

DESIGN AND RATIONING OF A TEST TO MEASURE THE ACCURACY OF SHOOTING BY JUMPING FORWARD FROM THE GOAL AREA LINE AS A RESULT OF THE QUICK ATTACK OF HANDBALL PLAYERS

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Abstract

The purpose of this paper is to design and standardize a test to measure the accuracy of shooting by jumping forward from the goal area line as a result of a quick attack for handball players and to find its standard levels, and the design of an iron tool that is attached to the goal to measure the accuracy of the shooting in a frontal view. The descriptive approach was used in a survey method for the teams of clubs participating in the Iraqi Handball League (the community of origin), to find a solution to the research problem, which numbered (12) clubs, and they are: (Al-Karkh, Al-Shorta, Al-Jaish, Al-Musayyab, Karbala, Al-Fatwa, Sulaymaniyah, Al-Kut and Al-Daghara clubs, and the Basra municipality, Diyala and Al-Khaleej Club are represented by (137) players, while the research sample was represented by (10) players of their clubs, and their number reached (110) players, with a percentage of (80.3%). One of the most important results reached by the researcher is that: Through the foregoing, the researcher concluded that the tool designed for use in the study is valid to measure what it was designed for and performed the duty well. He also concluded that the designed test has become standardized and can be used easily and easily, and this test can be considered an objective test as it is more realistic and fits the nature of The player's performance during the match, as well as reaching the standard levels for this test that allows coaches and researcher to stand on the real level of the players. One of the most important recommendations recommended by the researcher is that: The researcher recommend: that this test and this tool should be used by trainers and researcher in the future because this test is a real standard that reflects the player's shooting accuracy level, and future tests can be codified to measure the accuracy of shooting for other types of shooting and on different samples of women or different age groups using this tool.

Keywords: Sports Psychology. Sports exercise. Individual rapid attack. Close shooting. Measuring tool accuracy of the shooting. Standard levels

Introduction

The handball game is one of the favorite team games for the souls of its practitioners and fans at the same time, as handball players are characterized by manly play because they enjoy the elements of strength and speed in particular. The basic offensive and defensive skills alike, offensive skills, as it is known, are found to serve the players, as these players seek to score goals to win matches, by advancing to the opposing team's court, reaching the goal successfully, and shooting to resolve the team members' work in a successful and effective manner. Including the far-shooting from outside the free-throw area line, in which the player uses the vertical jump up to the presence of defenders in front of him who form a barrier or wall between him and the goal, the purpose of this type is to shoot from above these defenders, or it can be performed from stability or from

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walking and running without He jumped because there is a gap in the defense in front of the player who holds the ball, exploits it and shoots suddenly at the goal to score a goal. The second type is shooting close to the area line the goal, by jumping forward, especially from both sides of the field (wings), as this type of shooting is used by jumping forward and higher because there is no defender in front of him, and his success depends on the rapid penetration of the defenses of the opposing team. To the (upfront) towards the playing field, and the reason for this is to open or reveal the angles of the goal in front of him appropriately and to have his eyes on the goal to choose an area free from the goalkeeper's control appropriately while he is in the air, to deposit the ball finally in the goal before landing, and Nada Radi sees "after receiving the ball - Approaching steps, which help in the strength of getting up or going up with the leg opposite to the throwing arm, and in the air the trunk is turned to the right and aimed" (Nada Rady Kashash. 2012).

Therefore, it has become necessary for coaches to rely on this stage of the attack in which their players use this type of shooting. The player's reliance on his physical and skill capabilities is not enough if his movements are not translated in the end by entering the ball into the goal and scoring a goal, and here the accuracy of the correction plays an important and decisive role for the success or The failure of the attack, the player choosing the appropriate place to shoot in the goal successfully is called accurate shooting. As it requires the player to be characterized by his ability to hit the goal accurately. Accuracy "is the ability of the individual to direct the movements made by the individual towards a specific goal": (Ali Salloum Hakim. 2004)

In order to reach the higher levels of athletes in general and handball players in particular, it has become a duty for coaches to work hard to raise the level physically and skillfully through training during the preparation stage and before entering the competition stage in particular, and to stand on the general level of athletes at this particular time, as the tests are the most important a means of identifying the player's level and detecting weakness and imbalance and contributing to his evaluation. Therefore, tests and measurements are the true mirrors to shed light on the various human elements, as it is then easy to direct them to the physical activities that suit their capabilities, so they have contributed to placing the appropriate capabilities in the appropriate activity for them, so the chance of success, genius and excellence increases" (Muhammad Sobhi Hassanein, 1995). Therefore, it has become necessary for there to be specially standardized tests to measure some of the abilities,

kinetic abilities and basic skills of handball players, in particular those complex tests that combine two characteristics or two skills or a physical attribute and a basic skill or a certain kinetic ability, and one of the most important of these handball skill is the accuracy of Shooting close to the goal area line as a result of the quick attack, hence the importance of this study, to be a contribution from us to serve the game in Iraq.

Research problem

Through our personal follow-up to the handball matches and the continuous attendance of some training units for some Iraqi handball clubs, and from the personal experience that we possess, it was noted that there is a reluctance to translate the quick attacks from them into goals, as most of them end with losing the ball in favor of the opposing team, but some of them become a quick attack against the team results in a goal for the opposing team. All of this is due to shooting at the goal without focus and most players lack accuracy in hitting the goal, especially at the beginning of the season. If such tests are found, they may be outdated and useless and do not meet the ambition. Hence the problem of the research, that is why we decided to create a new test that measures the accuracy of shooting and the accuracy of shooting by jumping forward from the goal area line for handball players to contribute to the service and support of handball coaches, researcher and graduate students in the use of such modern tests to keep pace with the development of the level of the game in the world.

Research objective

To design and standardize a test to measure the accuracy of shooting by jumping forward from the goal area line as a result of a quick attack for handball players and to find its standard levels, and the design of an iron tool that is attached to the goal to measure the accuracy of the shooting in a frontal view.

Research fields

- Human field: Players of the clubs participating in the Iraqi Handball League.
- Time field: (2/9/2019) to (20/11/2019)
- Spatial field: Halls and stadiums for sports teams research sample.

Research Methodology and Field Procedures

Research Methodology

The descriptive approach was used in a survey method for the teams of clubs participating in the Iraqi Handball League

Community and sample research

The community of origin), to find a solution to the research problem, which numbered (12) clubs, and they are: (Al-Karkh, Al-Shorta, Al-Jaish, Al-Musayyab, Karbala, Al-Fatwa, Sulaymaniyah, Al-Kut and Al-Daghara clubs, and the Basra municipality, Diyala and Al-Khaleej Club are represented by (137) players, while the research sample was represented by (10) players of their clubs, and their number reached (110) players, with a percentage of (80.3%).

Experimental experiments

The test was initially designed on paper until a preliminary design was reached on (28-8-2019) on a sample of five players representing Al-Daghara Club on (2-9-2019). A tool of our design was used to measure the accuracy of the goal, consisting of Four iron squares separated from some of their dimensions (50 * 50), at the top of the two sides of the goal, and (50 * 84), in the middle of the two sides of the goal, and (50 * 50) at the bottom of the two sides of the goal, attached and fixed inside the goal structure representing the shooting areas with six-goal angles, As shown in Figure (1), As the player receives the ball from the colleague in the middle of the field and attacks at full speed and when he reaches the goal area line he jumps and shoots the ball the player repeats this process twice in a row, and there is a positive rest between one repetition and another of ten seconds represented by jogging back to the middle of the field, through that the researcher found that their performance It was more than good, and this is due, according to our opinion, to the ease of the test, and in order to make the test somewhat difficult because we feel that it is very easy, it was carried out on (20-9-2019) by conducting another experiment on the same sample, but this time the tool for measuring the accuracy of the shooting differed, as the player in This time he shoots at the goal (12) balls instead of (8), and the total score that the tester must obtain from the test is (64), for our opinion to settle on this, and a handball court was used, And (12) legal handballs, a plastic stick (funnel) number 4, a whistle, a questionnaire, a camera (cannon, a lenovo computer) to analyze the results statistically using the (spss) system. Statistical means were used representing percentage - arithmetic mean - standard deviation - skew coefficient - (T) test for independent samples - simple correlation coefficient - standard degrees - modified standard degrees. A questionnaire was conducted for the handball players, the research sample, to take their opinion in terms of the ease and difficulty of the six shooting areas from their point of view during the quick attack, and the results were as shown in Table 1 (Table 1).

The scientific foundations of the test were extracted, represented by honesty, stability and objectivity, as the discriminatory honesty of the test was calculated as shown in Table (3), and the test reliability was calculated through the correlation coefficient of the test and re-test on the research sample, Table 2, and the objectivity of the test was reached from During calculating the correlation coefficient for the results of the arbitrators' reading, and in this type of tests, the arbitrators' reading is often identical because it counts the ball's entry into the shooting areas (shooting accuracy) in a clearly visible manner and the arbitrators' opinions cannot differ from it, in addition to the presence of a camera facing the goal that documented this process and was developed as a procedure Secondary and precautionary only, so the value of the correlation coefficient (1) was recorded, as shown in Table 2 to match the readings (Table 2).

Table 1: Shows the percentage of difficulty and ease of accuracy of jumping in front of the goal angles from the point of view of handball players, the weight of the degree and the arrangement of the areas in the goal.

No	Angles by sides	handball players		weight (degree)	angle arrangement
		Ease of shooting	Difficulty shooting		
1	upper left corner	87%	13%	3	1
2	middle left	36%	64%	5	3
3	lower left corner	21%	79%	6	2
4	upper right corner	89%	11%	2	4
5	middle right	69%	31%	4	6
6	lower right corner	11%	89%	7	5

Table 2: Shows the scientific bases of honesty, stability, and objectivity to test the accuracy of shooting by jumping forward from the goal area line as a result of a quick attack by handball players.

Scientific foundations	Correlation coefficient	Level sig	Type sig
Stability	91.76**	0.000	Sig
objectivity	**1	0.000	Sig

For the purpose of obtaining the discriminatory power, the raw scores of the sample were arranged in descending order to obtain the discriminatory power as shown in Table 3, and it was found that there are significant differences and that the test distinguishes between the members of the sample (Table 3).

Test form Final

- Test name: A test to measure the accuracy of shooting by jumping forward from the goal area line as a result of a quick attack by handball players.
- The objective of the test: To measure the accuracy of shooting by jumping forward from the goal area line as a result of a quick attack by handball players.
- Tools: a handball pitch, a handball goal, (12) handballs, (4) signposts, a whistle, a stopwatch, a precision shooting tool, which is in the form of two rectangles made of a hollow iron frame with a thickness of (8 cm²), similar to the thickness of the goal structure, their total length (2 m) and width (66 cm) this from the outer edge, and it consists of six shooting areas, three of which are connected to each other and are installed on the left side of the first rectangular goal, and the other is installed on the right side of the goal, and each of them is divided into three square shooting areas at the top And another below, its dimensions are from the inner edge of the tool (50 x 50 cm), and the remaining area in the middle is a rectangular shape, its dimensions from the inner edge (50 x 84 cm), as in Figure (1), the player repeats the previous process twice, but the shooting process must be in sequence from Shooting area No. (1) in the goal to area No. (6) in the goal, taking a positive rest between one shot and another for a period of (15 seconds), which is the distance that they cross jogging from the goal area after shooting until it reaches the Bada area on the midline, to start the process of rapid progression to perform the next shooting process and another positive rest between the two repetitions of (25 seconds) (Figure 1).

Method of performance

The tester stands on the right side of the stadium, the first starting area, on the midline, at the person carrying the ball, and when he hears the whistle from the test supervisor who is standing in the middle, to provide him with balls as well, he advances as quickly as possible through the ball patting towards the goal, and when he reaches the goal area line in place. Shooting (the area limited to three meters in front of the goal) determined by two people on the ground (the shooting zone), the laboratory carries the ball and shoots it by jumping forward in the first shooting area on the goal and returns with a light jog to the starting point, as this trot is considered a positive rest between each repetition and another, the process is repeated six times in a sequence over the six shooting areas, as shown in Figure 1, then He takes a positive rest of (30) seconds to repeat the same process from the second court after hearing the whistle so that the number of shooting times on the goal becomes (12) times as shown in Figure 2 (Figure 2).

Conditions

- The attempt is considered a failure if the tester touches the goal area line, and it is not counted.
- You must aim from the area designated for shooting between two people.
- If he advances with the ball without a plumb, the attempt is considered a failure, and it is not counted.

Table 3: Shows the arithmetic mean, standard deviation and T value of the test of shooting accuracy by jumping forward from the goal area line as a result of a quick attack by handball players.

Variables	lower group		upper group		T value calculated	Level Sig	Type Sig
	arithmetic mean	standard deviation	arithmetic mean	standard deviation			
A test of measuring the accuracy of shooting by jumping forward from the goal area line as a result of a quick attack by handball players.	20.2	6.74	51.97	4.33	-24.458	000.	Sig

Table 4: Shows the mean, standard deviation and skew modulus of the test sample.

Test	Arithmetic mean	standard deviation	Coefficient of torsion
	36.8091	14.27418	0.283-

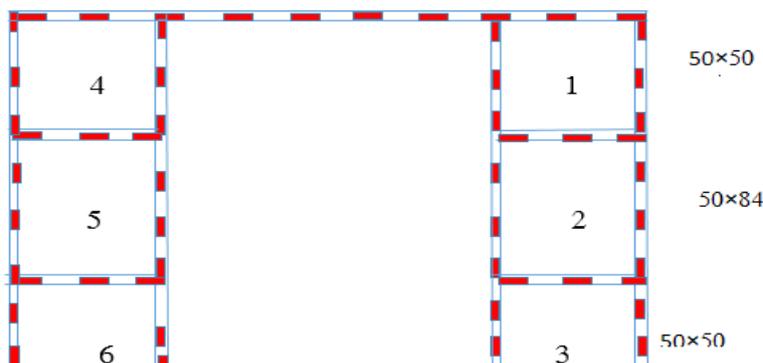


Figure 1: Shows a precision shooting tool attached to a handball goal.

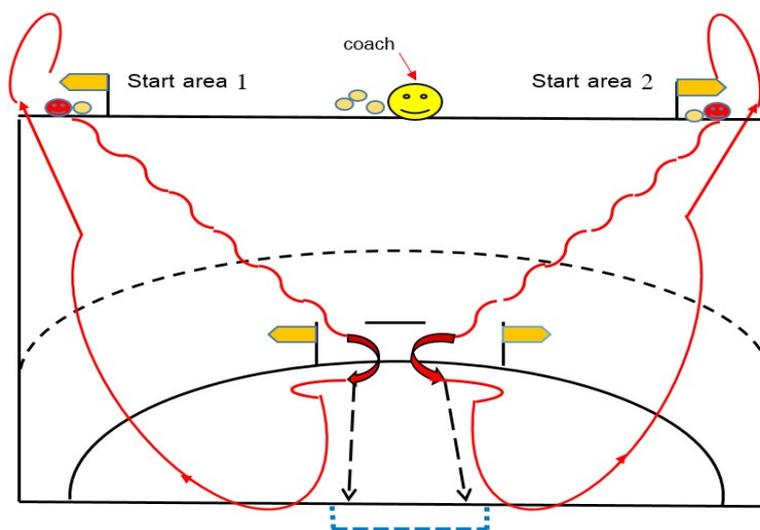


Figure 2: Shows the path of the laboratory in the test from both sides of the playing field.

- He must advance as quickly as possible and shoot hard at the goal, and the attempt is not considered a failure and is not counted.
- The balls must be shot at the shooting areas sequentially from area No. (1) to area No. (6).
- If the ball enters the first area, the laboratory will be awarded a score of (3).
- If the ball enters the second zone, the laboratory will be awarded (5) points.
- If the ball enters the second zone, the laboratory will be awarded (6) points.
- If the ball enters the second zone, the laboratory will be awarded a score of (2).
- If the ball enters the second zone, the laboratory will be awarded a score of (4).
- If the ball enters the second zone, the laboratory will be awarded a score of (7).
- If the ball bounces from the structure of the tool from the inside, the laboratory is awarded (1) score.
- If the ball rebounds from the structure of the tool from outside the side of the crossbar or the column or from the structure of the goal or (it did not enter the area designated for it according to the sequence and entered another area) or went outside the field, the tester shall not be awarded any score.

Results and Discussion

The arithmetic mean, standard deviation, and skewness coefficient were calculated for the sample members. The skew coefficient is considered as an indicator in the sample distribution and spread for the test under study as shown in Table 4 (Table 4).

The standard degree of the test was calculated, and for the purpose of eliminating the negative signs in it, the modified standard degree was calculated as shown in Table 5 (Tables 5-7).

Then the normal curve of degrees was divided into five levels, as shown in Figure 3 (Figure 3).

Table 5: Shows the raw scores, normative scores, and the modified normative scores for the test.

No	Raw grade	Standard score	Modified standard	No	Raw grade	Standard score	Modified standard	No	Raw grade	Standard score	Modified standard
1	61.00	1.69473	66.95	38	46.00	.64388	56.44	75	29.00	-.54708	44.53
2	60.00	1.62468	66.25	39	46.00	.64388	56.44	76	29.00	-.54708	44.53
3	60.00	1.62468	66.25	40	44.00	.50377	55.04	77	29.00	-.54708	44.53
4	59.00	1.55462	65.55	41	44.00	.50377	55.04	78	28.00	-.61713	43.83
5	58.00	1.48456	64.85	42	44.00	.50377	55.04	79	28.00	-.61713	43.83
6	57.00	1.41451	64.15	43	44.00	.50377	55.04	80	28.00	-.61713	43.83
7	57.00	1.41451	64.15	44	43.00	.43371	54.34	81	28.00	-.61713	43.83
8	56.00	1.34445	63.44	45	43.00	.43371	54.34	82	27.00	-.68719	43.13
9	56.00	1.34445	63.44	46	42.00	.36366	53.64	83	27.00	-.68719	43.13
10	55.00	1.27439	62.74	47	42.00	.36366	53.64	84	26.00	-.75725	42.43
11	54.00	1.20434	62.04	48	42.00	.36366	53.64	85	25.00	-.82730	41.73
12	54.00	1.20434	62.04	49	41.00	.29360	52.94	86	22.00	-1.03747	39.63
13	54.00	1.20434	62.04	50	41.00	.29360	52.94	87	22.00	-1.03747	39.63
14	54.00	1.20434	62.04	51	39.00	.15349	51.53	88	22.00	-1.03747	39.63
15	54.00	1.20434	62.04	52	39.00	.15349	51.53	89	21.00	-1.10753	38.92
16	52.00	1.06422	60.64	53	39.00	.15349	51.53	90	21.00	-1.10753	38.92
17	52.00	1.06422	60.64	54	38.00	.08343	50.83	91	19.00	-1.24764	37.52
18	51.00	.99417	59.94	55	38.00	.08343	50.83	92	19.00	-1.24764	37.52
19	51.00	.99417	59.94	56	38.00	.08343	50.83	93	18.00	-1.31770	36.82
20	51.00	.99417	59.94	57	38.00	.08343	50.83	94	18.00	-1.31770	36.82
21	51.00	.99417	59.94	58	38.00	.08343	50.83	95	18.00	-1.31770	36.82
22	51.00	.99417	59.94	59	38.00	.08343	50.83	96	17.00	-1.38776	36.12
23	50.00	.92411	59.24	60	38.00	.08343	50.83	97	17.00	-1.38776	36.12
24	49.00	.85405	58.54	61	36.00	-.05668	49.43	98	17.00	-1.38776	36.12
25	49.00	.85405	58.54	62	36.00	-.05668	49.43	99	17.00	-1.38776	36.12
26	49.00	.85405	58.54	63	35.00	-.12674	48.73	100	16.00	-1.45781	35.42
27	49.00	.85405	58.54	64	35.00	-.12674	48.73	101	15.00	-1.52787	34.72
28	49.00	.85405	58.54	65	34.00	-.19680	48.03	102	13.00	-1.66798	33.32
29	48.00	.78400	57.84	66	34.00	-.19680	48.03	103	13.00	-1.66798	33.32
30	48.00	.78400	57.84	67	34.00	-.19680	48.03	104	12.00	-1.73804	32.62
31	48.00	.78400	57.84	68	33.00	-.26685	47.33	105	12.00	-1.73804	32.62
32	48.00	.78400	57.84	69	33.00	-.26685	47.33	106	12.00	-1.73804	32.62
33	47.00	.71394	57.14	70	33.00	-.26685	47.33	107	11.00	-1.80810	31.92
34	47.00	.71394	57.14	71	32.00	-.33691	46.63	108	11.00	-1.80810	31.92
35	47.00	.71394	57.14	72	32.00	-.33691	46.63	109	10.00	-1.87815	31.22
36	47.00	.71394	57.14	73	31.00	-.40696	45.93	110	9.00	-1.94821	30.52
37	46.00	.64388	56.44	74	31.00	-.40696	45.93				

Table 6: Shows the field of the standard levels to test the accuracy of shooting by jumping forward from the goal area line as a result of a quick attack by handball players.

standard levels	Modified T-degree field	Standard Level Field
Very well	60- 69	60.64- 66.59
Good	50-59	50.83- 59.64
Middle	40- 49	41.73- 49.43
Acceptable	30-39	30.52- 39.63
weak	20- 29	————

Table 7: Shows the percentages of the standard levels achieved by the sample by testing the accuracy of shooting by jumping forward from the goal area line as a result of a quick attack by handball players.

Paragraphs	Less than 30 is weak	30-39 acceptable	40-49 Middle	50-59 good	60-69 Very good	
normal curve levels	2.14%	13.59%	34.13%	34.13%	13.59%	2.14%
A test of measuring the accuracy of shooting by jumping forward from the goal area line as a result of a quick attack by handball players	Repetition	0	17	43	25	25
	percentages	0%	15.45%	39.1%	22.72%	22.72%

Through the table 7 of the test of measuring the accuracy of shooting by jumping forward from the goal area line as a result of a quick attack by handball players, we found that the highest repetition was achieved at the average level, while the lowest repetition was achieved at the weak level, as none of the sample members fell in this level.

As it turns out to us that there is a difference in the percentage achieved for the research sample for the standard levels, it was not according to the percentage prescribed for it in the curve of the normal distribution, and let's start with the second acceptable level. Of the percentage established in the normal distribution, but with regard to the level of good, it was much less than

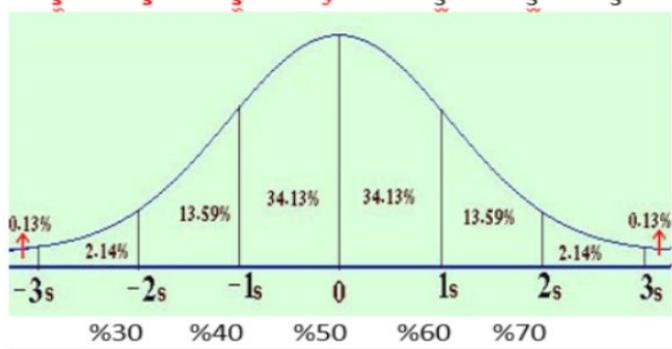


Figure 3: Shows the percentages of the standard levels the sample achieved in the test.

the percentage determined for it in the curve of the normal distribution, and the percentage of the level was very good, very high and a little more than the percentage prescribed for it in the normal distribution, as it turns out that the highest frequency of observations it was at the average level, as it was found that most of the players' levels were concentrated in the average, good, and very good levels, so the researcher believes that these percentages were achieved by applying the test to the sample after it was statistically processed, as the largest number of observations were collected at the average level and the sample members were distributed over the other levels in different proportions, and this distribution has achieved moderation and gathered in the middle and is not dispersed to the edges. The sample, and these percentages are closer to the ratio of the normal distribution curve, and the reason behind this is the ability of most of the sample members to perform the shooting process with somewhat high accuracy. The performance of the shooting by jumping forward in general requires the player to take approximate steps, and if we return to the nature of this test we see the tester is advancing the ball at full speed from the midfield to get his body a great momentum before shooting. In solving new kinetic problems, they are important factors in order to achieve the goal) (Wajih Mahjoub University of Baghdad - College of Physical Education. 1987), As soon as the player arrives between the free-throw line and the goal area line, he carries the ball and starts hitting the ground with the pivot leg to obtain from it an opposite reaction in the direction that helps him to rise in the air to take the path of his body flying in a higher frontal direction, and as a result, he approaches the center of the goal area and the goal significantly while he is flying in the air. The goal is to reveal to him the goal in a large way, as well as the shooting areas in it that are not well protected by the goalkeeper, to select from them an area free of oversight through which a goal can be scored and then shoots the ball, as flying in the air inside the goal area and approaching the goal structure before shooting by jumping forward greatly helps him to shoot more accurately, "The shorter the shooting distance between the goal and the shooter, the more this helps in achieving the accuracy of the shooting and achieving the goal hit successfully" (Imad Al-Din Abu Zayd and Medhat Al-Shafei. 2007).

By looking at the previous studies that were mentioned in the introduction, we can compare the findings of those studies in terms of hardening conclusions and what our current study reached through goals, questions, method and approach to solving the problem, as well as the community and sample of the study. (Dr. Hardan Azeez Salman, and Dr. Haider Ghazi Azeez Salman. 2020) is a device designed to develop and measure shooting for handball players. The objectives included designing a device to develop and measure the accuracy of some types of handball shots, developing special exercises to improve the accuracy of some types of handball shootings, and determining the repercussions of special exercises in improving some types of handball shooting accuracy. For individuals in the research sample. As for the research hypotheses, the researcher assumed that there is a significant effect of exercises using the device developed by the researcher in improving the accuracy of some types of handball strokes. The research community consists of 16 players from the handball team at Al-Mustansiriya University. The same 16 players represented the research sample, as this study differs from our study in terms of objectives, approach, method and sample using the device developed to improve some types of shooting for handball players from students of Al-Mustansiriya University.

As for the study of (Moushriq Khaleel Fathi. 2020), which reached to measure the accuracy of the close-shooting of the circle player, which was the main objective of the study, while our current study aimed to measure the accuracy of shooting for handball players from the case of the quick attack from the goal area line. Similar, as well as the approach followed and the conclusions reached by the researcher and what he recommended.

As for the study of (Okab, Mustafa Issa; Mahdi, Prof. Dr. Hamed Saleh. (2021) included more than one goal to solve problems and was interested in creating a complex test that includes at the same time measuring defensive movements and shooting accuracy from the front jump of handball players and targeting the age group (15-17 years), and this second difference from our research, and then they studied and analyzed the case. And work to find ways to develop the players' skill and technical levels. The difference between this study is in terms of objectives, method, and sample, and they are similar in terms of methodology. It was concluded that this test is used in the process of evaluating players in the handball game, and they recommend the need to adopt a test of defensive movements and accuracy of shooting by jumping forward in the evaluation process. The researcher recommends the need to build other complex tests on age groups other than the research sample, and to emphasize the need to pay attention to training the skills that were addressed, as what the researcher reached in this study differs from the conclusions and recommendations we reached, as for the study of (Moushriq Khaleel Fathi. 2020) . . , it is similar with our current study in terms of the objective and the use of the adopted approach and method, but the nature of the player's performance varies. This test is done after the effort to measure the accuracy of the shooting Young players, and the researcher concluded that the test can measure the real level of the player and can be adopted by the coaches to assess the level of their players, and one of the most important recommendations was the use of these tests to know the levels of players by their coaches and specialists in the training process.

Conclusion and Recommendation

Conclusion

Through the foregoing, the researcher concluded that the tool designed for use in the study is valid to measure what it was designed for and performed the duty well. He also concluded that the designed test has become standardized and can be used easily and easily, and this test can be considered an objective test as it is more realistic and fits the nature of the player's performance during the match, as well as reaching the standard levels for this test that allows coaches and researcher to stand on the real level of the players,

Recommendation

The researcher recommends: that this test and this tool should be used by trainers and researcher in the future because this test is a real standard that reflects the player's shooting accuracy level, and future tests can be codified to measure the accuracy of shooting for other types of shooting and on different samples of women or different age groups using this tool.

References

- Dr. Hardan Azeez Salman, and Dr. Haider Ghazi Azeez Salman. (1, 2020). The influence of special exercises using a device designed to develop and measure the accuracy of some shooting types in handball. *European Journal of Molecular & Clinical Medicine*, Issue 01, pp. 3926-3933.
- Okab, Mustafa Issa; Mahdi, Prof. Dr. Hamed Saleh. (2021). Building and standardizing testing defensive movements and shooting accuracy from jumping forward for handball players for ages (15-17) years. *Indian Journal of Forensic Medicine and Toxicology*, 3. doi: <https://doi.org/10.37506/ijfmr.v15i3.16261>
- Ali Salloum Hakim. (2004). Tests, measurement and statistics in the sports field. Al-Najaf Al-Ashraf: Al-Taif Library for Printing.
- Imad Al-Din Abu Zayd and Medhat Al-Shafei. (2007). *Attacking applications in handball learning - training*. Cairo: B-M.
- Muhammad Sobhi Hassanein. (1995). *Measurement and Evaluation in Physical Education (Version C 1)*. Cairo: Arab Thought House.
- Moushriq Khaleel Fathi. (2, 2020). Design and standardization of a test to measure the accuracy of shooting close to the goal area line for handball players. *International Journal of Psychosocial*.
- Bright Aziz Tanish. (2015). Design and legalization of a test for the accuracy of shooting from effort for young handball players *Al-Qadisiyah Journal of Physical Education Sciences*
- Nada Rady Kashash. (2012). The effect of using some visual techniques on perceptual speed and kinetic sense of learning and retention of handball shooting skill. Master's Thesis, Baghdad, Baghdad, Iraq.
- Wajih Mahjoub University of Baghdad - College of Physical Education. (1987). *Kinetic Analysis (Volume 2)*. Baghdad, Iraq: Higher Education Press - Baghdad.