# The effect of dynamic balance according to the audio-visual balance on the accuracy of scoring skill from the (6) m penalty kick in futsal football

## Researchers

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#### **Abstract**

The scientific progress that the world is witnessing at the present time has been and remains one of the main reasons for progress in all areas of life, including the sports field, and the soccer game for halls, specifically the scoring skill, which is considered important and the decisive factor in the match, which requires the availability of a number of motor abilities to achieve this The factor, where the dynamic balance plays an important role in achieving and mastering many skills, including the skill of scoring because it depends on the efficiency and safety of neurological instructions emanating from the nervous system because of its great importance in developing this skill according to the audiovisual balance, which also works to increase the rate of development of this skill Hence the importance of the research in identifying the level of audiovisual balance for accuracy of scoring according to the dynamic balance of football for halls, which provides important information about this game and thus provides coaches with the necessary and necessary information on how to deal with this sporting skill, and the aim of the study is to identify The level of dynamic balance according to the audiovisual balance, as well as identifying the level of accuracy of scoring skill from the (6m) penalty kick for the members of the research sample As for the methodology of the study, the researchers chose the experimental approach using the method of equal groups, and the study sample was also chosen from some football players for halls of Basra University, which numbered (12) players from the original community of 18 players. The exploratory and main experiment was also conducted, and after that the data were processed. Extracted by appropriate statistical means, and the results were presented and discussed, where the researchers reached a set of conclusions, including the presence of differences for both the pre and post tests in the scoring accuracy test, as well as the existence of significant differences for the audiovisual balance test in the pre and post tests.

Key words:. dynamic balance, scoring skill

# Introduction and importance research

The scientific progress that the world is witnessing at the present time was and still is one of the main reasons for the progress and advancement of human life through programmed and thoughtful scientific planning that contributes to achieving the required goals, as this progress includes all areas of life, including the sports field. The means of advancing nations because of their clear impact on the advancement of societies, and in recent years they have shown a special importance in sports that developed countries have reached with high levels and sporting achievements Among these games is the gymnasium soccer game, which has recently developed considerably as one of the team games of widespread use all over the world, and stands out through the great interest given by various media outlets for the sport's distinctive individual or collective skillful performance at a high level. Scoring in the ballroom soccer game is of great importance in the match, which determines the result of the accuracy of successful shots in the goal, so the decisive factor and the conclusion of the attack is a matter that requires the availability of a number of motor abilities to achieve this facto Where dynamic balance plays an important role in achieving and mastering many skills because it depends on the efficiency and safety of neurological signals emanating from the nervous system because of its great importance in developing this skill, in addition to its association with the accuracy of scoring according to the audiovisual balance, which increases the rate of development of these The skill also, hence the importance of the research in identifying the level of audiovisual balance for accuracy of scoring according to the dynamic balance of soccer halls, which works to provide important information about this event as well as strengths and weaknesses in performance and thus provide coaches with the necessary and necessary information on how to deal with this sporting skill

## Aim of the study

- 1-To identify the level of dynamic balance according to the audiovisual balance of the .individuals of the research sample
- 2-Identify the level of accuracy of the scoring skill from the (6m) penalty kick among .the members of the research sample
- 3-Application of the combination of the two tests, dynamic balance and audiovisual balance, in scoring accuracy

# Research methodology and field procedures

The selection of the curriculum is a very important matter in solving the study problem and the experimental curriculum in the method of equal groups was the best way to do that, and the research sample was chosen by the deliberate method, and they are some of the futsal players for the Basra University team for the academic year 2020-2021 and their number was (12) players and their percentage was (12) 88.88%) of the original community of (18) players, and for the purpose of ensuring the homogeneity of the sample in the variables that may affect the course of the experiment, the researchers performed a statistical treatment using the coefficient of variation and it appeared that all the values of the coefficient of variation were less than (30%). With this, the researcher made sure that the sample was distributed closer to normal under the kauss curve In the search variables (1990: 87: 10  $\square$ ), which indicates the homogeneity of the search sample in the variables, as the arithmetic mean and standard deviation of the length variable reached (175.1, 5.81) and the coefficient of variation was 3.3%, while the arithmetic mean and the standard deviation of the mass variable reached (68.2, 5.4) with a difference of 7.9%, and the arithmetic mean and standard deviation of age reached (23.3, 1.21) and a variation coefficient of 5.1%. The focus during the training modules was on skill exercises according to the dynamic audiovisual balance by (three units) per week and for a period of (two months) In addition to the used method, the following statistical methods have been used: 1- the arithmetic mean, 2- the standard deviation, 3- the coefficient of variation. 4the law of ((T) for correlated

### **Tests used**

First: The accuracy test according to the audiovisual balance (6: 9: 2014)

Test name: Test (Imad) for scoring accuracy according to the visual-audio balance to -develop a penalty kick for halls soccer

The purpose of the test: to measure the accuracy of scoring according to the visual-audiovisual balance

The tools used: five football goals - soccer balls (3) randomly colored iron sheets, - and inside each plate there are different colors (10) plate - a tape measure - a bork to determine the distance of scoring - iron cage (8) - wood (block 1 m in width and 1.20 m in height

Method of performance: The plates are placed inside a circle in which a group of -scattered colors is located, and inside these colors there is a number and these plates are (ten) meaning we have (10) numbers that the trainer chooses the plate he wants,

the plate is fixed in a cape on the four corners of the target two at the top and two At the bottom of the target and installed in a cap around the target pillars from the top and side, which are four (40 x 40) size during the performance, the trainer changes these plates after each of the three attempts and a rectangular shape made of wood (block) is placed with a base width (1 meter) Fixed his arrows from both sides to fill the gap in the middle of the goal instead of the goalkeeper The ball is placed on the penalty kick point that is 6 m away from the middle of the goal, where the laboratory straightens the ball with force and accuracy and the ball is fixed on the ground in the inner part of the foot towards the plate to which the coach instructs the number required to implement the ball towards it so that the tester's focus is towards the coach's voice first And then note the number you want the ball to be directed towards in any of the four corners of the goal

**Registration**: The test consists of (15 marks) for all three attempts, and the scores are calculated by what the laboratory collects from these attempts, which are calculated on the basis of the following:

1-When the plate that is instructed by the trainer and which carries the number to be directed towards, is hit, and by looking at it when correcting, a score of (5) is .calculated for him

2- When aiming at the unwanted plate, its hit is given to the laboratory 3 score

3-In the event that the ball is not pointed correctly, or the plate bearing the required .number is not hit, the tester will be given a zero

Note: - These plates change their positions after each of the three attempts (that is, .(they are not fixed

(Second: A test for dynamic (moving) balance (7: 97- 99: 1987

The aim of the test: to accurately measure the ability to jump and maintain balance .during and after movement

Tools: stopwatch, tape measure, 10 markers (1 x 0.75 inch) with hold on the floor, .footballs

Method of performance: The tester stands on his right foot on the starting point, then begins the jump to the first mark with his left foot, trying to stabilize his position on the instep of his left foot for the largest possible period of time and a maximum of five seconds during the stay period, tries to shoot the ball towards the square that the coach wants, after that He leaps to the second mark with his right foot. Thus, he changes the landing foot from one mark to another and relies on the metatarsal each time, noting that his foot is above the mark, so that no part of it appears

.

## Registration

.The laboratory awards points for each mark in case of correct landing -

The laboratory awards one point for every second in which it maintains its balance above the mark for a maximum of 5 seconds

scores are added for each correct scoring accuracy according to the audiovisual (4) - balance

The laboratory does not award the five special points in the event that it fails to stop - during the landing after a jump on the mark, or if its heel or any other part of its body touches the surface of the ground except for the instep that has a turn or its failure to cover the mark with the instep and in the event of any mistake Previous landing errors allow the tester to re-position the equilibrium on the metatarsal of the turn above the .mark and attempt to maintain balance for a maximum of 5 seconds

If the tester commits any of the balance errors before the end of the five-second - period, he loses one point for every second

## Presentation and discussion of results

1-Presenting and discussing the results of the level of dynamic balance, audiovisual balance and scoring accuracy

Table (1)

Shows the arithmetic mean, standard deviations, and (T) score calculated for the pre and post tests for the variables dynamic balance and audiovisual balance

Statistical	measruing	The pre test		Post test		(T)	Sig	
means	unit	X	S +	X	S +			
Scoring	degree	11.64	0.74	13.01	0.89	4.82	0.01	
accuracy								
according to								
the								
audiovisual								
dynamic								
balance								
Degree of	15							
freedom								
Indication	0.05							
level								

Table (2)

Shows the arithmetic means, standard deviations, and the (T) score calculated for the pre and post tests for accuracy Scoring skill according to dynamic balance and audiovisual balance

Statistical	Measruing	The pre test		Post test		(T)	Sig			
Variables	unit	X	S+	X	S+					
dynamic	degree	8.20	0.41	8.46	0.51	2.25	0.04			
balance										
Audiovisual	degree	12.26	0.74	12.93	0.89	2.82	0.01			
balance										
Scoring	degree	9.22	1.11	10.13	1.08	2.26	0.05			
accuracy										
Degree of	15									
freedom										
Indication	0.05									
level										

The researchers believe that the reason for the differences results through Table (1 and 2), which shows the amount of development in the skill of accuracy of scoring according to the dynamic audio and visual balance Through which the player has sufficient time to correct the fact that the player's stability is a result of his balance. Wrestling and soccer, as in increasing the friction of the player's feet on the ground, which increases his stability) (1967: 9: 57)

Ali Salloum also notes by saying ((The balance of the player works to increase his accuracy in correction, improve his abilities, develop his skill level and his performance in many moves)) (5: 18: 2004) And we see in the football game that the player starts off at full speed and then stops suddenly to do the correction, which must increase his balance in order to prevent the player from falling, and this is confirmed by Abdel Moneim Suleiman, saying ((The balance helps the individual to achieve muscle sufficiency and control the direction of his movements) (1995: 4: 104). The researchers believe that the increase in precision training for this group has led to an increase in the improvement of the level of this skill and its development, as Risan Khuraibet indicates (Any increase in the level of physical or skill exercises must have positive returns in developing the general and private level) (2: 57: 2000)

The researchers believe that the visual focus processes that were among the basic requirements of this test gain a person mastery of the skill because this matter depends primarily on the development of mental processes, and from here Ahmed Omar (((that the process of focusing on mental processes is very important in achieving the required level of performance Raising the level of concentration, i.e. raising the level of mental processes, leads to the development of the skill level (1995: 261). The researchers add that the entry of the auditory variable during the application process of this test in choosing the plate that contains the number required to implement the ball towards it increases the increase in attention For the tester in order to memorize the number to be shot as well as the direction (presence of the plate Which also has mental aspects that must be focused on in order to achieve what is required, as Raysan Khuraibet and Najah Mahdi confirms ((that each stage of

attention contributes to the development of mental processes that lead to the development of the level (3: 35: 2002), as well as the researchers see That the development of the members of the research sample in the accuracy of scoring resulted from an increase in the level of awareness of the time difference between hearing the sound and seeing the number inside the plate in order to score correctly, and this is confirmed by Ahmed Omar by saying ((The processes of reducing the time lag between hearing and vision are considered from The most important matters that lead to achieving the highest levels of achievement (1995: 54: 1)

The researchers also see that among the things that the members of the research sample acquired through increasing practice, especially after the first month of giving the accuracy exercise, this led to a noticeable improvement in directing the ball towards the plate to be shot, so that the members of this group became able to direct the ball towards the required angle, Hence, Kazem Al-Rubaie and Muwaffaq Al-Mawla confirm ((The continuous increase in the use of performance leads to an increase in sensitivity to it and then helps to develop the required skill (8: 75: 1988)). By the trainer, with a quick look towards the plate bearing the required number, i.e., more precisely, the process of linking hearing and vision has been acquired When executing the penalty kick after this stage was a kind of delay due to their inability to link the process of focusing towards the sound and looking at the beginning, and this aspect is one of the important aspects that the player needs when executing the penalty kick. The penalty kick is one of the important things that the player needs to have a high-level concentration process by looking at the ball first and determining the angle towards which to shoot)) (13: 32: 1999) The researchers also see that the accuracy of the penalty kick skill is one of the skills that requires with accuracy the appropriate speed when executing and needs the ability to visual distinction when aiming, which must be of a high degree in order to be corrected appropriately, which is an important characteristic at the port For the penalty kick, these qualities are developed by focusing between the two senses of hearing and sight at the same time. Combine accuracy with any other sense of the player's senses (1999: 12: 87) On the other hand, the second group that was given the vocabulary of the lesson and did not focus on this test within the lesson did not witness a noticeable development except for the simple thing because the members of this group did not acquire the appropriate accuracy and in both the audio and visual directions, as the researcher sees that the size of the repetitions that have been applied has an impact The adult in the development of accuracy of scoring through the development of the senses of hearing and sight to know the most accurate mechanical details of this skill among the members of the research sample, which in turn developed the motor path during the performance, which serves the mechanical foundations of the skill under study, as some studies have shown ((It is when the learner knows the mechanical foundations of the skill will help This is in the rapid entry to learn a skill and progress in performance (11: 99: 2000) Likewise, the importance of estimating the distance during the success of the accuracy of the performance and the transition between the angle to be implemented and its direction and identification is one of the common tasks of a group of senses with mental processes, and it is one of the complex functions of the central nervous system that is achieved by consulting and attracting the activity of different sensory analyzers where these analyzers play more roles In the success of performing motor skills, as Zaki Muhammad points out, ((The visual evaluation with the musculoskeletal basis raises the accuracy of movements and skills that are generally performed)) (1995:

### **Conclusions**

- 1-The variation in the level of differences among the members of the research sample in the .dynamic balance test
- -2. There were differences in both the pre and post tests in the scoring accuracy test
- -3. There are significant differences in the audiovisual balance test in the pre and post tests
- 4-There is an evolution of the differences in the pre and post tests in the accuracy of the scoring skill according to the dynamic, audiovisual balance

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