



## PSYCHOLOGICAL MOTIVATION AS A PREDICTOR OF ATHLETIC PERFORMANCE IN BASKETBALL

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### Introduction

Sports professionals agree that basketball, like other sports, is constantly evolving. This is due to research that has helped achieve outstanding results, benefiting countries, including Iraq, at the local, regional, and global levels. There is no doubt that psychological factors are an influential factor, as they have a profound impact on athletic achievement, just like other factors (physical, skill, and tactical). Sports psychology is one of the most important foundations of the training process. Without it, it is difficult to achieve a comprehensive level of achievement, as this factor constitutes the core of the training process and is an indicator of the athletes' high abilities and potential. Motivation is one of the drivers of behavior and performance, and even the key to athletic practice. At a certain level, it can lead to satisfactory results. It works to reduce gaps and shorten distances, enhancing players' performance and promoting them to the best. Therefore, it is one of the first steps coaches must take to develop and enhance it. However, an unnatural increase or decrease in motivation below the desired level can disrupt performance and negatively impact results. Therefore, it is important to understand how to apply this condition to activate and motivate it to serve the athletic aspect. Therefore, it can be said that motivation is a double-edged sword, and it must be equal to the level of ambition. In other words,

### Research Problem

Psychological motivation is one of the primary factors influencing basketball players' performance, especially in official matches that require high physical and mental readiness. Through continuous field monitoring of a sample of 16 basketball club players, it was observed that the absence of a psychological scale that determines the level of players' motivation poses a major obstacle for coaches, as they are forced to make arbitrary decisions regarding player participation without a precise assessment of their psychological level. This often leads to on-court errors due to low motivation, forcing the coach to substitute the player. The same problem may be encountered with the substitute.

Hence, the need to design a psychological scale to help coaches detect players' motivation levels before matches. This will contribute to making more accurate decisions regarding player readiness and selecting players with a competitive spirit and enthusiasm to achieve better results.

### Research Objectives:

1. To identify the level of motivation among basketball players.



1. To identify differences in motivation levels among players within the same team.
2. To enrich the applied psychological aspect in the sports field, particularly in basketball.

## Research Areas:

1. Human scope: A sample of Baghdad club basketball players for the 2025 season.
2. Time scope: From April 20 to June 10, 2025.
3. Spatial scope: The research was conducted in the Al-Shaab Indoor Sports Hall in Baghdad.

## Research Sample:

The process of selecting a research sample is one of the fundamental matters that researchers must pay attention to and take into account. The selected sample must represent the community on which the research is to be conducted in a true and accurate manner. Sample selection is a procedure that aims to accurately represent the original community or a specific amount of information from which measurements and data related to the study or research are taken, with the aim of generalizing the results obtained from the sample to the original community. Therefore, the research was conducted on the Baghdad youth team, which represents the selected elite of players in the governorate. Baghdad, aged 16-18 years. Here, the research sample was chosen intentionally. After that, the sample was divided into two equal groups randomly and by lottery, one experimental and the other control, with an average of ten players in each group.

## Methods, devices, and tools used in the research:

- Foreign and Arab sources and references
- Expert and specialist opinion poll form
- Tests and measurements
- Work team
- Legal basketball court
- (20) basketballs
- Adhesive tape, benches, and special grills
- Scales for measuring weight
- Box (40) cm high
- Two electronic stopwatches for measuring time
- Electronic calculator

## Determining the tests used in the research:

One of the things the researcher must pay attention to and consider is the process of determining the tests, as these tests must achieve the objective for which they were developed. A test is (measuring an individual's ability to perform a specific task according to precise scientific controls and formulas). After reviewing the available sources related to the research topic, the researcher made modifications to some of the skill tests, making them suitable for measuring specific endurance, before presenting them to experts for the purpose of nominating appropriate tests for the research within the opinion poll form. Table (1) shows the percentage of physical, skill, and functional tests selected by the experts.

Table (1)

No.	Tests	Purpose of the Test	Repetition	Percentage
1	Zigzag running test with the ball (25m x 8) from a stationary position	Measure players' motor ability and transitional speed	19	76%



2	Shooting test from a stationary position for (45) seconds	Evaluate accuracy in shooting skill performance	22	88%
3	Dribbling between cones using both hands (45) seconds with direction change	Measure ball control ability and movement speed	23	92%

## Field Research Procedures:

### Exploratory Experiment:

Game experts and sports trainers had already decided on the study experiments, therefore it was time to start the exploratory phase. Researchers in the scientific community often stress the need of an exploratory experiment as a means of learning from their mistakes and improving future experiments.

This served as the basis for the exploratory experiment that took place on June 17, 2025, with a group of five young basketball players chosen at random. Thanks to the exploratory experiment, we were able to accomplish:

- Calculating how long it will take to finish the exams.
- Making sure the measuring and testing equipment is legitimate.
- Assessing the level of test comprehension among the study sample.
- Making sure the support personnel is capable.
- Recognizing potential major problems with the job and developing strategies to overcome them.

## Homogeneity of the research sample:

Researchers were keen to homogenize the sample by taking all the variables (height, weight, age, and training age) for each player. This would ensure a uniform level for the research sample and help avoid any obstacles that could affect the results, like individual differences among players. To ensure the sample was homogeneous, they used statistical processing on these variables in accordance with the skewness coefficient rule. The homogeneity of the sample is shown by the fact that the values were restricted to (+3), which is indicative of its excellent distribution and modest spread. The following table shows the results..

Table (2)

demonstrates that the study sample is consistent across all variables, and it also displays the mean, median, standard deviation, and skewness coefficient..

No.	Variables	Unit of Measurement	Mean (M)	Median	SD ( $\sigma$ )	Skewness
1	Height	cm	10.69	170.3	3.12	0.63
2	Weight	kg	10.62	70.56	2.89	0.21
3	Age	months	13.47	186.3	3.65	0.19
4	Training age	months	16.08	96.6	4.01	0.27

## Research Sample Equivalence:

Following the homogenization of the sample and the establishment of a normal distribution, eight players were randomly assigned to each of two groups: the experimental group and the control group. There were no discernible variations between the two sets of data.



First, the 25-by-8-meter slalom running test from Stability is designed to assess the endurance and speed of the leg muscles.

Equipment needed: A whistle, a level surface longer than 30 meters, measuring tape, adhesive tape, a timer, and a clock.

Test Requirements: A distance of 25 meters separates two parallel lines. The protagonist is positioned at the starting line. They sprint full speed forward to the second line, touch it with one foot as the start signal goes off, and then turn around to race back to the starting line. The total distance traversed is 200 meters, which is calculated by multiplying 25 meters by 8 meters.

Directions for the Test: The participant will have two chances to complete the task, and the time taken on the best attempt will be recorded.

Documentation: The subject's time, measured in seconds and fractions thereof, is documented for the distance covered.

Experimental firing under controlled conditions for 45 seconds:

Objective of the test: Proficient shooting in a sequential manner.

A basketball, a basketball hoop, and a timer are the necessary pieces of equipment.

Details of the test: The participant is free to stand anywhere they choose underneath the hoop while holding the ball. In order to get the maximum number of shots in forty-five seconds, they must fire once the start signal is heard, then pick up the ball and shoot again.

Guidelines for the test: The topic gets credit for the better of two efforts.

After the ball has left the subject's hand and reached the target, this attempt will be considered successful if the end signal is delivered.

During recording, the number of tries that successfully strike the target is tallied within the 45-second performance period.

Use your hands to tap the space between the cones for forty-five seconds:

The capacity to maintain a constant pace while changing directions is what this exam is measuring.

Basketball hoops, measuring tape, a timer, and sticks are required equipment. Test Conditions: A twelve-meter-long level area with straight-line obstacles or seats is required for the test. The first obstacle is located 3.6 meters from the 1.80 meter long ground-drawn starting line. Putting numerals on the ground, as in the picture, is the best option. Behind the starting line, with the ball in hand, the test subject stands. They dash forward, making an eight with the ball, as soon as the whistle blows. They keep going until the referee calls "Stop," which ends the 45-second run. The individual taking the exam will have two chances, with the highest score counting. Each obstacle that the test participant successfully navigates in the allotted forty-five seconds counts toward their final score. Evidence-Based Testing: Validity of Tests: When a test measures the intended construct, we say that it is legitimate. Among the many crucial features of an exam, this is key. Thus, researchers have relied on the advice of experts and professionals to confirm the tests' validity via content validity. Discriminant validity, which refers to the test's discriminatory power, has also been used by researchers. (between great heights and great depths).

## Test Objectivity:

To verify the objectivity of the tests being applied, the researchers used two judges. Test objectivity can be determined by (the correlation between the scores of two judges who assign scores to a single group of individuals at the same time). After statistically processing the results by finding a simple correlation coefficient between the scores, the results revealed a strong correlation between The scores of the first and second judges indicate the objectivity of the tests, as shown in Table (3).



Table (3)

shows the reliability and objectivity coefficients of the nominated tests.

No.	Tests	Reliability Coefficient	Objectivity Coefficient
1	Vertical jump from standing position	0.88	0.91
3	Zigzag running (25 x 8)	0.91	0.85
4	Shooting from stationary position for (45 seconds)	0.91	0.90

On the afternoon of June 24, 2025, at the People's Hall for Sports Games, the researcher administered the pre-tests to the study sample. All participants, including those in the control group, were given these assessments.

#### Research Sample Post-Tests:

Following the conclusion of the suggested training program, the study sample was given post-tests in the People's Hall for Sports Games on Thursday, July 4, 2025, during the afternoon. In order to get reliable findings, the researchers made careful to follow the same protocol and utilize the same equipment as in the pre-tests.

Curriculum Proposal: The researcher needed to examine current sources and references in the field of sports training to get information that would help in creating a training program that would be beneficial. On top of consulting a professional, this was done. Experts and professionals were briefed on the planned training program. Please find below a number of detailed explanations:

- Ten weeks is the suggested duration of the training program.
- - We have thirty training units in total.
- 3 units of training each week is the recommendation.
- Time required for the whole training unit: 90 to 120 minutes.

How much time is spent training for endurance on a per-unit basis:

#### Statistical methods used:

The researcher used the following statistics:

- Arithmetic mean
- Standard deviation
- Skewness coefficient

First: Presentation, analysis, and discussion of the first objective (building a motivation scale for basketball players).

Second: Finding out how motivated basketball players are, then presenting, analyzing, and discussing the findings.

Researchers found that, on average, basketball players had a motivation score of 140.70, with a standard deviation of 36.51, after administering the motivation scale to their study population. In comparison to the hypothetical average for the scale, which came out to be 129, this average was found to be higher. Using the t-test equation for a single sample, we were able to determine that there was a statistically significant difference between the two averages at the 0.05 level with 249 degrees of freedom..



Table (4)

shows the arithmetic mean, hypothetical mean, standard deviation, and (t) value for all basketball players.

Sample Mean	Standard Deviation	Hypothetical Mean	Calculated t-value	Tabulated t-value	Significance Level
140.70	36.51	129	0.91	2.365	0.05

Table 1 demonstrates that compared to the hypothetical average, the actual average of the motivation scale for the basketball players that participated in the research was greater. This indicates that the study participants were highly motivated. Both Muhammad Alawi's (2) and Majdi Ahmad's (3) studies corroborate this. The researchers attribute the inspiring result to the fact that all of the teams were quite comparable in terms of physical ability, skill level, and tactical acumen. The psychological component is what differentiates the two, and it had a major impact on how the matches went. Basketball players are known for their strong sense of teamwork, which is shown by the fact that they encourage one another before games, according to the researchers' findings in the area of motivation, which yielded a response rate of 85%. On top of that, they have a strong drive that shows in the positive reinforcement they receive from the coach and the crowd in the form of praise, admiration, and applause. This, in turn, shows up in their performance on the field, where they give it their all to win. Furthermore, the athletes are certain that rigorous training is the key to victory. They eagerly await the competition date so they may be ready to take on any opponent. Their competitive spirit ensures that they stay on the field regardless of the outcome, even when they're down by a significant margin in points..

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