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The Contribution Ratio of Selected Physical Attributes to the Performance of Selected Basic Offensive Skills in Basketball among Players of the University of Zakho National Team

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ABSTRACT

This study aims to investigate the contribution of selected physical attributes—namely strength, speed, and balance—to the performance of key offensive skills in basketball, including passing, dribbling, and shooting. The research utilized a descriptive correlational methodology and involved a purposive sample of 12 players from the University of Zakho basketball team, representing the full population of the study.

To achieve the objectives, data were collected using expert-approved physical and skill-based tests. Statistical methods such as Pearson's correlation coefficient and multiple linear regression were used to analyze the relationships and determine the predictive power of the physical attributes.

The findings revealed a strong, statistically significant negative correlation between speed and passing performance, indicating that increased physical speed enhances passing efficiency. While other relationships between physical attributes and offensive skills were not statistically significant, they demonstrated practical trends. Regression models explained a notable proportion of performance variance—ranging from 42% to 47%—with speed emerging as the most influential variable in passing and shooting, and strength showing a moderate influence on dribbling.

The study concludes that targeted development of speed and strength should be prioritized in training programs to enhance offensive performance in basketball. It recommends further research with larger and more diverse samples and encourages the inclusion of additional physical attributes such as agility and neuromuscular coordination in future studies.

Keywords: Physical Attributes, Skill Performance, Basketball

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1. Introduction to the Study

1.1 Introduction and Significance of the Study:

Basketball is widely recognized as one of the most demanding and dynamic team sports, requiring a seamless integration of physical, technical, and tactical elements to achieve optimal performance. Success in basketball is not solely dependent on individual talent, but rather on the effective execution of fundamental skills within a high-paced, constantly changing competitive environment. Players are expected to perform complex offensive maneuvers such as shooting, passing, dribbling, and cutting with both precision and speed—skills that rely heavily on a foundation of well-developed physical attributes.

These physical attributes include, but are not limited to, muscular strength, speed, endurance, agility, coordination, balance, flexibility, and accuracy. Each of these elements contributes in unique ways to athletic performance and is considered essential in the development and execution of basketball's basic offensive skills. For instance, explosive strength enhances jump shots and rebounding, while agility and coordination are crucial for effective dribbling and quick directional changes. Thus, understanding the role of these attributes in skill execution is critical for achieving high performance.

Given the competitive nature of modern sports and the increasing emphasis on performance optimization, it becomes necessary to explore the extent to which each physical attribute contributes to the successful execution of offensive skills in basketball. This approach not only deepens our understanding of the relationship between physiology and technical performance but also provides actionable insights for training and player development.

The present study, titled "The Contribution Ratio of Selected Physical Attributes to the Performance of Selected Basic Offensive Skills in Basketball among Players of the University of Zakho National Team," aims to investigate how specific physical qualities influence the execution of offensive skills among university-level basketball players. The research focuses on quantifying the contribution ratio of selected physical attributes to core offensive skills, with the goal of identifying the most influential factors in successful basketball performance.

The significance of this study lies in its potential to inform evidence-based coaching practices. By identifying which physical attributes have the highest impact on specific offensive skills, coaches and sports performance professionals can tailor their training programs to prioritize the development of those attributes that yield the greatest performance benefits. Additionally, this research contributes to the academic and practical fields of physical education and sports science by offering:

- A scientific basis for designing specialized training programs that align with players' physical needs and offensive roles.
- A clearer understanding of how physical conditioning supports technical proficiency in basketball.
- Evidence to support curriculum development and instruction in physical education settings.
- A roadmap for enhancing both individual player capabilities and overall team effectiveness through targeted physical preparation.

In conclusion, the study serves as a vital resource for sports educators, coaches, and performance analysts who seek to optimize basketball training strategies and improve athletic

outcomes through a better understanding of the physical underpinnings of offensive skill execution.

1.2 Research Problem:

Basketball is a sport that fundamentally relies on the integration of physical attributes and technical skills to achieve effective performance, particularly on the offensive side. However, the training process faces several challenges related to understanding the precise relationship between various physical attributes—such as strength, speed, agility, endurance, and others—and their respective contributions to improving the performance of basic offensive skills such as shooting, passing, and dribbling.

Although numerous studies have addressed the development of physical and technical skills in sports, there remains a noticeable gap in research specifically aimed at determining the exact contribution ratios of each physical attribute to the performance of fundamental offensive basketball skills. This gap often results in training programs that may not be optimally designed to enhance offensive performance in players.

Accordingly, the problem of this study stems from the following central question:

- **What is the contribution ratio of fundamental physical attributes to the performance of basic offensive basketball skills?**

1.3 Research Objective

The aim of this study is to:

- Identify the contribution ratio of selected physical attributes to the performance of selected basic offensive skills in basketball.

1.4 Research Hypothesis

- There is a statistically significant relationship between fundamental physical attributes and the performance of basic offensive skills in basketball.

1.5Scope of the Study

- **Human Scope:** Players of the University of Zakho basketball team.
- **Spatial Scope:** The indoor sports hall of the Department of Physical Education and Sport Sciences.
- **Temporal Scope:** From December 10, 2024, to May 30, 2025.

1.6Definition of Terms

- **Physical Attributes (Components of Physical Fitness):** These refer to the characteristics that enable an individual to perform physical activities efficiently and effectively. They include strength, speed, endurance, flexibility, balance, coordination, agility, and accuracy. These attributes are fundamental for developing athletic and physical performance and are commonly used as criteria for assessing individuals' fitness levels. (Na'mah et al., 2022, 16)
- **Offensive Basketball Skills:** Offensive skills in basketball refer to the set of technical movements and actions performed by players with the aim of scoring points against the opposing team. These skills include various types of shooting (set shot, jump shot, and layup), passing (short and long passes), and dribbling (controlling the ball while moving). These skills constitute the foundation of offensive performance, allowing teams to

overcome opponents' defenses and gain an advantage during the game. (Al-Qaisi, 2019, 19)

2. Theoretical Background and Previous Studies

2.1 Theoretical Background

2.1.1 Physical Attributes

- **Concept of Physical Attributes:** Physical attributes, also known as components of physical fitness, refer to a set of fundamental bodily capacities that form the basis for motor performance across various sports and daily activities. They indicate an individual's physical efficiency and capacity to perform exercises or daily tasks effectively without excessive fatigue. These attributes are key indicators of general health and physical ability, essential for the development of motor skills in sports activities. They are also considered a core element in evaluating athletes' and students' progress within physical education programs. (Shughati, 2014, 91)
- **Definition of Physical Attributes:** Physical attributes are the bodily characteristics that determine an individual's ability to perform physical movements efficiently. They constitute the foundation upon which athletic skills are built. (Hassan, 2008, 68)
- **Components of Physical Attributes:**
- Physical attributes, or fitness components, consist of a set of qualities that athletes possess in varying degrees depending on the nature of the sport and individual differences. These include:

❖ **Strength:** The ability to exert maximum force against resistance.
❖ **Speed:** The ability to perform movements in the shortest possible time.
❖ **Endurance:** The ability to sustain physical activity over a prolonged period without fatigue.
❖ **Flexibility:** The ability to perform movements through a wide range of motion in the joints.
❖ **Balance:** The ability to maintain body stability while stationary or moving.
❖ **Coordination:** The ability to synchronize body movements efficiently.
❖ **Agility:** The ability to change body direction quickly and accurately.
❖ **Accuracy:** The ability to direct movements toward a specific target correctly. (Saleh, 2005, 56)

- **Importance of Physical Attributes:** Physical attributes are a fundamental basis for developing an individual's motor and technical abilities. They enhance physical and athletic performance, improve adaptability to physical exertion, and reduce the risk of injury. Furthermore, they serve as vital indicators of overall health and fitness, and are used to measure physical readiness both in athletic contexts and daily life. Their significance is further highlighted by their role in developing motor competence in children and youth, which positively affects their physical and psychological well-being. (Oliveira, 2023, 3)

2.1.2 Offensive Skills in Basketball

- **Concept of Offensive Skills in Basketball:** Offensive skills in basketball refer to a set of fundamental motor and technical abilities used by players to break through the opponent's defense and score points. These skills include passing, dribbling, shooting, off-the-ball

movement, and offensive rebounding. They are a core component in building and executing team offensive strategies effectively during gameplay (Suleiman, 2012, p. 69) •

Definition of Offensive Skills in Basketball:

- Offensive basketball skills are a collection of technical and motor abilities used by players to score points and gain an advantage on the offensive end. (Mull, 2018, 43)
- **ypes of Offensive Skills in Basketball:**
  - ❖ **Passing:** Transferring the ball accurately and quickly between players.
  - ❖ **Dribbling:** Controlling the ball while advancing toward the basket.
  - ❖ **Shooting:** Attempting to score by directing the ball into the basket using various techniques (set shot, jump shot, layup, etc.).
- **Importance of Offensive Skills in Basketball:** Offensive skills are among the most critical pillars upon which a team depends to score points and achieve victory. They represent the practical application of tactical strategies and directly contribute to technical superiority over the opposing team. Their importance lies in enabling players to perform organized movements, break through defensive formations, and exploit gaps effectively. Moreover, these skills enhance players' confidence and creativity in team play. Skills such as shooting, dribbling, passing, and off-the-ball movement create numerous offensive opportunities, whether through individual actions or coordinated teamwork, and are crucial for translating collective effort into tangible results on the scoreboard. (Kamal, 2005, 96)

2.2 Previous Studies

• **Study 1: Al-Jafri & Al-Aouni (2023)** – *The Contribution of Selected Anthropometric and Physical Measurements to the Accuracy of Three-Point Shooting in Basketball* **Objective:** To analyze the extent to which selected anthropometric and physical measurements contribute to the accuracy of three-point shooting. **Findings:** The study revealed a relationship between certain anthropometric and physical measurements and three-point shooting accuracy, highlighting the importance of these variables in enhancing player performance.

• **Study 2: Abaub (2024)** – *The Contribution of Selected Anthropometric Measurements and Motor Abilities to the Accuracy of Layup Shooting in Basketball* **Objective:** To determine the contribution ratio of selected anthropometric measurements and motor abilities to the accuracy of performing layup shooting. **Findings:** The study showed that certain anthropometric features, such as overall height and arm length, along with motor abilities, have a positive effect on the accuracy of layup shooting.

- **Study 3: Al-Zubaidi (2020)** – *The Effect of Specialized Training on Power Endurance and Selected Compound Offensive Skills in Young Basketball Players* **Objective:** To investigate the impact of UPPER-LOWER training methods on the development of power endurance and compound offensive skills. **Findings:** The results demonstrated that training programs based on the UPPER-LOWER method were effective and contributed significantly to improving certain physical abilities and compound offensive skills among players of Al-Naft Sports Club.

3. Research Procedures

3.1 Research Methodology:

The descriptive approach using the correlational method was employed to achieve the objectives of the study.

- **Correlational Method:** This is a type of descriptive methodology used to identify the type and strength of relationships between two or more variables without manipulating them, through the use of statistical correlation coefficients. (Obeidat, 2001, 56)

3.2 Research Population and Sample:

The research population consisted of the players of the University of Zakho basketball team, totaling **12** students.

The research sample was intentionally selected from the University of Zakho basketball team, comprising **12** players, which represents **100%** of the research population.

3.3 Data and Information Collection Tools

3.3.1 Content Analysis:

Content from relevant sources and references related to the study variables was analyzed to define the theoretical framework and formulate hypotheses related to the research topic. Content analysis involves examining the measured phenomenon by the physical education specialist or the researcher, based on their professional experience in the field or by referring to specialized scientific literature. (Majeed & Salman, 1992, 12)

3.3.2 Personal Interviews:

Personal interviews were conducted with a group of experts and specialists to obtain specific information related to the research procedures.

A personal interview is a conversation conducted by an individual with one or more persons to obtain certain types of information for use in scientific research or in the process of diagnosis and guidance. (Abbas et al., 2009, 250)

3.3.3 Questionnaire :

A questionnaire form (Appendix 1), which included a list of offensive basketball skills, was distributed to a panel of experts and specialists (Appendix 2) in order to define the appropriate measurement items in line with the study objectives.

The questionnaire is one of the most commonly used tools for collecting data in scientific research, especially when the goal is to gather information, perceptions, or opinions from individuals.

3.3.4 Tests:

In the field of sports, a test is defined as a structured tool used to measure athletes' performance in specific aspects such as physical abilities, technical skills, or psychological traits. This is done through standardized exercises or questions designed to assess performance levels and identify strengths and weaknesses. (Lacy & Williams, 2018, p. 76)

Physical and skill-based basketball tests were administered after being reviewed by a group of experts and specialists to ensure their suitability for the research objectives. The experts' opinions were analyzed using percentage values to determine the approved tests, as shown in Table 1.

Table (1) illustrates the percentage agreement among experts and specialists regarding the approved physical and skill-based tests.

No.	Skill-Based Tests	Agreement Rate
1	Chest Pass (Passing)	95%
2	Fast Dribbling Test – 4 Cones	87%
3	Jump Shot from 3 Points – 60 Seconds	85%

No.	Physical Fitness Tests	Agreement Rate
1	Standing Vertical Jump (Explosive Strength)	88%
2	60 m Sprint (Speed)	81%
3	Straight-Line Walking (Balance)	80%

Table (1): Displays the physical and skill-based tests related to physical attributes that received more than 75% agreement from the panel of experts and specialists.

3.4 Pilot Study:

To obtain valid data from the research sample, it was first necessary to ensure the quality and safety of the selected tests, as well as the procedures for administering, sequencing, and measuring them. Therefore, a pilot study was conducted to achieve both scientific and administrative objectives. This pilot study was carried out on February 19, 2025, involving a sample of six fourth-year undergraduate morning-session students, who were later excluded from the main study. The experiment was conducted with the assistance of the supporting research team (Appendix 3). The primary goals of the pilot study were:

- To assess the efficiency of the tools and equipment used.
- To determine appropriate distances and dimensions for the tests.
- To establish the time required for administering the tests.
- To define the sequence of test administration.
- To identify potential issues before, during, or after implementation.
- To observe the participants' responses and performance during testing.

3.5 Main Experiment:

After confirming the appropriateness of the selected tests, the main experiment was conducted with the actual research sample, adhering to the procedures and guidelines established during the pilot study, and with the assistance of the support team (Appendix 3). The experiment was implemented as follows:

- The tests were administered to the research sample, consisting of the players of the University of Zakho basketball team, on April 9, 2025.
- During the testing process, the following procedures were followed:

❖ Recording demographic and identification data for the sample participants.
❖ Providing a clear explanation of the nature of each test and its execution.
❖ Allowing adequate time for the application of the tests.

3.6 Tools and Instruments Used in the Study:

• Test result recording form

- Basketballs
- Cones
- Measuring tape
- Stopwatch

- Whistle

3.7 Statistical Methods Used:

- Percentage
- Arithmetic mean
- Median
- Standard deviation
- Pearson's simple correlation coefficient
- Multiple linear regression

4. Presentation, Analysis, and Discussion of Results

4.1 Presentation, Analysis, and Discussion of Correlation Results between Study Variables:

(Physical Attributes and Offensive Basketball Skills)

Table (2) presents the use of Pearson's correlation coefficient to analyze the relationships between selected physical attributes (strength, speed, balance) and certain offensive basketball skills (passing, dribbling, shooting) among players of the University of Zakho basketball team.

S.	Physical Tests	Skill-Based Tests	Correlation Value	Sig.
1	Strength	Passing	0.40	0.20
		Dribbling	0.60-	0.10
		Shooting	0.41	0.24
2	Speed	Passing	0.70-	0.06
		Dribbling	0.41	0.29
		Shooting	0.61-	0.06
3	Balance	Passing	0.40-	0.30
		Dribbling	0.53	0.12
		Shooting	0.35-	0.32

It is important to note that the variables of speed and dribbling were measured in seconds, meaning that a lower value indicates better performance.

First: Muscular Strength:

- **With Passing:** A moderate positive correlation (r = 0.40), not statistically significant (Sig. = 0.20).
- **With Dribbling:** A relatively strong negative correlation (r = -0.60, Sig. = 0.10), indicating that increased strength is associated with reduced dribbling time, which reflects improved skill performance.
- **With Shooting:** A moderate positive correlation (r = 0.41), not statistically significant (Sig. = 0.24).

Second: Speed (Performance Time):

- **With Passing:** A strong negative correlation (r = -0.70, Sig. = 0.06), meaning that faster performance (lower time) is associated with better passing efficiency.
- **With Dribbling:** A moderate positive correlation (r = 0.41), not statistically significant (Sig. = 0.29), suggesting that an increase in speed time (i.e., slower movement) corresponds to longer dribbling time, reflecting reduced performance.
- **With Shooting:** A relatively strong positive correlation (r = 0.61, Sig. = 0.06), indicating that slower speed may be linked to lower shooting efficiency.

Third: Balance:

- **With Passing:** A moderate positive correlation (r = 0.40), not statistically significant (Sig. = 0.30).
- **With Dribbling:** A positive correlation (r = 0.53), not statistically significant (Sig. = 0.12), implying that better balance may contribute to reducing dribbling time.
- **With Shooting:** A weak negative correlation (r = -0.35), not statistically significant (Sig. = 0.32).

Note: Statistical significance was considered at the **0.05 level**.

4.2 Presentation, Analysis, and Discussion of Multiple Linear Regression Results

(Physical Attributes and Offensive Basketball Skills in Basketball)

Table (3) presents the multiple linear regression analysis used to determine the contribution of selected physical attributes (strength, speed, balance) to the performance of basic offensive skills (passing, dribbling, shooting) among players of the University of Zakho basketball team.

Dependent Variable	Variable	B Coefficient	Standard Error	P-value	Lower Bound 95%	Upper Bound 95%
Passing	Strength	2.35	2.87	0.44	-4.66	9.36
Passing	Speed	-2.46	1.44	0.14	-5.99	1.08
Passing	Balance	0.24	0.68	0.74	-1.42	1.90
Dribbling	Strength	-1.27	1.02	0.26	-3.77	1.23
Dribbling	Speed	0.04	0.52	0.94	-1.22	1.30
Dribbling	Balance	0.20	0.24	0.44	-0.39	0.79
Shooting	Strength	3.49	3.89	0.40	-6.02	13.00
Shooting	Speed	-3.10	1.96	0.16	-7.90	1.69
Shooting	Balance	0.36	0.92	0.71	-1.89	2.61

Three separate statistical models were developed, each treating one offensive skill as the dependent variable, while the physical attributes were treated as independent variables.

The regression results are shown in the table, including regression coefficients (B), standard errors, significance values (Sig.), and 95% confidence intervals.

It should be noted that both speed and dribbling variables were measured in seconds, meaning that lower values indicate better performance.

First: Passing Skill:

The regression model for passing skill explained 47% of the variance in performance. Although the model did not reach overall statistical significance, the speed variable showed a negative influence (B = -2.46, Sig. = 0.14), indicating that faster speed (lower time) contributes to improved passing performance.

In contrast, strength and balance did not show significant effects.

Interpretation:

This result can be interpreted by noting that passing requires high motor responsiveness, making **speed** a crucial factor in performance. This finding aligns with existing literature on skill execution in basketball.

Second: Dribbling Skill:

The model explained 42.9% of the variance in dribbling performance. The strength variable demonstrated a moderate negative effect (B = -1.27, Sig. = 0.26), suggesting that increased strength contributes to decreased dribbling time and thus improved performance, although the result was not statistically significant.

Speed and balance did not show notable contributions.

Interpretation:

This result highlights the importance of muscular strength in dribbling, as it aids in maintaining control over the ball during movement and reduces execution time.

Third: Shooting Skill:

The regression model for shooting explained **44.3%** of the variance. **Speed** appeared as an influential factor (B = -3.10, Sig. = 0.16), indicating that faster movement is associated with improved shooting performance.

Strength showed a moderate positive effect (B = 3.49), whereas **balance** had no meaningful impact.

Interpretation:

Both speed and strength seem to contribute to improved shooting quality by increasing execution speed and generating the necessary kinetic force for accurate shooting.

Summary of Regression Results:

The results of the multiple linear regression analysis indicate that physical attributes accounted for a reasonable percentage of variance in offensive skill performance (ranging from 42% to 47%).

Although the independent variables did not reach statistical significance, **speed** was the most influential attribute in both passing and shooting, while **strength** played a noticeable role in dribbling skill.

5. Conclusions, Recommendations, and Suggestions

5.1 Conclusions:

- A statistically significant strong negative correlation was found between **speed (time)** and **passing performance**, indicating that increased speed enhances passing efficiency.
- A moderate negative relationship was observed between **strength** and **dribbling**, though it did not reach statistical significance.
- No statistically significant relationships were recorded between the remaining physical attributes and offensive skills; however, most of these relationships demonstrated practical trends with applicable value.
- The three physical attributes (strength, speed, balance) collectively explained a considerable proportion of the variance in skill performance.
- Speed showed a notable impact on both passing and shooting skills, even though it was not statistically significant in the regression model.
- Strength exhibited a moderate negative effect in reducing dribbling time, indicating its role in enhancing motor performance.
- Balance did not emerge as a statistically significant factor for any of the offensive skills, although it showed weak to moderate associations in some results.

5.2 Recommendations and Suggestions:

- Emphasize the development of physical speed in training programs due to its direct association with improved skill performance, particularly in passing.
- Strengthen muscular strength training programs, given their role in reducing execution time for skills like dribbling.
- Conduct future studies aimed at validating these findings on larger and more diverse samples.

- Integrate speed and strength training exercises as core components of skill development programs for offensive basketball performance.
- Replicate the study using larger sample sizes to increase the statistical power of the models and confirm the predictive effects of physical attributes.
- Broaden the scope of future research to include additional physical variables (e.g., agility, neuromuscular coordination) that may offer more precise explanations of skill performance.
- Adopt longitudinal research designs to track the impact of physical capacity development on skill performance over time.

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Appendix (1)

Ministry of Higher Education and Scientific Research
University of Zakho
College of Education
Department of Physical Education and Sport Sciences

To: Mr./Dr. .....
Subject: Questionnaire for Surveying the Opinions of Experts and Specialists

The researchers intend to conduct a study titled:

" The Contribution Ratio of Selected Physical Attributes to the Performance of Selected Basic Offensive Skills in Basketball among Players of the University of Zakho National Team"

In light of your expertise and specialization in this field, we find it essential to benefit from your valuable insights in selecting:
The appropriate tests for physical attributes.
The appropriate tests for offensive basketball skills.
We kindly ask you to place a check mark (✓) next to the tests you consider suitable for the study. You may also suggest any additional tests you find relevant to the research objectives.
We sincerely appreciate your cooperation in supporting scientific research.
Name:
Specialization:
Academic Title:
Workplace:
Date: / /2024

Offensive Basketball Skills and Their Corresponding Tests
Physical Attributes

Attribute	Test	Selected (✓)
Strength	• Standing Vertical Jump (Explosive Power) • Upward Explosive Power • Shenar Upper Body Strength Test	
Speed	• 100m Sprint Test • 60m Sprint Test • Flying Start Sprint Test	
Endurance	• 3000m Run • 1500m Run • 800m Run	
Flexibility	• Active Flexibility Test • Passive Flexibility Test	
Balance	• Straight Line Walking Test • Stork Dynamic Balance Test • Narrow Beam Walk Test	
Coordination	• Interlocking Circles Test • Repeated Wall Pass Test • Crossed Movement Test	
Agility	• Motor Reaction Test • Side Agility Test • Circular Movement Test	
Accuracy	• Target Shooting Test • Ball Toss into Ring Test • Basketball Shooting Accuracy Test	

Basketball Offensive Skills and Their Corresponding Tests

Skill	Test	Selected (✓)
Passing	• Chest Pass Test: Measures speed and accuracy over 30 seconds. Scoring: 5 pts (inner circle), 3 pts (middle), 1 pt (outer). • Rebound Wall Pass Test: Measures pass accuracy/speed in 10 seconds. Scoring: count of accurate passes hitting target zone. • Nelson Pass Test: Measures speed/accuracy within 30 seconds.	
Dribbling	• Fast Dribbling Test (3 Cones x 4 Reps with Direction Change – Barrow): Measures ball control with directional changes. Scoring: time taken. • Fast Dribbling Test (4	

	Cones): Measures speed of dribbling. Best time of two attempts is recorded. • Shuttle Dribbling Test: Measures overall dribbling ability. Scoring: total time taken.	
Shooting	• Jump Shot Test: Measures shooting accuracy from free throw line. 10 shots in two sets of 5. • Three-Point Shooting Test (60 sec): Measures speed and accuracy of 3-point shots. Scoring: number of successful shots. • Set Shot Test: Measures shooting skill from a fixed left-side position. 15 total shots.	

Appendix (2)

List of Experts and Specialists Consulted

No.	Name	Specialization	Affiliation
1	Asst. Prof. Dr. Mohammed Mahdi Mohammed	Teaching Methods	University of Zakho – College of Education – Department of Physical Education and Sport Sciences
2	Lecturer Dr. Musab Mohammed Abdullah	Psychology	University of Zakho – College of Education – Department of Physical Education and Sport Sciences
3	Lecturer Dr. Dilshad Mohammed Abdulrahman	Measurement and Evaluation	University of Zakho – College of Education – Department of Physical Education and Sport Sciences
4	Asst. Lecturer Qahraman Nuri Zainal	Sports Training	University of Zakho – College of Education – Department of Physical Education and Sport Sciences
5	Asst. Lecturer Mahfan Skfan Khalid	Sports Training	University of Zakho – College of Education – Department of Physical Education and Sport Sciences
6	Asst. Lecturer Ahmed Ismail Abdullah	Psychology	University of Zakho – College of Education – Department of Physical Education and Sport Sciences
7	Asst. Lecturer Biwar Salem Sa'do	Psychology	University of Zakho – College of Education – Department of Physical Education and Sport Sciences

Appendix (3)

List of Supporting Team Members

No.	Name	Description
1	Ari Qadir	Fourth-year student, Department of Physical Education and Sport Sciences, College of Education, University of Zakho
2	Avan Abdul Sattar	Third-year student, Department of Physical Education and Sport Sciences, College of Education, University of Zakho
3	Rozhat Ali	Third-year student, Department of Physical Education and Sport Sciences, College of Education, University of Zakho
4	Semyan Saleh	Fourth-year student, Department of Physical Education and Sport Sciences, College of Education, University of Zakho