



The Role of Sports Culture in Achieving Psychological and Social Compatibility among Boxers

Mohammed Tareq Raheem¹, Munadhil Adil Kasim²
Ministry of Education - Misan Education Directorate¹
Imam Kadhim Faculty of Sciences University²
mtrh@yahoo.com², munadil.adil@iku.edu.iq²

Abstract

The present study aims to explore the level of sports culture in its various dimensions (cognitive, behavioral/applied, and ethical/educational) and the level of psychological and social compatibility among boxing players. It also seeks to analyze the correlational and predictive relationship between these two variables. The researcher relied on the descriptive and analytical method using the survey method and correlational/affective relationships. The research sample included 100 officially registered boxers, selected at random. To collect data, two measurement tools were used according to the five-point Likert scale: the Sports Culture Scale and the Psychosocial Compatibility Scale, and the validity and stability of the tools used were verified through approved psychometric processors. The data were statistically analyzed using IBM SPSS software version 26. The results of the study resulted in a set of outputs, the most important of which is that boxers enjoy a high level of sports culture with an overall arithmetic average of 3.91. The moral and educational dimension came in first place with an average of 4.12, followed by The behavioral and applied dimension with an average of 3.88, and finally the cognitive dimension with an average of 3.75. Also, the results showed that boxers possess high levels of psychosocial compatibility with an overall arithmetic average of 3.93, with social compatibility with a score of 4.05 outpacing psychological compatibility with an average of 3.82. It was also found that there was a positive and strong correlation with statistical significance between the level of sports culture and psychosocial compatibility among boxers with a significance level of 0.01 and a correlation coefficient of 0.771. According to the results of the regression analysis, it is clear that sports culture has a significant predictive effect, as it explains 59.4% of the variation in psychosocial compatibility in the sample. Based on these findings, the study recommends that psychological and sports education programs should be included in the annual plans of boxing federations and clubs, with the provision of a sports psychologist to promote self-confidence and control of emotions during combat competitions.

Keywords: Sports Culture, Psychosocial Compatibility, Boxing Players, Psychological Preparation, Combat Games

INTRODUCTION

Sport in the modern era represents a comprehensive social and cultural phenomenon that goes beyond the boundaries of physical performance and competition to become one of the main pillars in building an integrated human personality and an effective tool for achieving psychological and social balance for individuals (Siedentop & Van der Mars, 2022). The practice of sports is no longer limited to achieving awards

and achievements, but is closely related to the extent to which the athlete understands the values, concepts and knowledge that collectively constitute what is known as sports culture (Cormier et al., 2025). Sports culture is an integrated intellectual and behavioral system that includes knowledge, attitudes, ethical values, and awareness of the systems and laws that govern the sports field (Li, 2022). The importance of this culture is not limited to the awareness of the rules of the game, but extends to refining the mental and emotional awareness of the athlete, which gives him the ability to face increasing psychological pressures, regulate his emotions, and control his behaviors during difficult competitive situations, which reflects positively on his mental health and self-compatibility (Li, Jiang & Zhou, 2024).

On the other hand, psychosocial compatibility emerges as one of the most important indicators of mental health and quality of life for athletes, as psychological compatibility expresses an individual's ability to achieve self-actualization, adapt to changes in the sports environment, and control feelings of anxiety and stress (Albishi et al., 2025). Social compatibility refers to the extent to which an athlete succeeds in positively interacting with his managerial and training environment, adhering to values and sportsmanship, and building relationships based on respect and cooperation with his teammates and competitors alike (Padli et al., 2024). This compatibility is especially important in individual sports of a competitive nature such as boxing, as this sport requires high levels of self-control, emotional control, and control of aggressive charges, due to its direct combat nature and intense physical and psychological effort represented in facing the opponent under the pressure of the fans and the judging committees (Mojtahedi et al., 2023).

Here, sports culture emerges not only as a cognitive supporter, but also as an educational and moral foundation that contributes to the evaluation of combat behavior and directing the aggressive energy of the boxer to a disciplined sporting behavior characterized by sportsmanship and balance with oneself and society. In this context, this research aims to shed light on the role of sports culture in achieving psychological and social compatibility among boxing players, trying to reveal the nature of the relationship and impact between the breadth of the cultural horizon and the boxer's sports awareness and his ability to adapt psychologically and socially stabilize inside and outside the ring, in a way that contributes to enriching the sports scientific library with an analytical

reference that serves coaches, administrators and specialists in the psychological preparation of martial arts players.

RESEARCH PROBLEM

The sport of boxing occupies a distinct place among individual sports, loaded with extreme sensitivity due to its combat nature, which is based on direct physical contact, and the resulting emotional and psychological pressures that require a high degree of psychological control and a comprehensive knowledge of the ability to manage emotions both during and after a match (Mao et al., 2023). Although the primary purpose of sporting activity is to build a complete personality, the stereotype of boxing often associates it with aggressive tendencies or emotional disturbances, which can lead to negative effects on a boxer's psychosocial adjustment both in his or her sporting environment and in his or her public life (Li, Yan, & Wen, 2026). Through the researcher's observation of the reality within boxing clubs and training institutions, it is clear that the training apparatus focuses more on the skill, physical, and tactical aspects, with a tangible marginalization of the cognitive and cultural aspects related to sports, as it is believed that sports achievement stems mainly from physical superiority, while recent psychological studies highlight that the lack of sports culture in the athlete reduces his ability to understand the philosophy of sports, address the results of winning or losing, overcome psychological pressures, and adapt effectively to his teammates, competitors, and society.

The current research problem emerges in the existence of a knowledge and applied gap related to the extent to which boxers possess sports culture in its comprehensive sense (cognitive, behavioral, and ethical), and the extent to which this culture is reflected in the achievement of psychological compatibility (e.g., emotional stability, self-confidence, and anxiety control) and social compatibility (e.g., commitment to sportsmanship, good communication, and social adjustment). Accordingly, the research problem focuses on examining the role of sports culture in promoting psychological and social adjustment among boxers. To address this main problem, the study seeks to determine the level of sports culture and psychosocial adjustment among the participants, as well as to examine whether a statistically significant relationship exists between sports culture and psychological adjustment and between sports culture and social adjustment. Furthermore, the study investigates whether the influence of sports culture on psychosocial adjustment differs according to demographic variables, particularly years of experience, age group,

and level of achievement.

RESEARCH OBJECTIVES

The current research aims to identify the role of sports culture in achieving psychological and social adjustment among boxers. To accomplish this main objective, the study seeks to determine the level of sports culture among the research sample across its cognitive, behavioral, and moral dimensions; assess the level of psychological adjustment among boxers in terms of emotional stability, self-confidence, anxiety control, and aggression; and evaluate their level of social adjustment, including adaptation to the sporting environment, commitment to sportsmanship, and the quality of relationships with colleagues and coaches. Furthermore, the study seeks to examine the statistical relationship between sports culture and psychological adjustment, as well as the relationship between sports culture and social adjustment among boxers. Finally, the research aims to identify whether statistically significant differences exist in the relationship between sports culture and psychosocial adjustment according to selected demographic and competitive variables, such as years of experience, age group, and competitive or achievement level.

THE IMPORTANCE OF THE RESEARCH

The present study derives its scientific and practical importance from the nature of its overlapping topic, which combines a critical cognitive and behavioral variable, which is sports culture, and two fundamental psychological and social variables that form the foundation of a balanced sports personality, which is psychological and social compatibility, with the application of this to the sport of boxing, which is characterized by a high combat and emotional specificity. The theoretical importance of this research is confirmed in its relentless pursuit to enrich the scientific and academic library of sports with modern knowledge frameworks that link management sciences and sports culture on the one hand and sports psychology on the other hand, as the research provides a comprehensive conceptual rooting of the role of sports culture as a value and behavioral system that contributes to reformulating the athlete's awareness and overcoming the traditional view that reduces boxing to only the physical and tactical dimensions. In addition, research provides the academic field with scientific measurement tools and metrics that have high levels of honesty and consistency, allowing future researchers and

scholars to benefit from them and apply them in similar studies on other martial arts sports.

At the applied and field level, the importance of research is evident in directing the attention of coaches and technical and administrative bodies in boxing federations and clubs towards the need to include sports education programs as an authentic and parallel pillar of physical and skill preparation programs, as this culture directly contributes to refining the boxer's combat behavior, and transforming the emotional charges and aggressive energy resulting from the nature of competition into a disciplined sports behavior characterized by sportsmanship and self-control. This study also provides those in charge of sports management with accurate field indicators that help them formulate policies and strategic visions that enhance the psychological compatibility and social adjustment of players inside and outside the arena, in order to ensure the construction of athletes capable of achieving high achievement while maintaining psychological stability and societal integration.

RESEARCH DELIMITATIONS

The research areas define the procedural frameworks within which the study was conducted to ensure the accuracy of its results and the possibility of generalizing its findings within the specified limits. The human domain of the study comprises boxers who are officially registered with sports clubs and federations. The temporal domain covers the period from October 1, 2025, to March 1, 2026. The spatial domain includes sports halls, clubs, and training centers affiliated with the Iraqi Boxing Clubs Federation. Regarding the subject and methodological domain, the research is objectively limited to examining the role of sports culture as an independent variable and its relationship with psychological and social adjustment as dependent variables among boxing players. To achieve these objectives, the study employs a descriptive approach, specifically the analytical and correlational methods, to examine the levels and relationships among the variables under investigation.

RESEARCH METHODOLOGY

In light of the nature of the research problem and the objectives that the study seeks to achieve, the researcher adopted the descriptive approach using the survey, correlational, and comparative methods, as this approach is considered appropriate for

psychological, social, and sports research. It enables the researcher to describe the phenomenon under investigation, particularly sports culture and psychosocial adjustment, as it exists in reality, analyze its characteristics, measure its various dimensions, and determine the nature and strength of the relationships between the study variables without direct intervention or manipulation. The research population consisted of all boxers officially registered in the records of the relevant boxing federation and/or Iraqi boxing clubs participating in the 2024–2025 sports season, who regularly engage in sports and competitive activities in affiliated sports halls and clubs.

The research sample was selected using a purposive sampling method and comprised 100 boxers, representing 71.42% of the total research population. To meet the procedural requirements of the study, the sample was divided into several subgroups. The pilot sample consisted of 15 boxers from the same research population but outside the main application sample. This group was used to verify the psychometric properties of the measurement instruments, including their validity and reliability, assess the clarity of the instructions and items, and determine the approximate time required to complete the instruments. The construction sample consisted of 25 boxers and was used to conduct item analysis and the necessary statistical analyses for developing and evaluating the measurement scale. Finally, the main application sample consisted of 100 boxers who participated in the final administration of the research instruments, and the data obtained from this sample were statistically analyzed to derive the research findings and test its hypotheses.

Table 1: Shows the distribution of the research sample.

Sample Type	Issue	Percentage	Purpose
Survey Sample	15	10.71%	Benchmark Clarity and Truthfulness/Consistency Test
Sample Construction	25	17.85%	Building a search tool
Main Application Sample	100	71.42%	Apply the search tool and extract the actual results
Total	140	100%	--

First: Research Means & Tools

Data collection methods refer to the approaches and procedural tools employed by the researcher to obtain accurate information and facts related to the phenomenon under investigation. In the present study, the researcher relied on several methods of data collection. First, Arab and foreign sources and references were consulted, including

specialized books, theses, dissertations, and peer-reviewed scientific journals in the fields of sports culture, sports management, sports psychology, and boxing, in order to establish the theoretical framework and support the scientific foundations of the study.

Second, personal interviews were conducted with a number of experts and specialists in sports psychology and boxing to obtain their opinions and professional judgments regarding the dimensions of the phenomenon under study and to assist in reviewing and refining the items of the research scales. Third, official records and documents of the Iraqi Central Boxing Federation, or the relevant governing body, were examined to determine the size of the research population and identify the participating clubs and registered boxers. Regarding the research tools, the researcher adopted a questionnaire/scale as the principal instrument for collecting field data because of its suitability for measuring the study variables and its applicability to relatively large samples. Accordingly, two measurement instruments were prepared and/or adapted to assess the main variables of the study, namely sports culture as the independent variable and psychological and social adjustment as the dependent variables.

The First Dimension: The Cognitive Dimension (Awareness Of Laws, Regulations And Requirements)

Table 2: Shows the paragraphs of the cognitive dimension

No	Paragraph	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	I make sure to follow the latest rules and regulations issued by the International Boxing Federation.					
2	Recognize the scientific and health importance of the nutrition, rest, and recovery regimen in boxing.					
3	I understand the importance of psychological and mental preparation as much as I am interested in physical and skill preparation.					
4	I have a hard time understanding the refereeing techniques and					

evaluating points during
rounds in a fight.
(Negative)

The second dimension: the behavioral and applied dimension (practice and commitment)

Table 3: Shows the behavioral and applied dimension

No	Paragraph	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	I adhere to health and preventive instructions and wear safety gear during training and fighting.					
2	I apply a balanced sports lifestyle outside of gym training times.					
3	I keep the training dates accurate and adhere to the directives of the technical and administrative staff.					
4	I seek to develop my wealth of sports knowledge by reading and following the world championships.					

The Third Dimension: The Moral and Educational Dimension (Values and Sportsmanship)

Table 4: Shows the moral and educational dimension

No	Paragraph	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	I see boxing as a way to refine oneself and ,control one's strength not to show it.					
2	I respect my rival and I shook hands warmly before and after the fight, regardless of the outcome.					
3	I completely refrain from using any illegal					

	means or using force outside of the ring.
4	I accept the decisions of the referees in the spirit of sportsmanship, even if they are contrary to my expectations.

Second Scale: Psychosocial Compatibility Scale (Dependent Variable)

The first theme: psychological compatibility (emotional control and self-confidence)

Table 5: Psychocompatibility Paragraphs

No	Paragraph	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	I have a high ability to control feelings of fear and stress before going on the ring.					
2	I have a lot of confidence in my physical abilities and skill while facing tough opponents.					
3	I can control my emotions and anger when I receive hard blows from the opponent.					
4	I feel very shaken and frustrated for several days if I lose a fight. (<i>Negative</i>)					
5	I possess the ability to have high mental concentration and make the right decision during the pressure of a fight.					

Second Theme: Social Compatibility (Adapting to the Sports Environment and Society)

Table 6: Shows the paragraphs of social compatibility

No	Paragraph	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	I have relationships based on affection and					

	mutual respect with all my clubmates.
2	I collaborate positively with the coaches and administrators to develop the level of the team as a whole.
3	I find it easy to integrate and adapt to the atmosphere of sports camps and outdoor tournaments.
4	I am happy to represent the sport of boxing in a civilized way that befits my country and my community.
5	I actively participate in the social and cultural activities organized by the management of the club or federation.

To interpret the arithmetic means obtained from the statistical processing of the research data using SPSS, a three-level classification system was adopted to determine the level of each variable and its dimensions. The category length was calculated using the formula: $(5 - 1) \div 3 = 1.33$. Accordingly, arithmetic means ranging from 1.00 to 2.33 were interpreted as indicating a low level, means ranging from 2.34 to 3.67 as indicating a moderate level, and means ranging from 3.68 to 5.00 as indicating a high level. The items of the research instruments were scored according to a five-point Likert scale, in which "strongly agree" was assigned a score of 5, "agree" a score of 4, "neutral" a score of 3, "disagree" a score of 2, and "strongly disagree" a score of 1. For negatively worded items, the scoring procedure was reversed. To ensure the scientific quality and suitability of the measurement instruments for field application, the researcher conducted the required psychometric procedures to establish their validity, reliability, and objectivity.

Validity refers to the extent to which an instrument measures the construct for which it was designed. Face validity was established by presenting the initial version of the scales to a panel of experts and specialists in physical education sciences, sports psychology, measurement, and evaluation. The experts evaluated the appropriateness of

the items, their linguistic clarity, and their relevance to the specified dimensions, and items were retained, modified, or removed based on an agreement level of at least 80% among the experts. Construct validity and internal consistency were examined by administering the scales to the pilot sample and calculating Pearson correlation coefficients between each item score and the total score of its corresponding dimension, as well as between the score of each dimension and the total score of the scale. Items and dimensions demonstrating statistically significant relationships at the level of $\alpha \leq 0.05$ were considered acceptable.

Reliability refers to the consistency and stability of measurement results when the instrument is administered under similar conditions. The researcher assessed reliability using the test-retest method and the internal consistency method. For the test-retest procedure, the scales were administered to the pilot sample twice, with a 14-day interval between the two applications, and Pearson's correlation coefficient was calculated between the scores obtained in the first and second administrations. Internal consistency was assessed using Cronbach's alpha coefficient, which was calculated for each dimension and for the scale as a whole; a coefficient of 0.70 or higher was considered an acceptable indicator of reliability for academic research. The objectivity of the instruments was ensured through clear instructions, unambiguous item wording, standardized administration procedures, and a predetermined numerical scoring system, thereby minimizing the possibility of researcher or evaluator bias.

Finally, the data collected in the study were processed and analyzed using the Statistical Package for the Social Sciences (IBM SPSS), Version 26 or 28, depending on the version available to the researcher. The statistical procedures were selected in accordance with the nature of the data and the objectives of the study and were used to analyze the research variables and test the proposed hypotheses.

RESULTS

A. Results of the Cognitive Dimension :

This dimension includes the extent to which the player is aware and comprehensible of the rules, health requirements, training and refereeing systems. Table 8 illustrates the statistical indicators for the paragraphs of this dimension.

Table 8: Arithmetic Averages, Standard Deviations and Relative Weight of Cognitive Dimension Paragraphs (n = 80)

No	Paragraph	M	SD	Percentage Percentage	Ranking	Level
1	I understand the importance of psychological and mental preparation as much as I am interested in physical and skill preparation.	3.88	0.62	77.60%	1	High
2	Recognize the scientific and health importance of the nutrition, rest, and recovery regimen in boxing.	3.82	0.68	76.40%	2	High
3	I make sure to follow the recent rules and amendments issued by the International Boxing Federation.	3.70	0.71	74.00%	3	High
4	I have a hard time understanding the refereeing techniques and evaluating points during rounds in a fight. (Negative)	3.60	0.81	72.00%	4	Medium
-	Overall average of the cognitive dimension	3.75	0.61	75.00%	-	High

Statistical Analysis:

Table 8 shows that the general arithmetic mean of the cognitive dimension was (3.75) with a standard deviation of (0.61) and a relative weight of (75.00%), indicating a level of (high). Paragraph (3) came in first place with an average of (3.88), which reflects an awareness of the need for mental and psychological preparation, while the inverted paragraph (4) came in the last place with an average of (3.60) and an average level.

B. Results of the behavioral and applied dimension :

This dimension measures the extent to which mathematical knowledge translates into daily practice and adherence to instructions. Its results are shown in **Table 9**.

Table 9: Mathematical Averages, Standard Deviations, and Relative Weight of the Behavioral and Applied Dimension Paragraphs (n = 80)

No	Paragraph	M	SD	Percentage Percentage	Ranking	Level
1	I keep the training dates accurate and adhere to the directives of the technical and administrative staff.	4.05	0.52	81.00%	1	High

2	I adhere to health and preventive instructions and wear safety gear during training and fighting.	3.95	0.58	79.00%	2	High
3	I apply a balanced sports lifestyle outside of gym training times.	3.80	0.64	76.00%	3	High
4	I seek to develop my wealth of sports knowledge by reading and following the world championships.	3.72	0.69	74.40%	4	High
-	The general average of the behavioral and applied dimension	3.88	0.53	77.60%	-	High

Statistical Analysis:

Table 9 shows that the behavioral dimension achieved an overall arithmetic mean of (3.88), a standard deviation of (0.53), and a relative weight (77.60%) at a level of (high). Discipline with timing and field execution achieved the highest levels with a median of (4.05) for paragraph (7), which indicates behavioral discipline among the players.

C. Results of the Moral and Educational Dimension :

This distance expresses values, sportsmanship, and impulse control. Table (3) presents the details of its paragraphs.

Table 10: Mathematical Averages, Standard Deviations and Relative Weight of the Items of the Moral and Educational Dimension (n = 80)

No	Paragraph	M	SD	Percentage Percentage	Ranking	Level
1	I completely refrain from using any illegal means or using force outside of the ring.	4.25	0.45	85.00%	1	High
2	I see boxing as a way to refine oneself and control one's strength, not to show it.	4.18	0.51	83.60%	2	High
3	I respect my opponent and shake hands warmly with him before and after the fight is over, regardless of the outcome.	4.08	0.55	81.60%	3	High
4	I accept the decisions of the referees in the spirit of	3.97	0.62	79.40%	4	High

	sportsmanship, even if they are contrary to my expectations.					
-	The general average of the moral and educational dimension	4.12	0.48	82.40%	-	High

Statistical Analysis:

It is clear from Table 10 that the moral dimension achieved the highest rank among the dimensions of sports culture with a total mean of (4.12), a deviation (0.48), and a relative weight (82.40%). Paragraph (11) related to the non-use of force outside the ring with a very high medium (4.25) emerged.

D. Results of the Psychological Compatibility Axis :

This axis measures a boxer's level of self-control, stress control, and self-confidence. Table (4) shows the statistical results.

Table 11: Arithmetic Averages, Standard Deviations and Relative Weight of the Psychocompatibility Axis Paragraphs (n = 80)

No	Paragraph	M	SD	Percentage Percentage	Ranking	Level
1	I have a lot of confidence in my physical abilities and skill while facing tough opponents.	4.02	0.54	80.40%	1	High
2	I possess the ability to have high mental concentration and make the right decision during the pressure of a fight.	3.90	0.60	78.00%	2	High
3	I can control my emotions and anger when I receive hard blows from the opponent.	3.82	0.65	76.40%	3	High
4	I have a high ability to control feelings of fear and stress before going on the ring.	3.75	0.68	75.00%	4	High
5	I feel very shaken and frustrated for several days if I lose a fight. (<i>Negative</i>)	3.61	0.77	72.20%	5	Medium
-	The general average of the psychological compatibility allowance	3.82	0.56	76.40%	-	High

Statistical Analysis:

Table 11 indicates that the overall rate of psychological compatibility came at a level of (high) with an arithmetic mean of (3.82) and a standard deviation (0.56). Paragraph (2) on self-confidence topped the paragraphs with a middle of (4.02).

E. Results of the Social Compatibility Axis :

This hub measures the extent to which a boxer is integrated into his or her sporting environment and interacts with his teammates, coaches, and the community. Table 12 shows its findings.

Table 12: Arithmetic Averages, Standard Deviations and Relative Weight of Social Compatibility Axis Paragraphs (n = 80)

No	Paragraph	M	SD	Percentage Percentage	Ranking	Level
1	I have relationships based on affection and mutual respect with all my clubmates.	4.22	0.48	84.40%	1	High
2	I am happy to represent the sport of boxing in a civilized way that befits my country and my community.	4.15	0.51	83.00%	2	High
3	I collaborate positively with the coaches and administrators to develop the level of the team as a whole.	4.08	0.56	81.60%	3	High
4	I find it easy to integrate and adapt to the atmosphere of sports camps and outdoor tournaments.	3.95	0.61	79.00%	4	High
5	I actively participate in the social and cultural activities organized by the management of the club or federation.	3.85	0.66	77.00%	5	High
-	The general average of social compatibility	4.05	0.51	81.00%	-	High

Statistical Analysis:

Table 12 shows that the social axis was achieved with a very high mean of (4.05) and a deviation of (0.51). Fraternal relations with colleagues (paragraph 6) came in first place with a median (4.22).

The results in Table 13 illustrate the nature and type of relationship between the dimensions of sports culture and the two axes of psychological and social compatibility.

Table 13: Pearson correlation coefficients between sports culture and psychosocial compatibility (n = 80)

Dimensions of sports culture	Psychological compatibility (r)	Sig	Social Compatibility (R)	Sig	Total Compatibility (r)	Sig
Cognitive Dimension	0.584*	0.000	0.612*	0.000	0.648*	0.000
Behavioral Dimension	0.621*	0.000	0.655*	0.000	0.689*	0.000
The Ethical Dimension	0.672*	0.000	0.741*	0.000	0.758*	0.000
The Macro Measure of Sports Culture	0.695*	0.000	0.738*	0.000	0.771*	0.000

* The relationship is statistically significant at the significance level ($\alpha \leq 0.01$)

Statistical Analysis:

Table 13 confirms the existence of a strong and statistically significant positive (direct) correlation between the total scale of sports culture and the total measure of psychosocial compatibility ($r = 0.771$ at $p = 0.000$). The moral dimension was the highest correlation with total compatibility. $r = 0.758$.

Impact and predictive significance test (simple linear regression):

To test the main hypothesis about the extent to which sports culture contributes to predicting psychosocial adjustment, the regression equation was calculated in a table .14

Table 14: Shows the results of the linear regression analysis of the impact of sports culture on

Independent variable	Regression Coefficient (B)	Standard Error	Standard Parameters (β)	T	Sig	Determination Coefficient (R2)	T	Sig
Fixed	1.124	0.245	-	4.588	0.000	0.594	114.28	0.000
Sports Culture	0.718	0.067	0.771	10.690	0.000	-	-	-

Statistical modeling showed high quality, as the value of $F = 114.28$ was reached in a significant sense. The 0.000 coefficient of determination was $R^2 = 0.594$, which means that sports culture explains (59.4%) of the changes in the psychological and social compatibility of boxers, while the rest is due to other factors.

DISCUSSION OF THE RESULTS:

First: Discussing the results of the level of the dimensions of sports culture and compatibility: Field results showed that boxers have high levels in all dimensions of sports culture as 3.91 well as in psychosocial adjustment 3.93. The researcher argues that the moral and educational dimension has obtained the highest averages 4.12 because the sport of boxing requires moral discipline and a high sportsmanship to control behaviors and eradicate feelings of aggression. The international rules governing boxing oblige the athlete to the highest levels of ethical commitment and respect for the opponent inside and outside the ring. This is confirmed by the sports psychology literature, as Zvi and Lavi (2026) points out that individual combat sports work to provide its practitioners with the ability to self-control, refine emotional tendencies, and turn them into a directed skill performance. This result was also consistent with the results of the study of Gusliana et al. (2024) and Jahrir et al (2024), which concluded that adherence to the rules and ethics of sports activity enhances balanced personality traits and refines the value system of athletes. As for the observed increase in social compatibility 4.05 and psychological compatibility, 3.82 the researcher attributes it to the fact that the competitive training environment provides the boxer with an integrated space to vent harmful emotions and tensions, as well as supporting the team spirit and establishing strong social bonds with colleagues and coaches, which is in line with what Singh (2023) stated that social adjustment within clubs and training centers is the first line of defense to protect the athlete from harmful psychological arousals and frustration.

Second: Discussing the relationship and impact of sports culture on psychological and social compatibility: The results of the study confirmed the existence of a strong positive correlation $r = 0.771$ and a direct explanatory predictive effect of 59.4% of sports culture on psychosocial compatibility. The researcher explains this finding that sports culture acts as a cognitive and behavioral guide for the athlete. When a boxer understands the game plans, refereeing rules, and psychological preparation requirements (cognitive and behavioral dimension), he has a clear vision of how to deal

with psychological pressures and win-lose situations, which increases his self-confidence and increases his ability to control his emotions and overcome anxiety and competition tension. Furthermore, sports culture provides the player with social communication and environmental adaptation skills, which helps him build balanced relationships with coaches, fans, and teammates, and avoid aggressive behaviors and intolerance. This result is clearly in line with the findings of Yang, Tian and Madni (2025) study, which proved that the expansion of sports awareness and education contributes in a direct way to reducing emotional stress and enhancing the ability of players to adapt psychologically and socially to their sports environment. These results also intersect with the study of Wang et al (2024) and the study of Li, Xiao and Zeng (2024), which indicated that the administrative and educational culture acquired within sports institutions and federations raises the level of behavioral performance and psychological openness of athletes.

CONCLUSIONS

Based on the findings of the study, it can be concluded that boxers demonstrate a high level of sports culture across its three dimensions, namely ethical, behavioral, and cognitive culture. The results also indicate that boxers possess a high level of psychosocial adjustment, with social adjustment indicators showing a higher level compared with psychological adjustment indicators. Furthermore, a strong and statistically significant positive correlation was found between the level of sports culture and psychosocial adjustment among boxers, indicating that higher levels of sports culture are associated with higher levels of psychological and social adjustment. The statistical analysis also showed that sports culture, as an independent variable, explained approximately 59.4% of the variance in psychosocial adjustment among boxers, providing empirical support for the main hypothesis of the study.

Based on the findings and conclusions of the study, the researcher recommends integrating sports education programs into the annual preparation plans for boxers through regular lectures, workshops, and educational activities focusing on current sports regulations, sports nutrition, stress management, and anger management. It is also recommended that national boxing clubs and teams consider including a qualified sports psychologist within their training staff to enhance players' psychological adjustment and help reduce competition-related anxiety. In addition, it is recommended to develop an educational guide on the ethical behavior of boxers, emphasizing sportsmanship, respect

for referees' decisions, adherence to competition regulations, and the avoidance of physical aggression outside the legitimate context of the boxing ring and official training. Training programs should also be expanded beyond physical, technical, and tactical preparation to incorporate relaxation techniques, mental concentration, emotional regulation, and stress-adaptation exercises. Furthermore, coaches and training staff are encouraged to adopt educational approaches and positive role modeling when interacting with boxers, helping them regulate emotional responses and channel competitive and aggressive impulses toward disciplined and constructive sporting behavior.

To extend the benefits of the present study and contribute to the scientific and academic literature in the fields of physical education and sports psychology, the researcher proposes several directions for future research. Comparative studies could be conducted to examine differences in sports culture and psychosocial adjustment between athletes participating in individual sports, such as boxing, and those participating in team sports, such as volleyball and football. Future researchers could also conduct an experimental study to examine the effectiveness of a proposed educational or psychological program in developing psychosocial adjustment and reducing aggressive behavior among young boxers across different age categories. In addition, further research could investigate the relationship between sports culture and other psychological and mental variables, such as psychological toughness, emotional intelligence, and motivation for sports achievement. Finally, the same measurement instruments and research framework could be applied to other combat sports and martial arts, such as taekwondo, karate, and wrestling, in order to examine similarities and differences in the findings and assess the extent to which the results may be applicable across different sporting contexts.

REFERENCES

- Albishi, W., Alajlan, F., Alshehri, S., & AbuDujain, N. M. (2025). Athlete's mental health and quality of life after sports injuries. *JBJS reviews*, 13(9), e25-00123.
- Cormier, D. L., Jørgensen, H., Ferguson, L. J., Gyurcsik, N. C., Briere, J. L., & Kowalski, K. C. (2025). Constructing a grounded theory of grit in sport: understanding the development and outcomes of long-term passion and perseverance in competitive athletes. *Qualitative Research in Sport, Exercise and Health*, 17(2), 155-171.
- Gusliana, H. B., Ardiyanto, S. Y., Widiyanto, W. E., Setyawan, H., Putro, B. N., Darmawan, A., ... & Harmanto, H. (2024). Ensuring fairness and transparency in

sports through compliance to legal principles and ethical standards. *Retos: nuevas tendencias en educación física, deporte y recreación*, (60), 204-216.

- Jahrir, A. S., Adam, A., & Kamaruddin, S. A. (2024). Values of Physical Education and sports As character development and strengthening. *JOURNAL RESPECS (Research Physical Education and Sports)*, 6(2), 220-229.
- Li, J., Jiang, X., & Zhou, Y. (2024). Culture, emotion, and cognition: Understanding the psychological dynamics of Chinese sports with emotional regulation skills and cognitive reappraisal. *Heliyon*, 10(14).
- Li, Q., Xiao, D., & Zeng, Q. (2024). Exploring performance of athletic individuals: Tying athletic behaviors and big-five personality traits with sports performance. *Plos one*, 19(12), e0312850.
- Li, T., Yan, Y., & Wen, L. (2026). Integrating psychological profiling with deep learning for enhanced boxing action recognition. *Scientific Reports*, 16(1), 4684.
- Li, Z. (2022). Research on human behavior modeling of sports culture communication in industrial 4.0 intelligent management. *Computational Intelligence and Neuroscience*, 2022(1), 9818226.
- Mao, Y., Zhao, D., Li, J., & Fu, W. (2023). Incidence rates and pathology types of boxing-specific injuries: a systematic review and meta-analysis of epidemiology studies in the 21st century. *Orthopaedic journal of sports medicine*, 11(3), 23259671221127669.
- Mojtahedi, D., Dagnall, N., Denovan, A., Clough, P., Dewhurst, S., Hillier, M., ... & Perry, J. (2023). Competition anxiety in combat sports and the importance of mental toughness. *Behavioral Sciences*, 13(9), 713.
- Padli, P., Prasetyo, T., Kurniawan, R., Putra, R. A., & Candra, O. (2024). The influence of environment and social interaction on the formation of athlete character: a descriptive study. *Revista iberoamericana de psicología del ejercicio y el deporte*, 19(4), 430-434.
- Siedentop, D., & Van der Mars, H. (2022). *Introduction to physical education, fitness, and sport*. Human kinetics.
- Singh, S. (2023). The effect of psychological defense mechanisms on the fitness of an athlete. *International Journal of Physical Education and Sports Sciences*, 10(2), 33-40.
- Wang, Q., Zainal Abidin, N. E., Aman, M. S., Wang, N., Ma, L., & Liu, P. (2024). Cultural moderation in sports impact: exploring sports-induced effects on educational progress, cognitive focus, and social development in Chinese higher education. *BMC psychology*, 12(1), 89.

- Yang, X., Tian, J., & Madni, G. R. (2025). A nexus among sports education, psychological well-being, social development, strategic capacity, and environmental awareness in China. *BMC Sports Science, Medicine and Rehabilitation*, 17(1), 287.
- Zvi, L., & Lavi, N. (2026). Aggression among martial arts practitioners: a comparative study and an investigation into the role of personality traits and self-control in reducing aggression. *International Journal of Sport and Exercise Psychology*, 24(5), 816-834.