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## The Effect of Using an Educational Package on Cognitive Achievement and the Basketball Lay-Up Shooting Skill Performance Among Female Students

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#### **ORIGINAL STUDY**

# The Effect of Using an Educational Package on Cognitive Achievement and the Basketball Lay-Up Shooting Skill Performance Among Female Students

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#### Abstract

The study demonstrated a statistically significant positive impact of the educational package on improving cognitive achievement and organizing content in a systematic manner. Its use also led to an improvement in skill performance for basketball free throws, particularly within the experimental group. The modern method outperformed the traditional one, although both contributed to learning. Furthermore, the package contrib The study aimed to I dentify the effect of using an educational package on the academic achievement of female students at the College of Education for Pure Sciences, University of Baghdad. The researcher adopted the experimental method, as it is suitable for the nature of the study, conducted on female students of the College of Education at the University of Baghdad during the academic year 2018–2019. The total number of participants was 21, from which 5 students who took part in the pilot study were excluded. Thus, the final research sample consisted of 16 students Emphasize the dissemination of the contents of the educational package to colleges and departments of education participating in basketball tournaments, and benefit from the expertise it provides in the educational process uted to self-directed learning, enabling female students to review the exercises at any time and place, which reinforced learning and skill retention.

Keywords: Educational package, Cognitive achievement, Shooting skill, Basketball

#### 1. Introduction

#### 1.1. Importance of the study

E ducational practitioners employ diverse methods and approaches to achieve their objectives. Among these is the educational learning packages method, which is an approach that relies on integrating multiple media (visual, auditory, textual). This method has achieved notable success across various fields where it has been applied. It places the responsibility of learning on the student, while the teacher's role remains indispensable and cannot be diminished. Perhaps its most significant feature is the teacher's new role; the teacher no longer preoccupies themselves with presenting and dictating information, as the package is organized and utilized in a manner

that presents information in an engaging and more effective way for the learner.

The educational package system does not imply that each individual learns in isolation from others. Rather, it emphasizes providing various forms of interaction in every educational situation. Interaction may occur between the learner and other learners, whether in small or large groups, or between the learner and the educational program itself, enabling them to receive immediate feedback on the accuracy of their responses and on the progress they make in striving to achieve the required learning objectives. Printed materials, programmed booklets, compact discs, tapes, and others can be used, which the learner studies independently. These are designed under the supervision of a specialized teacher,

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granting the learner the freedom to choose the medium through which they wish to learn.

It is well known that the academic subjects in the College of Education for Pure Sciences are fundamentally different from those in sports sciences. Therefore, those responsible in the Student Activities Department must provide participating female students in the inter-collegiate championship with theoretical and practical information to recognize and learn the skills, understand how to perform them, identify common errors, and grasp the key points and considerations for these skills. The student must achieve an adequate and appropriate level of knowledge acquisition to apply these skills in practice. The better the student's knowledge acquisition of this information, the more they benefit from its practical application and participation in the college team.

The researcher used one of the methods to contribute to or help overcome some of the problems female students face while performing certain basketball skills. Basketball is one of the sports that requires an integration of physical and cognitive skills. The layup shot, being one of the fundamental skills, presents problems related either to the teaching method or to the skill itself, with numerous errors occurring during performance by female students. It is known that basketball is a game characterized by its numerous kinesthetic, skill-based requirements and duties, which students of the College of Education for Pure Sciences must practice extensively to overcome the obstacles they encounter during performance. Alternatively, the issue may relate to the student herself. This can only be achieved if educational means are available to assist female students in performing the skills correctly.

Hence, the importance of the research lies in designing an educational package for the layup shot skill in basketball, as it provides a solid basis for feedback. In the field of education, it is described as providing the learner with ample and rewarding information about the required task. Therefore, it is essential to use tools and means that provide feedback due to its significant impact in helping the student adapt according to their needs, in addition to allowing female students to know their level. This has a direct impact on enabling the student to reach the desired goal in the easiest way and shortest time possible.

Furthermore, it prepares students of the College of Education for Pure Sciences with numerous avenues through which they can gain educational experiences via practice, thereby advancing the reality of university sports.

#### 1.2. Research problem

Through the researcher's observation of basket-ball during tournaments held at the college, it was noted that many female students face difficulties performing the basketball lay-up shooting skill during intercollegiate competitions. This is in addition to the fact that the academic requirements at the college differ significantly from the sports field. Given that basketball is a sport that demands many conditions and requirements, and considering the complexity of this particular skill, the problem arises from the difficulty in performing the lay-up shot. This difficulty is experienced by all students across different age groups.

Therefore, the researcher decided to study this problem and seek solutions by designing and using an educational package focused on the skill under investigation.

#### 1.3. Research objectives

This research aims to

- 1. Design an educational package for performing the basketball lay-up shooting skill for female students at the College of Education for Pure Sciences, University of Baghdad.
- Identify the effect of using the educational package on the academic achievement of female students at the College of Education for Pure Sciences, University of Baghdad.
- Determine the impact of the educational package on the performance of the basketball lay-up shooting skill among female students at the College of Education for Pure Sciences, University of Baghdad.

#### 1.4. Research hypothesis

The researcher assumes that:

There are statistically significant differences at ( $\alpha \leq 0.05$ ) between the mean scores of the two groups (experimental and control) in the post-tests of cognitive achievement and skill performance of the layup shot in basketball among female students, with the results favoring the experimental group that used the educational package.

• Hypothesis on Cognitive Achievement: There are statistically significant differences between the mean scores of the two groups in the post-test for cognitive achievement, in favor of the experimental group. • Hypothesis on Skill Performance:

There are statistically significant differences between the mean scores of the two groups in the post-test for the performance of the layup shot skill, in favor of the experimental group.

#### 1.5. Research scope

#### 1.5.1. Human scope

Female students of the College of Education for Pure Sciences, University of Baghdad, academic year 2018–2019.

#### 1.5.2. Temporal scope

From October 10, 2018, to January 14, 2019.

#### 1.5.3. Spatial scope

Halls and sports courts of the Student Activities Department, University of Baghdad.

#### 2. Research methodology and field procedures

#### 2.1. Research method

The researcher used the experimental method due to its suitability for the nature of the study.

#### 2.2. Experimental design

The researcher employed a pretest-posttest experimental design with control and experimental groups. Fig. 1 illustrates this design:

#### 2.3. Research population and sample

The research population was defined as the female students of the College of Education at the University of Baghdad for the academic year 2018–2019, totaling 21 students. Five students who participated in the exploratory experiment were excluded, resulting in a final research sample of 16 students. The sample was randomly divided into two groups: the first group was the control group, consisting of 8 students, and the second group was the experimental group, also consisting of 8 students.

#### 2.4. Equipment, tools, and means used in the research

#### 2.4.1. Information collection methods

- 1. Questionnaire
- 2. Interview
- 3. Observation and Experimentation
- 4. Testing and Measurement

#### 2.4.2. Equipment and tools used in the research

The researcher used the following equipment and tools in the experiment:

- 1. Educational package
- 2. Video camera (SUNY model), quantity: 1
- Laser discs
- 4. Official basketball court
- 5. Stopwatch
- 6. Manual calculator
- 7. Basketballs, quantity: 10
- 8. Markers (plastic cones, 30 cm height), quantity: 2
- 9. Laptops (DELL brand), quantity: 4
- 10.Measuring tape

#### 2.5. Tests used in the study

#### 2.5.1. Lay-up shooting test

*Test Objective.* To evaluate the performance of the lay-up shooting skill.

Tools Used. A basketball court, an electronic stopwatch, two official basketballs, a measuring tape, chalk, and a whistle to signal the start.

Performance Description. Upon hearing the start signal, the player dribbles the ball from a distance of 5 meters from the basket, takes two steps, and then performs the lay-up shot.

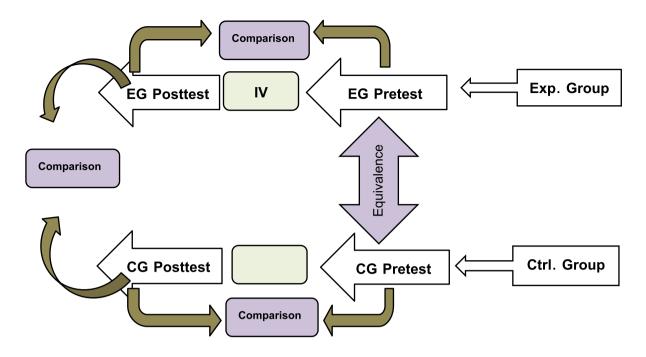
*Scoring.* Each student is given two attempts, and the best score is recorded. The maximum score is 10.

#### 2.5.2. Cognitive achievement test

A multiple-choice test was designed as a research tool, as this type of test is considered one of the best objective tests for measuring higher-order cognitive goals that other objective tests find difficult to assess. Multiple-choice items can be used to measure various educational objectives, especially in the cognitive domain, where they assess cognitive perceptual levels according to Bloom's taxonomy. The designed test consisted of 40 items, each with three alternatives, only one of which is correct. The test items covered the educational objectives of the prescribed material. After review by subject matter experts to verify its validity, the final version of the achievement test was prepared and ready for use.

#### 2.6. Stages of designing the educational package

The researcher aimed to present the educational package with fresh and engaging content, based on a thorough review of numerous theoretical studies and research addressing the preparation and design of educational packages, as well as information and resources obtained from the Internet.



Abbr.	Meaning	Abbr.	معناه	Abbr.	Meaning	Abbr.	Meaning
Exp. Group	Experimental Group	EG Pretest	Experimental Group Pretest	IV	Independent Variable	EG Posttest	Experimental Group Posttest
Ctrl. Group	Control Group	CG Pretest	Control Group Pretest			CG Posttest	Control Group Posttest

Fig. 1. Experimental design.

The researcher applied three stages in the preparation and design of the educational package:

- Analysis Stage
- Construction Stage
- Evaluation Stage

#### 2.6.1. First stage (analysis stage)

In this stage, the researcher worked on:

- 1. Defining the general objectives
- 2. Identifying the individual characteristics of each student
- 3. Identifying the common characteristics among the students
- 4. Analyzing the educational level
- 5. Determining the behavioral (educational) objectives

#### 2.6.2. Second stage (construction stage)

This stage consisted of:

1. Identifying alternatives (methods) and ensuring their variety.

Determining learning strategies, which could be individual, in large or small groups, or a combination of these.

#### 2.6.3. Third stage (evaluation stage)

The researcher conducted three types of tests during the experiment implementation: pretests, midtests, and posttests. It should be noted that the formative assessment was carried out by the students themselves through self-assessment by watching the educational video and other alternatives. These tests helped to evaluate the students' performance levels and provided them with feedback to determine the extent to which the research objectives were achieved.

#### 2.7. Exploratory experiment

The researcher conducted an exploratory experiment on a subset of the research sample, consisting of five students, after the first and second introductory units, on October 19, 2018. The objectives of the exploratory experiment were to:

	<u> </u>		
No.	Title	Name	Specialization
1	Prof. Dr.	Hilal Abdulkarim Saleh	Psychology
2	Assistant Prof. Dr.	Omar Mohammed Majeed	Basketball Coaching
3	Lecturer Dr.	Saif Ali	Basketball Coaching
4	Lecturer Dr.	Laith Mohammed Abd	Measurement and Evaluation
5	Lecturer Dr.	Mohammed Khalil Ibrahim	Football Measurement and Evaluation

Table 1. Names of the experts and specialists to whom the tests were presented to determine content validity.

	Questionnaire									
No.	Tests	Compatible	Not Compatible	no	significance					
1	Receiving and patting high and completing with peaceful aiming	3	2	0	Non-moral					
2	tapping test between cones	5	0	5	moral					
3	Patting test	2	2	1	Non-moral					
4	Ladder scoring test	5	0	5	moral					
5	Peaceful Movement Scoring Test	2	2	1	Non-moral					

- 1. Ensure the suitability of the tests for the research sample.
- 2. Provide an appropriate space for students to watch the educational video.
- 3. Verify the suitability of the courts and balls.
- 4. Verify the suitability of the electrical equipment used.
- 5. Confirm the clarity of the test instructions to the respondents.
- 6. Confirm the clarity of the test items to the respondents.
- 7. Assess the difficulty or ease of the test items to allow for rephrasing if necessary.
- 8. Calculate the response time and the duration needed to answer the test items.

#### 2.8. Scientific foundations of the tests

#### 2.8.1. Test validity

Test validity refers to the extent to which a test measures what it is intended to measure. A valid test assesses, Ali (2018) the specific function it claims to measure and does not measure anything else instead or in addition (p. 173). The researcher relied on content validity to determine the tests' validity. This type of validity aims to evaluate how well the test represents the aspects of the trait or characteristic to be measured, whether the test measures a specific facet or the entire phenomenon, and the extent to which its content matches what it intends to measure. Content validity is typically determined by the opinions of experts specialized in the field the test aims to assess.

This type of validity was confirmed when the tests were presented to a panel of experts and specialists in training, testing, and measurement, as shown in Table 1 below. All experts unanimously (100%) agreed that the tests measure what they were designed to assess.

#### 2.8.2. Test reliability

Reliability was calculated using the test-retest method. The test was administered twice during the exploratory experiment, and the Spearman correlation coefficient was computed between the scores of the first and second applications to determine the reliability coefficient. This coefficient represents a form of correlation between test results across two administrations. The correlation values indicated high reliability, as all calculated values exceeded the critical value of (3.18) at 3 degrees of freedom and a significance level of 0.05, as shown in Table 2.

#### 2.8.3. Test objectivity

To assess the objectivity of the tests used, the researcher calculated the Spearman correlation coefficient between the scores assigned by the first and second raters\*. The results showed high objectivity, as all calculated values exceeded the critical value of (3.18) at 3 degrees of freedom and a significance level of 0.05, also illustrated in Table 2.

#### 2.8.4. Pretests

The researcher conducted the pretest on Sunday, October 21, 2018, and recorded the students' skill performance using a video camera. The footage was then transferred to a compact disc (CD).

*Main Experiment*. The researcher began the main experiment on Sunday, October 28, 2018, following the completion of the two introductory units, the exploratory experiment, and the pretest. The researcher proceeded as follows:

- 1. Two instructional units were applied per week.
- 2. The duration of the experiment was 6 weeks.
- 3. The total number of main instructional units was 12 units.

Table 2. Shows the reliability and objectivity coefficients of the tests proposed for application.

No.	Tests Proposed for Application	Reliability	t-critical value	Objectivity	t-critical value	Reliability
1	Lay-up Shooting	0.90	3.58	0.89	3.38	Significant
2	Cognitive Achievement	0.92	4.06	0.89	3.38	Significant

Critical t-value (3.18) at 3 degrees of freedom and a significance level of 0.05.

Table 3. Instructional unit duration/90 minutes educational objective/learning technical performance of lay-up shooting skill.

No.	Requirements	Duration	Details of Educational Unit Components
1	Administrative Tasks	5 Minuets	Arrival at the court
			Bringing equipment to the court
2	Preparatory Section	15 Minuets	
	General Warm-up	5 Minuets	Jogging around the court
			Jogging with alternating forward arm rotations
			Jogging with backward arm rotations
			Jogging with high knee lifts
			Jogging while touching the ground alternately with the hands to the right and left
	Specific Warm-up	10 Minuets	Physical exercises for the arms
			Specific physical exercises for the trunk
			Specific physical exercises for the legs
			Full-body physical exercises with the ball
3	Main Section	60 Minuets	
	Educational Aspect	15 Minuets	Demonstration of the skill using the educational package and its various
			alternatives; after the demonstration, students proceed to the court
	Practical Aspect	45 Minuets	Performing the skill without the ball while jogging to practice the first three steps; the exercise is repeated
			The student performs the lay-up shooting skill from a distance of 3 meters; the exercise is repeated
			The student performs the lay-up shooting skill from a distance of 5 meters; the exercise is repeated
			After determining a suitable distance, the student performs the full skill including the shot; the exercise is repeated
4	Final Section	10 Minuets	The student performs the skill using available equipment through some small games Cool-down and relaxation exercises for the body with some simple signals

- 4. The main experiment was conducted on the research sample, with each instructional unit lasting 90 minutes, as shown in Table 3.
- 5. The instructional units were conducted on Sundays and Tuesdays.
- The researcher divided the experimental group, consisting of eight students, into four smaller groups and assigned a laptop to each group to display the skill-related compact discs (CDs).
- 7. The researcher conducted a cognitive achievement test following the learning of the lay-up shooting skill as follows:

After explaining and demonstrating the lay-up shooting skill using the educational package and its applications, an achievement test was administered during the week following the instruction.

#### 2.8.5. Posttests

On Wednesday, December 5, 2018, the researcher conducted the posttests at the Student Activities Department court at the University of Baghdad for both the experimental and control groups. The students' skill performances were recorded using a video cam-

era, and the footage was then transferred to a compact disc (CD). The posttests were administered under as similar spatial and temporal conditions as possible.

The researcher prepared questions related to the skill, with the maximum score for each achievement test set at 10 points.

After explaining and demonstrating the lay-up shooting skill using the educational package and its applications, an achievement test was conducted during the second week following the instruction. The researcher also prepared related questions with a maximum score of 10 points for this test.

#### 2.8.6. Statistical methods

The researcher used the following statistical methods, which were processed using the SPSS statistical software package to reach the study's results.

- 1. Percentage
- 2. Median
- 3. Standard Deviation
- 4. Mann-Whitney Test
- 5. Wilcoxon Test
- 6. Spearman Correlation

Table 4. Shows the means, standard deviations, calculated t-values, and significance (sig) values for the skills of the experimental group in the pretest and posttest.

	Statistical Indicators			Pretest		Posttest				
N	Indicators	Skills	Unit	M	±SD	M	±SD	t-value	sig	Statistical Sig
1 2	Lay-up Shootir Cognitive Achi	0	Grade Grade	4.8750 4.6250	1.24642 1.06066	8.5000 8.2500	.92582 1.03510	-6.604- -6.918-	0. 000 0. 000	Significance* Significance

<sup>\*</sup>Significant if (sig)  $\leq 0.05$ .

Table 5. Shows the means, standard deviations, calculated t-values, and significance (sig) values for the skills of the control group in the pretest and posttest.

	Statistical Indicators			Pretest		Posttest				
N	Huicators	Skills	Unit	M	±SD	M	±SD	t-value	sig	Statistical Sig
1	Lay-up Shootii	ng	Grade	4.8750	.99103	7.6250	1.06066	-5.358-	0.001	Significance*
2	Cognitive Ach	ievement	Grade	4.5000	1.19523	6.6250	.74402	-4.269-	0.001	Significance

<sup>\*</sup>Significant if (sig)  $\leq 0.05$ .

## 3. Results presentation, analysis, and discussion

#### 3.1. Presentation and analysis of results

## 3.1.1. Presentation and analysis of pretest and posttest results for the experimental group

After the researcher processed and statistically analyzed the data from the pretest and posttest for the experimental group, the results are shown in Table 4:

## 3.1.2. Presentation and analysis of pretest and posttest results for the control group

After the researcher processed and statistically analyzed the data from the pretest and posttest for the control group, the results are shown in Table 5:

## 3.1.3. Discussion of pretest and posttest results for both control and experimental groups

Tables 4 and 5 showed statistically significant differences in favor of the posttests for the investigated skill and cognitive achievement for both the control and experimental groups.

The researcher attributes the improvement observed in the experimental group to the use of the educational package as part of their curriculum. This package is considered a form of self-directed learning and is delivered with advanced computer technology that explains and clarifies the basic skills in a simple, progressive manner. This aligns with Mahmoud (2001) statement that the educational package is "one of the methods and means of self-learning" (p. 28).

Similarly, Al-Diwan (2009) noted that the educational package "is a type of self-learning that includes educational programs or programmed materials studied by the learner independently according to their interests and desires" (p. 36).

Moreover, the improvement is attributed to the inclusion of various educational alternatives within the package, such as sequential images (storyboarding), which illustrate the skill from start to finish. Al-Badri (2000) stated "Through illustrations or images, some ideas or concepts can be presented visually in a way that is easier to understand than oral or written explanations" (p. 103).

Additionally, the use of a booklet containing theoretical material and pictures demonstrating basketball skill performance, along with the CD featuring videos of players performing the skills with high accuracy and flawless execution, allowed students to watch the skill demonstrations before performing or whenever needed. These alternatives enhance clarity, which helped students gain a comprehensive understanding of the skill and its detailed components. Inevitably, the more information learners receive from multiple sources, the more effective their learning becomes, making it easier to acquire, store, and recall. These tools accelerate the acquisition of movement skills, consistent with the findings of Faraj (1986), who stated: "Educational media contribute to rapid acquisition of motor skills, as watching a performance model enables learners to follow skill components, imitate them, and identify their strengths and weaknesses, which helps eliminate incorrect movements and reinforce correct ones" (p. 157).

## 3.2. Presentation and analysis of differences between posttest results for control and experimental groups

To identify differences between the posttest results of the control and experimental groups, the data are presented in Table 6.

## 3.2.1. Discussion of posttest results for the control and experimental groups

Table 4 reveals differences in the posttest results between the two groups. The researcher attributes

0											
	Statistical Indicators			Pretest		Posttest					
N	mulcators	Skills	Unit	M	±SD	M	±SD	t-value	sig	Statistical Sig	
1	Lay-up Shooti	ing	Grade	4.8750	.99103	8.5000	.92582	5.692	0.000	Significance*	
2	Cognitive Achievement Grade		4 5000	1 19523	8 2500	1.03510	-4 269-	0.001	Significance		

Table 6. Shows the means, standard deviations, calculated t-values, and significance (sig) values for the skills of both control and experimental groups in the posttests.

these differences to various factors, primarily the type and consistency of feedback received—whether from the educational package, the instructor, or self-feedback.

More specifically, the researcher explains that the significant differences in the posttests between the groups regarding the investigated skill are due to the educational package consisting of a variety of alternatives that facilitated and enhanced the clarity of the required skill. This positively impacted the students' understanding and comprehension of the skill's features, characteristics, and components.

Such resources were not available to the control group. The visual and auditory aids, including the educational film, helped form a clear mental image of the movement by providing visuals, motion, color, review options, and integration of sound and image. These aids engage multiple senses and allow repeated viewing or pausing at desired moments. This aligns with Ail (2000) study, which stated: "Learning aids successfully clarified difficult skills, offered clear explanations and visualizations, enriched learning with illustrative images, and alerted learners to potential errors in performance"(p.112).

Furthermore, the presence of these alternatives in the package—such as theoretical material, sequential images, and CDs—allowed learners to utilize different resources at times that suited their preferences and moods. The multiplicity of sources increased learning effectiveness and facilitated reception, organization, storage, and retrieval of information.

Therefore, the progress observed in the experimental group resulted from the use of the educational package, which provided an opportunity to learn educational objectives in a sequential, step-by-step manner.

#### 4. Conclusions and recommendations

#### 4.1. Conclusions

The use of the educational package and the applied method had a positive impact on cognitive achievement and the learning of the basketball lay-up shooting skill among the female students.

The educational package proved to be a more effective educational aid than the traditional method, enhancing the effectiveness of learning the basketball lay-up shooting skill.

#### 4.2. Recommendations

- Conduct similar studies to investigate the impact of using educational kits on learning and developing other basic skills in basketball (such as passing, receiving, or dribbling) or in other sports (such as volleyball or handball).
- 2. Suggest studies examining the impact of educational kits on other dependent variables besides skill performance and cognitive achievement, such as attitudes toward physical education, achievement motivation, and self-confidence.
- 3. Conduct a similar study with an increased time spent implementing the educational kit-based program to determine its impact on long-term learning retention (cognitive and motor).
- Conduct a comparative study between the effectiveness of the educational kit and other modern teaching strategies (such as flipped learning or mobile learning) in learning basketball skills.

#### **Conclusions**

- The role of the educational package in achievement: The results showed a statistically significant positive effect of using the educational package on improving students' cognitive achievement. This is due to the systematic organization of the cognitive content, which facilitates learning, and the presentation of information through various means (visual, auditory, theoretical) that suit different learning styles.
- Increased skill performance: The educational package contributed to a significant improvement in the performance of the basketball shooting skill among the experimental group compared to the control group, which used the traditional method.

<sup>\*</sup>Significant if (sig)  $\leq 0.05$ .

- 3. Modern method outperformed traditional method: Although both methods (the educational package and the traditional method) demonstrated a positive effect on skill teaching, the use of the educational package was a more important and effective educational reinforce for learning basic basketball skills.
- 4. Enhancing the learning environment: The educational package contributed to creating an attractive and stimulating learning environment for students, fostering a spirit of competition and creativity, and placing the learner at the center of the learning process.
- The educational bag facilitated the self-learning process, as students could now review and practice at any time and place, which enhanced learning opportunities and retained skills and knowledge.

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## أثر استخدام حقيبة تعليمية على التحصيل المعرفي وأداء مهارة الرميات الحرة في كرة السلة لدى الطالبات

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#### المستخلص

أظهرت الدراسة تأثيرًا إيجابيًا ذا دلالة إحصائية للحقيبة التعليمية في تحسين التحصيل المعرفي وتنظيم المحتوى بشكل منهجي. كما أدى استخدامها إلى تحسن في أداء مهارة الرميات الحرة في كرة السلة، وخاصةً ضمن المجموعة التجريبية. وقد تقوقت الطريقة الحديثة على الطريقة التقليدية، مع أن كليهما ساهم في التعلم. علاوة على ذلك، ساهمت الحقيبة التعليمية في هدفت الدراسة إلى التعرف على أثر استخدام الحقيبة التعليمية على التحصيل الدراسي لطالبات كلية التربية للعلوم الصرفة، جامعة بغداد. اعتمد الباحث المنهج التجريبي لملاءمته لطبيعة الدراسة، التي أجريت على طالبات كلية التربية بجامعة بغداد خلال العام الدراسي 2018-2019. بلغ عدد المشاركات 21 طالبة، استبعدت منهن 5 طالبات من العينة التجريبية. وبذلك، تكونت عينة البحث النهائية من 16 طالبة التأكيد على تعميم محتويات الحقيبة التعليمية على الكليات والأقسام التربوية المشاركة في بطولات كرة السلة، والاستفادة من خبراتها في العملية التعليمية. كما أوصت الدراسة بضرورة التعلم الذاتي، وتمكين الطالبات من مراجعة التمارين في أي وقت ومكان، مما يعزز التعلم والاحتفاظ بالمهارات.

الكلمات المفتاحية: الحقيبة التعليمية، التحصيل المعرفي، مهارة التصويب، كرة السلة