



# **SOME FUNCTIONAL VARIABLES ASSOCIATED WITH THE STATE OF COMPETITION AND THEIR RELATIONSHIP TO THE LEVEL OF PERFORMANCE OF SCHOOL TEAMS FOR THE PREPARATORY STAGE (FUTSAL)**

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Descriptive research on the players of the school teams in the soog Al Shuyoukh

<b>Article history:</b>	<b>Abstract:</b>
<b>Received:</b> 11 <sup>th</sup> November 2022	<b>RESEARCH AIMS:</b>
<b>Accepted:</b> 14 <sup>th</sup> December 2022	1- Identify the differences between the functional variables (pulse, respiration, blood pressure, blood sugar level) in the normal state and before the competition directly for the players of the school teams.
<b>Published:</b> 28 <sup>th</sup> January 2023	2- To identify the differences between the psychosomatic symptoms in the normal state and before the competition directly for the players of the school teams.

## **Keywords:**

### **RESEARCH HYPOTHESES :**

- 1- There are significant differences in some functional variables (pulse, respiration, blood pressure and blood sugar level) in the normal state and before the competition directly for the players of the school teams.
- 2- There are significant differences in the psychosomatic symptoms in the normal state and before the competition directly for the players of the school teams.

The descriptive approach was used to suit it with the nature of the research, and the research sample consisted of (10) futsal players in Souk Al-Shuyoukh and participants in the preparatory championship 2021-2022. The normal state (rest) and twenty minutes before participating in the competition. The researcher concluded the following:

- 1- There are significant differences between the normal state and before participating in the competition in the variable systolic pressure and pulse, in favor of the period of participation in the competition.
- 2- There are significant differences between the normal state and before participation in the competition in the measure of psychological symptoms and in favor of the period of participation in the competition.
- 3- There are non-significant differences between the normal state and before participating in the competition in the measure of (pulse, respiration, diastolic blood pressure, blood sugar level).

Accordingly, the researcher recommended the following:

- 1- The need to emphasize the psychological preparation of the players as a factor affecting the level of achievement in view of its effects on the body systems.
- 2- To accustom the players to the atmosphere of competition by conducting intense and serious meetings.
- 3- The trainers' emphasis on developing the physical and functional side and not focusing on the technical and skillful side.
- 4- Conducting a similar study with the same research procedures and its variables on the rest of the different activities.

### **1- DEFINING THE RESEARCH:**

#### **1- Introduction and the importance of the research:**

High athletic achievement and sporting achievements. The sciences related to sports seek to reach the individual to the levels

The purpose of research and studies in this field is to identify the most important factors that lead to the development of athletic achievement and access to a high level.

As the sports activities carried out by the athlete are pleasant and unpleasant situations, or joy and sadness, therefore, they affect positively or negatively on the behavioral aspects of the athlete and thus are reflected in the level of his performance, just as the pleasant positive emotional state on which success experiences are based is one of the most important foundations for advancement On the level of the individual's abilities, and unlike it, the behavior that is accompanied by sadness or anxiety as a result of the experiences of failure that surround the individual athlete negatively affects his abilities and his athletic level (Galawi, 1987, 221).

The emotional experiences that the individual goes through during matches and competitions require him to have a high ability to control and control them, which reflects this on the physical condition and the emergence of some functional variables, and indicates (Elwes, 1981) as a result of the emotions, involuntary changes occur in breathing, blood circulation, pulse, and a rise in blood pressure ( Elwes, 1981, 80) and from this point of view, sports psychologists seek to reveal the psychological conflicts that appear in the athlete during training and sports competitions to ensure the positive role of the psychological factor that affects the game and the result.

The importance of the research lies in identifying the most important functional variables accompanying the state of competition for the players of the school teams, as they are the basic base upon which the club teams rely, and to identify the relationship between these variables and the level of performance, which determines the results of these teams.

## 1-2 Research problem:

The futsal game is one of the games that those who play it need patience, endurance and good physical fitness, as the match time sometimes reaches an hour, and by virtue of the work of a researcher in the field of teaching and training for this game, he saw that there are psychological, physical and functional factors that affect performance and that many teachers and coaches He does not care about the physical and functional side, but rather pays more attention to the skillful and technical side, and since the psychological factor surrounding the player before and during the conditions of competition is one of the main and influencing factors in supporting the outcome of the match that the athlete will play, from here the research problem emerged to try to detect the psychosomatic symptoms and some functional variables for the players School futsal teams.

## 1-3 Research Objectives:

- 1- Identify the differences between the functional variables (pulse, respiration, blood pressure, blood sugar level) in the normal state and before the competition directly for the players of the school teams.
- 2- To identify the differences between the psychosomatic symptoms in the normal state and before the competition directly for the players of the futsal school teams.

## 1-4 Research Hypotheses:

- 1- There are significant differences in some functional variables (pulse, respiration, blood pressure, blood sugar level) in the normal state and before the competition directly for the players of the school teams.
- 2- There are significant differences in the psychosomatic symptoms in the normal state and before the competition directly for the players of the futsal school teams.

## 1-5 Research areas:

- 1- The human field: the players of the school futsal teams in Souk Al-Shuyoukh (the first two teams)
- 2- Time range: 25/10/2021 to 8/1/2022.
- 3- The spatial field: the closed hall of the Souk Al-Shuyoukh Club.

## 1-6 Definition of Terms:

**Psychosomatic symptoms:** These are the symptoms that appear on the player in the different stages before or after the match, and these symptoms indicate that the level of stress, anxiety or distress that the player experiences during these different stages (Allawi, 1978, 193).

Or it is a group of symptoms that arise from psychological factors and whose symptoms take a physical, organic or functional form. (Ismail, 1997, 205).

**Emotion:** "A state of tension in the organism accompanied by internal physiological changes and external physical manifestations that often express the type of emotion" (Jalal, 1981, 308).

## 3- RESEARCH PROCEDURES:

### 3-1 Research Methodology:

The nature of the problem is what determines the methodology used in the study, and the researcher used the descriptive method because it is appropriate to the nature of the problem.

### 3-2 Research Sample:

The sample was chosen by the intentional method from the players of the school futsal teams (the first two teams), which are (10) players, and the participants in the sports activity championship for school teams (2021-2022).

### 3-3 The devices and tools used in the research.

- ❖ to measure blood pressure. sphygmomanometer
- ❖ To measure blood sugar. Ultra - type device
- ❖ Stethoscope .
- ❖ stopwatch .

### 3-4 Data collection methods:

#### 3-4-1 Functional measurements included:

##### 3-4-1-1 Measuring the pulse:

(artery carotid) to measure the heart rate per minute, it was measured using the carotid artery pulse palpation method.

in the neck area using the fingers and counting the number of heartbeats within (15) seconds, then multiplying the result by 4 (Muhammad Ali, 1996, 48-60).

### 3-4-1-2 Spirometry:

Take this measurement while the player is sitting on the chair. As the performer of the measurement process counts the number of times the chest rises (inhalation) during one minute (Al-Talib and Al-Samarrai, 1981, 185).

### 3-4-1-3 Measurement of blood pressure:

sphygmomanometer Blood pressure was measured indirectly using a pressure measuring device .

The purpose of the test: measuring systolic and diastolic blood pressure.

Tools used: manometer, stethoscope.

#### Measures :

- A- The bandage is wrapped around the arm at the elbow immediately after placing the stethoscope on the artery below the bandage, and the air is pushed into the bandage by means of a manual pump to inflate the bandage, thus increasing the pressure on the arm, which leads to an increase in pressure in the artery, and then the artery is blocked and blood flow stops below the bandage area.
- B- The valve connected to the manual pump opens, and then the air exits from the tape band gradually, and the pressure decreases, and when the pressure reaches the systolic pressure level, the blood begins to flow into the artery at each heart contraction, and the pressure recorded on the mercury manometer when the first sound is heard for the first time represents the systolic pressure .
- C- The pressure continues to be lowered, and when the pressure reaches the diastolic pressure level, the blood begins to flow into the artery, and the pressure recorded on the mercury manometer when the sound disappears represents the diastolic pressure (Ed Al-Fattah and Hassanein, 1997, 74-75).

### 3-4-1-4 Measurement of blood sugar level

Made in Japan, and according to the following procedures: (Ultra)

- A- Sterilizing the thumb and then pricking it with a needle for the device to obtain blood.
- B- We put the sheet in the special device.
- C- Drops of blood are placed on the sheet, and after a few seconds a reading of the blood sugar level is given, after which the thumb is sterilized with a special sterilizer.

### 3-4-2 Scale of psychosomatic symptoms:

It is a measure developed by Bauer and others (1973) and it was developed in its Arabic form by Muhammad Hassan Allawi to identify the severity of these symptoms. 440).

### 3-5 Exploratory Experience:

The two researchers, along with the work team\*\*, conducted an exploratory experiment on (3) players participating in the tournament (other than the first teams) who were excluded when implementing the basic research procedures. The experiment was conducted on 10/19/2021, during which the psychosomatic symptoms form was answered and measurements were taken The functional under study, and the aim of the experiment was the following:

- ❖ Ensure the validity of the devices and tools used.
- ❖ Calculating the time required to carry out tests and measurements.
- ❖ Ensure the safety and correctness of the sequence identified by the researchers in conducting tests and measurements.

### 3-6 Basic experience:

The basic experiment was conducted in the natural state and immediately before the competition for the period from (10/22/2021 to 10/26/2021), where the following was done:

- 1- A form of psychosomatic symptoms was distributed to the players to answer it and to measure the pulse, respiration, blood pressure and blood sugar level in the normal state and four days before the date of the competition.
- 2- A form of psychosomatic symptoms was distributed to the players to answer and measure the pulse, blood pressure, respiration and blood sugar level approximately (20 minutes) before participating in the competition.

### 3-7 Statistical means:

- ❖ Arithmetic mean .
- ❖ standard deviation .
- ❖ .t-test

(al Talib and the Samurai, 1981, 8-56-40).

All measurements took place at rest with the student seated on a chair.

\*\* The work team consisted of:

\* Wissam Sobeih, BA in Physical Education

\* Jamal Shannan, BA in Physical Education

#### 4-PRESENTING AND DISCUSSING THE RESULTS:

##### 1-4View Results:

After obtaining the data and knowing the differences in the psychosomatic symptoms and some functional variables between the normal state and before the competition, the researchers processed it statistically as the following table shows.

Table No. (1)

It represents the arithmetic mean, standard deviation, and the calculated and tabulated t-value of the psychosomatic symptoms scale and some functional variables in the normal state and before the competition.

variants	normal state		pre-competition condition		calculated t value	tabular t value	Statistical significance
	Arithmetic mean	standard deviation	Arithmetic mean	standard deviation			
systolic pressure	12,42	0,42	13,51	0,61	3,77	1,81	significance
diastolic pressure	7,65	0,72	7,9	0,78	1,66		Non significance
pulse	65,3	6,98	73,21	7,84	3,99		Non significance
breathing	17,21	1,33	18,6	1,59	1,16		Non significance
The level of glucose in the blood, mg	97,45	0,87	108	0,94	1,23		Non significance
The score of the psychosomatic symptoms scale	65,32	4,26	70,12	5,41	1,97		significance

#### 4- DISCUSSING THE RESULTS:

With regard to the results, we have the following:

The results of blood pressure showed significant differences in the high level of systolic blood pressure, which is due to the reflection of the emotional state on the work of the heart muscle, which increased the high systolic blood pressure, as the increase in the amount of blood pushed from the left ventricle of the heart leads to pressure on the walls of blood vessels. The resistance that (f0x & matheas) shown by these vessels to the flow of blood (10-24) as indicated)

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It differs among athletes before the match as a result of excitement that raises blood pressure, as he indicated that there is a positive relationship between anxiety and blood pressure (385, 1977, Willam & other)

The result of our study agrees with the findings of (Jassim and Allawi, 19971, 18), as they found significant differences in the systolic blood pressure variable and in favor of before participating in the competition compared to the normal condition.

As for the diastolic pressure, we showed differences, but it did not rise to the level of significance.

As for the pulse (the number of heartbeats), it showed a significant difference, and the researchers believe that the result of the emotion before the match that the players go through is where the psychological tension. The heart (Al-Sharnoubi, 1978, 23) On the other hand, the higher the pulse rate, the higher the systolic blood pressure, because the rate of pulse rate represents one of the main factors on which cardiac output depends (299, 1981, Mccardl & others). Our study agrees with what was reported by (Omaima) As I noticed that the pulse speed increases during the emotion (Omaima, 1970, 132).

As for breathing and the level of blood sugar did not appear significant in the study.

As for the list of psychosomatic symptoms, significant differences appeared, which the researcher attributes to the fact that the competition factor is one of the strongest factors that affect the players. Training and before the start of the race and in favor of the degree of anxiety before the start of the race (Ahmed, 1984, 53-65) and (Kharibet, 1988) indicates that psychological preparation is one of the necessary and inevitable components and without it it is impossible to achieve success, which contributes to the outcome of the match, and here confirms (the student , and Lewis, 1993) "Sometimes we see a team losing to a team weaker than it, not because of its weak technical ability or lack of physical fitness, but rather to psychological factors due to the unwillingness of the psychologically strong team to confront the opponent" (Talib and Lewis, 1993, 242).

#### 5-CONCLUSIONS AND RECOMMENDATIONS:

##### 5-1Conclusions:

- 1- There are significant differences between the normal state and before participation in the competition in the variable systolic blood pressure and pulse, in favor of the period of participation in the competition.
- 2- There are significant differences between the normal state and before participating in the competition in the measure of psychosomatic symptoms, in favor of the period of participation in the competition.
- 3- There are non-significant differences between the normal state and before participating in the competition in the measure of (respiration, diastolic blood pressure, blood sugar level.)

##### 5-2Recommendations:

Based on the conclusions, the researchers recommended the following:

- 1- The need to emphasize the psychological preparation of the players as an influential factor in the level of achievement due to its effects on the body systems.
- 2- To accustom the players to the atmosphere of competition by conducting intense and serious meetings.
- 3- The need for teachers and trainers to emphasize the development of the physical and functional side, and not to be limited to the technical and skillful side, and to familiarize themselves with the various psychological preparation methods.
- 4- Conducting a similar study with the same research procedures and its variables on different sporting events.

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Appendix (1).

List of psychosomatic diseases for athletes

#	Phrases yes no	yes	no
1	I feel tired		
2	I fear defeat		
3	I feel optimistic		
4	I feel depressed		
5	My memory is good		
6	My confidence in myself is high		
7	I feel anxious		
8	I get excited easily		
9	I feel happy		
10	My sleep is normal		
11	My ability to focus is great		
12	I feel a shiver in some of my limbs		
13	I get annoyed quickly		
14	I feel comfortable		
15	My nerves are taut		
16	I feel pain in my stomach		
17	My heart beats faster than usual		
18	I feel not ready to compete		
19	I feel a headache		
20	I have diarrhea		
21	My mouth feels dry		

22	I'm afraid of getting injured while playing		
23	My sleep is broken		
24	I feel pessimistic		
25	I feel at my best		
26	I can not focus		
27	The clowning of colleagues bothers me		
28	I feel calm		
29	I feel inner tension		
30	I feel pain in some parts of my body		