

**IMPORTANCE OF BASKETBALL FREE-THROW SHOOTING  
TECHNIQUE ON ITS EFFECTIVENESS AMONG PLAYERS OF DIFFERENT  
POSITIONS IN THE UZBEKISTAN CHAMPIONSHIP AMONG THE  
WOMEN'S TEAMS OF THE HIGHEST LEAGUE**

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**Annotation**

*The article discusses the importance of controlling the technique of performing a free throw and its impact on performance. The existence of a complete relationship between the technique of the free throw and its effectiveness is noted. The evaluation of the free throw technique was the same and by the end of the experiment increased in two teams, which served to increase the % of hits of players of various roles and teams as a whole. The use of the same free throw training technique for teams of different qualifications led to a significant increase in the effectiveness of free throws, which has been experimentally proven.*

**Keywords**

*mulcts throw, result, effective, technician fulfilment, central, forwards, protector.*

**Introduction.** A free throw is an opportunity provided to a player to score one (1) point by shooting an unimpeded basket from behind the free throw line and inside the semicircle.

Any method of making a free throw into the basket can be used, but players must throw in such a way that the ball enters the basket from above or touches the ring or backboard without touching the floor.

Basketball experts focus primarily on the free throw. The importance of mastering this throw lies in the fact that, on the one hand, it has an independent game purpose (the number of hits from a free throw makes up a significant part of the total game score, and team coaches analyze the statistics of opposing players in terms of the percentage of free throws made and give instructions to their players for the so-called "tactical fouls" at the end of the match), on the other hand, the skill

of making free throws is the basis for the formation of the entire complex of movements that is used by basketball players to throw the ball into the basket. At the same time, the initial period of training, in which the issues of primary training in throwing technique are resolved, is of decisive importance for the development of sniper qualities of a basketball player. According to a number of authors, [16–23], the currently existing methodology for initial training in throwing, based on the methods of story, demonstration, demonstration and practical implementation with subsequent correction of errors, can hardly be considered perfect and comprehensive.

To increase the efficiency of free throws during training, a number of experts [14–24,26] consider it necessary to use various training devices.

In recent years, the free throw has been constantly in the field of view of basketball specialists. The importance of mastering a free throw lies in the fact that, on the one hand, it has an independent game purpose (the number of hits from a free throw makes up a significant part of the total game score), on the other hand, the skill of making free throws is the basis for the formation of the entire complex of movements that is used by basketball players for throwing the ball into the basket.

The initial period of training, in which the issues of initial training in throwing technique are resolved, is of decisive importance for developing the sniper qualities of a basketball player.

The currently existing methodology for initial training in throwing, based on the methods of story, demonstration, demonstration and practical implementation with subsequent correction of errors, can hardly be considered exhaustive if we consider the process of learning to throw from the perspective of the formation of a motor skill and the modern theory of movement control [2,16 ].

Tests used in practice to assess the accuracy of free throws record only the final result, without providing information about the possible causes of misses.

Pedagogical control over the accuracy components of female basketball players is one of the least developed issues in the theory and methodology of basketball. At the same time, the implementation in practice of a scientifically based system of pedagogical control is currently considered an effective means of increasing the level of training of an athlete.

Numerous studies by physiologists, psychologists, specialists in the field of biomechanics, etc. have been devoted to the issue of increasing the accuracy of movements in various sports.

Emphasizing the leading role of the motor analyzer in the coordination of muscle activity, I.M. Sechenov emphasized that “muscular feeling becomes a meter or fractional analyzer of space and time.” I.P. Pavlov pointed out that the kinesthetic cells of the motor analyzer have the properties of communicating with all cells of the cerebral cortex.

The correspondence of the motor result with the given one is possible provided that the central nervous system has constant accurate information from numerous analyzers, receives continuous signaling about the occurrence of certain changes in the organ being moved, and such information is provided primarily by proprioceptors [2,12,23].

Only in the presence of clear proprioceptive information (feedback) can movement become controlled, and the motor act will receive clear organization and coordination.

Any motor act is ensured by the summarized activity of analyzers represented in a complex plexus in the cerebral cortex [12].

As they improve in any sport, at a high stage of training, athletes develop a complex analyzer, which is based on the mechanism of temporal communication, while athletes develop specific sensations, shown by the “sense of time”, “sense of the court”, “sense of the ball” etc. Based on these sensations, the athlete makes one or another correction to his activity in each specific case.

The large role of proprioceptive sensitivity in the formation of labor and sports skills is noted in the works of modern specialists.

Accurate perception of the movements performed is possible only on the basis of muscle-joint sensitivity, which is of great importance in improving sports technique, contributes to the development of the athlete’s sense of complete mastery of movements, and makes it possible to subtly and accurately regulate his movements.

With the growth of sports skills, there is a significant increase in the clarity of motor sensations, expressed in the finest differentiation of the amplitude of movements, their direction and speed.

In the process of regular training, an athlete acquires a state of fitness, which is characterized by the ease and accuracy of performing individual motor acts that do not require special attention [14,23,24].

An analysis of educational and methodological literature on basketball showed that there is no consensus on the methodology for improving the accuracy of movements of basketball players; some authors consider external conditions, the trajectory of the ball, the rotation of the ball, landmarks to be the decisive factors,

while others pay great attention to the technique of performing the structural characteristics of the movement, and only a small number of authors note that improving accuracy is a complex multifaceted process, consisting of a whole complex of various means and methods aimed at increasing proprioceptive sensitivity and stability of basic techniques [12,16,25].

According to most basketball experts, the technique of performing a free throw has a significant impact on its effectiveness.

However, in the methodological literature there is no sufficiently fully developed technique for throwing a free throw with one hand.

In practice, there is also no substantiated methodology for assessing free throw technique.

**Purpose of the study.** It consists of improving the system of pedagogical control of the accuracy of basketball players in performing free throws in the process of competitive activity.

**Material and research methods.** Analysis of scientific and methodological literature, survey of leading basketball coaches, pedagogical observations, recording, methods of control over free throw technique, pedagogical experiment.

At the first stage of the work, a model of the ideal one-handed free throw technique was developed.

The basis for the ideal technique, which served as a standard, was taken from the technique of performing a free throw with one hand published in the magazine "Sports Games" by Honored Masters of Sports, Olympic champions Sergei Belov and Modestas Paulauskas with some biomechanical appropriate clarifications and additions. Using a special scale, the main and then secondary moments of the player's movement in the preparatory, main and final phases of the free throw were assessed. A total of 10 items were analyzed [8].

Then, based on the model technique, a protocol for assessing one-handed free throw technique was developed.

The free throw technique was assessed using a developed 10-point scale using the expert assessment method.

The rating scale included the main parameters of movement when performing a throw with one hand from the shoulder according to the compiled biomechanical model.

For each parameter assessed, a score of 0 was given; 0.5; 1 point depending on the degree of compliance of the movement performed with the compiled model, followed by summing up the points.

To test our assumptions about the advisability of introducing constant monitoring of free throw technique into the training process by assessing it according to the developed protocol, a pedagogical experiment was conducted.

The pedagogical experiment was preceded by a search experiment, which consisted of conducting a test to determine the effectiveness and assessment of free throw technique, as well as a correlation analysis to assess the close relationship between these indicators.

30 basketball players took part in the experiment, including: 15 players from AGMK (Almalyk Mining and Metallurgical Combine), a team of the major league of the championship of Uzbekistan (2 people - MS and 13 people - KMS), aged from 20 to 32 years, coach Khojaev Zh. .M., and 15 players of the national team of the Namangan region (9 people - CMS, 3 people - 1st category, 3 people - 2nd category), aged from 17 to 22 years, coach Nugmonkhodzhaev I.A. who performed a control test - 30 free throws with an assessment of performance and execution technique.

The study was conducted on the basis of the sports college of the Olympic reserve of the Namangan region during educational and training camps in preparation for the Uzbekistan championship among women's teams of the major league and preparation for the Asian games in the period from August to September 2021.

In the educational and training process of both groups, the following exercises were used to practice the technique and effectiveness of a free throw: 1) throws between performing various game exercises; 2) throws with the task of hitting two or three times in a row; 3) throws with the task of making as many hits in a row as possible; 4) throws using balls of different weights and diameters: basketball, volleyball, handball, football; 5) throws with eyes closed; 6) throws from various starting positions: standing, sitting, kneeling, etc., 7) throws close to the game situation, after a miss - acceleration to the opposite baseline and back, flexion and extension of the arms in a lying position and etc.

**Results of the study and their discussions.** Analysis of the research results at the beginning of the experiment showed that the average free throw score in the two teams is almost the same: the AGMK team 5.8 points, the Namangan region team 5.3 points. The difference was 0.5 points (see Table 1). The lowest score for center players is 4.5 points for Namangan region and 5.0 points for AGMK, the average score for forwards is 5.0 points for Namangan region and 5.5 points for AGMK, and the highest score for defenders is 6.0 points for Namangan region and

6.5 points from AGMK. The difference is insignificant and amounts to 0.5 points for all roles of players.

**Table 1**

**Evaluation of free throw performance at the beginning of the experiment**

N	Roles of players	Quant Player	Number parameter	Total points		Number of points on average	
				Nam.re	AG	Nam.reg.	AGMK
1.	center	6	10	13,5	15,0	4,5	5,0
2.	forwards	12	10	30,0	33,0	5,0	5,5
3.	defenders	12	10	36,0	39,0	6,0	6,5
4.	total	30	10	79,5	87,5	5,3	5,8

At the end of the experiment, the assessment of the execution of a free throw increased among players of both teams (see Table 2). The average score of the AGMK team was 7.2 points, which is 1.4 higher than the initial one, the Namangan region team was 6.5 points, which is 1.2 higher than the initial one. The score for free throws by center players increased by 0.5 points, by forwards by 0.5 points, and by defensemen by 1 point.

**Table 2**

**Free throw evaluation at the end of the experiment**

N	Roles of players	Quant Player	Number parameter	Total points		Number of points on average	
				Nam.re	AG	Nam.reg.	AGMK
1.	center	6	10	16,5	18,0	5,5	6,0
2.	forwards	12	10	39,0	42,0	6,5	7,0
3.	defenders	12	10	42,0	48,0	7,0	8,0
4.	total	30	10	97,5	108,0	6,5	7,2

The same picture is observed when analyzing the effectiveness of free throws; the number of hits out of 30 shots was calculated (see Table 3). The results of the study at the beginning of the experiment differed in favor of the AGMK team. They hit, on average, 19.2 times, which was 64.0%, and the Namangan region team hit

17.6 times, which was 58.8%. The difference in indicators is 5.2%. The reliability of the differences in favor of the AGMK team was noted.

**Table 3**

**Evaluation of the effectiveness of a free throw at the beginning of the experiment**

N	Role players	Number players	Total hits		Average hits		% hits	
			Nam.reg.	AGM	Nam.reg.	AGMK	Nam.reg.	AGM
1.	center	6	51	54	17,0±0,1	18,0±0,1	58,6	60,0
2.	forwards	12	106	116	17,6±0,1	19,3±0,1	58,8	64,4
3.	defenders	12	108	118	18,0±0,2	19,6±0,1	60,0	65,5
4.	total	30	265	288	17,6±0,3	19,2±0,3	58,8	64,0

At the end of the experiment, the hit rates increased in the two teams (see Table 4). The AGMK team hit on average 23.1 times, 77.1%, which is 3.9 hits more, the Namangan region hit 21.0 times, 70%, which is 3.4 hits more. The difference in indicators is 2.1 hits. The reliability of the differences in favor of the AGMK team was noted.

The performance test did not change the performance of centers, forwards and guards. Among the centers, the indicators are as follows: at the beginning, AGMK 60.0% of hits, Namangan region 58.6% of hits, the difference in indicators is 1.4%. At the end of the experiment, AGMK 71.1%, Namangan region 64.4%, the difference in indicators is 6.8%. Among the attackers, the beginning of the experiment, AGMK hit 64.4%, Namangan region 58.8%, the difference in indicators is 5.6%; at the end of the experiment, AGMK had 77.2% hits, Namangan region 68.8%, the difference in indicators was 8.4%. The defenders have the following indicators: the beginning of the experiment, AGMK 65.5%, Namangan region 60.0%, the difference in indicators is 5.5%; at the end of the experiment, AGMK 80.0% hits, Namangan region 73.8% hits, the difference in indicators is 6.2%.

**Table 4**

**Evaluation of the effectiveness of a free throw at the end of the experiment**

No.	Role players	Number players	Total hits		Average hits		% hits	
			Nam.reg.	AGM	Nam.reg.	AGMK	Nam.reg.	AGM
1.	center	6	58	54	19,3±0,1	21,3±0,1	64,4	71,1

2.	forwards	12	124	139	20,6±0,1	23,2±0,2	68,8	77,2
3.	defenders	12	133	144	22,1±0,2	24,0±0,1	73,8	80,0
4.	total	30	315	347	21,0±0,4	23,1±0,5	70,0	77,1

A comparative analysis of the effectiveness of free throws showed significant differences at the end of the experiment in the two teams (see Table 5) and allows us to state that the use of a new evaluation approach to free throws made it possible to adequately assess the effectiveness of the technique.

**Table 5**

**Comparative analysis of the effectiveness of free throws**

Commands	Start of experiment	End of experiment
Namangan region	17,6±0,32	21,0±0,46*
"AGMK"	19,2±0,35	23,1±0,52*

**Note: \*- statistically significant differences, at P<0.05**

The efficiency of free throws by the players of the Namangan region team (lower qualifications) is correspondingly lower than that of the AGMK team, whose players are more qualified, due to the more stable psychological, physical and emotional state of the players, and having more playing practice.

Conclusions. A free throw is not only a way to score points, but also a means of psychological influence on the opponent. But success in free throws can only be brought by systematic training in them.

Analysis of literary sources and practical experience, as well as the results of our own research, allows us to note the existence of a complete relationship between the technique of performing a free throw and its effectiveness. The assessment of the technique of performing a free throw was the same and by the end of the experiment increased in the two teams, which served to increase the percentage of hits of players of various roles and teams as a whole. The use of the same free throw training methodology for teams of different qualifications led to a significant increase in the efficiency of free throws, which has been experimentally proven.

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