PSYCHOLOGICAL AND SOCIAL ADAPTATION AND ITS RELATIONSHIP TO SOME PSYCHOLOGICAL SKILLS OF HANDBALL PLAYERS

¹ASSIST, PROF, SAMEER SABRI HASSAN (PH.D.), ²M.SC. IBRAHIM BAHRAM KHORSHEED, ³PROF. MAHA SABRI HASSAN (PH.D.)

¹University of Diyala, Baqubah, 32001, Diyala, Iraq dr.sameer.sport@uodiyala.edu.iq ²Kirkuk University, College of Physical Education and Sports Sciences ibrahim_bahram@uokirkuk.edu.iq ³Kirkuk University, College of Physical Education and Sports Sciences Maha_sabri@uokirkuk.edu.iq

1. INTRODUCTION

1.1 Introduction and Research Significance

Sport is the true indicator of a society's progress and the correctness of its intellectual and humanitarian approach. This progress is nothing but a natural reflection of the diligent search for modern methods and technological means used in studies and research. These cognitive human research papers have influenced factors of advancement and excellence, which is evident through remarkable achievements, particularly in the field of sports. In order to develop these games, it is necessary to employ appropriate modern methods and techniques, which are based on several sciences related to sports, including sports psychology.

Handball gains its significance through its practice by both males and females and at various age stages. The game is well- known for its skills and arts. When emphasizing the skillful, physical, and strategic aspects of this game, it is essential to clearly refer to the psychological aspect. Adaptation areas have diversified, including mental adaptation, academic adaptation, and professional adaptation. These areas vary according to the different life situations of individuals. However, most researchers in the field of psychology agree that personal (psychological) adaptation is a bodily psychological and social unity. Therefore, we observe that biological structure influences personality.

Psychological skills are one of the psychological factors that players constantly need to assess the level of their abilities and psychological readiness. In addition, the individual who is considered one of the psychological elements is concerned with the mental state of the players. Hence, the significance of studying and applying psychological skills in the sports field has emerged because developing players' psychological skills is no less important than developing their physical and motor skills. Developing these psychological skills adds strength and importance to the training process. This is achieved through the development of various dimensions of these psychological skills, including anxiety, attentional focus, mental preparedness, self-confidence, and team orientation. Developing these dimensions helps improving the mental efficiency, leading to better skill proficiency.

The significance of the current research is in line with achieving guidance opportunities and using appropriate measurement methods for these psychological variables in sports skills. The current research can modestly contribute scientifically to the sports education library, providing suitable opportunities for conducting scientific research in this field. This will contribute to understanding some psychological aspects that will help reach an advanced level of player performance.

1.2 Research Problem

Psychological skills are influential factors in players' performance levels and play a significant role in improving and developing performance. The presence of deficiencies or disorders in the psychological state directly affects the player's ability and performance, both individually and as part of the team. Therefore, it is important to focus on the psychological aspect and its significant role in advancing and developing players' performance and stability through their preparation.



Psychological skills are one of the important fundamental components that handball players need. They contribute to the development of motor abilities and skills, providing more confidence and the ability to achieve better artistic performance and higher levels of accomplishment. As handball is a sport that requires constant development and updating, studying the topic of psychological skills is considered one of the important modern trends in this developmental process.

Through the practical experience of the researcher, who is also a handball player, it was found that there is variation in the psychological adaptation level of handball players at Diyala University. Naturally, this led to variation in their performance levels. Based on this, the researcher decided to study this case, demonstrate the level of psychological skills they have, and establish the relationship between these skills and psychological adaptation. This relationship forms a fundamental pillar in enhancing the performance level of players on both individual and collective levels, and it has a positive impact on the development of handball among the players.

1.3. Research Objectives

The research aims to:

- 1- Identify the level of psychological adaptation among handball players.
- 2- Identify the level of psychological skills among handball players.
- 3- Explore the relationship between the level of psychological adaptation and psychological skills among handball players.

1.4 Research Hypotheses

There is a statistically significant relationship between the level of psychological adaptation and psychological skills among handball players.

1.5 Research Scope

- 1-5-1 Human domain: A sample of players from the University of Diyala teams for the academic year 2021-2022.
- 1-5-2 Temporal domain: The period from 7/11/2021 to 1/4/2022.
- 1-5-3 Spatial domain: The handball field at the University of Diyala.

6. Definition of Terms

1-6-1 Psychological adaptation is defined as: "The individual's ability to successfully perform their function in life, based on their goals, capabilities, and the opportunities guaranteed to them, within their social and economic environment."⁽¹⁾

1-6-2 Psychological skills

They were defined by Mahmoud Abdel Fattah Anan (1995) as the ability to approach an achievement situation with confidence and the belief that both the body and mind are fully prepared for optimal performance.

2.FIELD RESEARCH PROCEDURES

2-1 Research Methodology

The researcher adopted a descriptive method using the survey approach, as it was suitable for the nature of the research. "Descriptive research aims to collect data in an attempt to test hypotheses or answer questions related to the current status of the research sample" (2)

2-2 Research Population and Sample

The researcher randomly selected handball male players from the University of Diyala's handball teams, with a total of 114 players. The sample consisted of 80 players who underwent the main experiment, and an additional 10 students represented the survey experiment outside the research sample.

3.2 Research Tools:

⁽¹⁾ Suinn. R. M. Psycology in Sport, 3rd edition, India, Surject publications, 1994, p. x.

⁽²)Mohamed Hassan Alawi, Osama Kamel Rattab. Scientific Research in Physical Education and Sports Psychology, Cairo: Dar Al-Fikr Al-Arabi, 1999, p. 139.



(These are the means or methods through which the researcher can solve their problem, regardless of the nature of those tools, whether they are data, samples, devices, etc.) (11) Based on this, the researcher utilized the following research tools:

- Arabic sources.
- Psychological adaptation scale.
- Psychological skills scale. (3)

2-4 Psychological Adaptation Scale:

The scale consists of (66) items, with responses graded on a three-point scale. The current scale followed the method of Likert in which, if the item is positively oriented and the response is "completely applicable," it is given a score of (3) for that item, (2) for "partially applicable," and (1) for "not applicable."

2-5 Psychological Skills Scale:

The scale consists of six dimensions: (1) the skill of mental imagery, (2) the skill of attention focus, (3) the skill of self-confidence, (4) the skill of relaxation, (5) the skill of coping with anxiety, and (6) the skill of motivation for athletic achievement. It includes 35 items. The responses are given by selecting one of the six alternatives that best applies to the individual (very much, much, moderately, slightly, very slightly, not at all). The scale is scored by assigning grades to the items in accordance with the athlete's degree of agreement with each statement in the respective dimension. The scores assigned by the athlete are reversed for items that are in the opposite direction of the dimension, according to the following conversion: 1=6, 2=5, 3=4, 4=3, 5=2, 6=1. The scale ranges from 35 to 175.

2-6 Pilot Study

The pilot study is a miniaturized version of the basic experiment, and it should have the same conditions and circumstances as the basic experiment as much as possible, so that its results can be taken into account. Therefore, the researcher conducted a survey experiment on a sample of players who were not included in the main research sample on Thursday, January 25th, 2022, at 10:00 AM at the handball stadium of Diyala University. The purpose of the experiment was to assess the clarity, validity, and suitability of the two scales for the research sample.

2-7 Scientific Conditions for Scales:

The scientific conditions for the measurements are conditions that must be met in every test, as long as these conditions are not available, the results should not be relied upon. Therefore, the researcher sought to determine the scientific conditions for the tests used in the research (psychological adaptation test, psychological skills test).

2-7-1 Reliability:

The reliability of a test is determined by its consistency in producing the same results when repeated, especially if the test conditions and environment are similar for both instance⁽³⁾. Based on this, the researcher calculated the reliability coefficient by re-administering the tests to a sample of 10 handball players who were not part of the original research sample. The tests were conducted on 12/2/02022, and then repeated after a period of 10 days on 22/2/2022. The results demonstrated a high degree of reliability, as indicated by the Pearson correlation coefficient, with scores of 78.0 for the psychological adaptation scale and 89 for the psychological skills scale.

2-7-2 Validity:

(1) Wajih Mahjoub and others. Scientific Research Methods and Approaches in Physical Education. Baghdad: Higher Education and Scientific Research Press, 1988, p. 85.

⁽³⁾ Abdul Razzaq Wahib Yaseen Al-Azzawi (2006) Constructing a Scale for Psychological Compatibility among Advanced Players in Some Individual Sports in Iraq. Diyalah University, College of Physical Education - Master's Thesis.

⁽³⁾Qais Naji, Basitu Yaseen Ahmed. Exams and Principles of Statistics in the Field of Mathematics, Baghdad: Ministry of Higher Education and Scientific Research Press, 1987, p. 95.

³ Salah bin Hamad Al-Assan. <u>Introduction to Research in Behavioral Sciences</u>, 1st Edition, Riyadh: Al-Obeikan Library, 1995, p. 430.

To ensure the validity of the tests, the researcher employed the method of self-validation, according to the following principle:

Self-Validity (3) =(1)

The results shown in Table (1) indicated self-validity for the tests under investigation.

2-8 Experimental Procedure:

After confirming the scientific basics of the tests under investigation, the researcher distributed psychological adaptation test forms to individuals in the primary research sample, using direct individual communication. The researcher explained the importance and objectives of the research, as well as the necessity of carefully and honestly answering all the questions in the test. This was crucial to obtain highly accurate responses from the participants. After collecting the forms, the researcher recorded the data based on the question keys, obtaining raw scores for the test. Then, a fixed evaluation table was used to convert these scores into final grades.

2-9 Statistical Methods

The statistical package for social sciences (SPSS) was used to find the following statistical measures: mean, median, standard deviation, T-test for two independent samples, and Pearson correlation coefficient.

3- Presentation, Analysis, and Discussion of Results:

This chapter includes the presentation, analysis, and discussion of the results obtained from analyzing the responses of the sample individuals using the research tools, according to the stated objectives, as follows:

1- Identifying the level of psychological adaptation of the research sample.

Table (1) Results of the T- test for a single sample on the difference between the theoretical and calculated means in the research sample individuals in the psychological adaptation scale.

Effectiveness	The c mean sample		standard deviatio	deviatio ical		T va	lue	Evidenc
		n	average	m	Calculat ed	tabula ted	e level	
Handball players	80	115.60	6.55	102	79	5,90	2.99	Significa nt

Function level (0.5) under the degree of freedom (79).

According to Table (1), we find that the differences were significant, with a tabulated (t) value of (2.99), which is greater than the calculated (t) value of (5.90), at a significance level of (0.05) in the psychological adaptation scale. As for Table (2), it shows the results of the (t-test) to determine the significance of differences among the research sample individuals in the psychological skills scale according to their domains.

2- The second objective is to identify the level of psychological skills for handball players.

Table (2) presents the presentation, analysis, and discussion of the results of identifying psychological skills.

Dimensions of psychological	Arithmetic mean	standard deviation	Hypothetical mean	One-sample t-test		Significance
skills				Calculated	Tabulated	
The ability to visualize	17.533	5.622		4.94		Significant
The ability to	18.310	5.809		5.05		Significant

--

relax					2.99	
The ability to face anxiety	18.447	6.745	14	5.601		Significant
The ability to focus attention	17.943	6.300		4.791		Significant
Self-confidence	18.294	7.477	1	5.802		Significant
Motivation for athletic achievement	17.698	6.743		5.13		Significant
Total dimensions	96,909	36,810	84	7.993		Significant

The tabulated value (t) is equal to 2.99 when the error rate is ≤ 0.05 and the degrees of freedom are 79.

From Table (2), it is evident that all calculated values have exceeded the tabulated values, whether for the entire sample or for each dimension, at a significance level of 0.05 and the corresponding degrees of freedom for each sample. This means that handball players possess a level of psychological skills.

Table (2) shows that the mean of the dimensions' psychological skills is slightly higher than the hypothetical mean. Moreover, the calculated scores for the t-test for all dimensions were greater than the tabulated value of 2.99, indicating that all dimensions were significant. Similarly, the overall scale score also showed that the calculated t-test was greater than the tabulated value.¹

The Table (3) It shows the mean scores and standard deviations for both psychological skills and psychological adaptation.

Variable	mean scores	standard deviations	average
The variable Scale of psychological skills	119.632	7.343	89
Scale of psychological adaptation	87.909	9.299	102

From Table (8), it can be observed that the arithmetic mean of psychological skills was (119.632) with a standard deviation of (7.343). The arithmetic mean of psychological compatibility was (87.909) with a standard deviation of (9.299). The hypothetical average for psychological skills was (89), and when compared to the arithmetic mean (115.676), it is evident that it is lower than the arithmetic mean. This indicates that the research sample possesses high psychological skills. The hypothetical average for psychological compatibility was (102), which is higher than the arithmetic mean of (87.909). Therefore, the research sample exhibits a high level of psychological adaptation.

3-2 RESULTS DISCUSSION:

Based on the results obtained from the study and Table 3, significant differences were found among the research sample in terms of psychological adaptation and psychological skills. The researcher believes that this result is logical, despite the correlation between psychological adaptation and daily life events at home, on the street, or at university. It is found that the research sample does not have a high level of psychological compatibility, as evidenced by comparing the mean with the

¹ The average assumption = Sum of alternatives ÷ Number of alternatives × Number of paragraphs



hypothetical mean, considering that they engage in this game as a hobby and not professionally. Even in cases of loss or racing pressures, it did not affect their compatibility.

The researcher finds in this result an explanation that adaptation is a response to a situation that usually makes the individual experience conflicting emotions depending on this situation. This response is a specific reaction when the player faces a strong challenge. "An individual who engages in a specific hobby or sport tends to have more control over their emotions and greater compatibility and control over their nerves. Physical education plays a positive role in increasing adaptation in players.¹

It is evident from Table 2 that the research sample possesses a high level of psychological skills. The researcher believes that this is due to the high degree of psychological skill dimensions, indicating that the psychological preparation has a significant impact on the player's behavior and performance on the field. Psychological preparation also helps in the process of "identifying the factors that affect the player and then reaching a plan executed through specific mechanisms in adapting and modifying behavior, which contributes positively to achieving peak performance levels, whether in the short or long term."²

The player utilizes all his different senses and combines all his experiences, emotions, and feelings. Osama Rattab (2000) indicates that a player who utilizes his psychological skills and employs them in serving performance exhibits organized and non-random muscle activity. Its usefulness becomes apparent in strengthening the neural pathways responsible for transmitting signals from the nervous system to these working muscles for the skill. By mentally evoking the image of the skill in an organized manner, the player achieves the actual involvement of the body's muscles in performing this skill.

Mahmoud Anan adds, citing Cox (1994), that the use of psychological skills in motor behavior allows the player to distance himself from nervousness and tension and be in a state of complete relaxation. This means that nervousness, muscle tension, and involuntary organ tension can be reduced if the structural muscles are in a relaxed state³. Achieving the optimal level of psychological preparation and applying psychological skills prevents the accumulation of nervous pressure through work and reaching a low level of tension and a degree of satisfaction with the performance level⁴. This is what handball players need as it helps raise their morale and improve their performance, thus achieving victory.

This confirms the correlation between psychological adaptation and the distinctive psychological skills of handball players, contributing to sporting achievement.

CONCLUSIONS AND RECOMMENDATIONS:

4.1 Conclusions:

1- Handball players at Diyala University demonstrated a high level of psychological adaptation.

- 2- Handball players at Diyala University showed a high level of psychological skills.
- 3- There is a significant correlation between psychological adaptation and psychological skills of handball players at Diyala University.

4.2 Recommendations:

Based on the conclusions, the researcher recommends the following:

- Conduct similar studies on psychological adaptation and its relation to other psychological variables.

¹ Psychological compatibility in physical activity / internet network / Dr. Rania Amer Mahmoud's website.

² Osama Kamel Rātib: Sports Psychology, (Arab Thought House, Cairo, 2000), pp. 316-317.

³Mufti Ibrahim Hammad: Modern Sports Training, Vol.1 (Dar Al-Fikr Al-Arabi, Cairo, 1998), p. 233.

⁴ Sadeqi Nour Al-Din: The Relationship Between Psychological Orientation and Sports Confidence as a Characteristic and State Among Football Players: (Scientific Journal of Education and Sports, Scientific Conference on Sports, Olympic Principles, Accumulations, and Challenges, Faculty of Physical Education for Boys in Cairo, Helwan University, 1994), p. 66.

- *************************************
 - Conduct a study on the preferred psychological skills of handball players and their relationship to performance.
 - Utilize psychological training with players to enhance their psychological skills.
 - Conduct a study that includes research variables and apply them to both team and individual sports players and different samples.

Annex (1) Psychological Adaptation Scale

No.	Psychological Adaptation Sc Items	perfectly	sometimes	Never
1,0.		applicable	applicable	applicable
1	I don't think about changing my sport because it aligns with my interests and physical and mental abilities			
2	I don't care about the ridicule from the audience during the race due to my high confidence in my abilities			
3	I don't rely heavily on luck but rather on the abilities I have			
4	I find it difficult to express my feelings			
5	I believe that long-distance racing creates more patience and endurance for the player			
6	My self-confidence doesn't waver even if I have repeated failures			
7	I become afraid and anxious when I compete, unlike during training			
8	The closer I get to the end of the race, the more tense and anxious I become.			
9	I have the ability to make decisive decisions during the race.			
10	I am impulsive and act quickly without considering alternative actions or possible outcomes.			
11	I feel tense if something unexpected happens during the race.			
12	I believe that I have a sixth sense and that I am smarter than the average person.			
13	I feel that I have unlimited physical energy.			
14	I don't care about others' opinions of my behavior as long as I am convinced of it			
15	I forget all my personal problems during the race			
16	My willpower drives me to perform well in competition			
17	I tend to challenge competitors who excel at a high level			
18	I feel that I have the ability to defeat any opponent			

19	I have the ability to perform in races under nervous pressure		
20	I have the ability to think and respond successfully during the race		
21	I prefer accomplishing difficult tasks over easy ones		
22	I refuse to give in to fatigue when competing or training		
23	My peers describe me as someone who can handle difficult tasks		
24	I am prepared to train and compete throughout the year without interruption to succeed in my sport		
25	I never think about defeat or failure in competition		
26	I believe that the most important trait of an athlete is their control over matters during a race		
27	My choice to participate in this activity itself is a challenge to my high abilities		
28	The more participants there are in the race, the stronger the competition becomes		
29	I have the ability to persevere and succeed even if the level of my competitors is stronger than mine		
30	I have the ability to perform successfully after a failed performance.		
31	I have the ability to face competitors regardless of their fitness level during the race.		
32	I have the ability to face competitors regardless of their fitness level and strength during the race.		
33	I try to achieve my goals regardless of the means.		
34	I continue to perform my athletic duties and achieve success despite the lack of support from the club I belong to.		
35	When I am on the race field, I have my family, friends, and the club I belong to in mind.		
36	I don't care about the mockery and comments of others because I see myself better than them in many aspects, and I believe that the tree that bears fruit will be stoned.		
37	I am a practical person, I work and train, and I do what my family asks of me without boredom or fatigue.		
38	Sometimes I feel like quitting the game due to others exploiting my efforts.		
39	I consistently and continuously engage in my own training without interruption.		

40	I give my best as dictated by my duty and my		
10	conscience towards my country.		
41	The standards I set for myself regarding my performance are very high.		
42	I feel that my achievements are respected by		
	others.		
43	I can achieve high accomplishments regardless of the difficulties I face during competitions.		
44	I handle different situations seriously during the competition.		
45	I feel bored with training for a long period of time.		
46	I dream of achieving a high position and status in the sports community.		
47	I am determined to win despite the difficulty and length of the race.		
48	I justify my failures and blame others when I fail.		
49	I expect high achievements to open the doors of the future for me.		
50	I always strive to be at the level of excellent players.		
51	I believe that success in sports championships is based on struggle and sacrifice.		
52	I see long-distance running as an exciting thing that requires perseverance despite the difficulties.		
53	I am the type of person who easily gives up when facing some difficulties.		
54	I do not let the pressures of training and competitions prevent me from achieving my goals.		
55	I can control my emotions in difficult situations during training and competitions.		
56	I feel that I easily give up in competition when there is a significant difference in level between me and other players.		
57	When the competitor annoys me, I cannot maintain my balance.		
58	I lose my appetite before the race.		
59	I avoid taking on responsibilities that I cannot handle in training and competitions.		
60	I suffer from trembling hands when the race is crucial.		
61	I take things very seriously without underestimating them.		

62	I get nervous when facing crucial situations.		
63	I do not have difficulty in making decisions.		
64	I am quickly affected by the movements and gestures of others.		
65	I feel a strong headache before the start of the race.		
66	I find it hard to sleep before a race.		

Items of the Psychological Skills Scale

No.	Statement	Often 3	Occasion	Rarely
			ally 2	1
1	Sometimes I feel like I came to this world by			
	mistake.			
2	I am a serious person and I seize any opportunity			
	that enhances my status.			
3	I don't care about what's happening around me,			
	other people's problems don't concern me.			
4	I don't care about what is said about me behind			
	my back because I am confident in myself and			
	what I do.			
5	I try to imitate others when they are positive			
	people.			
6	I am a romantic person who loves art and			
	romantic atmospheres.			
7	I have a sixth sense.			
8	Sometimes I feel inferior to others.			
9	I am a person who has a presence in the places I			
	go to.			
10	I am always ready for surprises.			
11	I set goals for myself that suit my physical and			
	intellectual abilities.			
12	I feel like I'm a useless person.			
13	I respect the opinions of others and listen to			
4.4	them.			
14	I often regret some actions, but I often repeat			
4.5	the same mistakes.			
15	I am a moody person. Things and people attract			
	me for a limited time, then I feel the need for			
1.0	change.			
16	I don't like attracting attention.			
17	I easily make friends.			
18	I know how to attract others to me.			
19	I practice relaxation from time to time.			
20	I do my work as required to avoid punishment.			
21	I don't like my current job, but it's better than			

	nothing.		
22	I am a social person and I always like to be with		
	others.		
23	I avoid philosophical discussions.		
24	I accept others as they are.		
25	I have specific criteria for the person who will		
	share the rest of my life.		
26	I am bold to the extent that I speak openly		
	about sensitive topics.		
27	I feel comfortable when I'm alone.		
28	Time is not important to me.		
29	I turn to others to solve the problems I face.		
30	I don't like to talk about myself too much.		
31	I always smile even in difficult situations.		
32	I anticipate things before they happen.		
33	My respect for women adds a touch of		
	sophistication to my behavior.		
34	I have a good impression of every person.		
35	I am an optimistic person.		