

# The Relationship of Psychological Stress to the Accuracy of the Performance of Rapid Handball for Students

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## Abstract:

Practicing sports is a physical effort or skill according to agreed rules with the aim of competition or self-confidence and differing goals in terms of meeting or alone. It distinguishes sports in addition to what players or teams add to their competition. and that the game of handball is one of the most widespread global sports, and accuracy plays a big role in obtaining goals, whether in the skill of quick handling and its accuracy for the handball player, which has a specialty from the rest of the other activities and most importantly is the presence of accuracy in receiving quick handling, Which is based on building a quick attack to score goals and win the match. Since psychological stress has an impact on the players, it is reflected in the accuracy of performance. Here, the researchers will address psychological pressure to identify the extent of its impact on the accuracy of quick handling in the handball game.

**Keywords:** handball, stress, performance, players.

## The study aimed to:

1- Recognizing the relationship between psychological stress and the accuracy of quick handling in the handball game for students. The researcher used the descriptive approach using the survey method, normative studies and comparative studies in measuring the psychological stress of the Babylon University team in handball. The number of them was (14) and (10) of them were chosen by random method, thus representing a sample of 71%.

After distributing the psychological stress scale forms, tests were conducted and the following conclusions were reached:

1. There is a significant and inverse correlation between the accuracy of quick handling and the psychological stress of the selected research sample.
2. Students who are highly affected by psychological pressures, their reception of quick handling is less accurate than the rest of the players.
3. Students who had less psychological stress had better accuracy in receiving handball than the rest of the players.

The recommendations were as follows:

1. The need to focus on exercises to receive fast handling under competition-like conditions.
2. Paying attention to the good psychological preparation of players to reduce the level of psychological stress that affects the performance of basic skills.
3. Studying the effect of psychological stress on other skills and activities.

## **Chapter one**

### **1-1 Research Problem:**

Through the experience of the researchers, one of them being a handball player and coach, the researchers noticed that the players of the Babylon University team for students change their level in the matches and during the competition to less than the real level they appear during the training and friendly matches, so the researcher decided to study this problem and the reason is the psychological pressures that the player is exposed to hence the idea of the researchers to go into this experiment, study it, identify the facts and results and treat them.

### **1-2 Research Objectives:**

Get to know:

- 1- Recognizing the relationship between psychological stress and the accuracy of performing quick handling in handball game for students.

### **1-3 Research Hypotheses:**

There is an inverse significant relationship between psychological stress and the accuracy of the students' quick handling performance in handball.

### **1-4 Research Areas:**

1-4-1 Human field: The players of the Babylon University handball team for the academic year (2021-2022).

1-4-2 Time range: from 2/1/2022 to 5/3/2022.

1-4-3 Spatial domain: the hall and the outer courtyard in the College of Physical Education and Sports Sciences - University of Babylon.

## **Chapter two**

**1-1 Stress:** Stressful situations have a negative impact on the athlete's performance result. To reduce the effect of pressure for sports activities, it is recommended to follow the following recommendations:

- "perception of the current situation" (a change in the perception of the situation, A reference to the maximum an athlete can do and focus on the competition, not on the critical importance of success or failure).
- "The role of external interest" (managing the external environment, persuasion, That you need to control your emotions and realize the negative impact of these feelings on the athlete).
- "Crucial Action" (focuses exclusively on athlete's task, "detachment" from external influences).
- Cognitive Stress Management (reduce or completely eliminate negative images and

thoughts that cause a high level of physiological activity and provoke the appearance of stress).

Thus, studying the effect of pressure on competitive activity, it was decided that:

- The level of stress resistance is higher in highly qualified athletes with a higher level of psychological preparation.

It is characterized by great psychological stability, can withstand it. Heavy pressure for a long time. Knowing the individual characteristics of athletes in terms of endurance and exposure to mental stress is not of great importance in the issue of individualizing the process of preparation for the start of responsible competitions.

### **1-2 Handball**

Handball is one of the fun sports competitions that can be played indoor and outdoor, and it is a high-level competition, and this makes it next to the high-level sports that attract most players to practice it and spectators to watch it, because it is an exciting, fast and competitive game, which is currently one of the most popular games, it is very popular in the world, because this game is characterized by the basics of skill and physicality that requires a strong physical structure, as well as being an interesting and competitive game. Handball is one of the games that are suitable for both sexes, and it can be practiced investing leisure time and competition at the same time. Its stadium is smaller than the rest of the team games, and the match must end with the victory of one of the two teams. What distinguishes the game of handball from other similar games is that it depends on mental and physical abilities as much. In all handball movements, we find that the player needs to think and agree between his nervous and muscular systems, and knows how to analyze playing situations and find appropriate solutions for each situation. Handball is also a sport that develops the competitive spirit and the positive characteristic of physical improvement, as it requires a high level of physical fitness. The preparation of handball players requires physical preparation, especially after preparing them in general, to be qualified to perform the game skills during competitions at the best possible level, and here lies the importance of explosive ability training, which is one of the most physical components that athletes need in most sports in general, and in the game of handball in particular, because of its effective impact in increasing the efficiency of players to achieve the best possible performance to win the match.

The handball game consists of several skills, namely:

Handling, clapping, shooting, receiving, blocking, defensive moves Competition is the first of the basic principles in handball, and on it the success of the player depends on receiving a ball from a colleague using his hand correctly, that is, in agreement with all the joints of the body in order to receive it in an appropriate way. In order for the process of receiving handling to be performed correctly, the player must take certain positions, and there is a general position taken by the player, from which he can move easily and smoothly in all directions. Experiences have proven that the correct position for quick handling requires continuous training to become better.

And that the player's proficiency in the skill of quick handling in handball is attributed by some coaches to the technical aspect and that quick handling and directing the ball belongs to multiple options for the different course of play and the complications arising from receiving the ball make it imperative that the player possess physical, skill and mental qualities in addition to focus. And the skill of quick handling requires high accuracy for the ball. Accuracy has been defined as "the individual's ability to control the voluntary movements of the athlete through the development of the muscles responsible for the voluntary movements represented by the skeletal and voluntary muscles, which have the primary duty to deliver the athlete to the good and ideal technique" It was defined by Qassem Hassanein, Hassan and Mansour Al-Aniki from a physiological point of view as "the physiological control over the performance of the voluntary muscles to direct them towards a specific goal" and Saad Mohsen Ismail defined it as "complete control over the voluntary muscles to direct them towards a specific goal as it is required that the incoming nerve signals to the muscles to be tightly directed.

### **Chapter Three**

#### **3- Research methodology and field procedures:**

##### **3-1 Research Methodology:**

The researcher used the descriptive method and the correlational relationships to suit the nature of the research

##### **3-2 Research community and sample:**

The researcher chose the research community represented by the Babylon University handball team for students for the academic year (2021-2022), which numbered (14) players. Ten of them were chosen randomly, so the research sample represents 73%.

##### **3-3 Means, tools and devices used:**

- 1- Arabic sources and references
- 2 - Questionnaire
- 3 - Practical and psychological tests
- 4- Personal interviews
- 5- Legal handball court
- 6- Legal handballs (10)

##### **3-4 tests used in the research:**

3-4-1 Psychological Pollution Test\*:

3-4-3 Transmitter reception accuracy test:

Quick handling accuracy:

The purpose of the test is to measure the accuracy of rapid handling- Tools: handball court, bench, exercises, 10 handballs. Performance specifications: The bench is placed in the center (2) The player who turns a ball onto the bench stands using his fast-handling pass.

- Register:

- 4 points for each correct pass that a ball falls on the bench
- 3 points for each correct pass in which a ball lands on the edge of the bench

Two points for each correct pass in which a ball falls within 3 metres  
 One point for each correct pass with a ball on either side of 3 metres  
 Each student has five (5) attempts The set of five attempts is counted.

### 3-5 exploratory experience:

"A simple preliminary experimental study carried out by the researchers on a small sample of the research community before it conducted its research in order to test the research methods and tools" (). The experiment aimed to: The suitability of the tests to the research sample Knowing the right time to do the research.

### 3-6 The main experience:

The researchers conducted the main experiment to test the accuracy of rapid handling and measure psychological stress on Monday 8/3/2022 at nine in the morning. As psychological stress scale forms were distributed to the students, its paragraphs were answered, and then a quick handling accuracy test was conducted. Each player was given 5 attempts in area (A) and 5 attempts in area (B). Scores were recorded according to what is in the test for each player.

### 3-7 Statistical means:

The researchers used the statistical bag (spss) to extract each of:

- Arithmetic mean
- standard deviation

Correlation coefficient (Pearson).

## Chapter Four

### 4- Presentation, analysis and discussion of the results

#### 4-1 Presenting the results of the long-handling accuracy test and psychological stress of the research sample

### 4- Presentation, analysis and discussion of the results

#### 4-1 Presentation of the results of the tests of accuracy of rapid handling and psychological stress of the research sample:

**Table (1) shows the arithmetic means, standard deviations, and the results of the Pearson correlation coefficient) for the research sample.**

| Statistical variables   | From | +A    | Pearson correlation coefficient | Test significance value | Morale correlation |
|-------------------------|------|-------|---------------------------------|-------------------------|--------------------|
| Tests                   |      | -     |                                 |                         |                    |
| Quick handling accuracy | 26.4 | 2.456 | -.64                            | (sig)                   | Morale             |
| Psychological stress    | 29.2 | 2.612 |                                 | 0.045                   |                    |

Table (1) shows the arithmetic means, standard deviations, and the simple correlation coefficient (Pearson). The results showed, as shown in the above table, that there is a significant correlation between the investigated variables. And the relationship is

inverse, that is, the greater the psychological pressure of the player, the weaker his quick handling accuracy. These players will be affected by the voices of the fans, which will cause their skills to be affected during the competition, which will negatively affect the team. This situation requires the training staff to prepare the players psychologically to reduce the impact of this situation, especially the players who are directly affected by psychological pressure.

## **Chapter Five**

### **5- Conclusions and recommendations**

#### **5-1 Conclusions:**

1. There is a significant and inverse correlation between the accuracy of quick handling and the psychological stress of the research sample.
2. Students who are affected by psychological stress have inaccurate handling.
3. Students who are not affected by psychological stress, their quick handling is accurate and better than the rest of the students.

#### **5.2 Recommendations:**

1. Emphasis on quick handling exercises under competitive conditions.
2. Emphasis on the good psychological preparation of students to reduce the impact of psychological stress on the performance of basic skills.
3. Studying the effect of psychological stress on other skills and activities.

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