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Investigating the Effect of Coaches Communication Skills on Socialization and Satisfaction of Students Participating in Football Leisure Classes

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Abstract

The purpose of this study was investigate the effect of coaches' communication skills on socialization and satisfaction of students participating in football leisure classes. The research method was descriptive-correlational based on structural equation modelling. The Social Skills Questionnaire (Inderbitzen & Garbin, 1992), Communication Skill Questionnaire (Burton, 1990) and Satisfaction Questionnaire (Riemer & Chelladurai, 1998) were used to gathering data. The participants included all the students in the secondary school and football schools of district 7th of Mashhad (N=300). Sampling was done randomly based on 5 to 10 times the number of research items (n=159). Data analysis was performed using SPSS version 22 and LISREL 8.80. Findings showed that there was a positive and significant correlation between communication skills of coaches with the social skills of students ($p<0.05$), and the components of communication skills have the ability to predict 31% of changes of social skills. Also, there was a positive and significant correlation between communication skills of coaches and student's satisfaction ($p<0.05$), and the components of communication skills were able to predict 27% of changes of satisfaction. Finally, the structural equation model showed a good correlation between communication skills of coaches, socialization skills and satisfaction of students participating in football leisure classes.

Keywords: Communication skills, Socialization, Satisfaction, Sports leisure time.

Introduction

Undoubtedly, human life can be considered a product of a social relationship. From the moment we open our eyes to the world, we form our first social experience and face the verbal and non-verbal reactions of the people around us, moment by moment adds to the richness of this experience. Basically, human life is tied to life in society, and the necessity of social life is inextricably linked with people's lives. In fact, from the very first days of life, human beings have thought about establishing interaction with their own kind and have constantly been striving to expand this relationship (Rahnama et al., 2012). Hence, communication can be considered one of the essential elements of social and professional life and it can be mentioned as the most vital element needed by humans for interaction in the current century (Azimkhani et al., 2022; Bronk, 2013). Communication skills (also called social or interpersonal skills), are the ability of a person to communicate with other people efficiently and in order to fulfil their desires, needs, rights and obligations in an acceptable manner without violating the rights of others (Keshtkaran et al., 2012). In this regard, coaching in sports is one of the skills that is based on solid communication skills with people, and it is one of the professions that extensively requires professional and purposeful communication with athletes and team members (Mohammadi turkmani et al., 2022). Clearly the behavior of a coach, in addition to acceptance by the players; plays a significant role in the players' success. According to Holstein(2010), it can have a direct impact on the intensity, performance and satisfaction of a team. In this regard coaches can present in class to improve student by giving just-in-time feedback (Bolton, 1999) Also, it provides the required conditions for their socialization and social growth (A'arafi & Ibrahim, 2018). Satisfying people is a process that requires skill, and it is important to investigate the factors which affect the increase or decrease of this satisfaction can help sports coaches to fill the gaps that cause the dissatisfaction of athletes and help to use factors that can lead to an increase in the level of satisfaction (Saez & Stantcheva, 2016). Therefore, one of the aspects that sports coaches should pay attention to as a manager and team leaders is the satisfaction of athletes. Athlete satisfaction is defined as a positive emotional state that is achieved by evaluating the structures, processes and consequences related to sports experiences (Aoyagi et al., 2008). This evaluation is based on the difference between what the athlete's expectations and the perception of what he received. Maslow believes that satisfaction of needs not only keeps a person in the team, but also provides satisfaction (Ghorbani et al, 2019).

It is difficult to find a specific definition for socialization, and each expert has come up with a specific definition. In general, socialization is related to a balanced set of learned social skills and adaptive behaviors that enable a person to have favorable mutual relations with other people, show positive reactions and avoid behaviors that have negative consequences in society (Rajaeian & Bagherpour, 2015). In this regard, the personal development and socialization of students is a process that could happen with the help of sports exercises and with the constant work and attention of coaches during training and competitions. Therefore, the communication skills of the coaches have an impact on the personality of the players and the behavior of the teacher and coach as a role model can affect the students (Purnomo et al., 2021). The role of a teacher and coach as a role model is particularly important due to direct and continuous communication with learners. Hence, a teacher can become an incomparable role model for students by using characteristics such as openness, playing sports with them, respecting them, not blaming and punishing them, and finally by giving positive motivations (Yousefi et al., 2015). It seems that the communication skills of coaches play a significant role in the development of players' personality and can improve their social skills and satisfaction. Also, the communication skills of coaches have a reciprocal effect on the

performance of athletes, and the coach's awareness of these effects will lead to favorable results in coaching (Thelwell et al., 2017). However, it can be acknowledged that coaches with different levels of efficiency need to have good communication skills to help them to do their best. In fact, it is necessary for the coaches to be efficient and to benefit from certain skills, including communication skills, and it seems that neglecting the acquisition and application of the required skills in the personal affairs, human relations and communication with others, as well as affairs being related to the team is inevitable. In other words, without proper communication, it will not be possible to obtain information that will help coaches to make good decisions, and naturally, it is impossible to create the desired motivation and full awareness of the needs. Hence, paying attention to the dimensions of the communication skills of coaches can provide a basis for more participation of players in collective activities.

In this regard, the current research aims to explain the effect of communication skills and their role as a fundamental factor in the socialization skills and satisfaction of students in sports leisure activities. Measuring such characteristics can help teachers and coaches in planning to remove obstacles and gaps and also to strengthen students' abilities.

Material and Method

Research Model

The research method was descriptive-correlational based on structural equation modeling.

Sampling

The participants included all the students in the football schools of district 7th of Mashhad (N=300). The samples were selected randomly and based on the method of 5 to 10 times the number of the research items (n=159).

Data Collection Tools

The measurement instruments included three questionnaires of teachers' communication skills, social skills and satisfaction. The instrument for measuring the communication skills of coaches was the Communication Skills Questionnaire (Burton, 1990) which consists of 15 items and three subscales (feedback skills - listening skills - verbal skills) based on a five-point Likert scale (completely disagree =1 to completely agree =5). The reliability of the questionnaire using cronbach's alpha test was 0.80. The second instrument was the Social Skill Questionnaire (Inderbitzen and Garbin, 1992), which consists of 8 items and two subscales (desirable social behaviors and undesirable social behaviors) and based on a five-point likert scale (completely disagree =1 to completely agree =5). The reliability of the questionnaire using cronbach's alpha test was 0.81. And the third instrument was Satisfaction Questionnaire (Riemer&Chelladurai, 1998), which measures this concept by 3 items and a five-point likert scale (completely disagree =1 to completely agree =5). Also, the reliability of the questionnaire using cronbach's alpha test was 0.87.

Ethical Approval

All relevant permits were obtained from Imam Reza International University (2018.06.11/427998). All ethical standards were met.

Collection of Data

In this research, after coordinating with the managers of football schools and their coaches in 2016, the above questionnaires were given to the selected students.

Analysis of Data

In order to analyze the data, Kolmogorov-Smirnov test, Pearson test, regression test and structural equation modeling was used. Also, SPSS version 24 and LISREL 8.80 software were used to analyze the data.

Findings

In this section, first the demographic characteristics of participants are presented (Table 1).

Table 1. Demographic characteristics of participants

Variable		Frequency	Frequency percentage
Age (Year)	10 to 12	19	9.11
	13 to 15	88	5.53
	16 to 18	55	6.34
Father's job	Freelancer	103	8.64
	Employee	56	2.35
Mother's job	Housewife	127	9.79
	Employee	32	1.20
Degree of education	Seventh	4	5.2
	Eighth	18	3.11
	Ninth	53	3.33
	Tenth	46	9.28
	Eleventh	38	9.23
The amount of engaging in sports activities during the week (Hour)	Under 5	7	4.4
	6 to 10	52	7.32
	11 to 15	43	0.27
	16 to 20	36	6.22
	More than 20	21	34
Sports experience (Year)	Under 1	16	1.10
	2 to 3	34	4.21
	4 to 7	66	5.41

The results of Table 1 showed that the age group of 13-15 years had the highest number of 88 people and the age group of 10-12 years had the lowest number of 19 people. On the other hand, the sample under review in terms of educational level; The 9th grade had the highest number with 53 people and the 7th grade had the lowest number with 4 people. The results also showed that according to the amount of sports activity during the week (hours); The highest frequency was related to those who were active for 6-10 hours a week, and the lowest frequency was related to those who were physically active for less than 5 hours.

Table 2. Kolmogorov-Smirnov test of communication skills, social skills and satisfaction

	Communication skills	Social skills	Satisfaction
Z	0.39	0.47	0.61
Sig.	0.81	0.12	0.27

According to the results of Table 2, the normality of the data distribution was evaluated by the Kolmogorov-Smirnov test, and the results showed that the distribution of the variables is normal.

Also, Pearson correlation test was used to determine the relationship between the components of communication skills and social skills.

Table 3. Correlation between the components of communication skills and social skills

	Correlation coefficient	Sig.
Feedback skills and social skills	0.22	0.005
Verbal skills and social skills	0.25	0.003
Listening skills and social skills	0.34	0.001

As can be seen in Table 3, there is a positive and significant relationship between all the components of communication skills and the social skills of students ($p < 0.05$).

Table 4. Regression test of communication skills components with social skill variable

Components	B	SE	ETA	T	Sig.
Feedback skills	0.222	0.092	0.214	2.404	0.01
Verbal skills	0.119	0.261	0.044	0.048	0.01
Listening skills	0.076	0.083	0.502	1.406	<u>0.61</u>
Significance level = 0.04		Fisher = 2.773	Correlation = 0.56	Prediction coefficient = 0.31	

According to the results of Table 4, in order to predict the social skills through the components of communication skills, a regression test was used. Based on the results of table 4, 0.31 of the changes of social skills are predicted through the components of communication skills. According to the significance level, only the components of feedback skill and verbal skill had predicted the social skill.

Table 5. Correlation between the components of communication skills and satisfaction

	Correlation coefficient	Sig.
Feedback skills and satisfaction	0.15	0.04
Verbal skill and satisfaction	0.28	0.001
Listening skills and satisfaction	0.10	<u>0.17</u>

According to the results of Table 5, the relationship between the components of communication skills and students' satisfaction is presented. As can be seen in table 5, among the components of communication skills, feedback skill and verbal skill have a positive and significant relationship with students' satisfaction ($P < 0.05$). Also, there is no significant relationship between listening skill and satisfaction.

Table 6. Regression test of communication skills components with satisfaction

Components	B	SE	BETA	z	T	Sig.
Feedback skills	0.068	0.135	0.044	0.507		<u>0.61</u>
Verbal skills	-0.013	0.359	-0.010	0.064		<u>0.90</u>
Listening skills	0.112	0.121	-0.118	2.961		0.004
Sig. = 0.005		F = 4.482	Correlation = 0.51	Prediction coefficient = 0.27		

According to the results of Table 6, in order to predict satisfaction through the components of communication skills, a regression test was used. Based on the results of table 6, 0.27 of the changes of the satisfaction are predicted through the components of communication skills. According to the significance level, only the listening skill have predicted the satisfaction. Finally, using structural equation modeling, the relationship between communication skills and social skills, and communication skills and satisfaction was investigated (Figures 1 and 2).

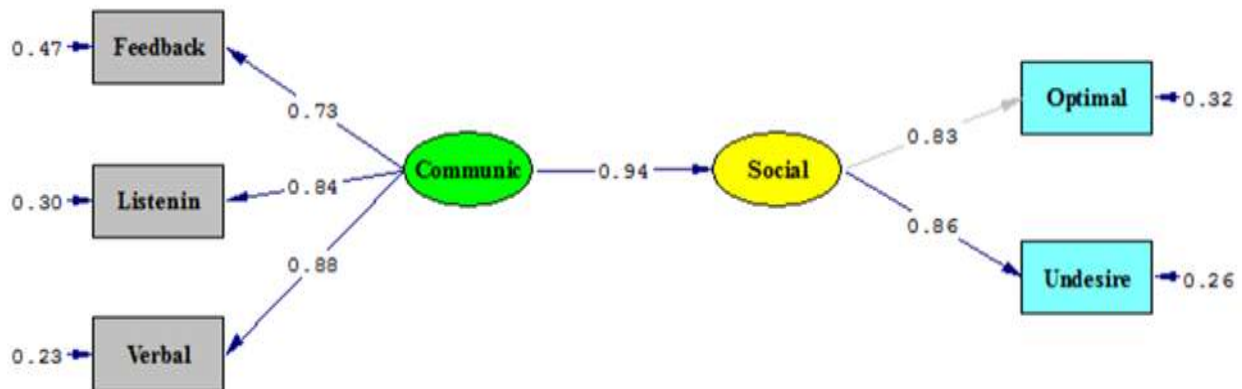


Figure 1. The Relationship between communication skills and social skills

In figure 1, the relationship between the communication skills of the coaches and the social skills of the students is investigated and all the factor loadings have acceptable values. Also, the results showed that the communication skills of coaches can have a positive and significant effect on students' social skills with a path coefficient of 0.94 (Sig=0.001, T=23.77).

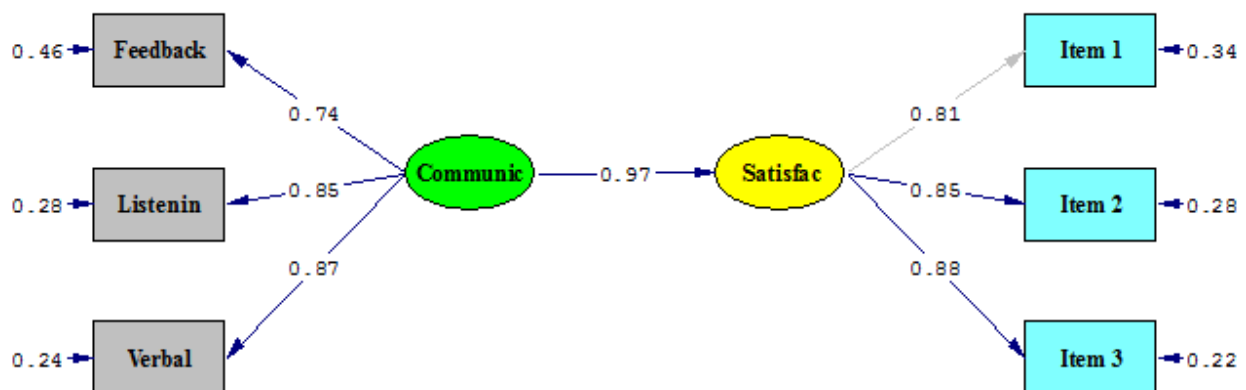


Figure 2. The Relationship between communication skills and satisfaction

In figure 2, the relationship between the communication skills of the coaches and the satisfaction of the students is investigated and all factor loadings have acceptable values. Also, the results showed that the communication skills of the coaches can have a positive and

significant effect on students' satisfaction with a path coefficient of 0.97 (Sig=0.001, T=24.44).

Discussion and Conclusion

Societies that are thinking of improving the current situation and preparing a better future for themselves, pay attention to leisure time, especially in students, and consider these people as future talents. Therefore, in order to achieve progress, it is necessary to pay attention to this generation and plan for the optimal use of their leisure time, and neglecting this issue will have many negative consequences. In this regard, one of the factors that can create rich leisure time for students is the communication skills of teachers (Sukys et al., 2019). Thus, considering the importance of coaches' communication skills in determining and channeling students' thoughts and behavior, the present research has investigated the relationship between coaches' communication skills on socialization and the satisfaction of students participating in Mashhad's football school.

One of the most positive things and a major supporting factor in success is creating a solid team and producing exemplary achievements, one of which is the communication factor. Interpersonal communication is considered a complex social process in both psychology and pedagogy. Also, a coach must have good communication skills to reduce aggressive actions that can be done at any time by the players/athletes. However, the coach's communication skills will be more effective in individual sports, and a lower level of athlete education provides the development of better communication between athletes and coaches. Currently, knowledge of the physical and cognitive aspects is essential in sports. So, it is not uncommon for sports to be associated with social issues or more complex ones. In addition to knowledge, techniques, strategies, or sports skills, coaches should also know how to teach these skills to players with communication skills (Purnomo et al., 2021)

According to the results, the students were satisfied with the experiences gained in the leisure classes, they feel happy to be in the sports environment and enjoy participating in sports activities. To and Lung(2020) believe that some social skills have a greater impact on students' satisfaction with physical activity. They believe that, despite the common belief that social behavior leads to satisfaction, it is the characteristics of age groups that require specific social activity to form satisfaction, and some simple social skills such as listening, which is also one of the variables of this research, increases the satisfaction of students, but the same issue causes less satisfaction in older age groups, and older age groups are more satisfied with planning and correct implementation of the game (To and Lung, 2020). According to the results, a positive and significant correlation was observed between the communication skills of the coaches and the socialization of the students. Sport psychologists have taken a great interest in the development of life skills through sport. Additionally, they have worked upon the factors influencing the link between sport and the development of life skills among youth. Some researchers have worked upon the development of an important life skill of self-esteem (Khan et al, 2021).

Sport is defined as physical activities performed for different purposes in the literature. In addition, it is the whole of spiritual, physical and mental activities that aim to satisfy the subconscious feelings of the human being, such as superiority and power, which are performed within the framework of certain rules, socializing, integrating and based on competition. Today, sports are becoming more and more important in terms of its place and importance in society, although it increases impact on human life. Individuals who do sports

develop in terms of physical and mental abilities. In terms of its social aspect, it is known that it strengthens the social ties between individuals and socializes the individual. In addition, sport is the most effective form of activity that enables people to prepare for life psychologically, and in this respect, it contributes to people's psycho-social and individual balance (Altun et al, 2021).

The research results of Yousefi et al., (2015), Linet al., (2020) and To and Lung (2020) also support this finding. Thus, proper planning for communication skills of coaches can help in facilitating the socialization of students. In this regard, Mohammadi et al (2018) believe that honesty is one of the factors that promote communication programs and the presence of a specific strategy in coaches' communication skills can be very effective and beneficial in facilitating communication. Also, the findings of the research showed that there is a positive and significant correlation between the communication skills of coaches and the satisfaction of students participating in sports activities. The results of Karimi et al., (2019) and Wallace (2010) support this research finding. In this regard, Fallah et al, (2010) believe that creating a sense of satisfaction from participating in sports activities is one of the main duties of coaches, and considering the results of Konter(2010), coaches can increase this satisfaction by using their authoritative power correctly. Karimi et al., (2019) believe that there is a positive relationship between the behavior perceived by athletes and satisfaction; they consider appropriate feedback as a suitable communication bridge that strengthens the relationship between coach and athlete. Nicholls et al., (2016) stated the relationship between the coach and the athlete may be the basis for the positive sports performance of the players, and on the other hand, the improve of this relationship can bring important reflections for achieving the sports results of the players. Therefore, the existence of appropriate verbal skills can be a good complement to communication skills, especially providing appropriate feedback, and the coach should pay special attention to these two skills, because these skills are related and complement each other.

It can also be concluded that considering the confirmed role of sports in increasing students' mental and physical abilities, as well as helping to reduce abnormal behaviors and facilitating the process of socialization among students, engaging in sports in leisure time is one of the best options for families. On the other hand, considering the need to communicate in the sports environment, coaches' attention to communication skills and teaching these skills at the beginning will improve the coach's leadership skills. These skills should be taught to coaches and teachers in a targeted way in coaching courses or in teacher training courses and coaches should be familiar with the functions of these skills. Considering the meaningfulness of the research model, coaches should be fully familiar with the performance indicators and know the specific skills and techniques of the sports field so that they can provide them with appropriate feedback regarding the students' performance. Also, when giving feedback, try to make the feedback a reflection of the reality of the student's performance and not involve emotions or other disturbing factors in the feedback, it is a kind of corrective feedback (Rafati et al, 2021). One of the feedback factors that educators can use to increase students' socialization is engaging one or more students in the teaching process. The coach or teacher can ask students who have higher skill levels to teach and improve the skills of weaker students. This improves the teacher's feedback and increases the communication between students, which ultimately helps the students' socialization. In addition, teachers should be well acquainted with verbal skills; verbal skills can strengthen the sense of confidence and motivation in students (Sahebdel and Asadi, 2016). A teacher can reinforce a behavior in a student with a positive sentence and can also prevent an abnormal behavior with a punitive sentence. Of course, it is worth mentioning that the coach must understand the level of

knowledge of the students well, and in communicating verbally, he/she should speak with them according to the level of understanding of the audience, avoid specialized words and convey the essence of the matter in the shortest sentences. Listening is also one of the skills that teachers should pay special attention to. It may be difficult or even impossible to pay attention to everything the students say, but the teacher can overcome this problem by establishing rules. For example, ask the students to tell their opinions to the instructor before or after the practice session. Therefore, taking into account that the population of this research is in the age group between 10 and 18 years, it can be concluded that any positive behavior and action from the teachers in the first stage in the formation of the personality and socialization process of the students can be very important. And secondly, it can make students satisfied with the sports environment, and in this way, by considering sports in one's leisure time options, it can help to improve the quality of life and promote the health culture in the society.

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Examination Of Nomophobia, Internet Addiction And Loneliness Levels Of University Students: A Cross-Sectional Study

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Abstract

The aim of this study is to examine the nomophobia, internet addiction, and loneliness levels of university students. The study group of this cross-sectional study consisted of 966 university students who responded to the items digitally and manually. Personal information form, Young Internet Addiction Scale Short Form, UCLA Loneliness Scale, and Nomophobia Scale were used as data collection tools. SPSS version 24 was used for data analysis. It was found that students who used the internet for 5 hours or more had higher scores in nomophobia and loneliness. Additionally, male students had higher scores in nomophobia and internet addiction compared to female students. Sedentary students had higher scores in nomophobia and internet addiction compared to athletes. Based on the findings of this study, it can be said that sports have positive reflections on emotions and behaviors such as nomophobia, internet addiction, and loneliness. As the duration of internet use increases, emotions and behaviors such as addiction, anger, and loneliness negatively impact individuals' experiences.

Keywords; Sport, Loneliness, Internet, Nomophobia, Addiction, University Students

Introduction

University students have to struggle with various socio-cultural problems such as accommodation, nutrition, and orientation, as well as issues related to education and training. Both students and their families form an emotional bond with their mobile phones until they get used to a new environment. Today, technological development and innovations force almost every individual to use devices such as mobile phones, tablets, computers, and digital applications. Nomophobia is defined as the irrational fear and anxiety when a person is away from their mobile phone (Yıldırım & Correia, 2015). It is reported that the first users of smartphones were university students (Lee, 2014), and they are popularly used by university students (Yıldırım, 2014). Individuals establish closeness with their phones and feel distressed when they are separated from them (Konok et al., 2016). University students have high levels of anxiety and stress and may experience psychological problems while solving these issues (Bayram & Bilgel, 2008).

Technological developments and the widespread use of smartphones affect daily life and activities (Pavithra et al., 2015). The symptoms of nomophobia include behaviors such as spending too much time with the smartphone, checking it frequently, not switching it off, sleeping with it, communicating only with it, allocating too many resources to the smartphone, and avoiding places where using the phone is prohibited (Bragazzi & Del Puente, 2014). For an individual to be addicted to something, they should consume the relevant substance more than necessary, develop tolerance to it, and show withdrawal symptoms when they cannot get enough of it (Cüceloğlu, 2005).

The number of Internet users has increased due to its features such as enhancing communication quality with visual and audio elements, enabling economic and quick communication, providing access to up-to-date information sources, and facilitating information sharing (Kuzu, 2011). Banking, access to books and magazines, social networks, communication and transportation operations, education, health, security, and especially the ability to perform many different transactions connected to the e-government application make internet applications attractive and indispensable. Over time, the need for the application may be replaced by the concept of uncontrollable use and internet addiction due to the widespread use of the internet and disinformation related to its use. Individuals can neglect their responsibilities in their daily lives due to excessive Internet use, and they can become dependent on the Internet with the deterioration and weakening of social relations (Karaca, 2019). Internet addiction is characterized as uncontrolled and harmful use (Korkmaz & Şahin, 2011). Individuals who spend time on the internet can spend their days on digital platforms for hours, only leaving for their physiological needs, often without realizing how time passes. Individuals can turn the Internet into an escape point from problems, and if they cannot access the Internet, they may become anxious, sad, and depressed (Günüç, 2009).

Loneliness is defined as an ordinary emotion that everyone can experience at different stages of life, akin to a physical hunger that draws attention to social needs (Cacioppo & Patrick, 2008). Loneliness has two dimensions: emotional and social (Weiss, 1973). Emotional loneliness causes feelings of anxiety and isolation, while social loneliness is characterized by boredom, aimlessness, and feelings of contradiction. Loneliness can be explained by different groups, approaches, and classifications in the literature. Beck and Young (1978) considered the time spent alone and mentioned three types of loneliness: transient, situational, and chronic. Transient loneliness is defined as short-term loneliness that can be felt at any time of the day and disappears when communicating with someone else. Situational loneliness is a type of loneliness that can be caused by situations that happen to the individual (such as

moving to a new city or the loss of a relative), and chronic loneliness is reported to have a structure that makes it difficult for individuals to enter social interactions, paradoxically increasing the loneliness of individuals who need social and close relationships.

Sport is a concept consisting of a combination of competitive, social, inclusive, physical, psychological, and mental activities carried out within the framework of certain conditions and rules to satisfy subconscious desires such as power and victory (Yetim, 2005). The phenomenon of sport enables the emergence of many positive emotions and behaviors such as peace, love, friendship, tolerance, and sharing, and is a powerful concept that prepares the ground for the prevention of negative habits and behaviors. Sport is defined as a special life and a special morality that affects the whole existence of people (Erdemli, 1995). Sport, which contributes to the physical and mental well-being of people, is a physiological, cultural, socio-economic, and social activity that drags people along and makes its importance felt more every day with significant investments (Silik, 2014).

In the literature, it is possible to come across studies that indicate digital addictions cause many mental and physical health problems (Adnan & Gezgin, 2016; Blachnio et al., 2019; Chen & Nath, 2016; Hazar et al., 2017; Kuss & Griffiths, 2011; Rosenberg, 2014). Our study, which aims to examine the nomophobia, internet addiction, and loneliness levels of university students, is thought to shed light on a limited number of studies.

Method

Participants

This cross-sectional study was conducted at the Faculty of Sport Sciences at Gazi University, Duzce University and Selcuk University. To ensure a diverse representation within the sample group, participants were selected using a sampling method supplemented with snowball sampling. The student-athletes reached out through convenience sampling and were asked to share the link to the scale with their student-athlete friends. The inclusion criteria included in the study were as follows: being a university student, not currently taking psychiatric medication, and not participating in psychotherapy. A total of 966 university students, 397 female and 569 male, were reached.

Data Collection

The personal information form created by the researcher was used to obtain the sociodemographic information of the students. In this form, gender, university, daily internet usage, and active sports license were asked. Young Internet Addiction Scale Short Form (YIBÖ-KF) was used for Internet addiction, Nomophobia Scale (NMP-Q) for nomophobia levels, and UCLA (University of California, Los Angeles) Loneliness Scale was used to determine loneliness levels.

Young Internet Addiction Scale Short Form (YIBÖ-KF)

The Young Internet Addiction Test-Short Form (YIAT-SF) was originally developed by Young in 1998, later shortened by Pawlikowski et al. in 2013, and its Turkish version was validated and tested for reliability by Kutlu et al. in 2016. This scale comprises 12 items and uses a five-point Likert-type format (1 = Never, 5 = Very often). The internal consistency reliability of the scale was determined to be 0.85. The findings from the validity and reliability analyses confirm that the YIAT-SF is both valid and reliable. All items are scored positively, with higher scores indicating greater levels of internet addiction. In our study, the Cronbach's Alpha reliability coefficient was found to be 0.84.

UCLA (University of California, Los Angeles) Loneliness Scale

The UCLA Loneliness Scale, originally developed by Russel et al. (1980), was adapted into Turkish and tested for validity and reliability by Demir (1989). The scale’s discriminant validity was found to be significant, with similar scales showing validity coefficients ranging from $r = .50$ to $r = .82$. Reliability assessments revealed an internal consistency coefficient of $.96$ and a test-retest reliability coefficient of $.94$. The scale is composed of 20 items, evenly divided between 10 direct and 10 reverse-scored questions. In our study, the Cronbach’s Alpha coefficient was determined to be $.88$.

Nomophobia Scale (NMP-Q)

Nomophobia Scale was developed by Yıldırım and Correia (2015) to determine the nomophobia levels of individuals. The Turkish validity and reliability study was conducted by Yıldırım et al. (2016). The scale consists of 20 items and is 6-point Likert type. Scale scores between 120 and 90 were evaluated as highly nomophobic, between 89 and 60 as moderately nomophobic, between 59 and 21 as mildly nomophobic, and 20 as non-nomophobic. Cronbach's Alpha reliability coefficient was calculated as $.95$ in the original scale and $.92$ in the adapted scale. The Cronbach Alpha reliability coefficient in our study was found to be $.93$.

Study Ethics

This study was initiated after the ethics committee permission dated 11.05.2023 and numbered 105 was obtained from Selçuk University Faculty of Sport Sciences.

Analysing the Data

SPSS version 23 was used for analysing the data. First, the scales with invalid or missing responses were excluded from the analysis. Subsequently, the kurtosis and skewness values of all scale items were assessed to ensure the normal distribution of the data, with values falling within the range of ± 2.00 for all items, as recommended by George and Mallery. Since it was observed that the data were normally distributed, Independent Sample T test was used for pairwise comparisons and One Way Anova was used for multiple comparisons. $P < 0.05$ was considered as significance value.

Linguistic revisions were conducted in collaboration with an artificial intelligence (AI) language model. The manuscript underwent automated linguistic analysis and revisions using the AI tool to ensure linguistic appropriateness. This process involved examining various linguistic aspects, including grammar and syntax, with the assistance of ChatGPT 3.5. The revisions were integrated into the manuscript to enhance its clarity and coherence.

Results

This section provides tables displaying the percentage, frequency, standard deviation, and mean values derived from the analysis results.

Table 1. Changes in nomophobia, internet addiction and loneliness level depending on gender factor

Gender	n	%	NBAAI		GUC		NBAC		LC		Total NP	
			\bar{x}	Ss	\bar{x}	Ss	\bar{x}	Ss	\bar{x}	Ss	\bar{x}	Ss
Female	397	41.10	20.57	3.68	25.87	3.90	31.06	4.33	25.98	4.00	103.48	10.07
Male	569	58.90	21.30	3.08	26.30	3.73	31.69	3.94	26.07	3.59	105.36	7.81
Total	966	100	21.00	3.35	26.13	3.80	31.43	4.11	26.03	3.76	104.59	8.85

	t		-3.215	-1.721	-2.334		-0.361		-3.126		
	p		.001*	.083	.018*		.713		.001*		
Gender	n	%	Internet Addiction				Loneliness				
			\bar{x}	Ss	t	p	\bar{x}	Ss	t	p	
Female	397	41.10	44.36	4.59				51.10	4.01		
Male	569	58.90	45.46	3.71				51.40	4.95		
Total	966	100	45.01	4.13				51.28	4.59		

* Significant difference between groups ($p < 0.05$), NBAAI: Not Being Able to Access Information, GUC: Giving Up Convenience, NBAC: Not Being Able to Communicate, LC: Losing Connectedness, NP: Nomophobia

It was determined that the value of men was higher than women in nomophobia dimensions depending on the gender factor, and the Not Being Able to Access Information (NBAAI), Not Being Able to Communicate (NBAC) and total nomophobia scores was statistically significant ($p < 0.05$). It was determined that the internet addiction value of males was statistically higher than the value of females, and there was no statistical change in loneliness values depending on gender (refer to Table 1).

Table 2. Changes in nomophobia, internet addiction and loneliness level depending on daily internet usage factor

Daily Internet Usage (H)	n	%	NBAAI		GUC		NBAC		LC		Total NP	
			\bar{x}	Ss	\bar{x}	Ss	\bar{x}	Ss	\bar{x}	Ss	\bar{x}	Ss
1-2 H	418	43.27	20.61	3.42 ^a	26.21	3.79	31.49	4.04	26.10	3.80	104.41 ^b	8.66
3-4 H	393	40.68	21.08	3.28 ^b	25.76	3.76 ^a	31.24	4.06	25.96	3.63	104.04 ^b	8.62
5 and +	155	16.05	21.85	3.19 ^b	26.83	3.87 ^b	31.75	4.44	26.03	3.99	106.46 ^a	9.71
F			8.076		4.538		.966		.138		4.360	
p			.000*		.011*		.381		.871		.013*	
Daily Internet Usage	n	%	Internet Addiction				Loneliness					
			\bar{x}	Ss	f	p	\bar{x}	Ss	f	p		
1-2 H	418	43.27	44.95	4.24				50.96	4.04 ^b			
3-4 H	393	40.68	44.91	4.01				50.87	4.21 ^b			
5 and +	155	16.05	45.43	4.14				53.16	6.20 ^a	16.079	.000*	

* Significant difference between groups ($p < 0.05$) ^{a,b} = Source of difference. NBAAI: Not Being Able to Access Information, GUC: Giving Up Convenience, NBAC: Not Being Able to Communicate, LC: Losing Connectedness, NP: Nomophobia

While no statistical change was observed in the NBAC and Losing Connectedness (LC) on the daily internet usage, it was determined that the change in NBAAI, Giving Up Convenience (GUC) and total nomophobia values was statistically significant ($p < 0.05$). While no statistical change was observed between internet addiction values depending on daily internet use, it was determined that the value of students with internet habits of 5 hours or more in loneliness levels had a statistically higher mean value than students who used the internet for 1-2 and 3-4 hours ($p < 0.05$).

Table 3. Changes in nomophobia, internet addiction and loneliness level depending on sporting status factor

Sporting Status	n	%	NBAAI		GUC		NBAC		LC		Total NP		
			\bar{x}	Ss	\bar{x}	Ss	\bar{x}	Ss	\bar{x}	Ss	\bar{x}	Ss	
Athletes	451	46.69	20.73	3.61	25.98	4.18	31.38	4.44	25.86	3.89	103.96	10.28	
Sedentary	515	53.31	21.23	3.10	26.25	3.44	31.47	3.81	26.18	3.63	105.14	7.35	
			t		-2.272		-1.114		-.345		-1.315		-2.034
			p		.022*		.260		.728		.187		.038*

Sporting Status	n	%	Internet Addiction				Loneliness				
			\bar{x}	Ss	t	p	\bar{x}	Ss	t	p	
Athletes	451	46.69	44.60	4.42				51.05	4.16		
Sedentary	515	53.31	45.36	3.82				51.47	4.94		
					-2.838	.004*				-1.415	.153

*Significant difference between groups (p<0.05), NBAAI: Not Being Able to Access Information, GUC: Giving Up Convenience, NBAC: Not Being Able to Communicate, LC: Losing Connectedness, NP: Nomophobia

After observing Table 3, it was determined that the values in the nomophobia dimensions of the students who do sports are lower than those who do not do sports, and the change in NBAAI and total nomophobia values is statistically significant (p<0.05). While no statistical change was observed between the internet addiction values depending on the status of doing sports, it was determined that the loneliness value of the athlete students was statistically lower than the value of the non-sporting students (p<0.05).

Table 4. Changes in nomophobia level between men and women due to sporting status

Sporting Status	n	%	NBAAI		GUC		NBAC		LC		Total NP		
			\bar{x}	Ss	\bar{x}	Ss	\bar{x}	Ss	\bar{x}	Ss	\bar{x}	Ss	
Female Athletes	183	46.10	20.10	4.13	25.59	4.35	30.84	4.84	25,38	4,19	101,90	12,44	
Female Sedentary	214	53,90	20,98	3,18	26,11	3,46	31,24	3,85	26,50	3,76	104,83	7,22	
			t		-2,344		-1,309		-.917		-2,778		-2,803
			p		.017*		.184		.351		.005*		.004*
Male Athletes	268	47.10	21.17	3.13	26.24	4.05	31.75	4.12	26.19	3.65	105.36	8.22	
Male Sedentary	301	52.90	21.41	3.04	26.36	3.43	31.64	3.78	25.96	3.53	105.36	7.44	
			t		-.928		-.357		.348		.775		-.006
			p		.353		.719		.727		.438		.995

* Significant difference between groups ($p < 0.05$). NBAAI: Not Being Able to Access Information, GUC: Giving Up Convenience, NBAC: Not Being Able to Communicate, LC: Losing Connectedness, NP: Nomophobia

As can be seen in Table 4, while no statistical change was observed in the nomophobia values of athlete and non-athlete male students, it was determined that the nomophobia values of non-athlete female students were higher than athlete females, and the change in the NBAAI, LC and total nomophobia was statistically significant ($p < 0.05$).

Table 5. Changes in internet addiction and loneliness level among men and women due to sporting status

Sporting Status	n	%	Internet Addiction				Loneliness			
			\bar{x}	Ss	t	p	\bar{x}	Ss	t	p
FemaleAthletes	183	46.10	43.90	5.15	-1.834	.062	51.46	3.95	1.672	.095
FemaleSedentary	214	53.90	44.76	4.01			50.79	4.05		
Male Athletes	268	47.10	45.09	3.78	-2.274	.023*	50.78	4.28	-2.863	.004*
Male Sedentary	301	52.90	45.79	3.62			51.96	5.43		

* Significant difference between groups ($p < 0.05$),

As can be seen in Table 5, while no statistical change was observed in the internet addiction and loneliness values of athlete and non-athlete female students, it was determined that the internet addiction and loneliness values of non-athlete male students were higher than athlete males and this change was statistically significant ($p < 0.05$).

Discussion and Conclusion

It was determined that the values of men in nomophobia dimensions were higher than the values of women, and the change in the dimensions of not being able to access information (NBAAI), not being able to communicate (NBAC), and total nomophobia values was statistically significant ($p < 0.05$; Table 1). When the relevant literature is examined, it is seen that although there are studies reporting that nomophobia does not differ depending on the gender variable (Erdem et al., 2016; Roberts et al., 2014), there are more studies reporting differences (Billieux et al., 2015; Çakır Özgöz, 2020; Çırak, 2021; Ercan & Tekin, 2019; Jena, 2015; Jood, 2017; Kıvrak, 2021; Kwon et al., 2013; Öz, 2018; Polat, 2017; Taştan, 2020; Yaman et al., 2019; Yildirim & Correia, 2015; Yoğurtçu, 2018) and these studies are in parallel with the findings of our study. In our study, the reason for the high nomophobia value of men being higher than the value of women can be seen as the tendency of men to use mobile devices more intensively. However, the statistical change in the dimensions of not being able to access information and losing communication and in the general nomophobia values is an indication of the critical role of mobile devices as communication tools and that they facilitate people's access to information.

It was also found that the internet addiction value of males was statistically higher than that of females ($p < 0.05$; Table 1). When the relevant literature is examined, it is seen that while there are studies showing that the internet addiction value of women is higher than the value of men (Bal, 2023; Cengiz, 2020; Hoşgör & Hoşgör, 2019; Şener, 2022), the studies in which the internet addiction values of men are higher (Adiele & Olatokun, 2014; Akdağ et al., 2014; Aslan & Yazıcı, 2016; Aycan & Üzüm, 2020; Can & Tozoğlu, 2019; Chou & Hsiao, 2000; Chou et al., 2005; Hotar et al., 2022; Johansson & Götestam, 2004; Mahmoud et al., 2022;

Morahan-Martin & Schumacher, 2000; Servidio, 2014; Taştan, 2020; Üzgü et al., 2023; Yoo et al., 2004) and these studies are in parallel with the findings of our study. Within the framework of gender-based femininity and masculinity values, it is known that male students mostly prefer technological products and sports equipment, while women mainly buy clothing, cosmetics, and household goods (Karahana & Adak, 2019). This may mean that men may increase their online interactions and thus the risk of internet addiction. In addition, the popularity of competitive and game-oriented online activities among men (Griffiths et al., 2012; Toker & Baturay, 2016) may also explain the high levels of internet addiction. In terms of sociocultural structure, there are some duties and responsibilities imposed on women by society and the area where women are placed in terms of the function of these responsibilities is the home and family (Elçi, 2011). The fact that women have lower levels of internet addiction can be explained by the fact that they have to fulfill these duties and responsibilities.

There was no statistical change in loneliness values depending on gender (Table 1). When the related literature is examined, it is seen that there are studies in which there is a significant difference between genders in loneliness values (Cramer & Neyedley, 1998; Yılmaz et al., 2018), while many studies in which no significant difference between genders is observed (Altın, 2019; Çeçen, 2008; Çubuk, 2022; Kozaklı, 2006; Oruç, 2013; Serdar et al., 2018; Tunç & Günay, 2020; Üzgü et al., 2023; Uzuner & Karagün, 2014; Yazıcılar Özçelik et al., 2015; Yöyen, 2017). The reason why the value of loneliness in our study did not differ between genders can be seen as the fact that today's technological development and changes have brought the gender-related roles and status between men and women closer to each other.

Those with an internet usage time of 5 hours or more had higher scores in nomophobia and internet addiction depending on the duration of use than those with a low phone usage time; this change in NBAAI, giving up convenience (GUC), and total nomophobia dimensions was statistically significant ($p < 0.05$; Table 2). When the relevant literature is examined, it is seen that studies showing that individuals with high internet usage time have high nomophobia and internet addiction scores (Akdağ et al., 2014; Al-Mamun et al., 2023; Aslan & Yazıcı, 2016; Balcı & Gülnar, 2009; Büyükçolpan, 2019; Can & Tozoğlu, 2019; Cengiz, 2020; Çiftçi, 2018; Gezgin et al., 2018; Helvacıoğlu, 2022; Karaca, 2017; Köyünü et al., 2022; Kutlu et al., 2016; Naser et al., 2023; Öztürk, 2022; Vagka et al., 2023; Yılmazsoy & Kahraman, 2017). In his research on university students, Çiftçi (2018) reported that students mostly access social media from their smartphones. These results are important in terms of overlapping with the findings of our research.

In the loneliness values, it was determined that the value of the students with 5 hours or more of internet usage time had a statistically higher mean value than the students with 1-2 and 3-4 hours of usage time ($p < 0.05$; Table 2). The literature shows that loneliness levels increase with the increase in smartphone and internet use (Andrea & Lovašová, 2020; Arpacı, 2020; Asghari, 2018; Aktaş & Yılmaz, 2017; Batıgün & Hasta, 2010; Çakır & Oğuz, 2017; Çelebi et al., 2020; Demir & Buğa, 2019; Gülaçtı, 2020; Hayırcı, 2019; Mert & Özdemir, 2018; Wang et al., 2011). These studies support our findings in this respect. Individuals with high nomophobia value have characteristics such as checking the smartphone frequently, feeling discomfort when away from the phone, getting stressed when they cannot find their phone, and sleeping with the smartphone (Bragazzi & Puente, 2014). It is thought that the fact that nomophobic individuals see their phones almost as an extension of themselves and prefer to be in places where there is constant internet access will negatively affect their loneliness levels.

It was determined that the nomophobia and internet addiction scores of non-sporting students were higher than those of sporting students, and the change in NBAAI, total nomophobia, and internet addiction scores was statistically significant ($p < 0.05$; Table 3). Aycan and Üzüm (2020) examined the internet addiction levels of high school students and found that the internet addiction levels of students who do not do sports are higher than those of students who do sports. Can and Tozoğlu (2019) examined the internet addiction levels of university students and found that the internet addiction scores of those who do not do sports are higher than those who do sports. In another study conducted by Kautiainen et al. (2005), it was reported that physical activity decreased smartphone use. Torlak et al. (2022) reported that there was a negative relationship between physical activity levels of university students and nomophobia scores, and that students with high physical activity levels may have low nomophobia levels. It is seen that the findings of these studies support the results of our study. It is thought that meeting more people and having the opportunity to share the same social environment, interpersonal communication, being included in a group, recognizing oneself and realizing one's limitations, experiencing and learning emotions such as winning and losing, and gaining skills such as self-expression and gaining self-confidence (Yıldız & Çetin, 2018) may positively affect the over-commitment to the internet and nomophobia levels, and the time allocated to sports may also shorten the time allocated to digital devices.

The loneliness scores of students who did not do sports were higher than those who did sports, but this change was not statistically significant (Table 3). Şara et al. (2018), in their study on university students, found that the loneliness levels of students who do not do sports are higher than those who do sports, but this change is not statistically significant. Toktaş and Demir (2021) examined the loneliness levels of university students and reported that there was no significant difference in the loneliness levels of students who did and did not exercise regularly. Yazıcılar Özçelik et al. (2015) reported that there was no significant difference between the loneliness levels of students who do sports and those who do not do sports. It is seen that the results of these studies support our findings. The fact that the difference in loneliness values was not statistically significant can be explained by the fact that factors such as age, social environment, and emotional states of the students who do not do sports can be effective on loneliness. In addition, frequent training of athletes may also affect their loneliness levels, as a matter of fact, in studies investigating the relationship between exercise frequency and loneliness level, it was concluded that exercise frequency positively affected loneliness values (Hopman-Rock & Westhoff, 2002; Page & Tucker, 1994).

The nomophobia scores of athlete women were higher than non-sporting women, and the change in NBAAI, losing connectedness (LC), and total nomophobia dimensions was statistically significant ($p < 0.05$; Table 4). Social media platforms are seen as a medium where individuals present their lives perfectly and this puts people under pressure. The desire to constantly receive positive feedback and likes on social platforms and the desire of athletes to show their ideal body image associated with sports on these platforms may increase the commitment to phones. In addition, the use of smartphones for training tracking and diet planning for athletes may increase the commitment of sportswomen to their phones. Taştan (2020), in his study on Internet Addiction and Nomophobia Levels of University Students who do and do not do sports, reported that there is a statistical change in internet addiction levels depending on the type of sport and the type of sport. Torlak et al. (2022) reported that the relationship between physical activity and nomophobia risk was higher in female students than in male students. In our study, no statistical difference was observed between the nomophobia scores of men who did and did not do sports (Table 4). Although it is thought that the time allocated to sportive activities will limit excessive phone use, it should not be

ignored that the intensity, duration, and frequency of these activities will affect this situation, and that the smartphone may be with and in use by the athlete during the activities.

No significant difference was observed in internet addiction and loneliness levels between female athletes and non-athletes (Table 5). Şara et al. (2018), in their study on university students, found that there was no difference between the loneliness and internet addiction levels of students who do and do not do sports. Toktaş and Demir (2021), in their study examining the loneliness levels of university students, reported that there was no significant difference in the loneliness levels of students who exercise regularly and those who do not exercise regularly. Yazıcılar Özçelik et al. (2015) examined the loneliness levels of university students and found that there was no significant difference between the loneliness levels of female students who do and do not do sports. It is seen that these studies support our findings. It is known that sport has positive effects on psychological health and provides psychological well-being to individuals. Therefore, doing sport has the potential to reduce individuals' loneliness levels and the risk of internet addiction. However, these effects may not be directly dependent on the factor of playing sport; that is, they may be insufficient to explain the difference between women who are athletes and women who are not athletes. In future studies, it may be recommended to conduct studies that examine the effect of sport on loneliness and internet addiction in more depth by using larger and more diverse sample groups.

The internet addiction and loneliness scores of male students who did not do sports were higher than male students who did sports and this difference was statistically significant ($p < 0.05$; Table 5). Can and Tozoğlu (2019) examined the internet addiction levels of university students in terms of sports and different variables and found that the internet addiction scores of students who do not do sports are higher than athletes. Yazıcılar Özçelik et al. (2015), in their study on university students, found that the loneliness scores of male students who do not do sports are higher than those who do sports. The findings of Can and Tozoğlu (2019) and Yazıcılar Özçelik et al. (2015) overlap with the findings of our study in this respect. It can be said that individuals who do sports can meet more people, find the opportunity to share the same social environment and thus increase their interpersonal communication skills (Yıldız & Çetin, 2018), which can reduce the loneliness levels of athletes and reduce the time they spend on the internet.

Lastly, it can be said that sport has a positive reflection on emotions and behaviors such as nomophobia, internet addiction, and loneliness, and as the duration of phone use increases, emotions and behaviors such as addiction, anger, and loneliness are reflected negatively on the experiences of individuals.

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Investigation of Volleyball Players' Metaphorical Perceptions Regarding the 2023 Kahramanmaraş Centered Earthquakes in Turkey: The Sultan's League Example

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Abstract

This research aims to examine the metaphorical perceptions of Turkish players in the Turkish Sultans League regarding the 2023 Kahramanmaraş-centered earthquakes. The study group of the research consists of 40 players. The method of the research is the phenomenology pattern, one of the qualitative research method patterns. Participants said, "An earthquake is like.....". "Because" research data were collected according to their answers. The collected data were analyzed by inductive content analysis. As a result of the research, it was found that the participants produced 16 different metaphors regarding the concept of "earthquake". Metaphors are grouped under 4 categories according to their common features and reasons for use. Categories; They are named "Religion", "Sociology", "Psychology" and "Philosophy". It was concluded that the participants mostly produced the metaphors of apocalypse (f=7), nightmare (f=6), unexpected accident (f=4), helplessness (f=4) and death (f=14). It is thought that the data obtained will help in planning disaster education studies by the level of players and thus in organizing disaster education studies to be given to players effectively. In addition, learning the volleyball players' perspectives on the earthquake phenomenon is important for the authorities in terms of knowing their reasons for making sense of the world. It is also expected that the research will be an example and a pioneer for similar studies.

Keywords: Earthquake Perception, Phenomenology, Metaphor, Volleyball, Volleyball Players.

Introduction

Disaster is an event that leaves local resources inadequate, require surgent assistance at a global level, is unpredictable and often develops suddenly, and causes great damage, destruction and human suffering (Hoyois et al., 2007). Disasters such as earthquakes, floods, landslides, volcanic ructions and storms that occur in nature harm people and societies. (Zhou et al., 2018). While humans try to influence the natural environment with the help of technology, they are also influenced by the natural environment. One of the biggest problems that humans face in the natural environment is natural disasters.

Among natural disasters, earthquakes cause the most damage to people and societies. (Rij, 2016). Earthquakes are a natural disaster that should be evaluated not only as the movement of the earth, but also in the context of human relations with space (Afacan & I. Afacan, 2023). The inability to predict the earthquake precisely, the feeling of helplessness experienced during the earthquake, and the problems encountered after the earthquake have negative effects on people.

The geography of Anatolia has a geological structure that is fragmented by fault fractures (Şahin & Sipahioğlu, 2002). In Turkey, depending on the density of fault lines, the earthquake risk is higher in residential areas located on the Northern Anatolia, Western Anatolia and Eastern Anatolia fault lines (Özkul & Karaman, 2007). For this reason, Turkey is a country that is always in danger of earthquakes. Frequent earthquakes are proof of this situation. Among the natural disasters in Turkey, earthquakes are the natural event that causes the most loss of life and property (Afad, 2018). For example, on the Eastern Anatolian fault line, 1513 Pazarcık, 1822 Maras, 1866 Karliova, 1872 Antakya, 1874 Gezin, 1875 Sivrice, 1893 Malatya-Celikhan, 1905 Pütürge, 1964 Malatya, 1965 Karliova, 1966 Varto, 1968 Bingöl-Elazığ, 1971 Bingöl, Natural events such as the 1971 Lice, 1977 Palu, 1986 Malatya Sliders, 1998 Karliova, 2003 Bingöl earthquakes have occurred (İmamoğlu & Çetin, 2007). Public earthquake anxiety has also increased due to the loss of life and property in these earthquakes.

Kahramanmaraş centered earthquakes

Earthquakes occurred in Turkey on February 6, 2023, with the epicenter in Pazarcık and Elbistan town of Kahramanmaraş. This earthquake consists of two consecutive earthquakes, nine hours apart. First, there was a 7.7 magnitude earthquake that lasted 65 seconds at 04:17. Then, at 13:27, there was another earthquake with a magnitude of 7.6 that lasted 45 seconds. In addition to Kahramanmaraş, Gaziantep, Şanlıurfa, Adıyaman, Malatya, Elazığ, Diyarbakır, Kilis, Adana and Hatay provinces were negatively affected by these earthquakes. Among these provinces, the province with the most damage was Hatay. This earthquake took its place in history because there was no other earthquake that affected such a wide area in the history of the Republic of Turkey and Anatolia. For the earthquakes centered in Kahramanmaraş, large organizations were organized in Turkey and around the world, and international rescue efforts were carried out. The World Health Organization evaluated these earthquakes as a "level three emergency". The Republic of Turkey introduced a level four alert, an alert level that includes international assistance, and declared a state of emergency in the region affected by the earthquakes for three months. 13.5 million people living in an area of approximately 110,000 square kilometers were damaged by the earthquakes around 50,000 people died. Around 385 buildings were destroyed and around 150 thousand people were evacuated from the earthquake area. The material damage is estimated to be over 100 billion dollars. After these earthquakes, according to the data announced by the Ministry of Culture and Tourism of the Republic of Turkey, a total of 47 tourism facilities collapsed in the region, including 21 Ministry buildings and 26 municipal buildings.

Since earthquake is a natural disaster that negatively affects people and societies, it deeply affects human consciousness both when it occurs and afterwards. The occurrence of an earthquake and the stress it causes cannot be completely eliminated. However, by providing earthquake training, people can be provided with the knowledge and skills necessary to recognize the structure of the earth's crust, to be informed about the formation of earthquakes, and to minimize the damages that may occur after the earthquake (Öcal, 2005). For example, according to a study investigating earthquake perception in Turkish sports newspapers, the comments of celebrities and authorities that constitute the content values of the newspapers were examined. According to this study, the fears experienced by sports people who experienced the 2023 Kahramanmaraş-centered earthquakes, the names of those who lost their lives and property, and their psychosocial conditions are remarkable (Afacan & I. Afacan, 2023). According to a study investigating the earthquake knowledge and sustainable earthquake awareness levels of students of the Faculty of Sports Sciences, it was determined that male participants had higher levels of knowledge about the durability of buildings such as homes and schools where they live and how to behave in times of danger than female participants (Budak & Kandil, 2023). In this context, considering that the majority of the female volleyball players participating in the study, 70%, have an undergraduate education level, the importance of conducting research that will address the connections of female athletes to earthquakes and the reasons for these connections becomes evident. Perceptions about earthquakes can be changed in a positive way thanks to the earthquake training given under the title of disaster education. In this regard, disaster education activities of clubs, as well as schools, should come to the fore. Therefore, it is necessary to examine the earthquake-related knowledge levels, perceptions and opinions of players in clubs, just like students in schools.

When the literature was examined, no study was found on the earthquake perception of volleyball players. One of the ways to examine the earthquake perceptions of players who can have an impact on society is through metaphors. Metaphors are one of the mental tools that shape and control the individual's thinking structures and thoughts for the formation of concepts (Hogler et al., 2008). Thanks to these mental tools, the individual reconciles concepts and objects (Arslan & Bayrakçı, 2006). In this respect, metaphors are mental designs that allow individuals to express their thoughts more easily (Shaw & Mahlios, 2011). Therefore, in this study, the perceptions of Turkish women volleyball players playing in the Turkish Sultans League regarding the earthquake were tried to be determined with the help of metaphors.

As a result, investigating players' metaphorical perceptions about earthquakes can help in planning processes related to earthquake training for players. Because if earthquake training studies are organized in accordance with the perception levels of the players, the efficiency of these studies can be increased. Accordingly, it is expected that the data obtained from this and similar studies will contribute to making earthquake education studies more efficient by organizing them in accordance with the perception patterns of players. In addition, investigating the metaphorical perceptions of players regarding earthquakes contains important clues for the authorities in terms of learning their emotional states and getting to know their inner world in the face of such natural disasters.

In this regard, answers were sought to the sub-problems given below.

1. What are the metaphors of Turkish volleyball players about the earthquake?
2. Under which categories can the metaphors of Turkish volleyball players related to the concept of earthquakes be conceptualized in the context of common features?

Materials and Method

Research Model

Phenomenology pattern, a qualitative research method, was used in this research examining the metaphorical perceptions of Turkish volleyball players playing in the Sultans League regarding the 2023 Kahramanmaraş Centered Earthquakes. Phenomenology pattern is a pattern used to investigate phenomena that are not known in depth (Creswell, 2007). In this pattern, it is tried to interpret there search phenomenon from the perspectives of the person or people who will reflect the phenomenon (Patton, 2002). The study has obtained permission from Aydın Adnan Menderes University Rectorate Social and Humanities Research Ethics Committee (2023/31906847/050.04.04-08.291).

Participants

Turkish women volleyball players who played in various teams in the Sultans League in the 2023-2024 season constitute the limitations of the research. Participants were selected according to the maximum variation sampling method from the purposive sampling method. In the maximum diversity sampling method, there is an idea to conduct research on similar individuals in itself (Büyüköztürk et al., 2016). In this context, volunteer Turkish volleyball players who did not vary in terms of gender and league level were included in the study. The demographic characteristics of the 40 participants in the study are shown in Table 1.

Table 1. Demographic information for participants

Variables	Demographic features	F	%
Age	18-22	10	25,00
	23-27	13	32,50
	28-32	9	22,50
	33-35	8	20,00
Education status	High School	12	30,00
	University	28	70,00
Marital status	Single	35	87,50
	Married	5	12,50
Position played	Setter	6	15,00
	Middle Player	11	27,50
	Spiker	9	22,50
	Setter's Cross	8	20,00
	Libero	6	15,00

When table 1 is examined, it is seen that the age distribution of the participants is balanced. In this balance, the 23-27 age range ranks first with 32.50%. When we look at the graduation status, the number of players who are undergraduate graduates (70%) is higher. Considering the information regarding marital status, the majority of the participants are single with 87.50%. Inters of the positions played by the participants, middle players (27.50%) come first.

Data Collection

In the study, Turkish volleyball players' metaphors regarding earthquakes were collected using an open-ended survey form consisting of two parts. In the first part, questions were asked regarding the personal information of the participants. In the second part, the participants were asked to make the analogy "An earthquake is like" in order to reveal their metaphors about earthquakes. And then, "Because," it is expected that they will make a statement starting with. Here, the aim was to reveal the relationship between the

metaphor and its source with the expression "like" and to explain the reason for the analogy with the expression "because" (Tok, 2018). Before implementation, a sample study was conducted with volleyball players on the concept of "earthquake". Then, the application was started and volleyball players were asked to fillout the survey form.

Data Analysis

In this study, inductive content analysis was used in the analysis of the data. The data collected in the content analysis is organized and presented in categories (Yıldırım & Şimşek, 2011). This type of presentation; This includes sifting and numbering, coding, conducting validity and reliability studies, and interpreting the data. In this research, the data was analyzed through similar stages.

Sifting and Enumerating Findings: At this stage, it was examined whether the answers given were suitable for the purpose of the research. It was decided that the answers of the 40 participants in the study were suitable for the purpose of the research. In this context, the answer papers of the participants were evaluated and the numbers P1, P2, P3, ..., P40 were given to the 40 answer papers.

Coding Findings: At this stage, the metaphors that were decided to be evaluated were numbered starting from one. As a result of this process, four different codes were determined: sociology, psychology, religion and philosophy. The codes and metaphors determined by the researchers were listed and the frequency values of each metaphor were written.

To Provide Reliability with Validity: In the study, credibility, transferability, consistency and confirmability strategies were used for validity and reliability (Shenton, 2004). For credibility, the survey form developed by the researchers was presented to two professionals. Inline with Professional opinions, it was decided to use the concept of earthquake in metaphor form. Purposive sampling method was used in the study for transfer ability. For consistency, the data obtained were evaluated by two researchers, first separately and then together. As a result of all these studies, categories and codes were determined.

Interpreting the Findings: In the data analysis, volleyball players' earthquake-related metaphors were categorized and their justified expressions were stated. These metaphors and their categories were interpreted by presenting them in figures and tables.

Findings

Volleyball Players' Metaphors Regarding the Concept of "Earthquake"

It was found that the volleyball players participating in the research produced a total of 15 metaphors regarding the concept of "earthquake". The metaphors produced and the frequency values of the metaphors are shown in Table 2.

Table 2. Metaphors produced by participants for the concept of earthquake

Metapfor	F
Apocalypse	7
Nightmare	6
An Unexpected Accident	4
Despair	4
Death	4
Enlightenment	3
The Destruction of Dreams	2
Heartache	2
Darkness	2

Horror Movie	1
An End	1
Education System	1
Our Future	1
Graveyard	1
Staying in Need	1
TOTAL	40

In Table 2, the metaphors produced by volleyball players regarding the earthquake are arranged according to their frequency of use. It was found that the most used metaphors of the participants were apocalypse (f=7), nightmare (f=6), an unexpected accident (f=4), despair (f=4), death (f=4) and enlightenment (f=3).

Categorization of Metaphors Related to the Concept of Earthquake

The 15 metaphors produced by volleyball players about earthquakes were grouped under four categories in terms of their common features and reasons for use. Categories and subcategories are given in Figure 1.

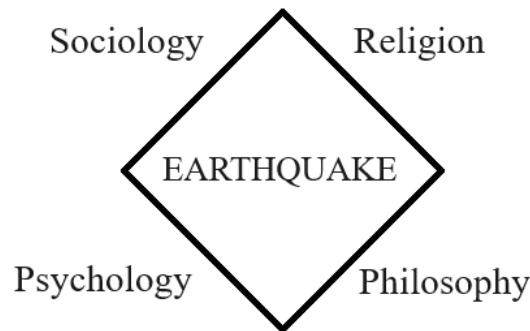


Figure 1. Subcategories of earthquake metaphors

In Figure 1, it is seen that the metaphors produced by volleyball players related to the earthquake consist of four categories as “Religion”, “Sociology”, “Psychology” and “Philosophy”. Metaphors and explanation examples in these categories were presented in tables.

Metaphors and explanation examples belonging to the “Religion” category of volleyball players are given in Table 3.

Table 3. Volleyball players' metaphors and explanation examples belonging to the “Religion” category

Category	Metaphor	Description Examples
Religion	Death	It makes one feel coldness and fear (P11)
	Apocalypse	The horror rate is very high (P28)
	Graveyard	Buildings collapse when the foundation is not strong (P18)

When the participants' explanations are examined, it is seen that they explain the earthquake by comparing it to some basic concepts of religion.

Volleyball players' metaphors and explanation examples belonging to the "Philosophy" category are given in Table 4.

Table 4. Volleyball players' metaphors and explanation examples belonging to the "Philosophy" category

Category	Metaphor	Description Examples
Philosophy	Enlightenment	Reminds you of what you have and the value of every moment (P4)
	An end	You think everything is over and coming to an end (P24)
	Our Future	There is no telling when evil will come (P31)

In Table 4, there are 3 metaphors under the "Philosophy" category. When the participants' statements are examined, it is seen that the earthquake gave a new and different perspective from a philosophical perspective.

Volleyball players' metaphors and explanation examples belonging to the "Sociology" category are given in Table 5.

Table 5. Volleyball players' metaphors and explanation examples belonging to the "Sociology" category

Category	Metaphor	Description Examples
Sociology	Education system	Without a solid foundation, our future will collapse (P35)
	Needy of Others	Suddenly being in need of others (P14)
	Unexpected Accident	Everyone is unprepared and has not taken precautions (P40)

In Table 5, there are 3 metaphors under the "Sociology" category. When the participants' statements are examined, it is seen that the earthquake is sociologically linked to the words education, others and everyone.

Volleyball players' metaphors and explanation examples belonging to the "Psychology" category are given in Table 6.

Table 6. Volleyball players' metaphors and explanation examples belonging to the "Psychology" category

Category	Metaphor	Description Examples
Psychology	Despair	There is nothing to be done to buildings during an earthquake (P7)
	Nightmare	A bad dream that lasts for a long time (P10)
	Horror movie	At the end of the scenario, everything ends badly (P34)
	The Destruction of Dreams	Disappearance of plans and thoughts (P9)
	Darkness	Without light you don't know where to go (P38)
	Heartache	It hurts the heart when others die like this (P17)

Table 6 includes 6 metaphors under the "Psychology" category. When these statements of the participants are examined, it is seen that the earthquake is a phenomenon that creates psychological anxiety, concern and fear.

Discussion

Based on the findings of this study, which was conducted to determine the metaphorical perceptions of female volleyball players playing in the Sultans League regarding the earthquakes centered in Kahramanmaraş in Turkey in 2023, the following conclusions were reached.

As a result of the research, it was concluded that the players produced 15 different metaphors. Metaphors were grouped under four categories according to their common features and reasons for use. These categories are; Religion, Philosophy, Sociology and Psychology. The most repeated metaphors by the players were; It was concluded that they were metaphors of apocalypse, nightmare, an unexpected accident, helplessness and death. According to these results, it is seen as an important result that volleyball players' earthquake-related metaphors include the negative and destructive aspects of the earthquake. Since there is no research investigating athletes' earthquake perceptions in Turkey, the destructive and negative aspects of volleyball players' earthquake-related metaphors revealed in the research need to be compared with other fields. For example, the studies conducted by Aksoy (2013), Karakuş (2013) and Değirmenci (2019) on earthquake metaphors of students in Turkey are similar to the study in which students revealed the negative and destructive aspects of earthquakes. Because players are also students in the field of sports, this type of comparison can be considered correct. In another study investigating the earthquake perception of religious officials in Turkey, it was determined that some religious officials evaluated earthquakes as a divine punishment or warning by taking the example of destroyed tribes as a reference from the Quran (Batır & İnce, 2023). This situation is also similar to the study. It is normal for athletes and religious officials to emphasize the destructive and negative aspects of the earthquake in a similar way because they live in Turkey and are raised with the same cultural values. According to a study investigating the post-earthquake success motivation levels of professional athletes after the Kahramanmaraş earthquakes, athletes' motivation to approach success can be used as a source of motivation to overcome the effects of the earthquake event and return to normal life (Özkan et al., 2023). Another study conducted on Turkish Cypriot athletes who lost their lives in the earthquakes centered in Kahramanmaraş showed that news about the earthquake was generally followed on social media, that instant and eyewitness posts gained importance, and that trust in the mainstream media regarding accurate reporting was low (Öze, 2024). According to another study concerning the negative and destructive aspects of the earthquake on people, it has been found that recreational sports performed after the disaster help residents of devastated areas to cope with stress after the disaster and to develop a sense of belonging to a place, to cope with stress after the disaster (Thorpe, 2015). Volleyball players participating in the research produced 3 metaphors in the religion category. In this category, earthquakes are likened to frightening concepts such as "death, apocalypse and graveyard". It is possible to assess this situation as a connection has been established with people's feelings of helplessness, fear, and anxiety during and after the earthquake. At the same time, people receive constant support from God, thinking that God is always with them during disasters such as earthquakes that make them feel helpless. The fear and anxiety felt by a person who constantly thinks about God with herself / himself will decrease, and she will complain less about the helpless situation she finds herself / himself in. Research also supports this idea (Pargament, 1996). Research has shown that 45% of people try to overcome the problem by performing some religious behaviors during stress fultimes, and 78% of people turn to religious values in the face of a negative situation such as illness, death, orearthquake (Thompson & Vardaman, 1997). For example, in a study, it was determined that the importance given to religion by parents who lost their baby in an earthquake supported the parents and at the same time made it easier for them to make sense of the baby's death (McIntosh et al., 1993). Another example is a study investigating religious services during the February 6 Kahramanmaraş Earthquakes. According to this study, it was observed that the spiritual counseling and guidance process after the earthquake progressed as a consolation process in which asking how people were doing, chatting, reading the Quran, and praying were prominent (İnce, Temiz & Erdinç, 2023). Accordingto a study, 82% of those who

experienced the Marmara earthquake in Turkey on August 17, 1999, stated that it was as if the end of civilization as we know it (Kula, 2000). In this context, it seems meaningful that volleyball players also explain the earthquake with the concept of apocalypse.

Volleyball players participating in the research produced 3 metaphors in the philosophy category. In this category, earthquakes were likened to cognitively based concepts such as “enlightenment, an end, and a future.” The intellectual content of the concepts expressed in this category can be interpreted as the fact that for volleyball players, the earthquake caused people to start questioning their existence after a great fear and anxiety.

People need to be enlightened about natural disasters that seriously affect people, such as earthquakes. On the contrary, many people, especially in developed or developing countries, are unaware and uninformed about such situations (Thomas et al., 1999). However, the earthquake that occurred in Lisbon in 1755 and caused the death of thousands of people went far beyond being a natural disaster and the real earthquake took place in thoughts. For example, Voltaire wrote his “Poem on the Lisbon Disaster”, full of pessimism and unhappiness, a few weeks after the disaster (Voltaire, 2020). In this poem, Voltaire questioned existence due to the Lisbon earthquake.

J.J. Rousseau wrote a letter to Voltaire in 1756 after reading his "Poem on the Lisbon Disaster". In this letter, he discussed the evil that came with the earthquake by removing God from the event. He suggested that the source of the physical evil and pain caused by the earthquake was man's own actions. And he explained the severe consequences of the disaster by unregulated urbanization and the poverty of the people (Roosbroeck, 1923). Based on the Lisbon earthquake, Immanuel Kant explains the relationship between natural events and the power of God with the view that God has no influence on the necessary laws of nature. In his work titled "The Only Possible Argument in Support of a Demonstration of the Existence of God", Kant stated that an earthquake is only a natural event and that metaphysical inferences should not be made based on the phenomenon. In this process, Kant especially tested the validity of the rationalist tradition's proofs of God and tried to determine what the method of metaphysics should be (Gardner, 2003). Therefore, the earthquake phenomenon brings up discussions about the enlightenment of people about the future, the end of this world, and the perfection of God throughout human history.

Volleyball players participating in the research produced 3 metaphors in the sociology category. In this category, earthquakes are expressed with socially based concepts such as “education system, being in need of others and unexpected accident”. An earthquake can be likened to a system created by people, such as education. This situation can be explained by comparing it to social situations such as being dependent on others after an earthquake or experiencing an unexpected accident due to someone else's mistake. A study conducted in Japan can be given as an example of comparing an earthquake to a system created by people, such as education. According to this research, sports managers about the usage system of sports facilities after the earthquake; They stated that after the disaster, sports facilities should be used for emergency response, emergency action, emergency shelter and should be built to serve in this direction (Amano, 2012). Despite the earthquakes in China before the Beijing 2008 Summer Olympic Games, 31 competition and 43 training sports facilities were built earthquake-resistant. In particular, the construction of the Beijing National Stadium was designed so that its primary structure would remain elastic in the event of a severe earthquake. In addition to earthquake safety, the use of sports facilities after other natural disasters has also been planned (Subramanian, 2008). Therefore, in addition to post-earthquake usage

strategies of sports facilities, their technical planning before their construction is also important. This situation is also linked to the quality of the education system.

Volleyball players participating in the research produced 6 metaphors in the Psychology category. In this category, earthquakes were based on emotion-based concepts such as “helplessness, nightmare, horromovie, destruction of dreams, darkness and heart ache”. The reason why there are more metaphors in this category than others is that an explosion of emotions occurs when a major natural disaster such as an earthquake suddenly occurs. According to a study, the psychological effects of disasters can be seen more severely in special groups such as children, women and the elderly (Makwana, 2019). Therefore, natural disasters such as earthquakes, due to their devastating effects, cause various mood disorders such as post-traumatic stress disorder, anxiety, phobias, and depression in survivors (Alipour & Ahmadi, 2020). Especially in the first few days of the disaster, a temporary emotional shock may be experienced due to the problems that may occur. Feelings of fear, anger, guilt, shame, helplessness and hopelessness may be felt, or one may remain motionless without feeling anything due to the effect of shock (Hodgkinson & Stewart, 1991).

Psychosocial support practices are frequently used to reduce the traumatic effects of earthquakes (Xu & She, 2012). It is estimated that while providing these trainings, the players should be prepared according to their perception level and thus the trainings will be more effective and permanent. In addition, this research data can enable people who have influence and authority about athletes to comprehensively evaluate their feelings and thoughts about the earthquake. Because Turkey is an earthquake country and training on natural disasters should be given to athletes by their clubs. It is estimated that while providing this education, the players should be prepared according to their perception level and thus the education will be more effective and permanent. For example, according to the results of a study conducted on students of the Faculty of Sports Sciences, it was understood that most undergraduate students were aware of the effects and consequences of earthquakes, but university education was not sufficient during the preparation phase of the earthquake (Budak & Kandil, 2023). The fact that a large majority of the female volleyball players participating in this study, 70%, had an undergraduate education also supports the importance of earthquake education for athletes.

With this study, metaphors were determined by which female volleyball players playing in the Turkish Sultans League could Express their thoughts and feelings about the 2023 Kahramanmaraş-centered earthquakes. Thus, the perception levels related to the earthquake were determined. With this data obtained, disaster education studies to be carried out in sports clubs can be planned according to the athlete level.

There are no studies in the literature regarding Turkish volleyball players. The majority of people in developing countries are unaware and uninformed about earthquakes and other natural disasters (Thomas et al., 1999). Therefore, since Turkey is also a developing country, there are no studies in the literature regarding Turkish volleyball players. This creates an expectation that the research will be an example and a pioneer for similar studies.

Conclusion

This research, which aims to examine volleyball players' metaphorical perceptions of earthquakes, is the first research on the subject conducted in Turkey. Therefore, it has some limitations. First of all, this study is limited to 40 female athletes playing volleyball in the Sultans League in Turkey. Secondly, this study is related to the earthquakes centered in Kahramanmaraş in 2023. Therefore, research should continue on the sporting dimensions of a natural disaster such as an earthquake that negatively affects people and societies and is

always likely to happen. Therefore, this study can be an example for similar studies to be conducted in the future. Because earthquake is an important phenomenon not only for volleyball players but also for athletes in all sports branches, earthquake perceptions of other athletes should also be determined. In the direction of these perceptions, earthquake-related training in sports environments will be more conscious. Studies to be conducted with male athletes as well as female athletes can provide more detailed information about their earthquake perceptions. In addition to all these, similar studies to be conducted in other countries may provide the opportunity to make comparisons between countries and cultures.

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The Relationship of Alexithymia, Decision Making and Psychological Well-Being with Participation in Recreational Activities

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Abstract

The aim of this study is to examine the relationship between alexithymia, decision making and psychological well-being with individuals' participation in recreational activities. The data used in the study were obtained from a total of 307 individuals who constituted the research group on the principle of volunteerism. The research group was formed on the basis of convenience sampling method. The research was conducted in the survey model. The data used in the study were obtained through Personal Information Form, Toronto Alexithymia Scale, Melbourne Decision Making Scale and Psychological Well-Being Scale. The internal consistency of the responses obtained within the scope of the research was determined by Cronbach's coefficient. All analyses were conducted using the SPSS program. According to the findings it was determined that psychological well-being and careful decision-making style scores differed in favor of individuals who participated in recreational activities, gender and income level were not determinative in terms of the characteristics discussed, and single individuals who did not participate in recreational activities had significantly higher alexithymia scores. On the other hand, it was found, alexithymia had an inverse relationship with self-esteem in decision making, careful decision making and psychological well-being, and psychological well-being had a linear relationship with self-esteem in decision making and careful decision making. As a result, it can be said that participation in recreational activities may positively affect the level of careful decision-making tendency and psychological well-being.

Keywords: Alexithymia, Decision making, Psychological well-being, Recreation

Introduction

The fact that people are aware of their emotions does not always mean that they can express their emotions verbally, and some people or at sometimes people may have problems in expressing their emotions even if they are aware of them. This low level of emotional awareness or difficulty in expressing emotions can negatively affect people's relationships and social interactions with others. These conditions are defined as alexithymia (Way et al. 2007).

Alexithymia is expressed as the difficulty in recognizing emotions and transferring what is felt to the other person and contrary to the perception, it can be seen not only in sick individuals but also in healthy individuals (Koçak, 2003). This situation makes research on alexithymia important. It is known that alexithymia individuals have problems and feel bad because they cannot express their feelings and make sense of their emotions (Muzafferoglu, 2019). These conditions negatively affect people's lives in many areas. It is thought that one of these issues may be decision-making behaviors.

Human life is organized based on decision making. The decision on what to do constitutes the basis of how one's life will continue. This basis makes it important to determine the factors that may be effective on decision making. People differ from each other in terms of dominant decision-making styles. In people, careful decision-making style, which has a tendency to make a decision by considering all possibilities, evaluating alternatives and possible outcomes before making a decision; avoidant decision-making style, which prefers to put the responsibility on others because they will have to take responsibility when they make a decision; procrastinatory decision-making style, which tends to postpone the decision-making action as much as possible without the need for any reason, or hasty decision-making style, which tends to make quick decisions without thinking properly due to the time pressure they feel (Deniz, 2004).

In the literature, there is evidence that individual differences influence decision-making behaviors and alexithymia negatively affects decision-making styles (Bestepe, 2020). These conditions make the relationship between alexithymia and decision making remarkable.

On the other hand, when the literature is examined, there are studies reporting that psychological well-being, which is defined by Ryff (1989) as having the power to strive to establish a balance between life concerns and individual and social interests, is also related to decision-making (Uslu, 2016). It is reported that there is a high-level positive relationship between psychological well-being (Simsek, 2022), which means being aware of one's own limits, having a positive mood by understanding these limits, accepting life conditions and coping with these conditions, and decision-making styles (Uslu, 2016). In addition, it is reported that people with low levels of alexithymia have higher psychological well-being scores than people with high levels of alexithymia (Muzafferoglu, 2019). In this context, in addition to alexithymia, psychological well-being is a concept that should be taken into consideration in research on decision making.

In this study, it was aimed to examine the relationship between alexithymia, decision-making and psychological well-being with participation in recreational activities. It is known that regular physical activities positively affect alexithymia and decision-making styles (Bestepe, 2020). In addition, as psychological well-being levels increase, alexithymia levels decrease. In this context, it is said that feeling psychologically well is an important factor in expressing one's feelings and thoughts (Cobanoglu & Oguzhan, 2023). However, when the relevant literature was examined, it was determined that the evidence for the effect of regular recreational activities on concepts such as alexithymia, decision making, and psychological

well-being was insufficient. Accordingly, this study aims to examine the relationship between alexithymia, decision-making and psychological well-being with individuals' participation in recreational activities. Because recreation, which generally defines all activities that individuals voluntarily undertake in their free time depending on their personal tastes (Nagle, 2005), is becoming a remarkable concept in line with the changing needs and increasing free time of individuals in today's modern societies.

In general, individuals participate in recreational activities (Kılbas, 2001), which are defined as activities in which individuals participate individually or as a group to obtain physical, social and emotional attitudes as well as being happy in a free time period, without feeling any obligation, and the sense of satisfaction they obtain through activities contributes to the physical and spiritual development of individuals (Simsek, 2023). Based on past research results, it is known that recreational activities can be seen as a therapeutic escape from daily pressures and negative effects. It is stated that even just a walking activity can relax individuals physically and mentally, although it does not completely solve a big problem (Tomprowski, 1984). It is stated that recreational activities have an important effect on the development of psychological well-being and efficiently reduce psychological pressures (Shad et al., 2017).

Material and Method

Research Model

It is descriptive research conducted in the survey model aiming to examine the relationship between alexithymia, decision making and psychological well-being with participation in recreational activities.

Data Collection Tools

Toronto Alexithymia Scale: The scale developed by Bagby et al. (1994) and adapted into Turkish by Gulec et al. (2009) consists of twenty questions, three subscales and has a five-point Likert-type assessment. The subscale of difficulty in recognizing emotions consists of seven items, the subscale of difficulty in verbalizing emotions consists of five items, and the subscale of expressive thinking consists of eight items.

Melbourne Decision Making Scale: The scale developed by Mann et al. (1998) and adapted into Turkish by Deniz (2004) consists of two parts. The first part aims to determine the level of self-esteem (self-confidence) in decision making. It is a one-dimensional structure consisting of six items in total. The second part consists of twenty-two items and four decision-making styles aiming to determine dominant decision-making styles. These are careful decision making, avoidant decision making, procrastinatory decision making, panic decision making style. The scale has a triple likert type evaluation.

Psychological Well-Being Scale: The scale developed by Diener et al. (2009) and adapted into Turkish by Telef (2013) consists of eight items. The scale has a seven-point Likert-type evaluation.

Research and Publication Ethics

The research was conducted in accordance with the permission dated 20.05.2024 and numbered 05-714 given by the Ethics Committee Coordination Office of Ankara Yıldırım Beyazıt University Rectorate.

Study Group

The study group consisted of 307 participants, 144 (46.9%) of whom participated in recreational activities and 163 (53.1%) of whom did not participate in recreational activities. Among the participants who participated in recreational activities, 88 (61.1%) were female and 56 (38.9%) were male. Among the participants who did not participate in recreational activities, 98 (60.1%) were female and 65 (39.9%) were male. Detailed descriptive information about the study group is given in Table 1.

Table 1. Descriptive information about the study group

Participated in Recreational Activities n=144			
Description	Variable	n	%
Gender	Female	88	61.1
	Male	56	38.9
Marital Status	Single	121	84.0
	Married	23	16.0
Monthly Income Status	My income is less than my expenditure	42	29.2
	My income equals my expenditure	66	45.8
	My income exceeds my expenditure	36	25.0
Licensed Sports Background	Yes	73	50.7
	No	71	49.3
Weekly Leisure Time	1-3 hours	15	10.4
	4-6 hours	55	38.2
	7-9 hours	26	18.1
	10 hours and above	48	33.3
History of Participation in Recreational Activities	Less than 1 year	48	33.3
	1-2 year	24	16.7
	More than 2 years	72	50.0
Frequency of Participation in Recreational Activities	1 per week	50	34.7
	2-3 times a week	61	42.4
	4 or more per week	33	22.9
Not Participating in Recreational Activities n=163			
Description	Variable	n	%
Gender	Female	98	60.1
	Male	65	39.9
Marital Status	Single	121	74.2
	Married	42	25.8
Monthly Income Status	My income is less than my expenditure	48	29.4
	My income equals my expenses	77	47.2
	My income exceeds my expenditure	38	23.3
Licensed Sports Background	Yes	49	30.1
	No	114	69.9
Weekly Leisure Time	1-3 hours	26	16.0
	4-6 hours	50	30.7
	7-9 hours	43	26.4
	10 hours and above	44	27.0

Analyzing the Data

Firstly, the internal consistency of the responses obtained within the scope of the research was determined by Cronbach Alpha coefficient ($C\alpha$). After it was determined that the responses could be used in the analyses, graphs, skewness and kurtosis values were examined to evaluate the distribution of the responses and it was evaluated that the data showed normal

distribution. In order to express the data used in the study and the characteristics of the study group, mean, frequency and percentage values were presented (Table 2). The dominant decision-making style (careful decision-making) of the study group was determined. For statistical comparisons, independent groups t-test and one-way variance analysis were performed, and Pearson correlation coefficient was calculated. All analyses were performed using the SPSS 22 programmed, subject to a significance level of " $p < .05$ ".

Table 2. Some descriptive information about the responses

Participated in Recreational Activities n=144					
Dimension	Mean	Sd	Skewness	Kurtosis	Cra
Alexithymia	2.47	.479	.098	-.176	.799
Psychological Well-Being	5.63	.937	-1.22	1.89	.863
Decision Making Self-Esteem	1.48	.399	-.642	.401	.731
Vigilance	1.62	.353	-.727	-.617	.716
Buck Passing	.731	.471	.642	-.313	.777
Procrastination	.804	.506	.371	-.485	.765
Hypervigilance	.801	.504	.358	-.227	.778

Not Participating in Recreational Activities n=163					
Dimension	Mean	Sd	Skewness	Kurtosis	Cra
Alexithymia	2.56	.527	.295	-.163	.813
Psychological Well-Being	5.28	1.05	-.818	.389	.872
Decision Making Self-Esteem	1.46	.426	-.559	-.668	.732
Vigilance	1.53	.416	-.741	-.075	.792
Buck Passing	.701	.462	.561	.081	.780
Procrastination	.811	.484	.190	-.691	.722
Hypervigilance	.811	.496	.306	-.501	.750

Study Group n=307					
Dimension	Mean	Sd	Skewness	Kurtosis	Cra
Alexithymia	2.52	.506	.237	-.117	.807
Psychological Well-Being	5.45	1.01	-.987	.866	.872
Decision Making Self-Esteem	1.47	.413	-.598	-.479	.758
Vigilance	1.57	.390	-.781	-.097	.766
Buck Passing	.715	.466	.598	-.120	.778
Procrastination	.808	.493	.235	-.596	.741
Hypervigilance	.806	.499	.329	-.383	.739

Findings

Table 3. Comparison results in terms of participation in recreational activities

Dimension	Recreational Activities	n	Mean	Sd	t	p
Alexithymia	Participant	144	2.47	.480	-1.43	.153
	Non-participant	163	2.56	.527		
Psychological Well-Being	Participant	144	5.64	.938	3.13	.002*
	Non-participant	163	5.28	1.05		
Decision Making Self-Esteem	Participant	144	1.48	.399	.592	.554
	Non-participant	163	1.46	.427		
Vigilant Decision-Making Style	Participant	144	1.62	.353	2.08	.039
	Non-participant	163	1.53	.416		

*p<.01

Table 3 shows the t-test results for the comparison of the participants in terms of their participation in recreational activities. When the test results are analyzed, it is seen that the psychological well-being scores of individuals who participate in recreational activities (Mean=5.64, Sd=.938) are significantly higher than those of individuals who do not participate (Mean=5.28, Sd=1.05). On the other hand, it was determined that the individuals who participated and did not participate in recreational activities differed significantly in terms of the careful decision-making style, which is the dominant decision-making style of the study group. According to the results obtained, it was determined that individuals who participated in recreational activities (Mean=1.62, Sd=.353) had higher careful decision-making style scores compared to individuals who did not participate (Mean=1.53, Sd=.416).

Table 4. Comparison results in terms of gender

Participated in Recreational Activities n=144						
Dimension	Gender	n	Mean	Sd	t	p
Alexithymia	Female	88	2.45	.486	-.699	.486
	Male	56	2.51	.471		
Psychological Well-Being	Female	88	5.63	.936	-.049	.961
	Male	56	5.64	.948		
Decision Making Self-Esteem	Female	88	1.45	.404	-1.15	.250
	Male	56	1.53	.390		
Vigilant Decision-Making Style	Female	88	1.63	.363	.459	.647
	Male	56	1.60	.338		
Not Participating in Recreational Activities n=163						
Dimension	Gender	n	Mean	Sd	t	p
Alexithymia	Female	98	2.53	.554	-.708	.480
	Male	65	2.59	.483		
Psychological Well-Being	Female	98	5.37	.972	1.32	.186
	Male	65	5.14	1.15		
Decision Making Self-Esteem	Female	98	1.44	.441	-.491	.624
	Male	65	1.48	.405		
Vigilant Decision-Making Style	Female	98	1.56	.423	1.18	.237
	Male	65	1.48	.403		

Table 4 shows the t-test results for the comparison of the participants in terms of gender variable. When the test results are examined, it is seen that individuals who participate in recreational activities and those who do not participate in recreational activities do not differ in terms of the characteristics discussed in terms of gender variable.

Table 5. Comparison results in terms of marital status variable

Participated in Recreational Activities n=144						
Dimension	Marital Status	n	Mean	Sd	t	p
Alexithymia	Single	121	2.49	.487	1.05	.297
	Married	23	2.38	.437		
Psychological Well-Being	Single	121	5.61	.909	-.825	.416
	Married	23	5.80	1.08		
Decision Making Self-Esteem	Single	121	1.46	.403	-1.55	.131
	Married	23	1.59	.362		
Vigilant Decision-Making Style	Single	121	1.62	.363	-.356	.724

Dimension	Marital Status	n	Mean	Sd	t	p
	Married	23	1.64	.298		
Not Participating in Recreational Activities n=163						
Dimension	Marital Status	n	Mean	Sd	t	p
Alexithymia	Single	121	2.60	.551	2.26	.026*
	Married	42	2.42	.425		
Psychological Well-Being	Single	121	5.28	1.08	.047	.963
	Married	42	5.28	.950		
Decision Making Self-Esteem	Single	121	1.47	.429	.433	.666
	Married	42	1.43	.425		
Vigilant Decision-Making Style	Single	121	1.51	.431	-1.08	.283
	Married	42	1.59	.370		

*p<0.05

Table 5 shows the t-test results for the comparison of the participants in terms of marital status variable. When the test results are examined, it is seen that the individuals who participate in recreational activities in terms of marital status variable do not differ in terms of the characteristics discussed, and the alexithymia scores of single individuals (Mean=2.60, Sd=.551) are higher than married individuals (Mean=2.42, Sd=.425) in individuals who do not participate in recreational activities.

Table 6. Comparison results in terms of income levels

Participated in Recreational Activities n=144						
Dimension	Income Level	n	Mean	Sd	F	p
Alexithymia	My income is less than my expenditure	42	2.53	.458	.430	.651
	My income equals my expenses	66	2.46	.501		
	My income exceeds my expenditure	36	2.44	.471		
Psychological Well-Being	My income is less than my expenditure	42	5.42	1.07	1.720	.183
	My income equals my expenses	66	5.76	.759		
	My income exceeds my expenditure	36	5.67	1.03		
Decision Making Self-Esteem	My income is less than my expenditure	42	1.47	.377	.749	.475
	My income equals my expenses	66	1.52	.388		
	My income exceeds my expenditure	36	1.42	.444		
Vigilant Decision-Making Style	My income is less than my expenditure	42	1.65	.315	.132	.876
	My income equals my expenses	66	1.61	.349		
	My income exceeds my expenditure	36	1.62	.407		
Not Participating in Recreational Activities n=163						
Dimension	Income Level	n	Mean	Sd	F	p
Alexithymia	My income is less than my expenditure	48	2.60	.5234	.504	.605
	My income equals my expenses	77	2.51	.534		
	My income exceeds my expenditure	38	2.59	.523		
Psychological Well-Being	My income is less than my expenditure	48	5.27	.924	.015	.985
	My income equals my expenses	77	5.28	1.08		
	My income exceeds my expenditure	38	5.31	1.16		
Decision Making Self-Esteem	My income is less than my expenditure	48	2.60	.423	.414	.662
	My income equals my expenses	77	2.51	.429		
	My income exceeds my expenditure	38	2.59	.431		
Vigilant Decision-Making Style	My income is less than my expenditure	48	1.53	.472	.009	.991
	My income equals my expenses	77	1.53	.409		
	My income exceeds my expenditure	38	1.54	.364		

In Table 6, the results of one-way variance analysis for the comparison of the participants in terms of income level variable are given. When the results of the analysis are examined, it is seen that the individuals who participate in recreational activities and those who do not participate in recreational activities do not differ in terms of the characteristics discussed in terms of income level variable.

Tablo 7. Correlation analysis results for the relationship

Participated in Recreational Activities n=144			
	Pearson	Alexithymia	Psychological Well-Being
Decision Making Self-Esteem	r	-.465**	.346**
	p	<.001	<.001
Vigilant Decision-Making Style	r	-.332**	.309**
	p	<.001	<.001
Alexithymia	r	1	-.397**
	p		<.001
Not Participating in Recreational Activities n=163			
	Pearson	Alexithymia	Psychological Well-Being
Decision Making Self-Esteem	r	-.368**	.442**
	p	<.001	<.001
Vigilant Decision-Making Style	r	-.168*	.222**
	p	.032	.004
Alexithymia	r	1	-.384**
	p		<.001

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

Table 7 shows the results of the correlation analysis conducted to examine the relationship between the characteristics considered within the scope of the research. When the results of the analyses are examined, it is seen that there is a weak negative correlation between the level of self-esteem in decision making and alexithymia in individuals participating in recreational activities ($r = -.465$), a weak positive correlation between the level of self-esteem in decision making and psychological well-being ($r = .346$), between careful decision-making style and alexithymia at a negative weak level ($r = -.332$), between careful decision-making style and psychological well-being at a positive weak level ($r = .309$), and between alexithymia and psychological well-being at a negative weak level ($r = -.397$).

In individuals who do not engage in recreational activities, there is a negative weak level ($r = -.368$) between the level of self-esteem in decision making and alexithymia, a positive weak level ($r = .442$) between the level of self-esteem in decision making and psychological well-being, a negative weak level ($r = -.168$), there was a statistically significant relationship between careful decision-making style and psychological well-being at a positive weak level ($r = .222$), and there was a statistically significant relationship between alexithymia and psychological well-being at a negative weak level ($r = -.384$).

Discussion and Conclusion

In this study, the relationship between alexithymia, decision making and psychological well-being with individuals' participation in recreational activities was examined. In addition, the relationships of some variables with alexithymia, decision making, and psychological well-being were investigated. In this context, firstly, alexithymia, decision-making and psychological well-being levels were compared according to the variable of participation in recreational activities. According to the results obtained, it was determined that the

participants did not differ in terms of alexithymia and decision-making self-esteem levels according to their participation in recreational activities. In addition, it was determined that the participants' careful decision-making and psychological well-being levels differed significantly in favor of those who participated in recreational activities. Cakto and Akin (2022), who reached different results with the results obtained when the literature was examined, reported that the careful decision scores did not differ significantly according to the variable of doing sports. On the other hand, Nas and Temel (2019) observed that there was a significant difference in the careful decision-making style of coaches according to the variable of doing sports. The fact that the difference in question was in favor of the coaches who do sports, it was concluded that sport is important in decision-making. Yavuz and İlhan (2023) reported that according to the data obtained from university students in their study, a significant difference was observed between the psychological well-being levels of university students who do and do not do sports in favor of those who do sports. Tapsın et al. (2024) concluded that the psychological well-being scores of parents who do sports are significantly higher than those who do not do sports. Basar and Sari (2018) determined that the group who exercised regularly had significantly higher psychological well-being scores than the participants who did not exercise regularly. In the study conducted by Colakoglu and Kural (2022), when the scores of mountaineers from the sub-dimensions of self-esteem and decision-making styles in decision-making were examined; it was determined that the self-esteem of mountaineers in decision-making was above the middle level and their careful decision-making styles were high. It was reported that mountaineers make the necessary preliminary research before deciding at the decision-making stage and make a choice after carefully evaluating the alternatives; in other words, they make careful decisions instead of avoiding decision-making. In addition, Tukel (2020) found that coaches have high self-esteem and careful decision-making styles in decision-making. DiBartolo and Shaffer (2002) found that the psychological well-being scores of athletes were higher than those of non-athletes. Granero-Jiménez et al. (2022) reported that physical activity is directly related to individuals' psychological well-being. When the literature is evaluated holistically, it can be said that it supports our results and regular exercise, sports or recreational activities have positive effects on psychological well-being and decision-making.

Afterwards, alexithymia, decision making, and psychological well-being levels were compared in terms of gender variable. In the results obtained, it was determined that individuals who participated and did not participate in recreational activities in terms of gender variable did not differ in terms of the characteristics discussed. Acici and Cebi (2020) found that there was no significant difference in self-esteem and decision-making styles in volleyball referees' decision-making according to gender variable. Turkcapar and Sabraliyeva (2022) concluded that gender variable is not a determining factor in decision-making levels. On the other hand, unlike the findings obtained, Senel et al. (2023) obtained results that self-esteem scores in decision-making were higher in males than females and panic decision-making scores were higher in females than males according to gender variable. On the other hand, Salleh and Mustaffa (2016), who reached results in parallel with the results obtained, reported that the psychological well-being levels of female and male participants did not differ. The results of Avsar and Guzel Gurbuz (2024) also indicate that the psychological well-being of nature sports participants does not differ in terms of gender variable. Temel and Ulas (2023) also obtained results that the level of psychological well-being did not differ according to the gender of the athletes. Unlike our study findings, İmirlıoğlu et al. (2021) determined that the psychological well-being levels of female participants were higher than male participants. Like the alexithymia results obtained, Parker et al. (1989) determined that alexithymia was not related to gender. Unal (2004) concluded that there was no relationship

between gender and alexithymia scores in his study conducted with university students. Harms and Barley (2023) also obtained results that alexithymia levels did not differ according to gender. Although limited in number, there are also findings such as Mattila et al. (2006) that alexithymia levels differ in terms of gender. In this context, it is thought that the differences obtained are due to the differences in gender roles and socio-cultural structures of the study groups.

Within the scope of the research, alexithymia, decision making, and psychological well-being levels were also compared in terms of marital status. As a result, it was determined that individuals who participated in recreational activities in terms of marital status variable did not differ in terms of the characteristics discussed, and in individuals who did not participate in recreational activities, single people had higher alexithymia scores compared to married people. Bestepe (2020) determined that alexithymia levels of police officers differed significantly according to marital status variable. It was determined that the alexithymia levels of married police officers were lower than single police officers. Kalaman et al. (2019) reported that alexithymia levels differed significantly according to marital status variable, and alexithymia levels of single individuals were higher than married individuals. Unlike the results obtained, Manfredi and Gambarini (2015) reported that alexithymia levels did not differ according to marital status. In their study, Yerebatan and Mungan Ay (2019) found that self-esteem in decision-making and careful decision-making style scores of basketball referees did not differ statistically significantly according to marital status variable. Unlike the findings obtained, Bestepe (2020) determined that decision-making styles differed significantly according to marital status. He reported that careful decision-making scores differed statistically significantly according to marital status. He reported that the careful decision-making style scores of married people were higher than single people. In one of the studies in parallel with the psychological well-being results obtained, Dündar and Demirli (2018) determined that the psychological well-being scores of the participants did not differ significantly according to marital status. However, Abdel Aziz Gouda and Amin Al Ashqar (2018) found that the psychological well-being scale scores between married and single elderly people differed statistically significantly in favor of married elderly people. When the studies were analyzed, it was seen that different results were obtained. It is thought that the reason for the higher alexithymia scores of single individuals compared to married individuals in individuals who do not participate in recreational activities is that the emotional awareness of single individuals is less than married individuals.

Another result obtained in the study is that alexithymia, decision-making and psychological well-being levels do not differ in terms of income level variable. Similar to the results obtained, Secer et al. (2024) determined that self-esteem in decision-making and careful decision-making styles did not differ significantly according to the income level of the participants. However, Sibka and Duman (2022) determined that alexithymia levels differed according to income level and that people in the lower income range had higher levels of alexithymia than those in the higher income range. Obeid et al. (2021) also reported that low-income participants had significantly higher levels of alexithymia compared to middle-income participants. Like the results of the study, Elmas et al. (2021) found that the level of psychological well-being did not differ depending on the income level. However, Işgor (2017) found that the psychological well-being scores of university students at high economic level were significantly higher than the psychological well-being scores of university students at low economic level. It is seen that different results are obtained in the studies. It is thought that the reason why the individuals who participate and do not participate in recreational

activities do not differ in terms of the income level variable obtained as a result of the research is that the income expectation of the sample group is close to each other.

In the light of the findings obtained within the scope of the research, it was determined that recreational activities are effective on psychological well-being and careful decision-making, and alexithymia has an inverse relationship with psychological well-being and careful decision-making. Based on this information, it can be stated that the alexithymia levels of individuals should also be taken into consideration for the targeted high psychological well-being. Longitudinal research designs can be utilized in future studies. In the case of athletes, the data obtained from elite level athletes can be focused on the comparison of individual and team athletes. In addition, while evaluating the results of the study, it may be useful to consider the limitation that the study group was conducted only on individuals who participated and did not participate in recreational activities in Ankara province.

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The Relationship between Physical Education and Sports Teacher Candidates' Attitudes toward the Teaching Profession and Levels of Satisfaction with Life

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Abstract

This study aimed to examine the relationship between the attitudes of physical education and sports teacher candidates toward the teaching profession and their levels of satisfaction with life. The study population consisted of 203 students studying at Bartın University, Faculty of Sports Sciences, Department of Physical Education and Sports in the 2022-2023 academic year. The sample of the study comprised 165 volunteer students (98 male and 67 female) selected through a simple random sampling method. Data were collected using a personal information form for the candidates, the "Attitude Toward the Teaching Profession Scale (ATTPS)" and "Satisfaction with Life Scale (SWLS)". The collected data were analyzed using frequency, percentage distribution, and arithmetic mean, as well as independent sample t-test and the Pearson correlation analyses. The SPSS 26.0 software package was employed for data analysis. The study results revealed a significant difference in the mean total scores of ATTPS and SWLS based on the t-test results of the active engagement in sports variable ($p < 0.05$). Regarding the family income variable, the correlation analysis indicated a moderate and positive significant relationship with mean SWLS total scores, while no significant relationship was found with mean ATTPS total scores ($p < 0.05$). Similarly, for the leisure time variable, a moderate and positive significant relationship was identified with mean SWLS total scores, but no significant relationship was observed with mean ATTPS total scores ($p < 0.05$). Moreover, a low and positive significant relationship was noted between ATTPS and SWLS ($p < 0.05$). In conclusion, the study suggests that as physical education and sports teacher candidates' attitudes toward the teaching profession increase, their levels of satisfaction with life are likely to rise. Simultaneously, an increase in satisfaction with life may contribute to a higher level of positive attitude toward the teaching profession.

Keywords: Physical education and sports teacher candidates, Attitude toward the teaching profession, Satisfaction with life.

Introduction

Achievement positive outcomes in today's education process, collaboration among teachers, administrators, and families is essential. The cooperation and perceived competence of teachers and teacher candidates, particularly in classroom management, significantly influence their professional attitudes and behaviors toward students. A teacher's attitude toward the profession is prominently displayed and shaped by feedback or results received from students.

Teachers with a high sense of competence invest more effort in learning-teaching activities and guide their students toward goals more effectively than those with a low sense of competence (Bandura, 1993). However, it is crucial to recognize that a teacher's quality and competence are not solely determined by their education and diploma. According to Jones (1993) indeed, conceptual knowledge skills alone are insufficient; a teacher must also possess a sense of professional belief and sincerity. Therefore, fostering a positive attitude toward the profession relies not only on conceptual knowledge skills but also on the quality of relationships with students (Semerci and Semerci, 2004, as cited in Gencer, 2017). Teachers' attitudes toward students directly impact their professional success and satisfaction level (Gundersen, 2004; Tümkaya, 2011; Aloudat, 2017).

The professional competence, behavior, values, social education status, and attitude of teachers affect students' behavior and knowledge levels (Gömleksiz, 2004). In educational institutions, physical education and sports teachers, given the function of their courses, can exert more influence on students (Ilkim, 2006). The unique educational competence and skills of physical education and sports teachers set them apart from other teachers (Temel, Altınkok and Kayışoğlu, 2016; Karabulutlu and Pular, 2017), thus making their attitudes toward the profession crucial for achieving desired behavioral changes in students (Yazıcılar-Özçelik, Çobanoğlu and Koç, 2020).

A positive attitude of an individual in general life translates into an efficient professional performance. A positive attitude toward the teaching profession manifests in a teacher's classroom attitude and behavior, allowing them to fulfill their professional role more effectively (Recepoglu, 2013). Thus, it can be considered that the attitude of teacher candidates toward the profession, coupled with effective classroom management, positively influences overall satisfaction with life, creating subjective well-being and happiness.

The concept of "satisfaction with life" was initially defined by Neugarten, Havinghurst and Tobin (1961) as the state or result derived from comparing an individual's expectations (what one desires) with their possessions (what one actually has). Satisfaction with life is described as the state resulting from the comparison of an individual's expectations with the actual situation (Yaşartürk and Bilgin, 2019). The cognitive assessment of key life domains such as social life, family, and work environment generally constitutes an important indicator of satisfaction with life, a crucial aspect of the quality of life standard (Diener, 1984). Satisfaction with life encompasses the individual's positive assessment of their life according to the criteria they have determined (Diener et al., 1985). Satisfaction with life, which is a subjective assessment, is linked to the interactions leading to positive emotions in critical dimensions of an individual's life being more than those leading to negative emotions (Diener and Lucas, 1999).

Satisfaction with life significantly impacts people's overall quality of life and their performance in organizational settings. Individuals who are discontented in their private and professional lives often exhibit lower performance and productivity in their work. In this

regard, it holds significance for educators, who, in a sense, contribute to shaping the future of society within educational organizations. A high level of satisfaction with life among teachers is crucial for them to succeed and perform well (Uludağ, 2019). Concurrently, an education system ready for the use of future generations will be effective and efficient when teachers experience a heightened sense of satisfaction with life (Korkut and Aslan, 2019).

In light of this information, physical education and sports teacher candidates' satisfaction with life holds the potential to directly or indirectly influence their professional attitudes, subsequently impacting student productivity at school. The interconnection between the attitudes of physical education and sports teacher candidates towards their profession and their satisfaction with life is crucial for the holistic development of students-socially, psychologically, and physically. As instructors and guides, their attitudes play a pivotal role in shaping the quality of the educational environment.

Statement of the Problem

Nowadays, the most appropriate attitude, efficiency and performance of prospective physical education and sports teachers in the education and training process will be directly supportive for the implementation of the right attitude towards the profession. However, the fact that physical education and sports teacher candidates are directly involved in practices that will increase the success of the profession in both theoretical and practical courses will show value as a resource for our future students. Therefore, performing activities that include diversity and efficiency in leisure time will increase life satisfaction and as a result, this will create an incentive factor for attitudes towards the profession. Therefore, the fact that physical education and sports teacher candidates have high life satisfaction in their social life outside of education will shed light on the way to becoming a successful physical education and sports teacher.

Purpose of the Study

The aim of this study was to investigate the relationship between the attitudes of physical education and sports teacher candidates toward their profession and their levels of satisfaction with life.

Problem of the Study

How are physical education and sport teacher candidates' attitudes towards profession and life satisfaction levels?

Sub-problems of the study

1. Is there a significant difference between physical education and sport teacher candidates' attitudes towards profession and life satisfaction levels according to gender variable?
2. Is there a significant difference between physical education and sport teacher candidates' attitudes towards profession and life satisfaction levels according to the variable of doing active sports?
3. Is there a significant relationship between physical education and sport teacher candidates' attitudes towards profession and life satisfaction levels according to age variable?
4. Is there a significant relationship between physical education and sport teacher candidates' attitudes towards profession and life satisfaction levels according to family income variable?

5. Is there a significant relationship between physical education and sport teacher candidates' attitudes towards profession and life satisfaction levels according to duration of leisure time variable?

Material and Method

Research Model

The study employed a relational screening model, which involves analyzing variables to scrutinize the relationships and differences between them (Özdemir, 2010). This model is a correlational research approach aimed at revealing changes in two or more variables simultaneously and gaining insights into cause-and-effect relationships (Büyüköztürk et al., 2021; Karasar, 2022).

Population-Sample (Study Group)

The study group comprised 165 volunteer students (98 male and 67 female) selected through a simple random sampling method from a total of 203 students studying at Bartın University, Faculty of Sports Sciences, Department of Physical Education and Sports during the 2022-2023 academic year.

Data Collection Tools

Prior to commencing the data collection phase, the study obtained ethical approval from the Bartın University Social and Human Sciences Ethics Committee, identified by the letter numbered 2023-SBB-0354 at the meeting number 13, dated 15.06.2023. The data collection for the study was conducted using a Google Form. Participants were provided with comprehensive information regarding the study's objectives and procedures, emphasizing the significance of accurate responses for the integrity of the study results.

Personal Information Form

The personal information form designed by the researchers encompasses questions on key independent variables, including gender, active engagement in sports, age, income and duration of leisure time.

Attitude Toward the Teaching Profession Scale

The Attitude Toward the Teaching Profession Scale (ATTPS) was developed by Ustuner in 2006 as a tool to assess the attitudes of students enrolled in teaching programs toward the teaching profession. This one-dimensional attitude scale comprises a total of 34 items. Scoring is conducted on a 5-point Likert-type scale, with responses ranging from "Totally Agree (1), Mostly Agree (2), Moderately Agree (3), Partially Agree (4), Strongly Disagree (5)." The maximum attainable score is 170, and the minimum is 34. The scoring involves reversing the scores for negative items (2-5-6-7-8-15-20-21-30-32), where the values are entered as "1=5, 2=4, 3=3, 4=2, 5=1." A higher score on the scale indicates an increased positive attitude toward the teaching profession, while a lower score suggests a decreased positive attitude. The validity of the scale is 0.89, the reliability coefficient stands at 0.72, and the internal consistency coefficient (Cronbach's alpha) is 0.93 (Üstüner, 2006).

Satisfaction with Life Scale

The Satisfaction with Life Scale (SWLS), developed by Diener et al. (1985), serves the purpose of assessing individuals' satisfaction with their lives. Dağlı and Baysal (2016) adapted the scale to the Turkish context, ensuring its validity and reliability. This scale comprises 5 items and originally utilized a 7-point Likert scale, which was later adapted to a

5-point Likert scale during the Turkish adaptation process. The scoring is as follows: "Strongly Disagree (1), Slightly Agree (2), Moderately Agree (3), Strongly Agree (4), and "Totally Agree (5)." The total score on the scale ranges from a minimum of 5 to a maximum of 25, with higher scores indicating increased satisfaction with life and lower scores suggesting decreased life satisfaction. In the original study, the reliability coefficient (Cronbach's alpha) was found to be $\alpha=.87$, and the dependent validity was reported as .82. During the adaptation study, the scale's reliability was established with a Cronbach's Alpha value of .86, and the test-retest reliability coefficient was calculated as $r=0.73$ (Dağlı and Baysal, 2016).

Ethical Approval

Prior to commencing the data collection phase, the study obtained ethical approval from the Bartın University Social and Human Sciences Ethics Committee, identified by the letter numbered 2023-SBB-0354 at the meeting number 13, dated 15.06.2023.

Analysis of the Data

The data were analyzed using the SPSS 26.0 software package. Skewness and kurtosis tests were performed to determine whether the data followed a normal distribution. Parametric tests were subsequently employed, guided by the identification of a normal distribution in the data. Frequency, percentage distribution, arithmetic mean, independent sample t-test, and Pearson correlation analysis were used in the analysis of the data. The reliability of the scores obtained from the scales was assessed by calculating the internal consistency coefficient, with consideration given to the significance value ($p<0.05$) and confidence intervals.

Table 1. Reliability and kurtosis-skewness values of ATTPS and SWLS

Scales	Item number	N	\bar{X}	SD	Skewness	Kurtosis	Cronbach's Alpha
ATTPS	34	165	3.79	0.84	-0.661	0.046	0.95
SWLS	5	165	2.68	0.75	-.191	-.101	0.77

As is seen in Table 1, the ATTPS exhibits a mean score of 3.79, with a corresponding standard deviation of 0.84. Analysis of the skewness (-0.661) and kurtosis (0.046) values suggests that the measurement tool adheres to the assumption of normality. The internal consistency coefficient for ATTPS, consisting of 34 items, was calculated as 0.95. As for the SWLS, its mean score is 2.68, with a standard deviation of 0.75. Investigation into the skewness (-0.191) and kurtosis (-0.101) values of SWLS indicates conformity to the normality assumption. The internal consistency coefficient for SWLS, including 5 items, was determined to be 0.77.

Findings

Table 2. Demographic characteristics of participants

Variables	N	%	\bar{X}	S
Gender	Male	97	58.8	
	Female	68	41.2	
Active engagement in sports	Yes	121	73.3	
	No	44	26.7	
Age	165		23.61	3.86
Income	165		11.770 TL	9654
Duration of leisure time	165		5.89	3.43

According to Table 2, 58.8% of the participants are male, while 41.2% are female. Additionally, 73.3% of the participants are actively engaged in sports, whereas 26.7% do not actively do sports. The participants reported the mean age is 23.61 years, the mean income among participants is 11.770 TL (Turkish Liras) and a mean daily leisure time of 5.89 hours.

Table 3. ATTPS and SWLS t-test results by gender variable

Sub-dimensions	Gender	N	\bar{X}	S	SD	t	p
ATTPS	Female	97	3.71	.86	163	-.119	.905
	Male	68	3.73	.81			
SWLS	Female	97	2.70	.75		.395	.693
	Male	68	2.65	.75			

As presented in Table 3, the analysis of the t-test results for physical education and sports teacher candidates based on the gender variable reveals no statistically significant difference between the mean ATTPS and SWLS total scores ($p < 0.05$).

Table 4. ATTPS and SWLS t-test results by active engagement in sports variable

Sub-dimensions	Active engagement in sports	N	\bar{X}	S	SD	t	p
ATTPS	Yes	121	4.00	.83	163	3.017	.035*
	No	44	3.40	.87			
SWLS	Yes	121	2.95	.72		2.980	.045*
	No	44	2.37	.82			

($p < 0.05$)*

Table 4 shows the t-test results of physical education and sports teacher candidates by the active engagement in sports variable. Accordingly, a statistically significant difference was noted between the mean ATTPS total scores ($p < 0.05$). The attitude toward the teaching profession and the level of satisfaction with life of the participants who were actively engaged in sports were significantly higher than those who did not actively do sports.

Table 5. Results of the correlation between age variable with ATTPS and SWLS

Age	r	ATTPS	SWLS
		.250*	.104
	p	.045	.183

($p < 0.05$)*

As per the correlation analysis results presented in Table 5, a positive and low-level significant relationship was observed between the age variable and the participants' attitudes toward the teaching profession ($p < 0.05$). However, no significant correlation was noted between the age variable and their levels of satisfaction with life.

Table 6. Results of the correlation between income variable with ATTPS and SWLS

Family income	r	ATTPS	SWLS
		.063	.300*
	p	.421	.033

($p < 0.05$)*

According to the correlation analysis results in Table 6, there is no significant relationship between the family income variable and the participants' attitudes toward the teaching profession. However, a positive and moderately significant correlation was identified between the family income variable and the level of satisfaction with life ($p < 0.05$).

Table 7. Results of the correlation between leisure time duration with ATTPS and SWLS

		ATTPS	SWLS
Duration of leisure time	r	.099	.310*
	p	.208	.031

($p < 0.05$)*

According to the correlation analysis results in Table 7, no significant correlation was seen between the duration of leisure time and the participants' attitudes toward the teaching profession, while there was a positive and moderately significant correlation between the duration of leisure time and the level of satisfaction with life ($p < 0.05$).

Table 8. Correlation between ATTPS and SWLS

		ATTPS
SWLS	r	.290*
	p	.037

($p < 0.05$)*

The results of the correlation analysis presented in Table 8 showed a positive and low-level significant correlation between the participants' attitude toward the teaching profession and their level of satisfaction with life ($p < 0.05$).

Discussion and Conclusion

The study was conducted to examine the relationship between attitudes toward the teaching profession and levels of satisfaction with life among students in the Physical Education and Sports department. In this section, the results of data analysis are discussed and compared with existing studies in the field. When examining the t-test results of physical education and sports teacher candidates based on the gender variable, no statistically significant difference was observed in the mean ATTPS total scores ($p < 0.05$). Consistent with similar studies, it was found that gender did not have a significant impact on the participants' attitudes toward the teaching profession (Semerci and Semerci, 2004; Sülen Şahin, 2010; Kartal et al., 2012; Bademcioğlu, Karataş and Alcı, 2014; Eroğlu and Ünlü, 2015; Altuntaş, Kul and Karataş, 2016; Sönmez, Işık and Sulak, 2017; Serdar, Harmandar Demirel and Demirel, 2018; Yaylak, 2019; Yazıcılar Özçelik, Çobanoğlu and Koç, 2020; Akyürek, 2020; Doğrul and Kılıç, 2022; Mirze and Yılmaz, 2022; Şen and Koçak, 2022; Öztürk Çelik and Yılmaz, 2022; Aynalem et al., 2022). However, contrasting results from some studies suggested a significant association between attitude toward the profession and gender, favoring female participants (Güneyli and Aslan, 2009; Yeşil, 2010; Yalız, 2010; Kızıldaş, Halmatov and Sarıçam, 2012; Aydın and Sağlam, 2012; Yıldırım, 2012; Gunduz, 2014; Şener, 2015; Altunkeser and Ünal, 2015; Cinpolat, Alıncak and Abakay, 2015; Türkeli, 2017; Atalmış and Köse, 2018; Güneş, 2019; Doğaner and Özbek, 2019; Tüzel İşeri, Kahraman and Karadağ, 2019; Özlü, Çekin and Öğüt, 2022). Within the scope of our study, it is suggested that physical education and sports teacher candidates share similar attitudes toward the profession, likely influenced by their achievements in theoretical and practical courses during undergraduate education. This result underscores the participants' equal commitment and desire toward the teaching profession.

Upon analyzing the t-test results of physical education and sports teacher candidates based on the gender variable, no statistically significant difference was found in the mean SWLS total scores ($p < 0.05$). Similar studies have concluded that participants' levels of satisfaction with life do not significantly differ based on gender (Ading et al., 2012; Li, Jia and Zhou, 2017; Özkul and Cömert, 2018; Kara et al., 2018; Karaaslan, Uslu and Esen, 2020; Moran and

Çoruk, 2021; Başar and Kösem, 2022; Pelaez-Fernández et al., 2022; Bahar and Abdramanova, 2023). Conversely, other studies have reported a significant difference in levels of satisfaction with life between male and female participants (Türkoğlu, Özbey and Büyüktanır, 2014; Demirel, 2014; Başoğlu, Şekeroğlu and Altun, 2016; Çalışkan, Yasul and Ulaş, 2017; Demir and Murat, 2017; Öter and Dağlı, 2022). It can be inferred that participants' levels of satisfaction with life, influenced by family relationships, the social environment, the educational process, and socio-economic factors, are generally similar.

The analysis of t-test results based on the variable of active engagement in sports revealed a statistically significant difference in the mean ATTPS total scores ($p < 0.05$). The participants actively involved in sports exhibited significantly higher attitudes toward the teaching profession compared to those not actively participating in sports. This result is consistent with the observations of Pehlivan (2010) and the study by Serdar, Harmandar Demirel, and Demirel (2018), both suggesting that physical education and sports teacher candidates who actively are engaged in sports demonstrate more positive attitudes toward the profession. Conversely, Altuntaş, Kul and Karataş (2016) found no statistically significant difference in the mean scores of attitudes toward the teaching profession based on the variable of engagement in sports. Küçük Kılıç (2014) and Duman (2018) also reported no significant difference in the attitude levels of physical education and sports teacher candidates toward the teaching profession based on engagement in sports. The professional dimension of actively engaging in sports, when related to physical education and sports, will positively influence the frequency or continuity of participation and contribute to a positive attitude toward the profession.

According to the analysis of the t-test results for physical education and sports teacher candidates based on the variable of active engagement in sports, a statistically significant difference was observed in the mean SWLS total scores ($p < 0.05$). Participants actively involved in sports demonstrated significantly higher levels of satisfaction with life than those who were not actively engaged in sports. Karaaslan, Uslu and Esen (2020) also found a significant difference in satisfaction with life, with those regularly participating in active sports experiencing higher life satisfaction. Similarly, Üçüncü (2019) found that teachers who regularly engage in physical activity exhibited higher life satisfaction levels. However, Kara et al. (2018) reported no significant difference in levels of satisfaction with life based on regular physical activity. In the context of our study, it is suggested that participants, being more familiar with concepts such as physical education, physical activity, and exercise, may apply them with greater discipline than other professional groups and sedentary individuals, contributing to their higher satisfaction with life.

In the correlation analysis conducted based on the age variable of physical education and sports teacher candidates, a positive and low-level significant relationship was identified between the mean ATTPS total scores ($p < 0.05$). Relevant studies have reported a significant relationship between the age variable and the attitude toward the teaching profession (Kızıltaş, Halmatov and Sarıçam, 2012; Cinpolat, Alıncak and Abakay, 2016; Türkeli et al., 2017; Özdemir and Güngör, 2017; Serdar, Harmandar Demirel and Demirel, 2018; İşeri, Kahraman and Karadağ, 2019; Yakar and Yelpaze, 2019). However, other studies have indicated no significant relationship between the age variable and the attitude toward the teaching profession (Gültekin, 2006; Can, 2010; Yıldırım, 2012; Toprak and Saraç, 2014; Altuntaş, Kul and Karataş, 2016; Burgul, Tınazcı and Erdağ, 2017; Erdemli and Yaşartürk, 2020; Yazıcılar-Özçelik, Çobanoğlu and Koç, 2020; Şen and Koçak, 2022; Ayenalem et al., 2022). The assumption is that professional experience, which results from positive or negative events, can be enhanced, or missing features can be complemented with increasing age.

Therefore, the advancing age of physical education and sports teacher candidates is viewed as an opportunity for gaining diverse experiences in their professional lives.

No significant relationship was found between the age variable and the mean SWLS total scores of physical education and sports teacher candidates ($p < 0.05$). Similar studies also report no significant relationship between the age variable and participants' levels of satisfaction with life (Avşaroğlu, Deniz and Kahraman, 2005; Deniz et al., 2010; Özyürek, Gümüş and Doğan, 2012; Receptoğlu, 2013; Demirel, 2014; Başoğlu, Şekeroğlu and Altun, 2016; Li et al., 2017; Üçüncü, 2019; Karaaslan, Uslu and Esen, 2020; Moran and Çoruk, 2021; Saraçlar, Ada and Gönenç, 2022). However, there are studies in the literature that do find a significant relationship between the age variable and participants' levels of satisfaction with life (Şahin Yüksel and Sarıdemir, 2017; Kara et al., 2018; Pelaez-Fernandez et al., 2022). The concept of satisfaction with life may vary across age ranges and can attain high levels due to early-life successes. Therefore, the participants' sufficient access to both socio-economic and mental motivational resources may contribute to this outcome.

The correlation analysis based on the income variable of physical education and sports teacher candidates revealed no significant relationship with the mean ATTPS total scores ($p < 0.05$). Similar results have been reported by other studies (Engin and Koç, 2014; Karatekin, Mery and Keçe, 2015; Altuntaş, Kul and Karataş, 2016; Erdemli, 2019; Akyürek, 2020; Öztürk Çelik and Yılmaz, 2022). Consistent with these results, it can be speculated that family income does not exert an influence on the attitude toward the teaching profession.

In the correlation analysis conducted based on the income variable of physical education and sports teacher candidates, a positive and moderate-level significant relationship was identified between the mean SWLS total scores ($p < 0.05$). In their study aiming to determine the perception of leisure boredom, life satisfaction, and social connectedness levels among prospective physical education teachers, Kara et al. (2018) found that participants with higher economic status exhibited higher levels of satisfaction with life. There are also other studies reporting similar results (Chow, 2005; Türkoğlu, Özbey & Büyüktanır, 2014; Gere & Schimmack, 2017; Li et al., 2017; Çalışkan, Yasul & Ulaş, 2017; Budria & Ferrer, 2018; Güldür & Yaşartürk, 2020). Increasing overall satisfaction with life can be achieved by enhancing activities such as leisure activities, social events, or educational seminars for professional development. Therefore, an improved income status positively influences the enhancement of satisfaction with life by facilitating participation in activities.

The correlation analysis based on the variable of leisure time duration among physical education and sports teacher candidates did not reveal a significant relationship between the mean ATTPS total scores ($p > 0.05$). Similarly, in their study, Erdemli (2019) and Kocaer and Yaşartürk (2022) did not find a significant relationship between leisure time duration and attitude toward the teaching profession. According to this result, it can be suggested that the participation of physical education and sports teacher candidates in similar or various activities during leisure time does not significantly affect their attitude toward the profession.

The results of the correlation analysis based on the variable of leisure time duration among physical education and sports teacher candidates revealed a positive and moderately significant relationship between the mean total scores of SWLS ($p < 0.05$). A study by Güldür and Yaşartürk (2022) investigating the relationship between daily leisure time duration and the benefits of participation in recreational activities and life satisfaction levels among preschool teachers reported a low-level and positively significant relationship between the variable of daily leisure time duration and SWLS ($p < 0.05$). Regular participation in leisure

activities contributes positively to individual development, concurrently increasing the level of life satisfaction.

The correlation analysis regarding the relationship between attitude toward the teaching profession and satisfaction with life indicated a positive and low-level significant relationship among physical education and sports teacher candidates' ATTPS and SWLS scores ($p < 0.05$). A study by Sülen Şahin (2010) aiming to determine the attitudes of teacher candidates toward the teaching profession and their levels of life satisfaction found that candidate teachers exhibited high levels of life satisfaction and a positive attitude toward their future careers, concluding that a teacher with high life satisfaction and a positive attitude toward the profession can effectively fulfill their role. Therefore, the identification of satisfaction with life and attitude toward the teaching profession among teacher candidates is considered crucial for the teaching profession.

A study by Eret Orhan and Ok (2014) examining the factors influencing the entry characteristics and attitudes toward the teaching profession of first-year teacher candidates who chose teacher training programs concluded that the overall satisfaction with life of teacher candidates is among the significant factors positively affecting their attitude toward teaching.

While the high level of satisfaction with life varies due to multiple factors, it is also associated with the intensity of these influencing factors. In conclusion, it can be stated that as the attitude of physical education and sports teacher candidates toward the teaching profession increases, their levels of satisfaction with life will similarly increase. Simultaneously, the enhancement of satisfaction with life is likely to contribute to an increase in the level of attitude toward the profession.

Recommendations

Elevate the level of attitude toward the teaching profession among physical education and sports teacher candidates, it is advisable to enhance both the physical conditions and academic education.

The organization of diverse leisure activities and offering education in this area during the undergraduate education of prospective physical education and sports teachers can enhance their satisfaction with life.

The implementation of conferences and seminar programs for physical education and sports teachers and candidates will emphasize the importance of recreational activities and facilitate their implementation.

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