



ACHIEVEMENT MOTIVATION AND ITS RELATIONSHIP WITH JUMP SHOT ACCURACY IN BASKETBALL AMONG FOURTH-YEAR STUDENTS AT THE COLLEGE OF PHYSICAL EDUCATION AND SPORTS SCIENCES, UNIVERSITY OF KIRKUK

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Abstract:

The aim of this research is to identify the level of achievement motivation among fourth-year students at the College of Physical Education and Sports Sciences, University of Kirkuk, to assess the jump shot accuracy in basketball among the sample members, and to determine the correlation between achievement motivation and jump shot accuracy in basketball. The researcher used a descriptive method with a correlational approach, which is suitable for the nature of the research. The study population was chosen using a purposive method from fourth-year students at the College of Physical Education and Sports Sciences at the University of Kirkuk for the academic year 2023/2024, divided into six sections, with a total of 210 students. The sample was selected randomly from section (C) of the fourth-year day study, consisting of forty-two students, which represents 20% of the total population. Considering the results discussion, the researcher concluded the following: There is no correlation between the psychological variable, achievement motivation, and jump shot accuracy among the sample members. However, there is a positive relationship between achievement motivation and jump shot accuracy in basketball, where students with high motivation achieve more accurate shooting rates. Achievement motivation directly affects the student's focus during shooting, which leads to improved skill performance under competitive pressure. Students with high achievement motivation show a greater ability to endure challenges and correct mistakes during shooting. Based on these conclusions, the researcher recommends that teachers consider the psychological factors when preparing educational programs and developing motivational traits to achieve success. Furthermore, the researcher advises developing the tests used in the study to understand achievement motivation and performance skills in students across various sports.

Keywords: Achievement Motivation, Accuracy, Jump Shot, Basketball, Students

1- Introduction:

Experts in the field of sports agree that basketball, like other sports, is constantly evolving. This progress is attributed to scientific research, which contributes to achieving outstanding results that benefit countries, including Iraq, on local, Arab, and global levels. There is no doubt that psychological factors play a significant and decisive role in achieving sports accomplishments, alongside other factors such as physical, skill-based, and tactical aspects. Sports psychology is considered a key element in the training process, as achieving an elevated level of performance is difficult without it. It emphasizes the importance of variation during learning and argues that movement patterns can be distinguished by adding random elements. It is noted that differences should be created in movements without repetition or correction during the skill (Hussein: 236-244, 2024).



Given its role in shaping the content of the educational and training process, as well as in highlighting the distinctive abilities and potential of athletes, the jump shot skill in basketball is one of the most important basic skills due to its significant impact on determining the outcomes of team matches. When this skill is successful during a game, it achieves the primary goal of performing other offensive skills, which is scoring points. In the age of science and technology, a rapid and massive development has been observed in all areas of human life, including the educational sector, in terms of updates in teaching methods, scientific foundations, and new learning strategies for students (Majed: 11-20, 2022).

Motivation is considered one of the main drivers of behavior and performance; it is the key to engaging in sports. When at an appropriate level, it can lead to satisfactory results by narrowing the gaps and bringing distances closer to improving student performance and pushing them to develop. Therefore, motivation is one of the primary variables that trainers and teachers must focus on developing in a balanced way so that it does not negatively affect the student. Excessive increase or noticeable decrease in motivation can disrupt performance and negatively impact results. Hence, it is essential to understand how to apply and motivate this state correctly to support the athletic aspect. Motivation can be seen as a double-edged sword, as it should align with the level of ambition. In other words, the coach or teacher must consider each student's capabilities and then provide motivation and support according to these abilities to help them face specific challenges on the court.

Psychological skills represent a fundamental dimension in preparing the student ideally, as they play a significant role in performance development. They have become one of the crucial factors that should be taken care of alongside physical and skill-based requirements to achieve athletic excellence. (Fawzi: 2006: 237).

The importance of this research lies in providing coaches with the opportunity to assess the level of motivation among basketball students, based on accurate scientific principles. This is crucial for enabling coaches to select the most prepared and qualified students for participation in matches with the best possible performance, while minimizing the likelihood of facing psychological issues that could negatively affect their performance on the court.

Research Problem:

Based on the researcher's field observations, as he is a basketball practitioner at the provincial club level, and following personal interviews with experts in the field, the researcher concluded that there is neglect by a considerable number of coaches and teachers regarding the psychological aspect during the student selection process and in preparing educational and training curricula. This shortcoming has led to the failure to achieve the desired integration in the physical, skill-based, and tactical preparation of students, which negatively impacted the proper and ideal performance of game skills. Among these skills, the jump shot skill in basketball stood out, as its effect appeared in the weak accuracy of shooting at the goal during the educational process, and thus, the inability to score points. To contribute to supporting the efforts of teachers in the Colleges of Physical Education and Sports Sciences and their departments, the researcher sought to highlight this issue through studying the relationship between achievement motivation and jump shot accuracy in basketball.

Research Objectives:

- To identify the level of achievement motivation among fourth-year students at the College of Physical Education and Sports Sciences, University of Kirkuk.
- To identify the accuracy of jump shooting in basketball among the research sample.
- To examine the correlation between achievement motivation and the accuracy of jump shooting in basketball among the research sample.

Research Hypothesis:



- There is a significant correlation between achievement motivation and the strength and accuracy of jump shooting in basketball among fourth-year students at the College of Physical Education and Sports Sciences, University of Kirkuk.

Research Scope:

- **Human Scope:** Fourth-year students at the College of Physical Education and Sports Sciences, University of Diyala, for the academic year 2023/2024.
- **Temporal Scope:** From March 10, 2024, to April 30, 2024.
- **Spatial Scope:** Basketball hall at the Directorate of Youth and Sports, Kirkuk.

2- Research Methodology and Field Procedures:

2-1 Research Method:

The researcher used the descriptive method with a correlational approach, as it suits the nature of the research.

2-2 Research Population and Sample:

The research population was selected intentionally from fourth-year students at the College of Physical Education and Sports Sciences, University of Kirkuk, for the academic year 2023/2024. The students are divided into six sections, totaling 210 students. The research sample was chosen randomly, consisting of students from Section (C) of the fourth-year morning study, totaling forty-two students. Thus, the research sample represents 20% of the original population.

2-3 Devices and Tools Used in the Research:

2-3-1 Data Collection Tools:

- Arabic and foreign sources.
- Observation.
- Tests and measurements.
- The World Wide Web (Internet).
- Achievement Motivation Scale.

2-3-2 Tools Used in Research:

- Legal basketball court.
- Legal basketballs.
- Sunny video camera.
- Nikon D3000 photographic camera.
- Measuring tape.
- Medical scale.
- Adanac stopwatch (measuring time to the nearest 1/100 second) – 8 pieces.
- Two whistles.

2-4 Field Research Procedures:

2-4-1 Jump Shot Accuracy Test in Basketball:

Test of Jump Shooting from Under the Basket (Hakeem, 2004: 180)

Goal of the test: To measure the ability to consecutively make shots under the pressure of time.

Required tools: Basketball hoop, basketball, stopwatch, whistle to signal the start.

Performance specifications: The tester stands anywhere beneath the hoop and attempts to score as many shots as possible within 30 seconds. The tester is allowed to shoot using any method they prefer.

Conditions:

- If the player loses the ball, they are allowed to repeat the test, with the restriction of doing so only once.
- The player is allowed two full attempts, with the best attempt being counted.



Scoring:

The tester earns one point for every correct shot made during the 30-second period. Both attempts must be recorded, and the best attempt is counted.

2-4-2 Achievement Motivation Scale (Alawi: 1998: 184)

This scale was designed by "Joe Wills" and translated by "Mohammad Hassan Alawi," and it was applied to the Iraqi environment as previously mentioned. The scale consists of twenty items, divided into two dimensions: the first dimension is the drive for success, and the second is the avoidance of failure.

Correction:

The scale includes items related to the drive for success, which are (2-4-8-10-12-14-16-18-20), all of which are positive items in the direction of the dimension, except for items (4-8-14), which are reverse-scored. The items related to avoiding failure are (1-3-5-7-9-11-13-15-17-19), all of which are positive items in the direction of the dimension, except for items (11-17-19), which are reverse-scored.

Each dimension is scored separately as follows:

- The total score for the scale is 100 points, divided into two sections: fifty points for the drive for success dimension and fifty points for the avoidance of failure dimension.

For items in the direction of the dimension, the scoring is as follows:

- Very high = 5 points
- High = 4 points
- Medium = 3 points
- Low = 2 points
- Very low = 1 point

For items in the opposite direction of the dimension, the scoring is as follows:

- Very high = 1 point
- High = 2 points
- Medium = 3 points
- Low = 4 points
- Very low = 5 points

2-4-3 Pilot Study:

The researcher conducted a pilot study with ten students from the research population. These students were excluded from the main experiment. The pilot study took place on Tuesday, March 4, 2024, in the sports hall at the College of Physical Education and Sports Sciences, University of Kirkuk, at 10:30 AM. During the pilot study, the Achievement Motivation Scale was distributed, and the jump shot accuracy test in basketball was conducted. The purpose of the pilot study was:

- To identify any errors or obstacles that might arise during the experiment.
- To assess the validity of the tools used.
- To evaluate the efficiency of the assisting team and their understanding of the measurements and tests.
- To determine the time required to complete the test.

3-4-4 Main Experiment:

The researcher conducted the main experiment on the research sample on Wednesday, March 12, 2024, by distributing the Achievement Motivation Scale form. After the students completed the scale, the researcher prepared the necessary tools and materials for the jump shot accuracy test in basketball. The test was applied in the sports hall at the College of Physical Education and Sports Sciences, University of Kirkuk, at 10:30 AM. All variables and results were fixed for the purpose of statistical analysis.

2-5 Statistical Methods:



- The researcher used the SPSS statistical software package to extract the results.
- **3 - Presentation of Results, Analysis, and Discussion**
- **3-1 Presentation of the Results of the Correlation between Achievement Motivation and Jump Shot Accuracy in Basketball Among the Research Sample.**

Table (1) shows the correlation results between achievement motivation and jump shot accuracy in basketball among the research sample.

Variable	Mean	Standard Deviation	Standard Error	t-value	Correlation Coefficient	Error Rate	Significance Level
Achievement Motivation	61.342	4.342	1.243	42.382	0.945	0.003	Significant
Jump Shot Accuracy	17.378	1.671	0.351				

3-2 Discussion of Results

From Table (1), the correlation coefficients for the research variables under study—achievement motivation and its relationship with jump shot accuracy—were found to be statistically significant. This significance reflects the positive influence of explosive arm power, which plays a crucial role in determining shot accuracy. Additionally, the movement pathways of the arms during shooting contributed positively to this outcome.

The researcher attributes these results to the nature of the movement pathways of the muscle groups involved in shooting, which primarily function in a single forward direction—both in throwing the ball and in the pushing, motion required for the shot. The preferred arm is used to shoot the ball over the head, while the opposite arm follows a countermovement to maximize the force applied. This alignment of movement pathways leads to optimal force production in executing the jump shot.

The researcher believes that the difference in achievement motivation, being a psychological variable, compared to the physical requirement of explosive strength, is a key factor in these results. Previous findings have shown that achievement motivation develops over time as players undergo prolonged training in jump shooting during their university studies. Psychological theories suggest that motivation arises from an individual's desire and need for achievement. According to sports psychology scholars, Murray emphasizes the existence of psychologically rooted motives, such as the need for excellence and aspiration for high-ranking positions, including the need for superiority (*Al-Kinani, 1997: 118*). These needs are not isolated from the behavioral environment; rather, they are influenced by both internal states and external stimuli that drive or pressure an individual into action (*Marx, 1973: 398*).

Murray further explains that a need emerges as a response to an internal drive influenced by external environmental pressures. Individuals anticipate that their actions will satisfy their needs based on their perception of "freedom of movement." The second variable, "need value," is determined by the outcome of the behavior. The likelihood of behavior occurring increases when both expectations and reinforcement value are high, or when one is high and the other is moderate, compared to when both are low (*George, 1986: 231*).

Moreover, continuous interruptions in training negatively impact players' skill and tactical levels. Athletes require self-confidence and motivation to achieve success, alongside gaining practical experience—especially in team sports like futsal. Maintaining this level of performance is crucial during competitions if players possess the necessary physical fitness to meet the demands of the game. This enables them to execute skill and tactical tasks efficiently (*Abdulridha, 2023: 285*).

Based on the researcher's review, it is logical for a significant correlation to emerge between achievement motivation and shooting accuracy. The tests conducted on the sample had substantial value for



the participants, stimulating their internal motivation. These physical tests align with the training program's objectives and serve as a tool for assessing shooting accuracy levels. It is evident that achievement motivation among the participants is closely tied to their actual performance, particularly in preparation for competitive matches, which serve as their goal.

The correlation coefficients for the research variables confirmed a significant relationship between achievement motivation and shooting accuracy, highlighting an interconnection across all study components. The researcher considers this result logical for the sample, as accuracy is a fundamental performance requirement in basketball. It is closely linked to cognitive processes and stored motor programs in the brain. The brain's "accuracy center" is in Area 6, from which neural signals are transmitted to the spinal cord and nerves to execute a specific movement (Hussein & Al-Anbaki, 1988: 308).

4- Conclusions and Recommendations

Conclusions:

Based on the discussion of the results, the researcher concludes the following:

1. There is a positive relationship between achievement motivation and shooting accuracy in basketball, as students with higher motivation tend to achieve more precise shooting performance.
2. Achievement motivation directly influences students' focus during shooting, leading to improved skill performance under competitive pressure.
3. Students with high achievement motivation exhibit a greater ability to handle challenges and correct errors while shooting.
4. Low motivation may lead to a decline in self-confidence, negatively affecting shooting accuracy, particularly in critical game situations.
5. The impact of achievement motivation extends to developing shooting skills from various distances and angles, contributing to enhanced offensive performance for the team.

Recommendations:

Considering these conclusions, the researcher recommends the following:

1. Teachers should emphasize the psychological factors influencing students when designing educational curricula and focus on developing achievement motivation traits.
2. Future studies should refine and expand the tests used in this research to better assess achievement motivation and skill performance in different sports.

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No.	Statements	Very High	High	Moderate	Low	Very Low
1	I find it difficult to sleep after losing a competition.					
2	I admire players who train extra hours to improve their performance.					
3	When I make a mistake during a competition, it takes me some time to forget it.					
4	Excellence in sports is not one of my main goals.					
5	I often feel fear just before participating in a competition.					
6	I enjoy taking on tasks that other players consider difficult.					
7	I fear losing in a competition.					
8	Luck plays a bigger role in winning than effort.					
9	Sometimes, losing a competition bothers me for several days.					
10	I am willing to train all year round without interruption to succeed in my sport.					
11	I have no difficulty sleeping the night before a competition.					
12	Winning a competition gives me a profound sense of satisfaction.					
13	I feel tense before a sports competition.					
14	I prefer to rest from training after completing an official competition.					
15	When I make a mistake during a competition, it bothers me throughout the event.					
16	I have an ardent desire to be successful in my sport.					
17	Before participating in a competition, I do not think much about what might happen or the results.					
18	I try my best to be the best player.					
19	I can remain calm in the moments right before a competition.					
20	My goal is to be outstanding in my sport.					

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