 26.7% (117 people) have been doing sports for 5-10 years, and 42.6% (187 people) have been doing sports for 10 years or more. When weekly training frequencies were examined, it was determined that 29.6% (130 people) trained 1-2 times a week, 37.4% (164 people) trained 3-4 times a week, and 33.0% (145 people) trained 5 or more times a week. When the social media usage habits of the participants were evaluated, it was found that 46.2% (203 people) used social media for 1-3 hours a day, 31.0% (136 people) used social media for 4-6 hours a day, and 28.8% (100 people) used social media for 6 hours or more. In terms of free time activities, it was seen that 59.9% (250 people) of the participants attended sports activities, and 43.1% (189 people) attended social, cultural, or artistic activities.

Table 2

Comparison of Total and Sub-Dimension Mean Scores of the Leisure Involvement Scale (LIS) According to Age

Factor	Age Group	N	X	Ss.	t	p
Attraction	<i>Below 21</i>	277	3,54	,727	-2,281	,023*
	<i>Above 21</i>	162	3,72	,870		
Centrality	<i>Below 21</i>	277	3,61	,851	-3,004	,003**
	<i>Above 21</i>	162	3,87	,931		
Social Bonding	<i>Below 21</i>	277	3,39	,801	-3,825	,000**
	<i>Above 21</i>	162	3,70	,827		
Identity Affirmation	<i>Below 21</i>	277	3,78	,812	-2,685	,009**
	<i>Above 21</i>	162	4,00	,873		
Identity-expression	<i>Below 21</i>	277	3,49	,806	-2,533	,012*
	<i>Above 21</i>	162	3,69	,807		
Scale Total Score	<i>Below 21</i>	277	3,56	,642	-3,410	,000**
	<i>Above 21</i>	162	3,80	,722		

*p<0.05 **p<0.01

When Table 2 is examined, it is seen that the total score and sub-dimensions of the Leisure Involvement Scale (LIS) were analyzed according to the age, and there were significant differences in terms of all sub-dimensions and total scores between participants ($p<0.05$). It was determined that participants above 21 had higher scores than athletes below 21 in all sub-dimensions and total score.

Table 3

Comparison of the Total and Sub-Dimension Mean Scores of the Adjective-Based Personality Test (ABPT) According to the Gender

Factor	Gender	N	X	Ss.	t	p
Extraversion	<i>Male</i>	301	4,78	,870	-1,414	,158
	<i>Female</i>	138	4,91	,878		
Agreeableness	<i>Male</i>	301	4,79	,889	-2,581	,010*
	<i>Female</i>	138	5,03	,970		
Conscientiousness	<i>Male</i>	301	5,11	,854	-1,805	,072
	<i>Female</i>	138	5,28	,979		
Neuroticism	<i>Male</i>	301	4,77	,912	-,843	,400
	<i>Female</i>	138	4,85	,976		
Openness to Experience	<i>Male</i>	301	5,63	1,052	-,124	,901
	<i>Female</i>	138	5,64	1,107		
Scale Total Score	<i>Male</i>	301	5,01	,745	-1,605	,109
	<i>Female</i>	138	5,14	,859		

*p<0.05 **p<0.01

According to Table 3, when the total score and sub-dimensions of the Adjective-Based Personality Test (ABPT) were analyzed according to the gender, it was determined that there was no significant difference between male and female participants in the sub-dimensions of Extraversion, Conscientiousness, Neuroticism and Openness to Experience and in the total score ($p>0.05$). However, it was determined that the scores of female participants were higher than male participants in the Agreeableness sub-dimension ($p<0.05$).

Table 4

Comparison of the Total and Sub-Dimension Average Scores of the Adjective-Based Personality Test (ABPT) According to the Nationality Status

Factor	National Team	N	X	Ss.	t	p
Extraversion	<i>National Athlete</i>	198	4,90	,908	1,675	,095
	<i>Non-National Athlete</i>	241	4,76	,842		
Agreeableness	<i>National Athlete</i>	198	4,93	,890	1,295	,196
	<i>Non-National Athlete</i>	241	4,81	,944		
Conscientiousness	<i>National Athlete</i>	198	5,25	,914	1,977	,049*
	<i>Non-National Athlete</i>	241	5,09	,877		
Neuroticism	<i>National Athlete</i>	198	4,81	,890	,205	,838
	<i>Non-National Athlete</i>	241	4,79	,968		
Openness to Experience	<i>National Athlete</i>	198	5,80	1,016	2,908	,004**
	<i>Non-National Athlete</i>	241	5,50	1,094		
Scale Total Score	<i>National Athlete</i>	198	5,13	,784	1,991	,047*
	<i>Non-National Athlete</i>	241	4,98	,780		

*p<0.05 **p<0.01

According to Table 4, the total score and sub-dimensions of the Adjective-Based Personality Test (ABPT) were analyzed according to the nationality of the participants. In the sub-dimensions of Extraversion, Agreeableness and Neuroticism, no significant difference was found ($p>0.05$). However, when the sub-dimensions of Responsibility and Openness to Experience, and the total score

were examined, it was seen that the scores of the athletes who were in the national team were higher than the athletes who were not in the national team ($p < 0.05$).

Table 5

Comparison of Total and Sub-Dimension Average Scores of Adjective-Based Personality Test (ABPT) According to Sports Experience

Factor	Sports Experience	N	X	Ss.	F	p
Extraversion	≤ 5 years	135	4,70	,935	1,905	,150
	Between 5-10 years	117	4,89	,778		
	≥ 10 years	187	4,87	,881		
Agreeableness	≤ 5 years	135	4,82	1,049	,312	,732
	Between 5-10 years	117	4,91	,888		
	≥ 10 years	187	4,87	,842		
Conscientiousness	≤ 5 years	135	4,99 ^a	,990	3,542	,030*
	Between 5-10 years	117	5,26 ^b	,833		
	≥ 10 years	187	5,22 ^b	,852		
Neuroticism	≤ 5 years	135	4,73	1,090	2,086	,125
	Between 5-10 years	117	4,71	,780		
	≥ 10 years	187	4,90	,890		
Openness to Experience	≤ 5 years	135	5,43 ^a	1,147	4,579	,011*
	Between 5-10 years	117	5,63 ^{ab}	1,073		
	≥ 10 years	187	5,79 ^b	,984		
Scale Total Score	≤ 5 years	135	4,93	,889	2,438	,089
	Between 5-10 years	117	5,07	,733		
	≥ 10 years	187	5,12	,726		

* $p < 0.05$ ** $p < 0.01$

According to Table 5, the total score and sub-dimensions of the Adjective-Based Personality Test (ABPT) were analyzed according to the sports experience. In terms of the sub-dimension scores of Extraversion, Agreeableness, Neuroticism and total scores, no significant difference was found between participants with 5 years or less, 5-10 years and 10 years or more sports experience ($p > 0.05$). However, in the Responsibility sub-dimension, it was determined that participants with 5-10 years and 10 years or more of sports experience had higher scores than those with 5 years or less of sports experience. Similarly, in the Openness to Experience sub-dimension, it was determined that participants with 10 years or more of sports experience had higher scores than participants with 5 years or less of sports experience.

Tablo 6

Correlation Analysis between the sub-dimensions of the Adjective-Based Personality Test (ABPT) and the Leisure Involvement Scale (LIS)

Factor		Attraction	Centrality	Social Bonding	Identity Affirmation	Identity Expression	Scale Total Score
Extraversion	r	,113	,239	,119	,232	,018	,179
	p	,017*	,000**	,012*	,000**	,706	,000**
Agreeableness	r	,057	,159	,107	,168	,057	,135
	p	,234	,001**	,026*	,000**	,237	,005**
Conscientiousness	r	,108	,246	,119	,221	,099	,196
	p	,024*	,000**	,012*	,000**	,039*	,000*
Neuroticism	r	,108	,246	,119	,221	,099	,181
	p	,024*	,000**	,012*	,000*	,039*	,000**
Openness to Experience	r	,100	,226	,130	,174	,101	,248
	p	,035*	,000**	,007**	,000**	,034*	,000**
Scale Total Score	r	,157	,284	,161	,243	,163	,225
	p	,001**	,000**	,001**	,000**	,001**	,000**
	N	439	439	439	439	439	439

*p<0.05 **p<0.01

According to Table 6, the relationships between the total and sub-dimension scores of the Adjective-Based Personality Test (ABPT) and the total and sub-dimension scores of the Leisure Involvement Scale (LIS) were examined. As a result of the analyses, low level positive significant relationships were found between the “Extraversion” sub-dimension of ABPT and the “Attraction”, “Centrality”, “Identity Affirmation”, “Social Bonding” sub-dimensions of LIS and the “Total Score” ($p<0.05$). However, no significant relationship was found between “Extraversion” and the “Identity-expression” sub-dimension of LIS. In addition, no positive or negative relationship was observed between the “Agreeableness” sub-dimension of ABPT and the “Attraction” and “Identity-expression” sub-dimensions of LIS ($p>0.05$). However, low level positive significant relationships were found between “Agreeableness” and the “Centrality”, “Social Bonding”, “Identity Affirmation” sub-dimensions of LIS and the “Total Score” ($p<0.05$). In addition, low level positive significant relationships were found between the “Responsibility” sub-dimension of ABPT and the “Attraction”, “Centrality”, “Social Bonding”, “Identity Affirmation”, “Identity-expression” sub-dimensions of ABPT and the “Total Score” ($p<0.05$). Similarly, it was found that the “Neuroticism” and “Openness to Experience” sub-dimensions of ABPT and the “ABPT Total Score” showed low level positive significant relationships with all sub-dimensions of ABPT and the “LIS Total Score” ($p<0.05$).

Discussion and Conclusion

When comparing the total and subdimension scores of the Leisure Involvement Scale (LIS) based on age, it was found that athletes over the age of 21 had significantly higher scores across all subdimensions and the total score compared to athletes under 21 ($p < 0.05$). However, no significant differences were found in the LIS total and subdimension scores when compared based on gender, sport type, national team status, type of leisure activities, sports age, number of training sessions, and frequency of social media usage ($p > 0.05$).

When reviewing the literature on leisure involvement, some studies support these findings while others conflict. In a study conducted by Kekäläinen et al. (2021), it was observed that the role of personality traits was effective in leisure time involvement during the COVID-19 outbreak. In another study, Aydın (2020) found that only the Centrality subdimension in LIS showed higher scores for male athletes compared to female athletes (Kırandi et al., 2018). Shaw et al. (1995) also found that men and women engaged in different leisure activities. This is consistent with the findings of Havitz et al. (2013) who also observed that leisure involvement varies with age. Additionally, Chang (2017) found that men had higher levels of leisure involvement than women in extreme sports, while Li et al. (2020) identified differences in certain subdimensions based on age.

The differences in leisure involvement observed in this study may be attributed to the increasing responsibilities and needs associated with aging. As people age, their workload increases, heightening the need for relaxation and recreational activities, which could explain the positive increase in leisure involvement among older individuals.

The absence of significant differences based on sports age may be explained by the diversity in the starting age of athletes in various sports, and the fact that some sports are newer in Turkey and may offer easier paths to national team status. When comparing the total and subdimension scores of the ABPT based on age, no significant differences were found ($p > 0.05$). However, in terms of gender, women scored higher than men only in the Agreeableness subdimension ($p < 0.05$). Regarding sport type, no significant differences were found in any subdimension or total score ($p > 0.05$). In terms of national team status, significant differences were found in the Responsibility and Openness to Experience subdimensions, with national team athletes scoring higher ($p < 0.05$). For the sports age variable, athletes with 5-10 years and more than 10 years of sports experience had significantly higher scores in the Responsibility and Openness to Experience subdimensions compared to athletes with 5 years or less of experience ($p < 0.05$). No significant differences were found in terms of the number of training sessions or frequency of social media usage ($p > 0.05$).

In the literature, several studies have explored the relationship between personality traits and various factors. Xia et al., (2022) examined the leisure satisfaction, personality and psychosexual adjustment of university students in their study and found significant differences. In addition, Naude et al., (2016) examined the relationship between employees' workplace expectations, personality types and leisure activities in a study on casino employees. According to the results, it was seen that employees' leisure lives and personality types have a definite effect on workplace expectations. Ulucan and Bahadır (2011) found that male weightlifters had different personality traits compared to female weightlifters, and Nas (2018) found significant differences in extraversion based on gender, but no significant differences between team and individual athletes. In a different study, Kuper et al., (2022) associated the reasons for participation in leisure activities with the personalities and well-being of individuals. The results found that personality traits are effective in individuals' leisure choices. Marchese et al. (2022) examined the personality characteristic and motivations of table tennis players and found that whether the athletes were elite or not did not affect their personality characteristic. Tunç and Kaygas (2016) found that men scored higher in extroversion among education faculty students; Demir et al. (2014) stated that gender had no effect on personality characteristic in physical education teachers. Işık (2023) showed that there was a difference between athletes and sedentary individuals, but gender was not effective. Ağduman (2018) found that there is a gender difference in winter athletes, but nationality is not effective. Schmitt et al. (2008) showed that women scored higher than men in the sub-dimensions of emotional instability, extraversion, openness to experience and agreeableness in a study with 17637 people from 55 countries (Yıldız et al., 2021).

The significant differences found in the Responsibility and Openness to Experience subdimensions based on national team status and sports age can be attributed to the greater sense of responsibility and increased openness to new experiences associated with higher levels of professionalism and international competition. Additionally, the lack of significant differences in personality scores based on sport type and age could be explained by the hereditary and environmental factors that shape personality traits, as well as the similar impacts of both individual and team sports.

Recommendation

The statistical analysis of the total and subdimension scores of the LIS and ABPT revealed generally low positive relationships. However, no significant relationships were found between ABPT Extraversion and LIS Identity-expression, or between ABPT Agreeableness and LIS Attraction and Identity-expression subdimensions. For the other subdimensions and total scores, low positive relationships were observed. The low-level relationship between personality subdimensions

and leisure involvement can be explained by the fact that personality is influenced by various factors. Additionally, leisure activities are a basic need for everyone, irrespective of personality types, which supports this finding.

Further research can be conducted to explore the relationships between personality types and leisure involvement in more depth. Future studies can examine leisure involvement in relation to psychological, social, cultural, and societal variables. This type of research can be repeated with larger sample groups for a broader understanding. Studies focusing on both individual and team sports can also assess these relationships with larger sample sizes to explore how personality traits and leisure involvement vary across different sports.

Ethics Committee Approval Information

Ethics Committee: Atatürk University Faculty of Sports Sciences Ethics Committee

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Authors' Contribution Statement

Both authors contributed equally to all stages of the research.

Conflict of Interest Statement

The author(s) declare no conflict of interest related to this research.

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