International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 02, 2020
ISSN: 1475-7192

Some special physical abilities and their relationship to the skill of remote shooting with hand reel

Nahlah Sabeeh Obaid[1], Nawres Ahmed Abd Zaid, Manahil Abduljabbar Khazaal

Abstract---*Sports excellence indicates the intellectual and scientific advancement of society because it is the result of training based on science and experience for individuals who have physical fitness and physical characteristics and are distinguished from others by many of the qualities that lead them to the highest levels of optimal achievement, and handball is one of the sports that are widely practiced It occupies a good position as it is an interesting game, and the physical preparation with its various elements is the most important component of mathematical preparation in all games, including the game of handball and what it needs in implementing its skills to some special structural abilities, and because the handball game includes offensive and defensive skills, which varies in its needs to the types of abilities The special physical and appropriate skills of these skills, and among these skills the correction skill, which has a decisive role in handball matches. The importance of the research lies in the fact that it is an attempt to identify the relationship between some of the physical abilities of the remote aiming skill of handball among the players of the National Center for Sports Talent Care of the [2]Ministry of Youth and Sports of Iraq for handball at ages (16-17) years of handball in Iraq, with the exception of the Kurdistan Region for the 2018 sports season 2019, which is a reliable indicator in the process of training and selecting players in the handball game.*

Type of Paper--- *Review*

Keywords*: Physical abilities, Players, Handball game, Sports*

Definition of research:

Introduction and Importance of Research:

Research problem:

Much research has been interested in identifying the factors affecting sports performance to achieve the best results in general, as well as studying these factors by research and study as well, reaching the most accurate conclusions that it recommends for interest in developing these factors, and it is known that offensive skills in handball need physical abilities. In particular, these abilities must be employed to serve the nature of the skillful performance in handball, especially the long-range shooting skill, the subject of the study, and through the experience of the researchers in the field of the game, I noticed that some coaches rely on training physical abilities in general without training on the physical abilities of each skill, so this neglect The lack of training in special physical abilities and the lack of knowledge of the type and importance of each ability and the type of relationship to which it relates to the skill of remote shooting with handball has led to a lack of poor level and accuracy of scoring with handball, whether during training or competitions.

From here it becomes clear that the problem of identifying the relationship between some special physical abilities and their relationship to the skill of remote shooting with handball among the players of the National Center for Sports Talent Care of the Iraqi Ministry of Youth and Sports for handball at ages (16-17) years to ensure the proper selection of the best players in addition to Overcoming the followed selection process, which is mostly based on interest

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Department of Physical Education and Sports Sciences, Esraa University College, Iraq

and self-determination, or on the available previous experiences without resorting to the scientific foundations for selection. Therefore, the two researchers decided to conduct a study to try to identify the relationship between some of the physical abilities of the distant aiming skill of handball in a scientific method that is not subject to Coincidence factors, which serves coaches with their final results.

Research aims

- Determining the special physical abilities of the players of the National Center for Sports Talent Care of the Iraqi Ministry of Youth and Sports for handball at ages (16-17) years.
- Identify the relationship between some of the physical abilities of the distant shooting skill of handball among the players of the National Center for Sports Talent Care of the Iraqi Ministry of Youth and Sports for handball at ages (16-17) years.

Research areas

The human field:

Players of the National Center for Sports Talent Care, affiliated to the Iraqi Ministry of Youth and Sports, at ages (16-17) years old with handball in Iraq, with the exception of the Kurdistan Region for the 2018-2019 sports season.

Temporal domain:

The study was conducted for the period from 12/20/2019 to 2/28/2020 AD.

Spatial domain:

The tests were conducted in the closed hall of the National Center for Handball Sports Talent, affiliated to the Ministry of Youth and Sports / Palestine Street - Baghdad.

Research methodology and field procedures:

Research Methodology

The two researchers used the descriptive method in the survey method for its suitability to the nature of the problem and to achieve the objectives of the study.

The research sample

The research sample was chosen by the deliberate method, which included the players of the National Center for Sports Talent Care of the Iraqi Ministry of Youth and Sports for handball ages (16-17) years old with handball in Iraq, with the exception of the Kurdistan Region for the 2018-2019 sports season, and the number of players reached (181) Players representing the total research community by (8) active centers all over Iraq. (130) players were selected as a sample for the study, with a percentage of (71.823%) from the total research community, of which (8) players represent the pilot experiment sample that was excluded from the sample The main work and thus the work settled on the final work sample of (122) players.

Methods of data collection:

Arab and foreign references, the international information network (the Internet), tests and measurements, a questionnaire form for professors and specialists to determine the most important physical abilities of handball, a questionnaire form for professors and specialists to determine the most important physical tests, an individual registration form for tests, a medical ball weighing (3 kg), a tape Metric measurement, hand-held electronic stopwatches (CASlO), count (3), four signs, a whistle.

Determining the physical abilities of the handball:

The two researchers put forward a questionnaire to survey the opinion of experts in the field of tests and measurement and in the field of handball for the purpose of determining the most important physical abilities related to the skill of remote shooting in the game of handball. And the explosive power of the two men, agility, and the distinctive strength of the velocity of the arms, the distinctive strength of the velocity of the two men, and the transitional velocity) after the special physical abilities that did not obtain the acceptance rate of experts and specialists were excluded.

Determining the candidate special physical abilities tests:

The two researchers nominated a group of (18) tests with scientific treatments, all of them given that they were mentioned in scientific references in addition to applying most of them to the Iraqi environment, and in order to determine the most important physical tests that measure the physical abilities of handball, a questionnaire was presented Experts in the field of testing and measurement and in the field of handball, and after collecting the forms, emptying the data and excluding the physical tests that did not obtain the acceptance rate of experts and specialists, work has settled on (6) physical tests that are candidates for the application are:

- Throwing a 3 kg medicine ball farther away (Martin 1998: 17: 20).
- The broad jump from stability (Mustafa and Salah 2000: 9: 80).
- Zig Zag (shuttle jogging) (Hassanein 2000: 10: 329).
- Arm bending and extension (Shenaw), the maximum number in (10) seconds (Qais and Bastawisi 1987: 7: 347).
- A slanted recline from standing (for boys and girls from 9 to 17) on (30) s (Hassanein 2000: 10: 250).
- .He ran 30 m from the moving start (6) (Hassanein 1995: 11: 381).

Remote Shooting Hand Reel Skill Test:

The two researchers selected the shooting accuracy test (Kamal and Hasanin 2002: 8: 187) to measure the long shot skill in the handball game.

The scientific basis for all tests:

Validate tests:

Through the two researchers presenting questionnaires to the experts for each of the special structural abilities, the physical tests and the skill of remote aiming with handball, they obtained (the validity of the content) for all the variables of the study, and they also calculated the (self-validity) which is equal to the root of the stability coefficient for the tests of special physical abilities. And the test of the skill of remote correction with the hand ball, as is evident from Table (1), and it is noticed that all of them are characterized by self-validity.

Stability Tests:

The two researchers used the (test and re-test) method (Thaer Dawood 2020: 2: 189). Candidate tests were conducted on a group of (8) players from the National Center for Sports Talent and Handball, and then the test was repeated after (4) Days, and the value of the simple correlation coefficient of Pearson was calculated between the results of the first and second tests, and it was found that all the tests have a high degree of stability due to the fact that all their calculated values, which have a significance level (Sig), are smaller than the approved level of significance of (0.05), as shown in the table. (1).

Objectivity of the tests:

The two researchers sought the help of two judgments for the results of the candidate tests for application in the second measurement of the exploratory experiment, and by using the simple correlation coefficient of Pearson between the scores of the two judgments, it was concluded that all the tests were of high objectivity due to the fact that all of their calculated values, which have a level of significance (Sig) smaller than the level of significance The amount of (0.05) is also shown in Table (1).

Table (1) shows the validity, consistency and objectivity of all tests of special physical abilities and the test of the skill of remote aiming with hand reel

No	the exams	Self-honesty	Persistence	Sig	Objectivity	Sig
1	Throwing a medicine ball weighing 3 kg as far as possible	0.912	0.832	0.00	0.926	0.00
2	The broad jump from stability	0.918	0.844	0.00	0.972	0.00
3	Zigzag jogging	0.916	0.840	0.01	0.933	0.00
4	Arm bending and extension (chinow), the maximum number in (10) seconds	0.914	0.836	0.00	0.924	0.00

5	Leaning recline from standing (for boys and girls from 9 to 17) on (30) seconds	0.900	0.811	0.02	0.910	0.00
6	He ran 30 m from the moving start	0.909	0.827	0.00	0.926	0.00
7	Aim accuracy	0.940	0.885	0.00	0.989	0.00

Main experience:

The main experiment was conducted on the main sample of (122) athletes from the National Center for Sports Talent Care with Handball. Special physical abilities tests were conducted and applied and the skill of remote shooting with handball was tested on all of them.

Statistical means:

The statistical data was processed by the ready-made program (IBM SPSS Statistics Ver 25) and the following was extracted:

- The arithmetic mean.
- Mediator.
- Standard deviation.
- Coefficient of torsion.
- Pearson's simple correlation coefficient.
- Presentation and discussion of the results

Specifications of the special physical abilities tests and the test of the skill of the remote aiming of the hand reel: The two researchers extracted the arithmetic averages, standard deviations, the median value and the value of the torsion coefficient for all physical tests and the test of the accuracy of shooting with handball, as shown in Table (2).

Table (2) The arithmetic averages, standard deviations and the value of the torsion coefficient for tests of special physical abilities and the skill of remote aiming with handball.

No	the exams	Arithmetic mean	Mediator	standard deviation	Coefficient of torsion
1	Throwing a medicine ball weighing 3 kg as far as possible	10.212	10.300	0.613	0.483 -
2	The broad jump from stability	2.027	2.000	0.355	0.125 -
3	Zigzag jogging	15.702	15.650	0.165	0.463 -
4	Arm bending and extension (chinow), the maximum number in (10) seconds	8.663	9.000	0.474	0.703 -
5	Leaning recline from standing (for boys and girls from 9 to 17) on (30) seconds	23.598	25.000	2.701	0.144 -
6	He ran 30 m from the moving start	3.846	3.850	0.053	0.428 -
7	Aim accuracy	5.204	5.000	0.759	0.364 -

Presentation and discussion of the correlation between the tests of special physical abilities with the test of the skill of remote aiming with handball:

The correlation relationship between the tests of special physical abilities was calculated with the test of the distant aiming skill with the hand ball, and a matrix of inter-correlation coefficients was obtained for them, as shown in Table (3), and it is noticed that all the values of the calculated correlation coefficients (R) all had p-value. And which is symbolized by the symbol (Sig), which is smaller than the approved and predetermined value of (0.05), which indicates that all of them enjoy the moral and the existence of a significant correlation between all physical abilities tests of the distant aiming skill test with handball.

Table (3) Matrix of inter-correlation coefficients for tests of special physical abilities with
A test of the precision of remote aiming with a hand wheel

the exams	Accuracy of remote shooting with hand pulley	Sig	Indication
Throwing a medicine ball weighing 3 kg as far as possible	0.764	0.000	moral
The broad jump from stability	0.812	0.000	moral
Zigzag jogging	0.790	0.000	moral
Arm bending and extension (chinow), the maximum number in (10) seconds	0.775	0.001	moral
Leaning recline from standing (for boys and girls from 9 to 17) on (30) seconds	0.782	0.000	moral
He ran 30 m from the moving start	0.810	0.000	moral

The two researchers note that the existence of the moral correlation between all the physical abilities of the far handball skill is a logical result because the physical tests are tests that measure the special physical abilities (the explosive strength of the arms, the explosive strength of the two legs, agility, and the distinctive strength of the speed of the arms, and the distinctive strength. With speed for the two men, and transitional speed), which requires special exercises as well, and this is consistent with what was mentioned (Abd Ali and Sabah 1988), "Special exercises should not be seen as a precaution, but rather a good method with multiple requirements for physical and skill" (Abd Ali And Sabah 1988: 4:35).
That the findings of the two researchers is consistent with what (Najwa Suleiman and Thanaa Al-Sayed 1991) indicated, that "the (physical) movement capabilities are one of the basic pillars on which the skill preparation depends on the various activities, as there is a relationship between the motor abilities and the level of skill performance, and that these levels differ The relationship according to the type of sports activity practiced, and accordingly, the individual's possession of a high level of movement ability indicates that this individual has a degree of ability to successfully practice sporting activity "(Najwa and Thanaa 1991: 15: 23).

It also agrees with his mention (Muhammad Hassan Allawi 1994), "The development of physical capabilities is related to the level of motor performance in various activities" (Allawi 1994: 13: 80).

It also agrees with what was indicated by (Hassanein 1996: 12: 31) and (Naji 1991: 16: 50) that explosive power training increases motor performance in the type of activity practiced, as a result of an increase in the ability of muscles to contract at a faster rate when performing Successive movements and this ability includes strength mixed with speed and is important in the movements of the jump and push and others. It also agrees with what (Khair al-Din Ali and Izzat Mahmoud 1985 cited in Uzulin) indicated that "special exercises are those aimed at developing the physical and psychological characteristics associated with the chosen type of sporting activity, as well as teaching the techniques associated with that activity" (Khair El-Din and Izzat 1985: 3: 90).

It also agrees with what was stated by (Muhammad Hassan Allawi 1978) "that special structural exercises aim to strengthen the muscles that play the main role in the type of specialized sporting activity, and within this scope includes various exercises that are similar in their motor formation to the movements performed by the individual" (Allawi 1978: 103: 14).

It also agrees with what was stated (Aisha Rizk Khairy 1993) that "the elements of physical fitness are closely related to the performance of the motor skill and require physical abilities to achieve it" (Aisha 1993: 5: 236), and agrees with what he mentioned (Allen Wadih 1990). The development of physical abilities enables the athlete to perform the motor performance of the skill in the best possible way (Allen 1990: 1: 219).
It also agrees with what was indicated by (Essam Abdel Khaleq 1994), "The motor performance of the skill depends on the special physical abilities" (Essam 1994: 6: 128).

Conclusions and recommendations
Conclusions

- There was a correlation between the characteristic (explosive power of the arms) with the distant scoring skill of handball among the players of the National Center for the Care of Sports Talent in Handball.

- There was a correlation between the characteristic (explosive power of the two men) with the distant scoring skill of hand reel among the players of the National Center for the Care of Sports Talent in Handball.
- There was a correlation between the adjective (agility) and the distant scoring skill of handball among the players of the National Center for the Care of Sports Talent in Handball.
- The existence of a correlation between the characteristic (the distinctive strength of the speed of the arms) with the skill of remote scoring with handball among the players of the National Center for the Care of Sports Talent in Handball
- The existence of a correlation between the characteristic (the distinctive strength of speed for the two men) with the distant scoring skill of hand reel among the players of the National Center for the Care of Sports Talent,
- There was a correlation between the adjective (translational velocity) and the distant scoring skill of handball among the players of the National Center for the Care of Sports Talent in Handball.

Recommendations

- It is necessary to use the special physical abilities tests that were related to and related to the skill of far-sighted with the hand ball when training and teaching effectiveness.
- Conducting similar studies and other skills not covered in the current study in the field of handball.
- Conducting similar studies on age groups and other levels that are not covered in the current study and for both genders in the field of handball.
- Conducting similar studies in the functional, physiological, biomechanical, and psychological aspects related to the skill of far-fetched aiming with the hand ball.

References:

1. Aline Wadih Farag; Volleyball, the teacher's guide, the coach and the player: (Knowledge facility in Alexandria, 1990).
2. Thaer Dawood Salman Al-Qaisi; Statistical Methods for Calculating the Validity and Validity of Tests and Standards Using IBM SPSS Statistics Version24, Edition 1: (Amjad Publishing and Distribution House, Amman, Jordan, 2020).
3. Khair al-Din Ali Owais and Izzat Mahmoud Adel Kashif; The Impact of a Proposed Program for Special Exercises on the Advancement of the Digital Level of the Triple Jump, Journal of Physical Education Research, College of Physical Education for Boys - Zagazig University, Volume Two, Issue (3, 4), 1985.
4. Abd Ali Nassif, Sabah Abdi; Skills and Training in Weight Lifting: (Higher Education Press, Baghdad, 1988).
5. Aisha Rizk Mustafa; The effect of circular training on the physical and skill levels of junior basketball: (Cairo, Journal of Sports, Sciences and Arts, College of Physical Education for Girls, 1993).
6. Essam El-Din Abdel-Khaleq Mathematical Training Theories and Applications: (Dar Al Maaref, Alexandria, 1994).
7. Qais Naji Abdul-Jabbar and Bastawisi Ahmed; Tests and Principles of Statistics in the Mathematical Field: (Higher Education Press, Baghdad, 1987).
8. Kamal Abdel Hamid Ismail - Mohamed Sobhi Hassanein; the Modern Handball Quad, Part 2: (Book Center for Publishing, 2002).
9. Mustafa Al-Sayeh and Salah Anas; the European Exam for Physical Fitness (Euro Fit), Edition 1: (Cairo: Radiant Art Library and Press, 2000).
10. Mohamed Sobhi Hassanein; Measurement and evaluation in physical education and sports: Part 2, i 4: (Dar Al-Fikr Al-Arabi, Cairo, 2000).
11. Mohamed Sobhi Hassanein; Evaluation and measurement in physical education and sports, 3rd Edition: (Cairo, Arab Thought House, 1995).
12. Mohamed Sobhi Hassanein; Factual analysis of physical abilities in the fields of physical education and sports, Edition 2: (Dar Al-Fikr Al-Arabi, Cairo, 1996).
13. Muhammad Hassan Allawi; Sports Training Science, 13th Edition: (Dar Al Maaref, Cairo, 1994).
14. Muhammad Hassan Allawi; The Science of Sports Training, Sixth Edition: (Dar Al Maaref, Egypt, 1978).

15. Najwa Suleiman and Thanaa Al-Sayed; The relative importance of some complex abilities that contribute to the selection of basketball beginners: (A group of master's and doctoral theses in physical education, Al-Rowad Press, Baghdad, 1991).
16. Naji Asaad; Plyometric Training: (The Scientific Journal of Physical Education and Sports Sciences, Bahrain Sports Institute, Second Issue, 1991).
17. Martin. Lee, Coaching Children in Mini - Basketball, FIBA Mini - Basketball, Hertford shire SG8 5NB, United Kingdom, 1998.