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ORIGINAL STUDY

Reflective Thinking and its Relationship with the Performance of Selected Offensive Basketball Skills Among University Students

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Abstract

The current study explores the correlation between reflective thinking and the chosen offensive basketball skills in students. This involved evaluating the degree of reflective thinking and relating it to performance in certain offensive skills, that is, receiving, high dribbling, chest passing, long passing, and lay-up shooting. The descriptive correlational design was chosen as it was consistent with the nature of research problems. The sample consisted of undergraduate students, and it was chosen based on predetermined scientific criteria. The study used various measures, such as a reflective thinking scale and three composite skills tests in basketball. The average of the reflective thinking scale was 83.26 (SD = 9.759) which was higher than the mean of 67 of the hypotheses. The *t*-value was 11.057 at $p < .001$ meaning that the participants reflected high level of thinking. In addition, it was established that reflective thinking has statistically significant positive relationships with the first test ($r = .684$), the second test ($r = .612$), and the third test ($r = .597$) with a significant level of $p = .000$. These findings indicate that there is an improvement in performance on complex offensive basketball skills as the level of reflective thinking increases. Reflective thinking is involved in the organization of motor performance but also improves the quality of learning skills among students. The research suggests the introduction of new instructional methods that will facilitate the development of reflective thinking in physical education lessons. The practice is in line with Sustainable Development Goals associated with quality education, and good health and well-being.

Keywords: Reflective thinking, Skill performance, Offensive skill, Motor learning

1. Introduction

There is growing interest in the role of mental processes in motor learning within education and sport. Skill performance is no longer seen as purely physical. It involves both thinking and execution. Modern motor learning depends on the learner's ability to understand performance and analyze its stages during practice (Magill & Anderson, 2021).

Reflective thinking is an important way of thinking. It helps students review past experiences, understand learning situations, and make appropriate decisions (Schön, 1987).

It also aids them in spotting errors, correcting them, and improving over time. This becomes especially important in team sports such as basketball, where

quick perception and accurate decision-making are required. Skills such as receiving, dribbling, passing and lay-up shooting require cognitive organisation that takes place before movement execution.

Zhang et al. (2024) indicated that students with higher levels of reflective thinking tend to perform better in complex skills. These skills require stronger coordination between thinking and movement than simple skills. The research problem lies in the presence of individual differences in performance quality, which may be related to differences in levels of reflective thinking.

In this regard, Mahjoub (2002) emphasizes that modern motor learning is based on the learner's awareness of performance details before execution.

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The more the learner understands the skill and analyzes it, the more able they are to acquire it with speed and accuracy.

Hussein (1998) explains that complex sport skills require cognitive organization before movement execution. The multiple parts of the skill require the student to understand the sequence of performance before applying it in practice.

Saadoon and Majeed (2025) emphasized that the importance of this type of thinking becomes greater in team sports such as basketball. These games require quick perception and accurate decision-making as play situations change. Skills such as receiving, dribbling, passing, and lay-up shooting are not performed in isolation. They are carried out as part of a sequence that requires a high level of coordination between thinking and movement.

According to Al-Khuli (2001), successful performance in team sports largely depends on the player's or student's ability to read the movement situation and choose the appropriate skill at the right time. Within this framework, composite tests in basketball provide meaningful learning contexts that reflect the learner's ability to combine more than one skill in a single performance. This requires clear mental engagement, as performing several skills in sequence depends on understanding the relationships between movement components.

Similarly, Khayoun (2010) notes that individual differences in skill test results are often related to cognitive factors such as attention, analysis, and thinking, rather than physical abilities alone. Therefore, studying reflective thinking helps explain differences in performance levels among students.

Recent Arab studies have shown that students with higher levels of reflective thinking are better able to learn quickly and correct errors during skill performance. They rely more on internal analysis of the learning situation rather than on repetition alone. This has a positive effect on the quality of performing complex skills in university classes (Saadoon & Majeed, 2025; Abdulwahab, 2021).

Based on this, the research problem is defined as follows:

Despite the strong focus on teaching motor skills in basketball, most training programs still emphasize physical aspects and repetitive practice. Limited attention is given to the cognitive side, which includes reflective thinking and mental analysis of movement.

As a result, students may have difficulty analyzing movement situations and making quick, accurate decisions when performing complex offensive skills.

This raises questions about how the level of reflective thinking among university students affects their performance in selected complex offensive basketball tests. It also raises the question of whether reflective

thinking is related to better movement organization, faster decision-making, and more accurate execution during skill performance.

The objectives of the study are as follows:

Study Objectives

1. To determine the level of reflective thinking among university students in the study sample.
2. To assess the results of selected complex offensive tests among university students.
3. To examine the relationship between reflective thinking and the results of selected complex offensive tests among university students.

Research Hypotheses

1. There is a statistically significant level of reflective thinking among university students in the study sample.
2. There is a significant relationship between reflective thinking and the results of selected complex offensive tests among university students.

Scope of the Study

- Human domain: Second-year students from the College of Physical Education and Sports Sciences, Ashur University.
- Temporal domain: From Saturday, 1 November 2025 to 13 December 2025.
- Spatial domain: The sports fields of the College of Physical Education and Sports Sciences at Ashur University.

2. Methodology

The researcher used a descriptive method based on a correlational design, which was appropriate to the nature and aims of the research problem. This methodology option allows exploring how variables relate to each other as it occurs naturally in the real world, without having to intervene directly to control or manipulate the variables. This method is extensively applied in studies that aim at explaining the character of relationships between psychological and skill-related variables in the field of sport.

Population and Sample

The population under study was the undergraduate students in institutions of higher learning in the field of physical education and sports sciences. The purposive sampling involved studying individuals who attended practical laboratory sessions regularly because they had previously been exposed to the basics of basketball techniques, thereby making them more appropriate to the research goals. The last sample comprised of (50) fifty students, which was sufficient to analyse the study. To prevent the effects of confounding extraneous variables, the researchers

ensured that the participants were homogeneous in terms of age, academic background, and overall physical competence. Homogeneity test revealed that the skewness values of the variables under study were within acceptable statistical limits and thus validated the normal distribution of the data and made the sample susceptible to strong statistical analysis. The resultant descriptive statistics that include means, standard deviations, and skewness coefficients are presented in [Table 1](#).

Based on the theoretical framework of [Dewey and Heath \(1933\)](#), the researchers used a reflective thinking scale to measure the level of reflective thinking among the study participants. The scale was adopted in its ready form and adapted to suit the context of physical education.

The scale consisted of 27 items distributed across three main domains: reflection and observation, analysis and inference, and decision-making, with each domain including nine items.

The scale used five response options: always applies, often applies, sometimes applies, rarely applies, and never applies. Positive items were scored on a five-point scale (5, 4, 3, 2, 1).

The validity of the scale was examined by ten experts from teaching methods, measurement and evaluation, and basketball. The goal was to assess face validity and the relevance of the items to the study objectives. The experts indicated an agreement score above 80%, indicating that the items were suitable and retained in their final form. The researchers used a set of appropriate research tools for the type and objective of the study. Systematic observation was used to evaluate the execution of skill tests by the participants and to document the quality of performance and adherence to protocols.

The researchers also used composite offensive skill tests in basketball to measure the level of skill performance. These tests included receiving, dribbling, passing, and lay-up shooting within integrated movement situations that reflect actual game performance.

Reflective Thinking Scale

The researcher used a reflective thinking scale to assess the ability of students to undertake a reflective, analytic, and evaluative process in relation to their learning experiences before planning. The scale consisted of a set of questions that were meant to outline various dimensions of reflective thinking. The data of the respondents were obtained through a graded response format. A panel of subject-matter experts was used to assess the instrument as to face validity.

Composite Offensive Skill Tests Under Study

The researcher has applied three composite offensive basketball tests for the purposes of this study:

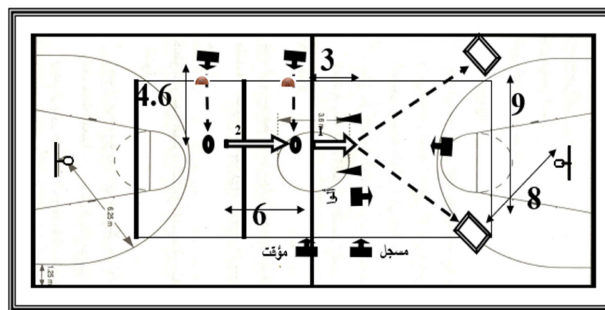


Fig. 1. Illustrates the receiving, high dribbling, and two-handed chest pass test.

First Test: High dribbling, receiving, and two-handed chest pass are regarded as the critical elements of basketball training at the advanced stage.

Test Name: Receiving, High-Dribbling 2 and Two-Handed Chest Passing.

Purpose: To assess the student in terms of velocity and accuracy in combining reception, high-velocity dribbling and bilateral chest passing as part of an integrated offensive flow.

Equipment: The experimental design included a normal basketball court, three normal basketballs, training markers, a stopwatch and a results recording form.

Procedure: As illustrated in [Fig. 1](#), the participant stands behind a given starting line. During the trial, at the start of the trial, the participant is given a ball and is expected to use a high dribbling method over a set distance between the set markers. When the participant reaches the terminal point, he makes a two-hand chest pass to the designated target.

Timing: The time is taken since when the ball is received to when it leaves the hands of the participant during a chest pass.

Scoring: The summed-up duration is recorded in seconds. The accuracy of passing is assessed separately. The higher score in the two tries is maintained ([Hussein, 1998](#), p. 76).

Second Test: The Long-range Distribution, Discrete Ball Handling and Proximal Single-point Scoring Manoeuvres.

Test Name: Long-range passing, dribbling and lay-up shooting test.

Purpose: This assessment aims to test the ability of students to be able to perform combined offensive skills accurately and quickly in an unbroken sequence of actions.

Equipment: The study equipment included a basketball court, a standard basketball, a standard basket, a stopwatch, and training markers.

Procedure: As shown in [Fig. 2](#), the participant performs a long pass towards a given target point. The

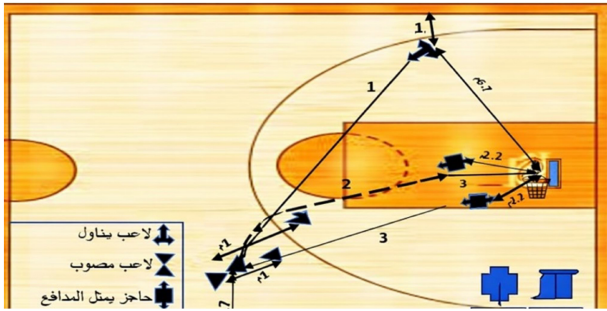


Fig. 2. Long-range passing, dribbling and lay-up shooting test.

participant then moves after this to get the ball. After this, the participant dribbles towards the basket. This is followed by the performance of a lay-up.

Timing: This time is counted as the time between the point when the ball first goes through until the point when the ball hits the basket or the backboard.

Scoring: Time is recorded in seconds. The successful shots are awarded one more point. The most successful of the attempts is stored (Hammad, 2002, p.132).

Third Test: Receiving, high level dribbling, and lay-up shooting.

Test Name: The Receiving, High Dribbling, and Lay-Up Shooting Test is a progressive evaluation of the basic basketball abilities, which includes the analysis of ball reception, high-level dribbling, and technical performance of the lay-up shooting.

Purpose: This assessment is aimed at determining the ability of the students to combine the reception of the ball, high-speed dribbling, and lay-up shooting, with the emphasis on reducing the time interval and maximizing the accuracy.

Equipment: The equipment will include a controlled basketball court, a normal basketball, a normal basketball basket, a stopwatch, and some training markings.

Procedure: As shown in Fig. 3, the participant starts from the assigned position. When the signal is given, the participant receives the ball and is required to dribble towards the basket. Later, the participant completes the action cycle with a lay-up shot.

Timing: The time interval will be measured since the reception of the ball to the time when the ball is moved out of the hand of the participant when he/she performs the shot.

Scoring: Time is recorded in seconds. A successful shot gets a score which is included in the outcome. One of the two attempts has superior performance which is retained (Allawi, 1999, p. 57).

Pilot Study

It was conducted on Monday, 20 October 2025, at 10:00 a.m. on the court to verify the suitability of

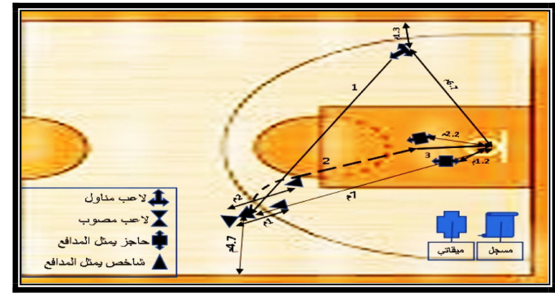


Fig. 3. Receiving, high level dribbling, and lay-up shooting test.

the research tools and tests, and to ensure clarity of instructions and objectivity in scoring before the main application.

The pilot study included a small group of second-year students from the College of Physical Education and Sports Sciences for Women (25 students) who were not part of the main sample. The three skill tests were carried out, with time and shooting success recorded. The reflective thinking questionnaire was administered after performance.

The results showed that the tools were appropriate and the instructions were clear. The tests demonstrated high reliability and objectivity. Test-retest analysis revealed a strong correlation between the two trials, and there was a high level of agreement among the evaluators (>90%).

The pilot study confirmed that the tools were suitable for use in the main study. It also recommended minor adjustments to the placement of the markers and the addition of brief written instructions to improve accuracy and consistency of performance.

Pre-test

The pre-test was conducted on Saturday, 1 November 2025, at 10:00 a.m. with all participants in the study sample. The purpose of this test was to assess the initial level of skills and cognitive structures before the implementation of the instructional units.

Implementation of Field Procedures (Instructional Units)

The procedures were carried out from Sunday, 9 November 2025, to Tuesday, 9 December 2025, with daily sessions starting at 10:00 a.m. All participants in the study were involved during this period. The instructional units were applied with the aim of improving offensive skills and developing reflective thinking as emphasized by Abdulwahab (2021).

This stage represented the training and practical application phase, where students were exposed to structured learning experiences under close supervision.

Post-test

The post-test was conducted on Saturday, 13 December 2025, at 10:00 a.m. with the same study sample. The aim was to measure changes in the level of skills and cognitive structures after the implementation of the instructional units. The results were then compared with the pre-test to determine the effect of the training program.

Instrument Validity

The research instruments were presented to a group of specialized experts, as listed in [Appendix A](#). The instruments were evaluated based on the following criteria:

Face validity: to ensure that the test content reflects the targeted skills.

Item appropriateness: to review the clarity of the items and exercises in relation to the participants' level.

Clarity of instructions: to confirm that the instructions are easy to understand.

Expert Evaluation Results:

Most experts agreed on the suitability of the instruments, with a few minor comments that were addressed to improve clarity and relevance.

Reliability of the Instruments

Reliability was assessed using the test–retest method. The procedure was as follows:

- Skill tests: The tests were administered again after a two-week interval to a pilot sample of 25 students from the same academic level.
- Reflective thinking scale: The scale, reviewed by experts listed in [Appendix B](#), was re-administered after two weeks to the same pilot sample.
- Correlation Results:
 - Skill tests: $r = 0.91$
 - Reflective thinking scale: $r = 0.88$: These values indicate a high level of reliability for the instruments.

Objectivity:

Objectivity was ensured through the following procedures:

- Standardized instructions were provided to all students before testing.
- Testing conditions were controlled, including the same location, time, and equipment.
- Multiple evaluators were used, including specialists in basketball, with unified scoring criteria.
- The psychological scale was scored using a standardized answer key to reduce personal bias.

Statistical Analysis

- Mean
- Standard deviation
- Coefficient of Skewness
- Simple correlation coefficient
- t-test

3. Results and discussion

Presentation of Results

After administering the scale and tests that accompany the scale to the study sample, the researcher engaged in a statistical analysis and further processing of the consolidated data to achieve the objectives of the study. The results were then expressed and analysed with the support of relevant academic sources.

Presentation of the Results of the Reflective Thinking Scale and Composite Offensive Basketball Skills

[Table 1](#) shows the main statistical features of reflective thinking and the offensive skill components among second-year undergraduate students. The table includes the mean values, standard deviations, and skewness coefficients. The skewness values fall within acceptable limits (± 1), which suggests that the data are close to a normal distribution. Statistical significance in the following analysis is considered at $p \leq 0.05$.

Presentation and Discussion of Results: Differences Between the Mean and the Hypothetical Mean of the Reflective Thinking Scale

[Table 2](#) shows the t-value of the difference between the mean score and the hypothetical mean on the reflective thinking scale of the study sample. The average value was 83.26 and the standard deviation was 9.759. The theoretical average of the scale was 67. The t-value obtained was 11.057 at $p < .001$, and this is less than the adopted significance level of .05. This outcome is an indication of statistically significant differences in favor of the mean score.

Such results indicate that the subjects were able to exhibit a degree of reflective thinking beyond the hypothetical level of the scale. This fact suggests that the students have a strong ability to contemplate, evaluate and make conclusions in the face of different learning and skill-related scenarios ([Zhou, 2025](#)).

The noted progress also indicates the capabilities of participants to use cognitive processes that involve re-examining past experiences and relating them to existing situations. This cognitive feature is specifically acute in the field of sport, particularly in team games that require quick perception and constant analysis while playing ([Abduljabar, 2025](#)).

Table 1. Gives the mean, standard deviations and skewness coefficients of the variables under study in the research sample.

Variables	Mean	Median	Standard Deviation	Skewness Coefficient	Unit of Measurement
Reflective Thinking	83,26	83	9,759	0,079	Score (out of 100)
Test 1	6,43	6	1,634	0,789	Second (s)
Test 2	5,77	6	1,278	0,539	Second (s)
Test 3	3,69	4	0,959	0,125	Second (s)

Table 2. Shows the calculated t-value for the significance of the difference between the mean and the hypothetical mean of the reflective thinking scale.

Variables	Mean	Standard Deviation	Hypothetical Mean	Calculated t-value *	sig	Statistical Significance
Reflective Thinking	83,26	9,759	67	11,057	0,000	Significant

*Significant at Sig. \leq .05.

On the other hand, the fact that the mean score is higher than the hypothetical mean indicates that the educational setting of the respondents has enabled them to develop this kind of thinking. This can be because of real-life learning scenarios or because of the nature of practical tasks that force students to consider how to implement skills and correct mistakes during performance (Kaloudis et al., 2025).

In line with this, reflective thinking is not spontaneously developed. It develops gradually with the addition of learning and training experiences that students go through in practice (Abduljabar, 2025). The t-value is very high and reflects the power of the difference between the two means. Therefore, the variation is not likely to be explained by chance but rather is the true propensity of the participants to a rather high degree of reflective thinking. It also supports the fact that the participants can analyze performance and understand learning situations at a level that goes beyond basic direct reception. This is in line with the nature of university education that emphasizes more comprehension, analysis and discussion.

Educationally, this outcome may be explained by understanding that, according to Brown et al. (2022), physical education learners are always exposed to learning scenarios that demand quick decision-making when performing skills. Such scenarios entail choice of kind of movement, estimation of distances, and direction of pass or shot. This situation promotes the use of reflective thinking by the students in an indirect manner in the process of learning and practicing.

The reinforcement of this kind of thinking is also the result of repeated exposure to complicated skill experience. The standard deviation of 9.759 shows that there is a reasonable degree of variation in the scores of the participants. However, it is not a significant difference to undermine the homogeneity of the sample.

This implies that most students are grouped in a similar level of thoughtfulness with inherent individual differences that reflect the differences in cognitive skills.

It is also possible to consider the outcome through the lens of the correlation between reflective thought and educational experience. Students who constantly train sports skills slowly develop a higher level of skill to analyze performance and to review performance sequences. Contemporary sports abilities do not just depend on repetition, but also on a conscious perception of movement and the principles of success or failure in the process of implementation.

The statistically significant finding presented in this table is an important clue that reflective thinking is one of the most prominent features of the participants. This provides a strong basis on which to examine its connection with skill performance in offensive basketball tests. The differences that will be found later in skill performance may be attributed to a high level of reflective thinking.

Overall, this observation highlights the need to put cognitive elements at the forefront of physical education lessons. The acquisition of skills and improvement of the quality of performance, especially in skills that involve a coordinated movement pattern and real-time analysis in the process of acting, can be allowed by the development of reflective thinking.

Presentation of the Correlation Results Between Reflective Thinking and Performance in the Studied Composite Offensive Basketball Tests

Table 3 presents the correlation coefficients between reflective thinking and performance in composite offensive basketball skills among the research participants. The results show that there are statistically significant positive correlations between reflective thinking and all the three skill tests.

- In the first test (receiving, high dribbling, and chest passing), the correlation coefficient reached 0.684, which was the highest among the tests. This indicates a relatively strong relationship between reflective thinking and performance. From this perspective, Awwad (2022) suggests that the complexity of the skill requires multiple cognitive processes, such as attention, anticipation, and distance estimation.

Table 3. Correlation coefficient between reflective thinking and the results of composite offensive tests among university students.

Variables	Correlation Coefficient*	sig	Statistical Significance
Test 1	0,684	0,000	Significant (positive)
Test 2	0,612	0,000	Significant (positive)
Test 3	0,597	0,000	Significant (positive)

*Significant at Sig. ≤ .05.

- In the second test (long passing, dribbling, and lay-up shooting), the correlation coefficient reached 0.612. This reflects a continued positive relationship between reflective thinking and skill performance, as the student needs ongoing mental processing while moving between skills as supported by [Dakhil and Abdullah \(2024\)](#).
- In the third test (receiving, high dribbling, and lay-up shooting), the correlation coefficient reached 0.597, which is slightly lower than in the previous two tests. This may reflect the relatively simpler movement sequence compared with the first test, although the positive relationship remains clear.

4. Discussion

The findings in Chapter Four indicated that the data among participants sampled, with respect to the study variables, were statistically homogeneous hence supporting appropriateness to undergo formal analysis. The mean of reflective thinking among students was higher than the hypothesized mean, and the differences were statistically significant. This suggests that the scale was able to distinguish between different levels of reflective thinking ([Abbas & Naseer, 2020](#)).

Maximum and Minimum Values

Variables	Maximum value	Minimum value	Observation
Reflective thinking	102	56	Indicates individual differences in reflective thinking
Test 1	9	3	Shows variation in skill performance
Test 2	8	4	Reflects differences among students in composite skill performance
Test 3	5	2	Represents levels of decision-making and movement analysis

5. Conclusion

- The results showed that the Reflective Thinking Scale is a valid and objective tool for measuring

the level of reflective thinking among basketball students.

- The results indicated a statistical relationship between the level of reflective thinking and some composite skill tests. Some tests showed weak to moderate positive correlations with reflective thinking scores.
- The data showed that the level of reflective thinking among students was moderate, with a distribution close to normal, as indicated by the skewness coefficients.
- There was variation in skill performance among students in the composite offensive tests. This reflects individual differences in skills rather than a direct effect of the instructional approach.

6. Recommendations

- Teachers can use the findings of this study to identify strengths and weaknesses in students' reflective thinking and offensive skills.
- It is recommended to use the reflective thinking scale as a periodic assessment tool to monitor students' performance.
- Further attention should be given to examining the relationship between reflective thinking and skill performance in different training contexts to support the development of future instructional programs.
- Future studies should consider using larger samples to further confirm the validity and objectivity of the results.

Psychological Aspects: Developing attention skills, maintaining long-term focus, improving decision-making skills and reducing anxiety in performance.

Limitations: The research is limited by a small sample size; the application of the research being limited to a particular group of students and the variation in the initial skills.

Author's declaration

Conflicts of interest

None.

We confirm that all tables and figures in this article are ours and written by the researchers themselves.

Ethical-clearance

This manuscript approved by the Scientific Committee of the College of Physical Education and Sports Sciences for Women, University of Baghdad, Iraq, on (2025/10/15).

Author's contributions

All contributions to this study were carried out by the researcher **Rawaa Jawad Kadhim**, who conducted the study procedures, collected and organized the data, participated in the implementation of the experimental program, and contributed to drafting the manuscript; with the assistance of a number of experts: **Prof. Dr. Warda Ali Abass** in Statistics, **Asst. Lect. Inam Al-Azzawi** in Translation.

Facilitating the task

This manuscript was supported by the **College of Physical Education and Sports Sciences for Women, University of Baghdad**.

Roles of each researcher in the research

First researcher: Rawaa Jawad Kadhim was responsible for the conceptualization of the research idea, study design, literature review, implementation of the study procedures, data collection and organization, execution of the experimental program, interpretation of the results, and drafting, reviewing, and finalizing the manuscript.

Funding statement

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Data availability

The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

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Appendices

A. Names of experts and specialists consulted in the study

No.	Name	Academic title	Specialization	Affiliation
1	Luma Sameer Hamoudi	Prof. Dr.	Motor Learning, Volleyball	University of Baghdad, College of Physical Education and Sports Sciences for Women
2	Sarmed Ahmed Mousa	Prof. Dr.	Motor Learning, Football	Tikrit University, College of Physical Education and Sports Sciences
3	Aseel Jalil Kati'	Prof. Dr.	Motor Learning, Athletics	University of Baghdad, College of Physical Education and Sports Sciences for Women
4	Sahar Hurr Majeed	Prof. Dr.	Motor Learning, Basketball	University of Baghdad, College of Physical Education and Sports Sciences for Women
5	Emad Tu'ma Radhi	Prof. Dr.	Teaching Methods, Basketball	Al-Mustansiriya University, College of Basic Education, Department of Physical Education and Sports Sciences
6	Nada Muhammed Ameen	Prof. Dr.	Training, Basketball	University of Baghdad, College of Physical Education and Sports Sciences for Women
7	Iqbal Abdul Hussein	Prof. Dr.	Teaching Methods, Handball	University of Baghdad, Al-Kindi College of Medicine
8	Ismail Abed Zaid Ashour	Prof. Dr.	Teaching Methods, Football	Al-Mustansiriya University, College of Basic Education
9	Maysa Nadeem Ahmed	Prof.	Teaching Methods	University of Baghdad, College of Physical Education and Sports Sciences for Women
10	Mayada Khalid Jassim	Lecturer	Teaching Methods, Basketball	Al-Mustansiriya University, College of Basic Education
11	Nadima Badr Mohammed	Asst. Prof. Dr.	Teaching Methods, Basketball	University of Baghdad, College of Physical Education and Sports Sciences for Women
12	Ishraq Ali Mahmoud	Asst. Prof. Dr.	Training, Basketball	University of Baghdad, College of Physical Education and Sports Sciences
13	Raghda Abed Ali Jubeir	Lect. Dr.	Biomechanics, Racket Sports	Al-Mustansiriya University, College of Basic Education

B. Names of experts for the reflective thinking scale

No.	Name	Academic title	Specialization	Affiliation
1	Luma Sameer Hamoudi	Prof. Dr.	Motor Learning, Volleyball	University of Baghdad, College of Physical Education and Sports Sciences for Women
2	Sarmed Ahmed Mousa	Prof. Dr.	Motor Learning, Football	Tikrit University, College of Physical Education and Sports Sciences
3	Aseel Jalil Kati'	Prof. Dr.	Motor Learning, Athletics	University of Baghdad, College of Physical Education and Sports Sciences for Women
4	Sahar Hurr Majeed	Prof. Dr.	Motor Learning, Basketball	University of Baghdad, College of Physical Education and Sports Sciences for Women

التفكير التأملي وعلاقته بأداء بعض المهارات الهجومية بكرة السلة للطلاب الجامعيين

رواء جواد كاظم

كلية التربية البدنية وعلوم الرياضة للبنات جامعة بغداد

المستخلص

يهدف هذا البحث إلى التعرف على العلاقة بين التفكير التأملي وأداء بعض المهارات الهجومية في كرة السلة لدى الطلاب، من خلال قياس مستوى التفكير التأملي وربطه بمستوى الأداء المهاري في مهارات الاستلام والطبقة العالية والمناولة الصدرية والمناولة الطويلة والتصويب السلمي. اعتمد الباحث المنهج الوصفي بأسلوب العلاقات الارتباطية لملاءمته طبيعة المشكلة البحثية، وشمل مجتمع البحث طلاب المرحلة الجامعية، وتم اختيار عينة ممثلة وفق شروط علمية محددة. استخدمت في البحث أدوات متعددة تمثلت في مقياس التفكير التأملي وثلاثة اختبارات مهارية مركبة في كرة السلة. أظهرت النتائج أن الوسط الحسابي لمقياس التفكير التأملي بلغ (83.26) بانحراف معياري (9.759)، وهو أعلى من الوسط الغرضي البالغ (67)، وبلغت قيمة (ت) المحسوبة (11.057) عند مستوى دلالة (0.000)، مما يدل على تمتع أفراد العينة بمستوى مرتفع من التفكير التأملي. كما أظهرت النتائج وجود علاقة ارتباط معنوية طردية بين التفكير التأملي والاختبار الأول بقيمة (0.684)، والاختبار الثاني بقيمة (0.612)، والاختبار الثالث بقيمة (0.597)، وجميعها عند مستوى دلالة (0.000)، مما يؤكد أن ارتفاع مستوى التفكير التأملي يقترن بتحسين الأداء المهاري في المهارات الهجومية المركبة بكرة السلة. ويستنتج البحث أن العمليات العقلية التأملية تؤدي دوراً مهماً في تنظيم الأداء الحركي وتحسين جودة التعلم المهاري لدى الطلاب، ويوصي بضرورة اعتماد استراتيجيات تدريس حديثة تنمي التفكير التأملي داخل درس التربية الرياضية بما ينسجم مع أهداف التنمية المستدامة المتعلقة بجودة التعليم والصحة الجيدة والرفاه.

الكلمات المفتاحية: التفكير التأملي، الأداء المهاري، المهارات الهجومية، التعلم الحركي.