

KINETIC COMPATIBILITY AND ITS RELATIONSHIP TO THE ACCURACY OF SHOOTING FROM STABILITY IN FOOTBALL FOR STUDENTS

Akeel Kadhim Hadi*

Department of Physical Education and Sports Sciences, University of Kufa, Iraq

Abstract

The purpose of this paper is to identify the relationship between kinetic compatibility and the accuracy of shooting among student players. The researcher used the descriptive method in a survey style and correlational relationships. The current research community is the students of the Faculty of Physical Education and Sports Sciences, the first stage in football for the academic year 2020-2021, whose total number is (30) students. The researcher dealt with the research community in a comprehensive inventory method. One of the most important conclusions obtained by the researcher is that players with high kinetic compatibility were more accurate in the skill of shooting in football; one of the most important recommendations recommended by the researcher is training of players on correction under different conditions to increase the kinetic compatibility under the influence of these conditions.

Keywords: Players. Football. Kinetic Compatibility

Introduction

The game of football has now become, in many countries, the first competitor to football in terms of attracting the largest number of players and spectators, due to the exciting, aesthetic and fast pace of play in terms of offensive and defensive terms, in addition to the fact that shooting is an important aspect of the football game. And football is one of the organized team games that is characterized by the nature of speed, and the changes in the law of the game that have occurred recently have put some difficulty for coaches in facing the requirements of modern play, and this is what makes teachers always look for new ways to learn and play, and in the game of football, shooting is an important aspect. One of the aspects of the game, if not the most important, is that shooting brings points and points bring victory. The game of football needs more scientific efforts to bring students to an advanced level and provide the perfect performance in the lesson according to a scientific method based on observation and experimentation.

Given the importance of soccer shooting, the researcher studied it because it is the only way to get points, in addition to the fact that the study of kinetic compatibility and accuracy of shooting leads to the development of playing, which is beneficial to the students themselves in advancing their educational level, hence the importance of research in finding the relationship between kinetic compatibility and shooting from football stability.

Research problem

Football is one of the team games that need high kinetic compatibility, especially in cases of scoring of all kinds. Through the researcher's observation and follow-up, students of the Faculty of Physical Education and Sports

Manuscrito recibido: 16/03/2022

Manuscrito aceptado: 30/03/2022

*Corresponding Author: Akeel Kadhim Hadi, Department of Physical Education and Sports Sciences, University of Kufa, Iraq

Correo-e: aqeelk.alfaham@uokufa.edu.iq

Sciences, University of Kufa note that there is a lack of kinetic compatibility among students, especially the compatibility of the eyes and feet at the moment of shooting, which prompted the researcher to study the relationship between kinetic compatibility and the performance of the skill of shooting from stability in football.

Research objective

– identify the relationship between kinetic compatibility and the accuracy of shooting among student players

Research hypotheses

– There is a significant correlation between kinetic compatibility and accuracy of shooting from stability in soccer for students.

Research fields

- Human field: Students of the first stage of football for students for the academic year 2021-2022.

- Time field: (21/12/2021) to (1/2/2022)

- Spatial field: Stadium of the Faculty of Physical Education and Sports Sciences - University of Kufa.

Research methodology and field procedures

Research Methodology

The researcher used the descriptive approach in a survey style and correlational relationships "because it is the best and easiest method to reach the achievement of the research objectives"(Hamid and Khairy. 1993).

Community and sample research

Field research procedures

The current research community is the students of the Faculty of Physical Education and Sports Sciences, the first stage in football for the academic year 2020-2021, whose total number is (30) students. The researcher dealt with the research community in a comprehensive inventory method.

Search tools and devices

Arabic sources and references - data blank form - questionnaire - electronic computer (acer) Number of footballs (8) - a legal football stadium - a measuring tape.

Main search procedures

Identify the research tests

The test is "measuring the individual's ability to perform a specific job according to accurate scientific controls and formulas" (Mahboub. 1993), as the researcher presented the standardized tests to measure kinetic compatibility and test the accuracy of shooting from stability in football in a questionnaire form (Appendix 1) on a committee of experts and specialists (Appendix 2) and after collecting the data, the data was unloaded and the percentage of each test was found, as shown in Table (1):

Description of the tests

Kinetic compatibility test (Hassanein. 1981): Jumping inside the numbered circles

- Purpose of the test: To measure the compatibility between the legs and eyes

- Tools: a stopwatch - eight circles are drawn on the ground, each with a diameter of (60) cm, and the circles are numbered (1_8)

- Test Specifications:

The tester stands inside the circle No. (1) And when he hears the signal to start, he jumps with both feet to Circle No. (2), then to Circle No. (3), then to Circle No. (4) and so on until Circle No. (8) As shown in the Figure (1)

Table 1: Shows the percentage of each test.

Variables	Tests	Percentage
Kinetic compatibility	Measuring the compatibility between the legs and the eyes	100%
Shoot accuracy	Legs accuracy measure	100%

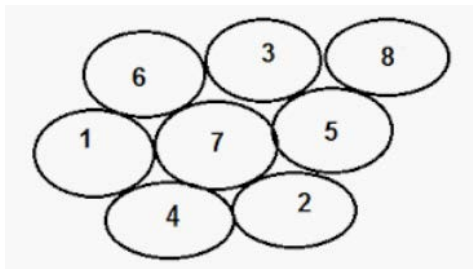


Figure 1: Kinetic compatibility test.

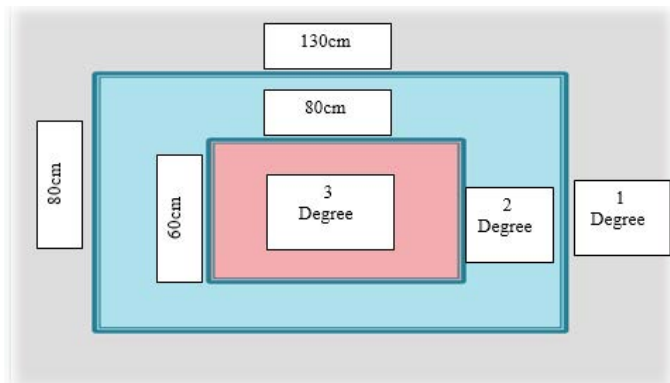


Figure 2: Shows the Shoot accuracy test.

- Register: The laboratory records the time it takes to travel through the eight circuits.

Shoot accuracy test: (Hassanein. 1979)

- The purpose of the test: to measure the accuracy of the man
- Equipment used: Five footballs - a wall in front of the paved ground
- Performance specifications: The tester stands behind the line facing the wall and then shoots the five balls (consecutively) on the rectangles trying to hit the small rectangle - the tester is free to use any of the feet.
- Register:
 - If the ball hits the small rectangle (within the rectangle or on the lines specified for it), three degrees are calculated for the laboratory.
 - If the ball hits the middle rectangle (inside the rectangle or on the lines specified for it), two degree are calculated for the laboratory.
 - If the ball hits the large rectangle (inside the rectangle or on the lines specified for it), one degree is calculated for the laboratory.
 - If the ball goes outside the three rectangles, the tester will be counted as zero (Figure 2).

Exploratory experiment:

The exploratory experiment "is a preliminary study carried out by the researcher on a small sample before doing it with the aim of testing his methods and tools" (Mahboub. 1993) Therefore, the researcher conducted an exploratory experiment on (12/29/2021) on a sample of the research community and their number was (5) Students The purpose of conducting the exploratory experiment was as follows:

- Ensure that the research sample understands the vocabulary of the research tests.
- Know the time the experiment will take.
- Knowing the difficulties and obstacles facing the work and addressing them.
- Ensure the Honesty of the tools and devices used in the research.
- Ensuring the efficiency of the auxiliary work team.
- Extracting the scientific basis for the tests.

Scientific foundations of scale and testing

Honesty of Tests

Honesty of Tests: Honesty is one of the important parameters of a good test,

and it measures the test accurately. "The degree to which the test measures the thing to be measured" (Farhat. 2001) Honesty is one of the basic parameters of a good test, as the researcher used apparent honesty by presenting the tests to a group of experts and specialists in the field of testing and measurement to express their opinions and observations on the validity of the tests for the purpose of applying them to the research sample. Shows its validity to measure what it is designed to measure.

Stability of the tests

The stability of the test means "the test that gives close results or the same results if it is re-applied more than once and in the same conditions" (Obeidat and et al. 1992). (7) Days have passed for the players themselves and under the same conditions. Thus, the researcher used the method of testing and re-testing to obtain the stability of the tests. This method is one of the simplest and easiest methods, and it is important in setting the test stability coefficient. This method is summarized in testing a group of individuals and then re-application Again and on the same group, the simple correlation coefficient (Pearson) is calculated between the two applications to obtain the test reliability coefficient (Rahman. 1997). The test reliability coefficient was as shown in Table (2):

Objectivity of Tests

The good test is characterized by objectivity, which is "the test that gives the same results, regardless of the difference of graders, meaning that the results are not affected by the corrector or his personality. (Shalash and Mazen Abdel Hadi. 2006) Therefore, the objective coefficient of the tests was found by finding the Pearson correlation coefficient based on the results of two arbitrators* who record the results of the pilot experiment sample as shown in Table (2):

Main experiment

The main research procedures consisted of performing kinetic compatibility tests and tests of shooting accuracy with soccer balls, which the researcher applied to the research sample, which numbered (30). A player as the researcher conducted kinetic compatibility tests (measurement of compatibility between the legs and eyes) and a test (measurement of leg accuracy). Over the course of one day on 9/1/2018, the main experiment included tests of measuring leg accuracy and tests of kinetic compatibility (measurement of compatibility between the legs and eyes) and with the help of the assistant work team.

Statistical methods: The search data was processed through the Statistical Package for the Social Sciences (SPSS).

Presentation, analysis and discussion of the results

Presentation, analysis and discussion of the results of the relationship between kinetic compatibility and the accuracy of shooting from the movement in football

It is clear from Table (3) that the value of the arithmetic mean and standard deviation of the kinematic compatibility, respectively, is (12.45) (1.07), while the value of the arithmetic mean and the standard deviation of the accuracy of the correction is (2.93) and the standard deviation of (1.099) and the value of the correlation coefficient between the kinetic compatibility was And the calculated correction accuracy is (0.83), which indicates that there is a correlation between them, that is, the greater the kinetic compatibility, the greater the accuracy of the correction, which indicates that the relationship between them is direct.

As the kinetic compatibility is linked to the possibility of the kinetic system and the central nervous system, in which the process of understanding, comprehending, analyzing and realizing the movement or the kinetic program takes place. The kinetic compatibility is also related to the work of the internal organs and their ability to organize and coordinate the effort expended according to the goal by building physical and kinetic qualities such as strength, speed, elongation, agility ... and others. Therefore, the learning of movements is in different degrees and the processes of kinetic compatibility are not equal

Table 2: Shows the stability and objectivity of the tests.

Tests	stability	objectivity
Measuring the compatibility between the legs and the eyes	0,91	0,96
Shoot accuracy	0,93	0,95

Table 3: Shows the values of the arithmetic mean, standard deviation, and the relationship between kinematic compatibility and accuracy of movement correction.

Variables	Measuring unit	Arithmetic mean	Standard deviation	correlation coefficient	Type sig
Kinetic compatibility	Degree	12.45	1.07	0.8	Sig
Shoot accuracy	Degree	2.93	1.099		

between individuals as a result of different abilities and qualities.

Conclusions

- There is a significant correlation between the kinetic compatibility and the accuracy of the correction of the movement in football.

- The players who have high kinetic compatibility were more accurate in shooting skill in football.

Recommendations

- Training the players to shoot under different conditions to increase the kinematic compatibility under the influence of these conditions.

- Conducting studies similar to the case study for other sports and for all other academic levels.

References

Jaber Abdel Hamid and Ahmed Khairy. 1993. Research Curriculum in Physical Education, Cairo. Authoring House Press, p. 230.

Wajih Mahboub. 1993. Methods of Scientific Research, Dar Al-Hikma for printing, p. 178.

Mohamed Sobhi Hassanein. 1981. Measurements and Evaluation, Physical Education and Sports, 3rd Edition, Volume 1, Dar Kutub for Printing and Publishing, University of Mosul p. 142.

Muhammad Sobhi Hassanein. 1979. Evaluation and Measurement in Physical Education, 1st Edition, Cairo, Dar al-Fikr al-Arabi, p. 451.

Laila El-Sayed Farhat. 2001. Methods of Codifying Tests and Measurement in Physical Education, 1st Edition, Cairo, Dar Al-Fikr Al-Arabi, Al-Kitab Center for Publishing, p. 111.

Thouqan Obeidat and et al. 1992. Scientific research, its concept, tools, methods, 4th edition, Amman, Dar Al-Fikr Al-Arabi for Publishing and Distribution, p. 164.

Saad Abdul Rahman. 1997. Psychometrics, 2nd Edition, United Arab Emirates, Al Falah Library for Printing and Publishing, p. 201.

Najy Mahdi Shalash and Mazen Abdel Hadi. 2006. Principles of kinetic learning, 1st edition, Babylon, Alwan Press for printing and publishing.