



## RELATIONSHIP BETWEEN KINESTHETIC INTELLIGENCE ON SCORING ACCURACY PERFORMANCE FROM MOVEMENT IN YOUNG FOOTBALL PLAYERS

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### ABSTRACT

**Background.** Kinesthetic intelligence is one of the important paradigm shifts in cognitive psychology and influences the level of basic skills in football in general and the accuracy of scoring goals from movement for young players. **Objectives.** The aim of this study is to understand the relationship between kinesthetic intelligence and scoring accuracy in football based on movement in a sample of young players. **Method.** The researchers used a descriptive method, and the study sample consisted of 30 young players out of 35, all from the Al-Minaa Club in Basra Governorate. They were selected purposefully. This chapter also covers shooting accuracy tests in football from movement, main experiments, and statistical methods. Chapter three presents, discusses, and analyzes the results. Chapter four includes conclusions and recommendations. **Results.** The research results show a difference in arithmetic mean between kinesthetic intelligence (3.6) and score accuracy (8.9) of movements in soccer. The results indicate a significant relationship, considering the calculated value ( $T=5.125$ ) is greater than the tabulated value ( $T=2.048$ ). **Conclusion.** In conclusion, the contribution of kinesthetic intelligence to shooting accuracy in football from movement among young players is significant. The researcher also concluded that bodily-kinesthetic intelligence is important for shooting accuracy from movement in football for young players, and indeed in various sports, particularly football.

**Keywords;** kinesthetic intelligence, scoring accuracy, young players, football.



## A. INTRODUCTION

Football is a team sport that requires high physical, mental and technical skills, including the skill of scoring, which is one of the most important basic skills that players strive to master because it is a fundamental means of achieving victory in the match (Burhaein et al., 2020). Because the moment of scoring is always linked to rapid movement and instantaneous decision-making regarding the accuracy of the shot, and the skill and accuracy of the shot are directly affected by the physical, technical, and mental abilities of the players, including kinesthetic intelligence, which is one of the higher mental abilities in using the body effectively through coordination between movements, sensory perception, and speed in making the appropriate decision (Alficandra et al., 2021; Janković et al., 2014, 2014).

This is evident in players who have the ability to control their bodies during skill performance (Bates et al., 2021). As a result of the development of training methods and the interest in thinking and intelligence in general and kinesthetic intelligence in particular, the need has arisen to know the relationship between kinesthetic intelligence and skill performance in football, especially the skill of scoring among young players . Hence, the researcher sees the importance of the research as manifested in understanding the extent of the impact of kinesthetic intelligence on the accuracy of scoring in football during movement among young players in Al-Minaa Sports Club in the (Basra) Governorate, which can benefit coaches, specialists, and those interested in the field of football in general.

Kinesthetic intelligence is one of the changes. The mindset that is important in cognitive psychology influences both the basic skills in football and the accuracy of scoring from movement for young players (Abade et al., 2019). This trend is particularly evident in the current research; therefore, players will need a certain level of kinesthetic intelligence. The researcher observed that the player's accuracy in scoring is crucial. While the team achieved victory, some players exhibited a clear weakness in shooting accuracy while on the move, despite possessing high physical and technical abilities, which negatively impacted their overall performance. And the team, Hence, the research problem is posed through the question: Is there a statistically significant relationship between kinesthetic intelligence and shooting accuracy in movement for young players? The research objective is to understand

the relationship between kinesthetic intelligence and scoring accuracy. Scoring in football from movement for a sample of young players.

## **B. METHOD**

### *Participant*

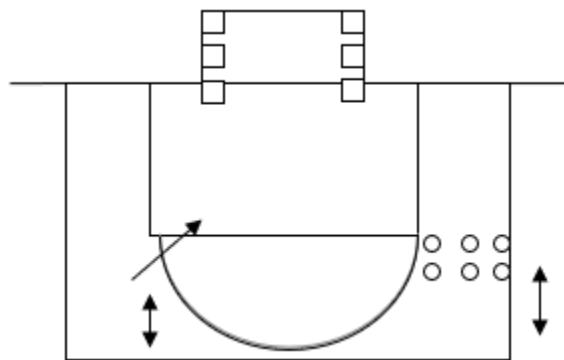
The research community and its sample: Wajih Mahjoub (1993) defines the research sample as “the model on which the researcher conducts the entirety and focus of his work” (Wajih Mahjoub, previous source, p. 181). The sample, consisting of (30) players, was selected from (35) players, representing (85.71 %), and it represents the entire original community. They are players from Al-Minaa Club in Basra Governorate, for the youth category, aged 17-18.

### *Research Design*

The researcher used the descriptive method (correlational studies) because it is suitable for the nature of the research problem: “Studying a phenomenon or addressing a problem as it exists in the present with the intention of diagnosing it, revealing its aspects, and determining the relationships between its elements through the use of objective tools to collect and analyze data” (Wajih Mahjoub, 1993, p. 181).

### *Tests Used in The Research*

Scoring from movement in a football test (Wael Qasim Jawad, 2007, p. 37). The purpose of the test: To measure the player's accuracy in shooting with his foot at the goal while moving. Test Implementation Method: The goal is divided into three squares on each column, with a side length of (80) cm, as shown in Figure (1). Each area has a specific score, and (6) balls are placed on the corner of the penalty area. The player being tested stands outside the penalty area near the coach. The coach then plays the ball on the penalty area in front of the arc. The player advances to execute the shot on the goal, as shown in Figure (1).



**Figure 1.** Scoring From Movement in a Football Test

### *Scoring method*

Three points are given when the ball is shot into the top corner, two points into the middle corner, and one point into the bottom corner. Balls that go into the unshot third are not counted. Tools used: (10) balls, goalposts and measuring tapes.

### *Main Experiment*

The main experiment involved conducting the tests used in the research, namely (scoring accuracy test from movement with a football), on the research sample consisting of (30) young players at Al-Minaa Club in Basra Governorate. The skill test was conducted . For young players (17-18), where testing procedures were carried out on 1/4/2025, and it ended on 1/5/2025 The same procedures that were applied to the exploratory experiment were observed, including the availability of all the necessary tools and supplies for the research.

### *Statistical Methods*

The researcher used the statistical software package (SPSS) version 16.0 to process the data.

## **C. RESULTS AND DISCUSSION**

### **Results**

Presentation, analysis, and discussion of the results of the relationship between perceptual speed and shooting accuracy from a stationary position in a sample of young players:

**Table 1.** Results Of The Relationship Between Kinesthetic Intelligence and Shooting Accuracy

Variables	Mean	Std	Calculated (T) value	Tabular (f) value	Sig.
kinesthetic intelligence	3.6	5.42	125, 5	2.048	Sig.

Freedom degrees (N - 2) = (30 - 2) at level (0.05) = (2.048)

Table (1) shows differences in the arithmetic means between kinesthetic intelligence and scoring accuracy from movement in football. We also observe differences in the standard deviations of the two variables. The calculated value of (T) is (5.125), and when compared to the tabulated value, which is ( 2.048 ), we observe that there is a significant relationship, given that the value of (T) The calculated value is greater than the tabulated (T) value. This indicates that kinesthetic intelligence is an important and fundamental variable in scoring in football.

### Discussion

This means that kinesthetic intelligence is necessary for young players to perform the skill of shooting accuracy from movement in football. The player needs high tactics and technique, and to observe what the opponent is doing during shooting. This depends on the player's intelligence, his understanding of the stimuli surrounding him, and his ability to think and analyze. Because no matter how complete and effective the shooting is, and no matter how high the level of skill, physical, and technical performance, it still needs the kinesthetic intelligence variable, through which the player can analyze problems and make decisions quickly and accurately, and achieve victory for the team (Aminudin et al., 2020; Gonzalez-Rodenas et al., 2020; Perdana et al., 2023).

The researcher ascribes this large correlation to the notion that all abilities executed by the football player fall under the domain of bodily-kinesthetic intelligence, which experts define as the individual's proficiency in physical movement (Hall et al., 2024). The physical body facilitates the creation of objects because it can articulate thoughts and emotions. According to Abade et al., (2019), certain physical intelligences such as speed, agility, balance, coordination, and flexibility are essential. Possessing these skills can aid in the development of training and competition. This is reinforced by several studies that say that improving soccer skills is supported by good physical and technical abilities. This way, the game will remain dynamic and run according to strategy (Suryadi et al., 2023; Tanri et al., 2023). Therefore, by having a high level of

intelligence, players will be able to quickly develop strategies and solve problems in matches to achieve maximum results. Athletes with good kinesthetic-physical intelligence will play a very important role in achieving victory in various sports. This is certainly in line with the demands of the game, which requires quick awareness to develop scenarios during matches (Michelaki & Bournelli, 2016; TAŞKIN, 2023).

Based on research conducted by Zhong (2023), multiple intelligences (MI) provide autonomy, competence, and relatedness, thereby increasing intrinsic motivation and encouraging students to actively participate. This statement is supported by Tomlinson & Jarvis (2023), who state that an increase in MI scores is related to an environment that facilitates the formation of cognitive profiles. Motor Learning Theory and the concept of differential learning enhance ball control and passing accuracy. According to de Pinho et al. (2021) and Lundqvist et al. (2023), motor representation and skill transfer can be improved through varied exercises. Structured and personalized learning encourages basic competence, facilitates technical execution, and improves skills (Tassinon et al., 2021).

A player's performance can be affected by many things, including the opponent, the ball, the movements of teammates or rivals, fan pressure, the type of game, and the player's mental state. These factors make it harder for players to do well, and they need to be smart enough to make the right choices and come up with plans to get around them. Bodily-kinesthetic intelligence is the reason why athletes are distinct from each other. It is a key aspect in success in many sports, especially those that need quick awareness of obstacles in diverse playing situations (Koçak, 2019; Mashkooor & Hameed, 2022). Indicates that structured and adaptable physical education programs support sustainable student involvement and the advancement of cognitive and motor abilities (Baena-Morales & González-Víllora, 2023).

The opponent, the ball, the movements of teammates or rivals, fan pressure, the nature of the contest, and the player's mental state are all things that can affect how a player plays. These factors make it harder for players to do well, and they need to be smart enough to make the right choices and come up with plans to get around them. Bodily-kinesthetic intelligence is the reason why athletes are distinct from each other. It is a key aspect in success in many sports, especially those that need quick awareness of obstacles in diverse playing situations (Koçak, 2019; Mashkooor & Hameed, 2022). Indicates that structured and

adaptable physical education programs support sustainable student involvement and the advancement of cognitive and motor abilities (Baena-Morales & González-Víllora, 2023).

This study gives us some fascinating information, however we need to be aware of several methodological problems. The restricted and uniform sample of 30 players from a single institution limits the applicability to other demographics, such as male students, athletes from various sports, or individuals from diverse educational and cultural backgrounds, as evidenced by prior studies on population variability (Ferrero et al., 2021; Lundqvist et al., 2023). The lack of blinding and reliance on self-reported MI measures may have heightened reporting bias, a concern highlighted in research on self-assessment in education (Zhong, 2023). The lack of long-term follow-up evaluations constrains the evaluation of the sustainability of improvements in motor and MI skills, a limitation already identified in other intervention research (Mendes et al., 2022; Ribeiro et al., 2021).

#### **D. CONCLUSION**

The results of this study provide information that kinesthetic intelligence is an important fundamental variable in supporting soccer performance. Kinesthetic intelligence shows a significant relationship with shooting accuracy in soccer. The contribution of kinesthetic intelligence to shooting accuracy from movement in football among young players is significant. These results also indicate that bodily-kinesthetic intelligence is important for shooting accuracy from movement in football for young players and in various sports, particularly football. This research emphasizes that the variable of kinesthetic intelligence has a direct impact on the accuracy of scores in football for young players. Further research recommendations could include adding other variables to strengthen the study's findings.

#### **E. ACKNOWLEDGMENT**

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#### **F. AUTHOR CONTRIBUTION STATEMENT**

Hussain Suhail Mathkor Khalati is the sole author of this research. She independently designed the study, developed the research instrument, collected and analyzed the data, interpreted the findings, and wrote the manuscript.

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