

Achievement motivation and its relationship to jump pass and jump shot in handball

Zahraa Fadel Abod^{1*}, Noor Hatem AlHaddad¹

¹ College of Physical Education and Sport Sciences for Women, University of Baghdad, Iraq.

² College of Physical Education and Sport Sciences for Women / University of Baghdad, Iraq.

* Correspondence: Ali Radhi Abdul Hussein; allitufaly1@gmail.com

ABSTRACT

The aim of this study was to identify the achievement motivation among players of Al-Bish Merka Handball Club and to determine its relationship to jump pass and jump shot in handball. The researchers used the descriptive approach in the associative relations method due to its relevance to the nature of the problem. The research community was chosen in a deliberate way and consisted of 12 players of the Al-Bish Merka Handball Club. The proportion of the research sample was 100% of the original community (12 handball players). The search data was processed through the Statistical Package for the Social Sciences (SPSS). The results indicated that the team players have an achievement motivation, as the significance value of the participants' motivation to achieve in sports compared to the test score or hypothetical value was $p = 0.05$. As for the relationship between the achievement motivation and passing and shooting accuracy in high jumping, our results indicated a statistically significant relationship between these variables. In conclusion, the handball players of the Al-Bish Handball Club enjoy this sport with an achievement motive. There is a positive relationship between achievement motivation and passing and shooting accuracy, which supports the need for success through shooting accuracy from jumping high to score points. We recommend paying attention to the psychological condition of the player, as it affects the motivation to perform. It is also important to study other psychological variables and know their relationship with handball skills.

KEYWORDS

Achievement Motivation; Passing; Shooting; Handball.

1. INTRODUCTION

Scientific progress is one of the advantages of our present age, as it includes the various aspects of life, including the mathematical aspect, which interacts with the natural and human sciences to prepare the individual in a comprehensive and balanced way to reach the highest levels in the chosen mathematical effectiveness. It also contributes to the development of all sports, especially handball, which require high physical skill and mental preparation.

One of the sports is the handball game, which contains a wonderful mixture of technical performance, which has evolved in its legal and tactical aspects and in the high levels of achievement of players, both physically and psychologically (Hussein & Nassif, 1987).

The handball game is one of the team games whose players are characterized by many mental abilities, physical qualities and skills. Therefore, it is necessary to improve and integrate the level of these abilities in order to achieve the best performance, as the psychological aspect is complementary to the skill side, which is the main axis in team building, so it is necessary to be accurate in performance and implementation. These skills are in line with the changes in the plans and the change in the rules of the game, which have made the pace of the game faster than the previous one, as this requires careful training commensurate with the game variables that occur at high speed, commensurate with the relatively small handball court (Zaid, 2008).

The coach can lead the player to the field, but he cannot obtain from him the best achievement unless he knows the initial motivation towards achievement and recognition of the confidence associated with the same player. Therefore, the importance of the research lies in the fact that achievement motivation is a driver of the handball player's behavior as a general trend for the handball player.

Given the importance of psychological factors for players in general and handball players in particular, as well as the physical and skill factors that contribute to building and preparing the player for advanced results, identifying all variables related to the player's psychology and physicality and their relationship to each other, is important for coaches to know and interpret cases of changes in their players' levels of performance. During the training process, the accuracy in shooting and passing from high jumping is one of the main factors in the victory of any team. Therefore, the purpose of this study is to identify the achievement motivation among players of Al-Bish Merka handball Club, and to determine the extent of the relationship between the achievement motivation and passing and shooting from high jumping. The study also aims to present scientific facts to the

coaches and specialists in handball about the type of some mental and physical abilities that affect the achievement.

2. METHODS

2.1. Study Design and Participants

The researchers used the descriptive approach in the associative relations method due to its relevance to the nature of the problem.

The research community was chosen in a deliberate way and consisted of 12 players of the Al-Bish Merka Handball Club. The proportion of the research sample was 100% of the original community (12 handball players).

2.2. Instruments and Materials

2.2.1. Test to measure the motivation for sports achievement (Allawi, 1998).

The researchers used the achievement motivation scale, which was designed by Joe Wells and was translated by Muhammad Hassan Allawi in 1998. The scale included 20 items and the expressions were organized as follows: 5 = a very large degree, 4 = a large degree, 3 = a medium degree, 2 = a small degree, 1 = a very small degree. The highest score was 100 and the lowest score was 20, and the hypothetical mean was 60 through these scores.

2.2.2. Passing and receiving and its accuracy on the wall (30 sec) (Mohsen, 2003)

- Objective of the test: to measure the ability of players to passing the ball with a double vision.
- Description of performance: the player stands in front of a double-walled wall with a distance of 4.5 m and carries a ball inside a square whose sides are 1 square m by taking 0.5 m from the estimated distance. The test begins when the coach gives the signal to start with the timing of 30 seconds. The player handles the ball continuously without the ball falling on the ground and on both sides of the wall once and right on the left until the end of the 30 seconds period. The coach gives an extra ball when any ball falls to the ground when handling on the wall.
- Registration: the number of consecutive manipulations is counted on the double-walled wall for a period of 30 seconds and continuously.

2.2.3. The high-jump shooting test (Al-Khayyat & Qasim, 1988)

- Objective of the test: to measure the accuracy of shooting from high jump.
- Tools used: handball goal, handball court, legal handballs, 4 iron squares measuring 60 x 60 cm, 7 bars.
- Description of performance: the student stands behind the first of the beams that are perpendicular to the direction of the target (the distance between the pillars is 1 meter). When the instruction is heard, the student performs the clapping between the pillars until he reaches the L area (9 m) and then jumps high over a barrier with a height of 40 cm. He shoots at the four hanging targets at the corners of the target, starting from the upper right corner, then the upper left corner, the lower right corner, the lower left corner and repeats the performance twice.
- Test administration: a registrar who calls the names of students and records the results.
- Registration: two scores are calculated when the ball enters any square, one score when touching the boundaries of the square, and zero if the ball is outside the square. The total score represents the total accuracy of the laboratory, which ranges between (0 - 16) degrees, as shown in Figure 1.

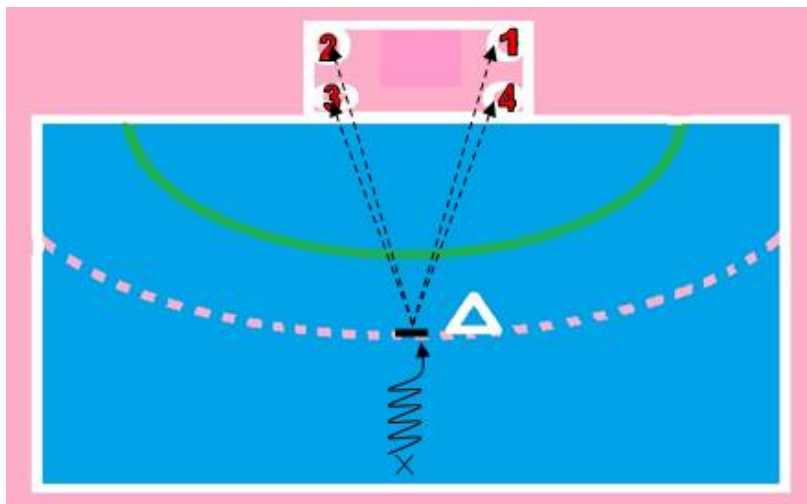


Figure 1. The shooting accuracy test from jumping high

2.3. Exploratory Experience

The researchers conducted the exploratory experiment on Monday, 8/1/2022, on a sample of 8 players from Al-Bish Merka Handball Club. The purpose of the exploratory experiment was to determine the time required to conduct the tests and to know the difficulties and obstacles.

2.4. Scientific Coefficient of Tests

2.4.1. Validity of the Tests

The validity of each of the two scales (achievement motivation) was verified through finding the content validity by presenting the scale to a group of experts and specialists in educational, psychological and physical education sciences in order to identify the suitability of the research sample. It was found that there is an agreement of 100% in all paragraphs.

2.4.2. Reliability of the Tests

For the purpose of making sure that the two scales obtained a high degree of stability, the researcher applied the test to a sample of 8 players on 8/1/2022. The test was re-applied after a week under the same conditions of the first test and on the same sample. The correlation coefficient of the results was calculated (Table 1).

Table 1. Reliability of the tests result

Test	Calculated value	Tabular value	p value	df
Achievement motivation	0.81	0.66	0.05	7
Self confidence	0.841			
Shooting from high jumping	0.738			

NOTE: df (degree of freedom) = 11; significance level = $p \leq 0.05$

2.4.3. Objectivity of the Tests

The current test was distinguished by the clarity and simplicity of its paragraphs. The data we obtain can be accurately interpreted, specific questions as well as its answer, and the sample members can understand its phrases and answer them easily without any ambiguity, which confirms the objectivity of the test.

2.5. Main experience

The researchers conducted their main experiment on the research community, where the motivation form and the performance of the handling and correction skills were distributed to the research sample.

2.6. Statistical Analysis

The search data was processed through the Statistical Package for the Social Sciences (SPSS). In order to analyze the hypotheses of the study, t-test was used. For the statistical tests, a p-value of <0.05 was considered statistically significant.

3. RESULTS AND DISCUSSION

We begin the presentation of results by determining the participants' motivation to achieve in sports (Table 2).

Table 2. The participants' motivation level to achieve in sports.

Scale	N	Hypothetical Mean	Mean	Standard deviation	t value	p value
Achievement motivation	12	60	77.16	9.44	28.92	0.05

NOTE: df (degree of freedom) = 11; significance level = $p \leq 0.05$

From the results of Table 2, the significance value of the participants' motivation to achieve in sports compared to the test score or hypothetical value is $p = 0.05$. This result shows us that the team players have an achievement motivation. The researcher attributes this to the success achieved by the players, which is the result of the cooperation of the coach and the surrounding environment, as winning the competition represents the player's internal motives that make him approach and pass the competitive position (Ratib, 2000).

The following table presents the relationship between achievement motivation and passing and shooting accuracy in high jumping (Table 3).

Table 3. The relationship between achievement motivation and passing and shooting accuracy from high jumping

Tests	Mean	Standard Deviation	Computed t-value	Tabular t-value
Achievement motivation	77.16	9.44	0.801	0.57
Passing	6.04	1.56		
Shooting from high jumping	7.41	0.66	0.650	

NOTE: tabular value (t) at a degree of freedom of $12 - 2 = 10$; significance level = $p \leq 0.05$

When calculating the computed t-value value of the test, the accuracy of shooting in high jumping with the achievement motivation test appeared with a value of 0.650, which is greater than the tabular t-value of 0.57. This result indicates a statistically significant relationship between the two tests. The researchers attribute this to the fact that the main goal of shooting is to score points and thus determine the outcome of the match by winning or losing (Hammouda & Dabour, 1995), and that achievement motivation has a positive relationship with shooting in high jumping, where the motivation to satisfy the need for success is associated with winning and achieving goals. This is indicated by the morality of the association.

4. CONCLUSIONS

In conclusion, the handball players of the Al-Bish Handball Club enjoy this sport with an achievement motive. There is a positive relationship between achievement motivation and passing and shooting accuracy, which supports the need for success through shooting accuracy from jumping high to score points. We recommend paying attention to the psychological condition of the player, as it affects the motivation to perform. It is also important to study other psychological variables and know their relationship with handball skills.

5. REFERENCES

1. Al-Khayyat & Qasim. (1988). *Handball*. Dar Al-Fikr for Printing and Publishing.
2. Allawi, M, H. (1998). *Encyclopedia of Psychological Tests*. Cairo: Book Center for Publishing.
3. Hammouda, M. K., & Dabour, Y. H. (1995). *Attacking in Handball*. Alexandria, Origin of Knowledge.
4. Hussein, I., & Nassif, A. (1987). *The Science of Sports Training*. Dar Al-Kutub for Printing.
5. Mohsen, S. A. (2003). *A suggested training curriculum and its impact on developing double vision on some handball passing skills*. Master Thesis, College of Physical Education, University of Diyala.
6. Ratib, O. Kamel. (2000). *Sports Psychology*. Cairo: Arab Thought House.
7. Zaid, N, A. (2008). *Fundamentals of Kinetic Learning*. Iraq: Dar Al-Diaa for Printing and Publishing.

Appendix 1 Achievement Motivation Scale

N	Phrases	Very large degree 5	Large degree 4	Medium 3	Little degree 2	Very little degree 1
1	I find it hard to sleep after losing a competition					
2	I like a player who trains for extra hours to improve his level					
3	When I make a mistake in performance during the competition, I need some time to forget this mistake					
4	Excellence in sports is not one of my primary goals					
5	I often feel afraid before I participate in the					

	competition directly					
6	Enjoy taking on any mission that some other players find difficult					
7	I am afraid of losing the competition					
8	Luck leads to more victory than effort					
9	Sometimes when I lose in a competition it bothers me for days					
10	I am ready to train throughout the year without interruption in order to succeed in my sport					
11	I do not find it difficult to sleep the night of my participation in a competition					
12	Winning the competition gives me satisfaction					
13	I feel nervous before a sports competition					
14	I prefer to rest from training in the period after completing the official competition					
15	When I make a mistake in performance, it exhausts me throughout the competition period					
16	I have a very high desire to be successful in my sport					
17	Before I participate in the competition, I do not get caught up in thinking about what might happen in the competition or about its results					
18	I try my best to be the best player					
19	I can be calm in the moments immediately before the competition					
20	My goal is to be special in my sport					

AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

FUNDING

This research received no external funding.

COPYRIGHT

© Copyright 2022: Publication Service of the University of Murcia, Murcia, Spain.