

RESEARCH ARTICLE		Sports enjoyment and its relationship to psychological toughness among football players (<i>A field study of football club players in the State of Touggourt for the Inter-Association Section</i>).	
Fedel Kais		Laboratory of Physical Activity Sciences and Sports, Kasdi Merbah University, Ouargla	
		Algeria	
		Email: fedel.kais@univ-ouargla.dz	
Kadri Takieddine		Laboratory of Physical Activity Sciences and Sports, Kasdi Merbah University, Ouargla	
		Algeria	
		Email: Kadri.takieddine@univ-ouargla.dz	
Toumi Nacereddine		Laboratory of Physical Activity Sciences and Sports, Kasdi Merbah University, Ouargla	
		Algeria	
		Email: toumi.nacereddine@univ-ouargla.dz	
Doi Serial		https://doi.org/10.56334/sei/8.6.59	
Keywords		Sports, enjoyment, relationship, psychological toughness, football players	
Abstract This study aimed to identify the relationship between sports enjoyment and psychological resilience among football players. The researcher employed a descriptive method, which was deemed appropriate for the study topic. Data were collected using the Sports Enjoyment Scale (José Carmelo Adsuar Sala, 2021) and the Psychological Toughness Scale (Mekheimer, 2002). These were applied to a purposive sample of 89 players from three football clubs in Touggourt, selected via a comprehensive survey. The study concluded that football players exhibit high levels of both sports enjoyment and psychological toughness, and that there is a positive correlation between the two.			
Citation Fedel K., Kadri T., Toumi N. (2025). Sports enjoyment and its relationship to psychological toughness among football players:(A field study of football club players in the State of Touggourt for the Inter-Association Section).. <i>Science, Education and Innovations in the Context of Modern Problems</i> , 8(6), 547-559; doi:10.56352/sei/8.6.59. https://imcra-az.org/archive/364-science-education-and-innovations-in-the-context-of-modern-problems-issue-6-volvi-2025.html			
Licensed © 2025 The Author(s). Published by Science, Education and Innovations in the context of modern problems (SEI) by IMCRA - International Meetings and Journals Research Association (Azerbaijan). This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).			
Received: 13.10.2024		Accepted: 05.01.2025	
		Published: 16.04.2025 (available online)	

Introduction and problem statement of the study:

In the modern era, people experience continuous psychological pressure due to the numerous demands and challenges they face. These demands and challenges require people to make great efforts to overcome them and adapt quickly. This

547 – www.imcra.az.org, | Issue 6, Vol. 8, 2025

Sports enjoyment and its relationship to psychological toughness among football players:(A field study of football club players in the State of Touggourt for the Inter-Association Section).
Fedel Kais, Kadri Takieddine, Toumi Nacereddine

enables them to create a balance between themselves and their environment. This reflects the alignment of personal and social goals and ambitions.

Sports activities are an integral part of the challenges faced by athletes striving to achieve noble objectives. Consequently, they endure ongoing psychological pressures that hinder their efforts. Therefore, athletes must develop their capabilities in physical, psychological, mental, social and emotional areas in order to confront these pressures and achieve the desired results (Al-Abdali, 2012, p. 15).

Therefore, the hasty pursuit of results through various means, prioritising one aspect over another without considering psychological factors and perceiving athletes as mere machines or batteries charged only for competition time can undermine their ambitions and goals.

Psychologists emphasise the necessity of addressing the psychological aspect of athletes, giving it due importance alongside other supportive factors in their development. This can be achieved by creating enjoyable environments within the team and enhancing psychological enjoyment during training, particularly during intense sessions lacking recreational characteristics or when preparing for high-pressure competitions (Loulwa, 1999, p. 20).

Thus, psychologists have turned to sports activity as a means of enhancing sports enjoyment. Many experts affirm the importance of feeling sports enjoyment during practice. German psychologist Scharnhorst emphasizes that basic motivators for engaging in sports are insufficient alone to continuously modify and improve an athlete's lifestyle; they need to feel enjoyment and positivity during practice to foster a desire to change their behavior and lifestyle (Farhati, 2022, p. 02).

It is also crucial to link the goals of sports activities with sports enjoyment. Ratib Mohammed Kamal (2000) stressed that participation in sports should be connected with enjoyment and that it is vital to associate sports goals with elements that facilitate sports enjoyment and recreation without rigid adherence to rules that detract from enjoyment and fun (Ratib, 2000, p. 45). Regarding the connection between sports enjoyment and self-esteem, Sidqi Nour Eddine (2004) noted that sports enjoyment is the feeling of pleasure and the expression of joyful emotions associated with sports practice, resulting in self-esteem and achieving a positive social value with others, whether peers or competitors (Sidqi, 2004, p. 26).

Psychological toughness is a frequently mentioned concept in positive psychology. Kobasa (1979) first defined it as 'a set of personal traits that serve as a source of resistance in the face of stressful events, characterised by an individual's belief or general attitude regarding their effectiveness and ability to utilise all available psychological and environmental resources, in order to perceive stressful life events accurately, realistically and objectively, and to cope with them in a positive manner' (Kobasa & Puccetti, 1983, p. 67).

Kobasa emphasises that psychological toughness is beneficial for coping with psychological pressures, diminishing their impact and adding significant psychological resilience to the individual. A study by Hannah and Morsy (1978) indicated that psychological toughness improves an individual's ability to perceive, evaluate and confront pressing obstacles effectively and accurately (Hannah & Morsy, 1978, p. 342).

Konstantinova (2012, p. 21) views toughness as the actions and responses an individual exhibits after evaluating stressful situations that negatively affect their health. These actions and responses use the components of toughness, starting from evaluation and moving through to problem-solving strategies. The individual focuses logically and consciously, without concentrating on feelings or direct confrontation. This gives them the feeling of competence to confront the situation.

Mekheimer (1996) refers to this as a psychological contract that individuals make with themselves and society. This acknowledges their ability to control and manage life's difficulties, viewing them as necessary challenges that must be confronted. Individuals seek solutions rather than considering these challenges as obstacles to achieving their goals (Mekheimer, 1996, p. 283).

The importance of this study lies in demonstrating the relationship between sports enjoyment and psychological toughness among football players. Given the researcher's modest experience in coaching and the scarcity of studies linking these two variables, this study will significantly contribute to improving players' psychological well-being and fostering balance with other dimensions for enhancement, thereby assisting them in achieving better personal and collective results. Consequently, this study aims to address the following questions:

1. What is the level of enjoyment of sport among football team players?
2. What is the level of psychological resilience among football team players?
3. Is there a statistically significant correlation between sports enjoyment and psychological toughness among football players?

2. Hypotheses of the study:

1. There is a high level of enjoyment of sport among football team players.
2. There is a high level of psychological resilience among football team players.
3. There is a positive, statistically significant correlation between sports enjoyment and psychological toughness among football team players.

3. Objectives of the study:

The current study aims to identify:

1. The level of sports enjoyment experienced by football team players.
2. The level of psychological toughness among football team players.
3. The relationship between sports enjoyment and psychological toughness among football team players.

4. Importance of the study:

The importance of the study can be divided into theoretical and practical significance.

First: Theoretical importance:

Our study is significant because of its variables, which are important in the field of sports psychology. The psychological aspect plays a crucial role in improving athletes' performance alongside other aspects, such as the physical, health, emotional, social and educational dimensions. The aim is to achieve better results during sports competitions, which often involve significant psychological pressure that must be addressed and confronted.

Secondly, in terms of practical importance,

Our study is timely due to significant scientific advancements and the numerous challenges faced in modern times across various fields, including sport. Enriching scientific libraries and the research heritage with topics related to the psychological aspect can provide practical solutions to these challenges, helping athletes to achieve balance between themselves and their environment and ultimately leading to better outcomes.

5. Definitions of study terms:

Sports enjoyment:

Natah Kamal (2016) defines this as 'the positive inner feeling experienced by the athlete during sports activities, whether during training or competitions'. It results in attraction, enjoyment, satisfaction and fulfilment despite the effects of excessive training loads and psychological pressures, motivating the athlete to continue their sporting activities without experiencing boredom or withdrawal (Natah, 2016, p. 10).

Osama Kamel (2001) states that 'it is what most elite and superior players exhibit: a performance blended with enjoyment'. This requires focusing on exerting maximum effort during competition rather than on defeating opponents. This concept should be taught to young athletes with limited competition experience to encourage their continued participation and prevent burnout or withdrawal" (Ratib, 2001, p. 53).

5.2 Psychological Toughness:

In language, 'tough' refers to strength; something is described as tough when it is firm and hard (Zainab Noufel, 2008, p. 21).

Pines and Kobasa (1986) define it as 'a general belief in one's abilities and potential to utilise all available environmental and psychological resources to effectively face the difficulties, challenges and pressures in life, interpreting and confronting them logically and objectively'. It consists of three dimensions: commitment, control, and challenge' (Pines, 1986, p. 80).

First: Commitment:

This refers to the strong attachment an individual shows through their commitment to various life changes, active participation in social activities and forming interactive social relationships (Khatib, 2023, p. 442).

According to Kobasa, there are two types of commitment: personal and psychological. The former involves self-awareness of one's capabilities and goals, while the latter involves commitment to work through recognising its importance and value (Farouk El-Sayed, 2001, p. 210).

Second: Control:

This refers to self-regulation or the feeling of self-control. Kobasa describes it as the belief that one has the ability to manage and change the events one encounters in life, an internal conviction (Miftah Muhammad, 2010, p. 129).

Al-Rifai (2003) indicates that basic forms of control include cognitive control, information processing control, decision-making control, behavioural control relating to actions and reactions, and feedback control (Madhat, 2010, p. 29).

Third: challenge.

Kobasa (1983) defines this as individuals' belief that life's changes are a natural and unavoidable reality to be embraced and approached positively rather than viewed as a threat to safety, security and self-confidence (Khatib, 2023, p. 442).

6. Previous studies:

1. A study by Ashab Lakhder and Kararmah Ahmed (2021) in Algeria, titled 'The Relationship Between Sports Enjoyment and Achievement Motivation Among Football Players'. This study aimed to explore the relationship between sports enjoyment and achievement motivation among football players. The researchers employed a descriptive method, using the Sports Enjoyment Scale developed by Wankel and adapted and standardised by Sidqi Nour Eddine Muhammad, as well as the Achievement Motivation Scale designed by Joe Wliss (1982) and adapted by Muhammad Hasan Alawi. These were applied to a purposive sample of 17 football players from the Olad Aadi Club. The results indicated a high level of sports enjoyment and a positive correlation between sports enjoyment and achievement motivation (in terms of success, achievement motivation, and failure avoidance motivation) among the players (Ashab & Kararmah, 2021).

2. A study by Natah Kamal et al. (2021) in Algeria was titled 'The Role of Sports Enjoyment in Reducing Withdrawal Behaviour from Physical Activity Among Adolescent Children'. This study aimed to identify the relationship between withdrawal behaviour and its dimensions and sports enjoyment. The researchers used a descriptive analytical method, selecting a purposive sample of 90 adolescents engaged in sports activities and utilising the Sports Enjoyment Scale and the Withdrawal Behaviour Scale. The study concluded that there is an inverse correlation between sports enjoyment and withdrawal behaviour (both partial and total), as well as a low level of sports enjoyment (Natah, 2021).

3. A study by Raaf Ahmed and Alwan Rafiq (2019) in Algeria, titled Mental Health and Its Relationship with Psychological Toughness Among Students of the Institute of Physical Activity Sciences and Sports. The study aimed to reveal the correlation between mental health and psychological resilience among students at the Institute. A descriptive correlational method was employed, with both the Mental Health Scale and the Psychological Toughness Scale, developed by Mekheimer (2002), being administered to a random sample of 70 students from Bouira University Institute. The results revealed a positive correlation between mental health and psychological resilience, as well as a strong link between psychological resilience and positive life orientation (Raaf & Alwan, 2019).

4. A study by Obaji Muhammad and Moulay Mustafa Abdul Nour (2023) in Algeria titled 'Self-differentiation and its relationship with psychological toughness among primary school teachers: A Field Study on a Sample of Primary School Teachers in the Amarhia District of Medea'. This study aimed to explore the relationship between self-differentiation and psychological resilience among primary school teachers. A descriptive method was employed and the Self-Differentiation Scale, developed by Al-Kaabi (2007) and modified by Al-Jabari (2013), as well as the Psychological Toughness Scale, developed by Mekheimer (2002), were administered to a random sample of 70 teachers from Amarhia District schools. The results revealed a high level of psychological resilience and a positive correlation between psychological resilience and self-differentiation (Obaji & Moulay, 2023).

5. A study by Ghalith Shafia (2019) in Algeria:

The Relationship Between Psychological Pressure and Psychological Toughness Among Primary School Teachers. The study aimed to reveal the relationship between psychological toughness and psychological pressure. The researcher employed a descriptive approach, administering the Mekheimer Psychological Toughness Scale and the Psychological Pressure Scale, along with conducting interviews, to a sample of primary school teachers. The results indicated low levels of psychological toughness among the teachers and an inverse correlation between psychological toughness and psychological pressure (Ghalith, 2019).

Commentary on previous studies:

The studies presented focused on the same variables as our own study: namely, sports enjoyment and psychological toughness. All of the studies were aligned with our goal of identifying the levels of these variables among the selected samples. Most studies employed a descriptive method, though the samples varied; some focused on the education sector, while others targeted the sports field. The methods of sample selection also differed, with some studies using random selection and others using purposive sampling.

In terms of the results, some studies, such as the study by Natah Kamal et al. (2021), found a low level of sports enjoyment, while others, such as the study by Ashab Lakhder and Kararmah Ahmed (2021), reported a high level of the same variable. Regarding psychological toughness, some studies concluded that it was low, as in the study by Ghalith Shafia (2019), while others, such as the studies by Obaji Muhammad and Moulay Mustafa Abdul Nour (2023) and Raaf Ahmed and Alwan Rafiq (2019), reported that it was high. Notably, we found no studies that specifically investigated the relationship between sports enjoyment and psychological toughness within the scope of our research, making this a unique aspect of our study.

Methodological procedures of the study:

Study method:

The correlational descriptive method was adopted as it was deemed to be the most suitable for our study.

Boundaries of the study:

Spatial boundaries: The study was conducted on municipal football pitches in the state of Touggourt.

Human boundaries: The study was conducted with football players from the senior category who were active in the inter-association section (southeast). A total of 74 players were studied during the 2023/24 sports season.

- **Temporal boundaries:** The study was conducted from 1 January to 25 August 2024.

- **Subjective boundaries:** The study focused solely on the variables of sports enjoyment and psychological toughness.

- **Study population:** All players registered with their clubs (Touggourt Club, Union of Nazla and Union of Al-Zawiya Al-Abidiya) were included in the study population, totalling 89 players.

- **Study sample:** Our study sample comprised 89 football players, chosen through a comprehensive survey method, representing 100% of the study population. The following table illustrates this:

Table 01: Community and sample of the study

Sports clubs for football	Sample		Population	
	Number	Percentage	Number	Percentage
touguert Club Team	30	33.71%	30	33.71%
Lanzla Union Team	29	32.58%	29	32.58%
Al-Abdiyah Union Team	30	33.71%	30	33.71%
Total	89	100%	89	100%

Study tools:

After reviewing the theoretical literature and previous studies, such as those by Nata Kamal et al. (2021), Ashab Lakhder and Kararmah Ahmed (2021), Ghalith Shafia (2019) and Obaji Muhammad and Moulay Mustafa Abdul Nour (2023), two scales were utilised: the Sports Enjoyment Scale and the Psychological Toughness Scale.

First: Sports Enjoyment Scale:

The Sports Enjoyment Scale, developed by José Carmelo Adsuar Sala in 2021 for the study titled 'A Short Version of the Physical Activity Enjoyment Scale: Development and Psychometric Properties', was used. This scale comprises 16 items (nine positive and seven negative). Responses to the items are scored using three alternatives: for positive items, 'Always

Agree' is scored as 3, 'Sometimes Agree' as 2, and 'Never Agree' as 1; for negative items, 'Always Agree' is scored as 1, 'Sometimes Agree' as 2, and 'Never Agree' as 3. The following table illustrates this.

Table 02: Distribution of Items in the Sports Enjoyment Scale

Variables	Items	Its number	Its count	Total number of items
Sport enjoyment	Positive	1,4,6,8,9,10,11,14,15	09	16
	Negative	2,3,5,7,12,13,16	07	

Second: the Psychological Toughness Scale:

The scale developed by Mekheimer (2002) was used. It consists of 47 items (32 positive and 15 negative) divided into three dimensions: commitment (17 items), control (14 items) and challenge (16 items). Responses to the items are scored using three alternatives: for positive items, 'Always Applies' is scored as 3, 'Sometimes Applies' as 2, and 'Never Applies' as 1; for negative items, 'Always Applies' is scored as 1, 'Sometimes Applies' as 2, and 'Never Applies' as 3. The following table illustrates this.

Table 03: Distribution of Items and Dimensions of the Psychological Toughness Scale

Variables			Scale items	Number	
- First dimension	- Commitment	Positive	.31 .22 .19 .17 .16 .10 .4 .1 43 .41 .40 .34	12	17
		Negative	46 .28 .37 .13 .25	05	
- Second dimension	- Control	Positive	44 .29 .26 .7 .20 .14 .8 .5 .2	09	14
		Negative	32 .35 .38 .11 .23	05	
- Third dimension	- Challenge	Positive	.33 .30 .27 .24 .15 .12 .9 .6 .3 45 .39	11	16
		Negative	36 .42 .47 .18 .21	05	
- The scale as a whole	- Mental toughness	Positive	.31 .22 .19 .17 .16 .10 .4 .1 .7 .20 .14 .8 .5 .2 .43 .40 .34 .24 .15 .12 .9 .6 .3 .44 .29 .26 45 .39 .33 .30 .27	32	47
		Negative	.38 .11 .23 .46 .28 .37 .13 .25 36 .42 .47 .18 .21 .32 .35	15	

Exploratory study:

Face Validity: Two scales were distributed to five judges specialising in human and social sciences and psychology. The judges were asked to provide their opinions on the scales and suggest any necessary corrections. All judges agreed on the validity of the scales in terms of form and content, with only minor adjustments to the structure and phrasing of some items. Thus, both scales were accepted with a 100% approval rate.

Psychometric Properties of the Study Tools:

The scales were distributed to a random sample of 15 football players. After collecting the completed questionnaires, we calculated the validity and reliability coefficients to ensure that the measurement tools were suitable for the main study.

First: Regarding the Sports Enjoyment Scale:

Criterion-referenced validity of the Sports Enjoyment Scale:

Table 04 represents the discriminative validity of the Sports Enjoyment Scale.

Variables	Category	Number	Mean	Standard deviation	T-value	Degrees of freedom	Significance level	Decision
Sports enjoyment	The highest	05	1.36	0.04	14.70	08	0.00	Dal
	The lowest	05	2.44	0.15				

Analysis:

The values of t equal 14.70 with a probability value of 0.00, which is significant at the 0.05 level, as shown in Table (). The mean for the lower group is 1.36 and differs significantly from the mean for the upper group (2.44). Therefore, we can conclude that there are statistically significant differences in the responses of individuals with low and high scores, indicating distinctions in the responses of the sample. Thus, it can be concluded that the study tool (Sports Enjoyment Scale) possesses discriminative validity.

2-1-1 Reliability of the Sports Enjoyment Scale:

2.1.1 Internal consistency method – Cronbach's alpha:

The results are presented in the following table:

Table (5):

Variables	Items	Cronbach's alpha coefficient	Significance level and decision
Sports enjoyment	16	0.82	Valid at (0.01)

This represents the Cronbach's Alpha internal consistency reliability coefficient.

Analysis:

The Cronbach's Alpha internal consistency reliability coefficient for the overall scale is 0.82, which is significant at the 0.01 level, as shown in Table (01). This indicates that the Sports Enjoyment Scale is a reliable study tool.

2. Split-half method: The results are presented in the following table:

Table 05: This represents the split-half reliability coefficient.

Variables	–Correlation coefficient between the sections of the questionnaire	–Spearman and Brown correlation coefficient after correction	–Significance level and decision
Sports enjoyment	0.81	0.90	Valid at (0.01)

Analysis: The results in Table () show that the split-half correlation coefficients for the overall scale are 0.81, 0.90 and 0.90 respectively, after correction, and are significant at the 0.01 level. This indicates that the study tool is reliable.

Regarding the Psychological Toughness Scale:

Criterion-referenced validity of the Psychological Toughness Scale:

Discriminative validity was calculated using a t-test for two independent samples and the results are presented in the following table:

Table 06: Discriminative validity of the Psychological Toughness Scale.

- Variables	Category	Number	Hypothetical Mean	Standard deviation	T-value	Degrees of Freedom	Significance level	Decision
- After commitment - After control	The lowest	05	2.00	0.07	22.63	08	0.00	Significant
	The highest	05	2.94	0.05				
- After challenge	The lowest	05	1.53	0.17	11.47	08	0.00	Significant
	The highest	05	2.81	0.18				
- Variables - After commitment	The lowest	05	1.29	0.09	12.72	08	0.00	Significant
	The highest	05	2.74	0.23				
- After control	The lowest	05	1.72	0.05	11.00	08	0.00	Significant
	The highest	05	2.77	0.20				

Analysis:

The results in Table () show that the t values for the dimensions and the overall scale are 22.63, 11.47, 12.72 and 11.00 respectively, with a probability value of 0.00 which is significant at the 0.05 level. The mean values for the lower group are 2.00, 1.53, 1.29 and 1.72 respectively, which differ from the mean values for the upper group: 2.94, 2.81, 2.74 and 2.77 respectively. Therefore, we can conclude that there are statistically significant differences between the responses of individuals with low and high scores, indicating differences among the sample's responses. Thus, it can be stated that the study tool (the Psychological Toughness Scale) possesses discriminative validity.

2-1-1 Reliability of the Psychological Toughness Scale:**2-1-1-1 Internal consistency method – Cronbach's alpha:**

The results are presented in the following table:

Table 07: This represents the Cronbach's Alpha internal consistency reliability coefficient.

- Variables	Items	Cronbach's alpha coefficient	Significance level and decision
- After commitment	17	0.83	Valid at (0.01)
- After control	14	0.73	Valid at (0.01)
- After challenge	16	0.82	Valid at (0.01)
- Mental toughness	47	0.93	Valid at (0.01)

Analysis:

The internal consistency reliability coefficients (Cronbach's Alpha) for the dimensions and the overall scale are 0.83, 0.73, 0.82 and 0.93 respectively. These values are significant at the 0.01 level. This indicates that the study tool is highly reliable.

2. Split-half method: the results are presented in the following table:**Table 08: This represents the split-half reliability coefficient.**

- Variables	- Correlation coefficient between the sections of the questionnaire	- Spearman and Brown correlation coefficient after correction	Significance level and decision
- After commitment	0.77	0.87	Valid at (0.01)
- After control	0.61	0.75	Valid at (0.01)
- After challenge	0.70	0.83	Valid at (0.01)
- Mental toughness	0.96	0.98	Valid at (0.01)

Analysis:

The results in Table () show that the split-half correlation coefficients for the dimensions and the overall scale range from a minimum of 0.61 to a maximum of 0.98 after correction. These values are significant at the 0.01 level. This indicates that the study tool is reliable.

Statistical Treatment Methods:

Frequencies and percentages; means and standard deviations; one-sample t-test (to test the first and second hypotheses); independent samples t-test (to calculate criterion-referenced validity); and Pearson correlation coefficient (to test the third hypothesis).

The data were processed using SPSS version 25.

Analysis and discussion of results:

Analysis and discussion of the first hypothesis:

‘There is a high level of sports enjoyment among football players.’

The data were analysed using a one-sample t-test to compare the theoretical mean with the mean of the study sample. The results are presented in the following table:

Table 09: Illustrates the level of sports enjoyment among football players.

Variables	Number	Hypothetical mean	Mean	Standard deviation	T-value	Significance level
Sports enjoyment	89	02	2.74	0.28	24.84	0.00dal

Analysis:

From Table (...), the significance level for the sports enjoyment variable is 0.00, which is significant at the 0.05 level. The mean value of 2.74 is greater than the theoretical mean of 2, indicating differences in mean responses favouring the study sample, thus confirming a high level of sports enjoyment among football players.

The researcher attributes this to athletes enjoying their sports activities, finding pleasure in them and experiencing less boredom during practice. They eagerly engage in training and follow the programme set by their coach because they realise that enjoying sports activities provides them with the psychological strength and energy needed to relax and escape pressures and depression. They experience a sense of self during training, which gives them significant social status due to the positive results they achieve in sporting competitions and the happiness they bring to others. This view is supported by Sidqi Nour Eddine (2004), who stated that ‘sports enjoyment is the feeling of joy and the expression of accompanying feelings of delight during sports practice. This results in self-esteem and the achievement of positive social value with peers and competitors’.

The researcher also explains that players enjoy sports so much because they don't feel frustrated and love achieving their goals through enjoying their sports activities. Some have gained considerable financial returns, which makes them happy, while others have achieved good moral returns, feeling successful and receiving praise from their teammates, including players, administrators and sports fans, for their contributions and achievements. Rateb Mohamed Kamel (2000) echoes this, linking sports enjoyment to achieving goals and stating that it is important to connect sports goals with elements that promote enjoyment and entertainment, rather than strictly adhering to rules and regulations that diminish fun.

The results of our study align with those of Ashab Lakhdar and Kararmah Ahmed (2021), who also found a high level of sports enjoyment. However, they differ from the findings of Nattah Kamal et al. (2021), who reported a low level of sports enjoyment.

Analysis and discussion of the second hypothesis:

'There is a high level of psychological toughness among football players.'

The data were analysed using a one-sample t-test to compare the theoretical mean with the mean of the study sample. The results are presented in Table 10.

Table 10:

This illustrates the level of psychological toughness among football players.

- Variables	Number	Hypothetical mean	Mean	Standard deviation	T-value	Significance level
- After commitment	89	0.26	2.78	0.26	27.47	0.00 dal
- After control	89	0.26	2.76	0.26	27.02	0.00 dal
- After challenge	89	0.29	2.72	0.29	23.06	0.00 dal
- Mental toughness	89	0.27	2.75	0.27	26.14	0.00 dal

Analysis:

From Table (...), the significance levels for the dimensions (commitment, control, challenge) and the Psychological Toughness Scale are all equal to 0.00, which is significant at the 0.05 level. The mean values for each dimension are 2.78, 2.76, 2.72, and 2.75, respectively, all greater than the theoretical mean of 2. This indicates that there are differences in the mean responses of the sample individuals in favor of the study sample's mean, confirming that the level of psychological toughness among football players is high.

The researcher attributes this to the psychological capabilities of the players, which enhance their sense of belonging to the team they represent, the city they play for and the audience that supports them. These factors motivate them, strengthening their relationships with teammates and improving social interaction. They demonstrate determination to overcome obstacles and achieve commendable results. They attend training sessions eagerly and defend their goals with all their strength, demonstrating a love for victory and expressing opinions about their team's future objectives and the management of their club, which they consider their living environment. Kamel Nattah (2006) affirmed this, stating that 'the strong sense of belonging that an individual shows through their commitment to various aspects of life and active participation in collective activities enhances social interactions with others'.

The researcher also explains that players' high level of psychological toughness is due to their ability to control their emotions, feelings and decisions. They do not allow these to be dictated by external factors that could hinder their progress towards achieving their values and goals. They have confidence in their psychological and physical capabilities and consider these to be their weapons for overcoming the pressures they encounter during competitions, rather than relying on luck or chance. They believe that hard work and their abilities are the only means of strengthening themselves psychologically and physically when facing challenges in order to achieve victory or engage in sports activities (training and competition) in general. This view is supported by Abdel Aziz Muftah Mohamed (2010), who stated that 'an individual's belief in their ability to control and change the events they face in life is an internal conviction'.

Moreover, the researcher explains that the high level of psychological toughness among players is also due to their high level of challenge. They believe that the enjoyment of sports practice lies in their ability to confront challenges and aspire to participate in competitions (local or regional). This fosters a desire to tackle difficult situations and a curiosity to explore sports competitions that vary in level and increase in pressure as they advance. Local competitions are not the same as regional or national ones, and as the competition changes, so do the challenges and pressures, which heightens the excitement and anticipation for discovering new adventures and greater challenges, for which they find necessary solutions to achieve better results. This is affirmed by Kobaza (1983), who noted that individuals' acceptance of the inevitable changes in life is a natural reality that must be approached positively rather than negatively, as it contributes to their security, safety, and self-confidence.

Our study's results align with those of Obaji Mohamed and Moulay Mustafa Abdul Nour (2023), and those of Raef Ahmed and Aliwan Rafiq (2019), which concluded that there is a high level of psychological toughness. However, our findings differ from those of Ghalith Shafia (2019), which indicated a low level of psychological toughness.

****Analysis and Discussion of the Third Hypothesis:**** "There is a statistically significant positive correlation between sports enjoyment and psychological toughness among football players."

The data were analyzed by calculating the Pearson correlation coefficient between the mean scores of the sports enjoyment variable and the mean scores of the psychological toughness variable for the sample, and the statistical significance was extracted. The results are presented in the following table:

Table 11: This table represents the relationship between enjoying sports and having psychological toughness.

Variables		Number	Arithmetic mean	Standard deviation	Pearson correlation coefficient	Significance and decision level
Sports enjoyment	- Variables	89	2.78	0.26	**0.96	0.00 dal
	- After commitment	89	2.76	0.26	**0.99	0.00 dal
	89- After control	89	2.72	0.29	0.98**	0.00 dal
	- After challenge	89	2.75	0.27	0.99**	0.00 dal

Analysis:

From the results in Table (...), the significance levels are equal to (0.00, 0.00, 0.00, 0.00), which are significant at the 0.05 level. The correlation coefficients between the sports enjoyment variable and the variables (commitment dimension, control dimension, challenge dimension, psychological toughness variable) are (0.96, 0.99, 0.98, 0.99), respectively, which are significant at the 0.01 level. These values are positive and very strong, indicating that as sports enjoyment increases among players, so do their levels of commitment, control, challenge, and psychological toughness. Therefore, we can conclude that there is a statistically significant positive correlation between sports enjoyment and psychological toughness among football players.

The researcher attributes this to the fact that, as players enjoy sports more during training or competitions, their psychological toughness increases too. The enjoyment they experience during sports activities provides significant psychological comfort, enabling them to be present and passionate during training sessions. This also elevates their levels of positive motivation, such as initiative and interaction with friends, by creating a family atmosphere characterised by respect and noble morals. This makes them feel like a united team that supports one another. This helps them build a solid psychological foundation, enabling them to face difficulties and challenges. They are committed to honouring the contracts they have made with themselves and with their team. This gives them the positive energy needed to fulfil their roles as athletes and players, defending their goals through sports practice and benefiting themselves, the team and the audience that supports them. This is supported by Freud's theory of 'psychological resilience and the ego' (1856, 1939), which states that 'the stronger the ego, the greater the energy to perform the tasks and responsibilities assigned to the individual, and the more mature and resilient it becomes towards itself, its environment, and society'.

This also helps them to control everything that happens around them, managing pressures and challenges positively and avoiding mistakes that could hinder the achievement of their goals. It enables them to tackle challenges and overcome

obstacles seriously, utilising all their psychological, physical, material and moral resources to handle the pressures that prevent them from achieving their goals.

Furthermore, our research found no studies that agreed or disagreed with our results regarding the presence or absence of a correlation between sports enjoyment and psychological toughness. This could be a novel contribution to the sports psychology research heritage.

General conclusion of the study: Through our study of the relationship between enjoying sports and psychological toughness among football players, we came to the following conclusions:

1. Football players enjoy sports to a high degree.
2. There is a high level of psychological toughness among football players.
3. There is a statistically significant positive correlation between sports enjoyment and psychological toughness among football players.

Recommendations:

Based on our study of the relationship between sports enjoyment and psychological resilience among football players, we make the following recommendations to those involved in the fields of psychology (social, educational and sports):

1. Incorporate recreational and enjoyable exercises into training sessions to enhance players' psychological resilience and prepare them for future challenges.
2. Encourage governing bodies and training committees at federation and association levels to educate coaches and educators about the importance of incorporating enjoyable sports activities.
3. Psychological and social specialists should be involved within the technical teams.
4. Create environments in which coaches can implement their activities without pressure.

Suggestions:

In light of the results obtained, and to enhance the previous recommendations, we propose the following topics for future research in the same fields:

1. The role of recreational physical activity in improving psychological resilience.
2. The relationship between psychological resilience and mental health during adolescence.
3. Levels of enjoyment of sports among players (e.g. football, handball).

References:

1. Hammah, T., & Momissey, C. (1978). Correlates of psychological hardiness in Canadian adolescents. *Journal of Social Psychology*, 127(04), 339-344.
2. Kobasa, S., & Pvcetm. (1983). Personality and social resources in stress resistance. *Journal of Personality and Social Psychology*, 45(04).
3. Pines, M. (1986). Psychological hardiness in D. Goleman & D. Heller (Eds.), *Pleasure of psychology*. USA: New York, Amentor Book.
4. Ahmad Al-Radi, Zainab Noufal. (2008). Psychological toughness among the mothers of martyrs of the Al-Aqsa Intifada and its relation to some variables. Gaza: Master's thesis, Islamic University.
5. Ahmed Rafik, & Rafik Alwan. (2019). Mental health and its relationship to psychological toughness among students of the Institute of Sciences and Techniques of Physical and Sports Activities. *Journal of Sports Science and Training*, 05(03), 161-170.
6. Ousama Kamel Rateb. (2000). *Sports psychology (concepts and applications)*. Egypt: Volume 02, Arab Thought House.
7. Ousama Kamel Rateb. (2001). *Psychological preparation for youth*. Cairo: Arab Thought House.
8. Al-Rashid, Lulwa. (1999). Coping strategies for psychological pressures among some individuals with special conditions and ordinary individuals and their relationship to certain personality traits. Saudi Arabia: Master's thesis, Department of Psychology, College of Education, King Saud University, Riyadh.
9. Jamal Kharshi. (2020). Standardization of the pre-stage scale for preschool children in the Algerian environment. *Journal of Sports Excellence*, 05(03), 38-53.

10. Hekmat Abdul Aziz Ghafouri. (2012). A comparative study of psychological toughness among players in the Elite Football League in Baghdad. *Journal of Sports Sciences*, 04(04), 174-203.
11. Khaled bin Mohammed bin Abdullah Al-Abdali. (2012). Psychological toughness and its relationship to coping strategies for psychological pressures among a sample of academically outstanding and ordinary secondary school students in Mecca. Saudi Arabia: Master's thesis, Department of Psychology, College of Education, Unmm Al-Qura University.
12. Razik Farhati. (2022). The relationship between motivations and sports enjoyment among secondary school students: A field study at Qardi Arafah High School, Al-Aqila Municipality, Tebessa. Algeria: Master's thesis, Institute of Sciences and Techniques of Physical and Sports Activities, Arab University of Tebessa.
13. Zoulekha Khatib. (2023). The control center and its relationship to psychological toughness among medical students. *Human and Social Studies*, 12(02), 439-450.
14. Shafia Ghalith. (2019). The relationship between psychological pressure and psychological toughness among primary school teachers. *Journal of Humanities Sciences*, 30(03), 207-220.
15. Abbas Medhat. (2010). Psychological toughness as a predictor of reduced psychological pressure and aggressive behavior. *Journal of Education*, Assiut University, Egypt, 26(01), 167-236.
16. Abdel Aziz Muftah Muhammad. (2010). *Health psychology* (1st ed.). Jordan: Wael Publishing and Distribution.
17. Othman Farouk Al-Sayed. (2001). *Anxiety and the provocation of psychological pressures*. Egypt: 1st ed., Arab Thought House, Cairo.
18. Imad Mekhaimer. (1996). Perception of parental acceptance/rejection and its relationship to psychological toughness among university students. *Journal of Psychological Studies*, 6(2), 277-299.
19. Kamal Nattah. (2016). The effect of a proposed training program on sports enjoyment among football players. Algeria: Doctoral thesis, University of Algiers 03.
20. Kamal Nattah. (2021). The role of sports enjoyment in reducing withdrawal behavior from physical activity among adolescents. *Journal of Excellence in Sciences and Techniques of Physical and Sports Activities*, 06(01), 668-680.
21. Lakhdar Ashab & Ahmed Kararnah. (2021). The relationship between sports enjoyment and achievement motivation among football players. *Journal of Sports Creativity*, 12(04), 594-608.
22. Mohamed Obaji & Mustafa Moulay. (2023). Self-differentiation and its relationship to psychological toughness among primary school teachers. *Tabna Journal for Scientific Academic Studies*, 06(02), 647-668.
24. Mohamed Nour Eddine Sidki. (2004). *Sports psychology*. Egypt: 1st ed., Modern University Office, Alexandria.