



Several Functional Factors are Connected to the Onset of Competition and Their Connection to the Futsal Preparation Students' Skill Level

1. Dr. Hassanain Mohammed Jihad

2. Dr. Qrar Abdullelah Kareem

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¹ Open Educational College, Wasit
Academic Center

² Directorate of Karbala Education, Al
Hindia Department

Abstract: The research problem emerged from multiple axes, and the main axis is the case of starting fever or pre-competition anxiety, especially in the age groups under 17 years in the preparatory schools for the futsal championship held by the General Directorate of Education of Karbala Governorate, Sports Department. Futsal is one of the games that requires high physical fitness and a state of psychological stability. Where the researchers found that the real playing time for the futsal game for the preparatory stage is (10) minutes for each half, while the real and legal time for this game is (20) minutes for each half and according to the law of the game, the psychological or functional several elements surrounds the students during or pre-competition, The researchers noticed the loss of opportunities on the one hand and scoring goals on the other hand, any fluctuation in the level of skill performance of the players, especially at the beginning of match, so researchers resorted to knowing relationship of functional variables to level and accuracy of skill performance, and the competitive environment are among the primary elements influencing the final result of match the students will play. from this problem of research arose to detect the player's condition before match starting through some functional variables for preparatory Futsal school players, which affects level of skill performance and to find out relationship between functional variables and level of performance researchers resorted to studying this problem.

1. Introduction:

1.1. Introduction and the importance of research:

Futsal is one of the collective sports that have received wide popularity in all countries around the world in general and Iraq in particular, and is almost comparable to football because of its excitement

and fun. It is still practiced by many teams with the aim of developing the levels of players as one of the sports activities carried out by the players. These activities, of course, are subject to changing situations only; the results are positive and joyful and may be sad because of the negative results obtained by the team during the competitions; they affect the behavior of the players and thus reflect on the level of performance; and the positive and enjoyable is the advantageous

emotional time of success based try, It's among the most crucial pillars of development in contrast to the behavior which match with sadness after a result of successive failures in the results of matches, which frustrates the player and thus the adverse effect on abilities and sports level (Saleh, 2020.9).

The emotional states that players pass of matches is required those who have a tough ability to authority them, which is reflected in their psychological and physical states and the emergence of some functional variables (Lewis, 2016; 23). that as a result of emotional situations, there are involuntary changes in breathing, pulse, and high blood pressure. From this corner of sight, psychologists see that they fight to detect psychological disputes that in athletes during sessions or training and sports events to make sure the best pleasure roles of scientific psychological factors that affect performance and result and the significance of research in determining the key functional variables associated with situations pre- and during competition for school team players.

1.2. Research objective:

to figure out the relationship among some several functional variables (breathing, pulse, and blood pressure) immediately before competition and the skill performance of futsal school team players.

1.3. Research hypothesis:

There is a relationship between some functional variables (pulse, breathing, and blood pressure) pre-competition and the skill performance of the students and players on the futsal school team.

1.4. Domains of Study:

Human domain: Futsal Preparatory School Teams in Karbala Governorate. Time Range: 25/10/2023 to 25/11/2023 Spatial Area: The indoor sports hall of Karbala Sports Club.

2. Research Procedures:

2.1. Methodology:

Type of research problem picks the method which should be used in study, as researcher used in this study the experimental method to suit the nature of the problem studied.

2.2. The sample:

The sample was selected in a deliberate way from players of futsal school teams (first and second teams who reached the final game) and their number (10) players who participated in championship sports activities of preparatory school teams for the academic year 2023-2024.

2.3. Devices and instruments: a blood pressure meter, a stethoscope, and a stopwatch.

2-3-1 Pulse measurement: To measure heart rate per minute, the tip of the index and middle fingers are placed in the neck cavity of the neck along the trachea to feel the pulse in the carotid artery by calculating the number of regular heartbeats within time of 15 seconds and after that multiply result by 4 (Al-Hazaa, 2008, 34).

2-3-2 Spirometry: The respiratory rate is measured by the player's sitting on the bench, where breathing is calculated by the number of times the chest rises (inhales and exhales) within one minute (Osman, 2018).

2-3-3 Pressure of blood measurement: it is measured by indirectly where using a sphygmomanometer with a stethoscope, where the test was done and aims to measure systolic and diastolic blood pressure. blood pressure measurement method, The ligament around the arm is placed on elbow joint immediately in same moment after placing the stethoscope on hand artery exactly below the ligament, then should air is pushed inside ligament by a hand pumping to inflating the ligament, thus should be increasing blood pressure directly in the arm leading to increase high pressure in the hand artery, artery then is blocked by some percentage and blood flow inside artery stops down ligament, opens the valve blood connected to hand pumping it, the air comes out of that pressing band, the pressure will be decreases, when pressure reaches level of blood contracting pressure, blood flow inside artery begins at any pumping of heart, and then it is recorded directly on mercury pressure gauge then first voice come out is should be heard for first moment representing systolic heart pressure. pressure will continue decreasing, the pressure declaim toward diastolic heart pressure, blood arrives, the stream inside hand artery begins, pressure on device mercury pressure meter is recorded when the sound is released, representing diastolic pressure (Abdel Fattah and Hassanein, 2019, 74–75).

2-3-4 Measuring skill performance: to measure skill performance The researchers recorded the final match of the sample, converted the imaging on CDs for 20 minutes, and presented it to a group of football experts in the form of an evaluation of the performance of football skills. See Appendix (8) prepared by Yahya Alwan Manhal in his thesis (Manhal, 2015, 80), so that the form contains two fields for appropriate performance and a field for inappropriate performance. The researchers made a simple modification to some of the names of the form fields to serve the research, i.e., changing the title only, and the contents of the test remain the same, as shown below.

Eligible: very good = 5 degrees.

Eligible: good = 4 degrees.

Eligible: medium = 3 degrees.

Ineligible: poor = 2 degrees.

Ineligible: very poor = 1 degree.

3. Exploratory experiment:

The researchers and the helping team conducted an exploratory experiment on three of the students who participated in schools tournament but other than first and second teams because excluded from exploratory when carrying out exploratory experiment. objective of the exploratory experiment was as follows:

- To ensure validity of the tools and devices which used in exploratory experiment .
- Calculate required time to conduct tests procedures and measurements.
- To ensure integrity and high correctness of specified sequence by researchers while conducting procedures of tests.

3.1. Main experiment:

The main experiment of the study conducted in normal situation pre-competition to the date of 25/10/2023 to 25/10/2023, where the pulse, breathing, and blood pressure were measured in their normal state pre-competition five minutes with all types of conditioning.

3.2. Statistics:

Mean value, standard deviation value, and Pearson's correlation coefficient.

4. Results:

4.1. Results Presentation:

The fourth chapter included the presentation, analysis, and discussion of the results, which the researchers obtained through tests and measurements of the studied research sample. The data was organized in illustrative tables and processed statistically until we reached the final results to achieve the objectives and hypotheses of the research related to the relationship of some functional variables to the skill performance of futsal players for the preparatory stage, and the researchers indicated that the values of the calculated correlation coefficient were compared to the level of error calculated from the system (SPSS), which is 0.05.

Table (1) Shows Mean, Standard deviation for variables

Seq	Variables	Units	Mean	Standard deviation
1	Systolic blood pressure	degree	12.93	0.27
2	Diastolic blood pressure	degree	8.40	0.69
3	Breathing	degree	15.50	0.97
4	Pulse	degree	72.40	1.50
5	Skill performance	degree	15.90	2.46

Table (2) shows the values of correlation coefficient, significance value, significance level of variables, and skill performance.

Seq	Variables	Correlation coefficient	significance value	significance level
1	Systolic blood pressure	-0.64	0.04	Significant
2	Diastolic blood pressure	0.23	0.52	Insignificant
3	Breathing	0.76	0.01	Significant
4	Pulse	-0.63	0.04	Significant

4.2. Discussion:

Through what has been presented in tables (1-2) above, which shows the statistical features of the arithmetic mean, standard deviation, correlation coefficient and significance values for the studied research variables, where the results of measuring systolic blood pressure proved the existence of an inverse significant relationship between the high level of contracting blood pressure and the skill performance of the players of school teams for the preparatory stage, and what confirms this is the value of significance in Table (2), where its value was (0.04), which is smaller than the level of significance (0.05) and this indicates the existence of the relationship between The two variables, and what confirms the inverse relationship between the systolic blood pressure variable and skill performance is the value of the correlation coefficient (Pearson) shown in the table above, where its value came (-0.64), which is a negative value, and this confirms the inverse relationship between the two variables, i.e. when the level of systolic blood pressure rises, the level of skill performance decreases.

Systolic blood pressure rises when the heart muscle is exerted more forcefully due to emotional reflections, as "the increase in the amount of blood driven from the left ventricle of the heart leads to pressure on the walls of blood vessels, such as the resistance of these vessels to blood flow," so we find a direct relationship between the condition of the players before the start of the match and blood pressure as a outcome of emotions which raises pressure, as the amount of systolic blood pressure varies between athletes before the match and thus affects their level of performance (Al-Bassaty, 2016).

The diastolic blood pressure did not show the results of a significant relationship between him and the level of skill performance, where the value of significance (0.52) is greater than the level of significance (0.05), and this confirms the absence of the relationship between the two variables, as well as the value of the correlation coefficient (0.23), which is smaller than 0.30, which is the smallest value for the existence of correlation. for pulse (number of heart beating), there appeared to be a relationship between him and the level of skill performance, where the value of significance (0.04) is smaller than the level of significance (0.05), and this indicates The existence of a significant positive relationship between the two variables, The researchers make sure that result of kind of emotion experienced by players before the match and the tension (starting fever) that occurs leads to a high pulse rate resulting from an increase in the level of adrenaline, and this is what he pointed out (Loucks, 2011): psychological factors before the match are the factors that affect the functional variables, including acceleration in the heartbeat, and on the other hand, whenever rate of pulse rises, blood pressure rises due to pulse the rate is one the main factors on which the heart output depends (Haff, 2011). The researchers noted that the pulse rate increases during those emotions, either for the variable breathing was the value of significance (0.01) which is smaller than the level of significance (0.05) and the value of the correlation coefficient (-0.76) and thus confirmed the existence of an inverse relationship between the variable breathing and the level of performance skill any greater the number of times breathing less level of performance skills of the players, and the researchers emphasize the impact of functional variables on the level of performance skills during the competition, especially in the early periods of the beginning of the games and thus affects the results of the matches.

Conclusions:

The researchers concluded after knowing the relationship between the variables studied in the presence of the impact of functional variables on the level of performance of different skills, especially in the first half of each half. The researchers found a difference in the level of functional variables between members of the same team.

Recommendations:

There is a need necessarily to emphasize field of psychological periodization of students who play as an impactful element in functional variables level and their relationship to skill performance. Introduce players to the atmosphere of competition through the intensive conduct of test matches. coaches emphasis highly to developing all types of abilities physical, skill, career sides not always focusing about one of these aspects only without the other.

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