Design and codify of the test of the nearby shooting accuracy of goal area line of the handball players

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Abstract

Design and codify of the test of the nearby shooting accuracy of goal area line of the handball players. The use of modern methods in measuring the accuracy of correction for the players of the circle players with handball contributes and helps coaches and researchers to stand on the level of the players by codifying and designing new tests especially to measure the accuracy of correction on the goal, hence the importance of the research, and the research problem is summarized in that the most available tests used in research The previous ones to measure near accuracy, the recent developments in the game do not serve as a result of the recent amendments to the rules of the game, and most of them are tests far from using modern methods and devices in measuring the accuracy of aiming Design and codify of the test of the nearby shooting accuracy of goal area line of the handball players to design and codify a special test to measure the accuracy of close aiming On the handball goal, as well as designing a special aid that is attached to the handball goal and divides it to measure the accuracy of proximity, and the researcher used the descriptive approach In the survey method for its suitability and search procedures, the research sample consisted of (125) players from Iraq clubs participating in the Iraqi handball league. The researcher used a new tool to measure the accuracy of close correction and used the percentage, the arithmetic mean, standard deviation, torsion lab, correlation coefficient and testing TAs a statistical means, and he concluded: The tool used in testing the accuracy of close aiming was successful and fulfilled the task, and the test that was designed and codified was also successful and was suitable for the sample and became a standardized test and can be generalized, and the researcher recommended that the tool designed for the test be used in Other tests for its success in measuring the accuracy of correction, and the adoption of the test in scientific research, through which it can determine the level of accuracy of correction for players in the future and can be modified to suit other age groups and for both sexes .

Key Words :Circle Line, Standard Levels, Shot Measurement Tool, Circle Player, Test Creation.

Introduction

Of the characteristics and requirements of the game handball is mastering the player skills of the basic and technical can practice , and the most important of these skills is a correction towards the goal, as the player must be mastered to performed effectively during the game, P through the correction is to score goals by the goal of the opposing team, **(Marwan, 2010)** There are many types and forms of them, as the close correction of the player is especially focused on the line of the goal area, and one of the most important and difficult types of correction, and its difficulty lies in the lack of sufficient space for the players of the opposing team defending him or accompanying him most of the time to prevent him from receiving the ball from his colleague , as well as close to the line pattern goal, as it can affect the line during the rotation and correction, and it's a legal sinned the attack fail or 's near the keeper of it and closed for most of the goal areas it during the correction,**(Wajih, 2005)** here it came the difficulty of this kind of types correction hand reel, so the player had to be mastered this kind of correction to score goals during the games, in the sports field like other spheres of life requires us to identify the level of players or their level compared with their peers through the results of the tests and counting , well J know the coach on the capabilities of the player yen , standing at the level of , had to be the existence of a scientific standard gives us an accurate reading, to see the extent to which the player of the training doses underwent, standing on the strengths and weaknesses has incorrigible, but beyond that to use tests proper planning process for training

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curricula, as well as that it serves the player himself to know his capabilities and compare it with his peers from the team, from here comes the importance of our study, test measurements means important to identify p Li all that information accurately, and scores that draw from the tests are degrees of ore do not give us A reading of what we want to obtain,**(Mohamed, 2006)** such as the number of iterations or time, which are degrees that are meaningless in some cases unless we deal with them statistically and convert them into standard scores and compare them with the test to determine the level , so it is preferable for the test to have standard levels, which are obtained according to some statistical means. to measure what can be placed for him, so before embarking on this process must determine the objective of the test and what wants to measure, in the goal of the legalization of the testing process is preparation of all technical aspects and data analysis Try it out and stand Concerning mistakes and then implementing it, that some of the already existing tests aim to measure a specific case, but sometimes they do not meet the aspiration of the trainer or the test-based, as it has become old, does not fit those changes that have occurred in modern training rules ,(**Freeman, 1962)** and it is worth noting the game handball has recently undergone radical changes to the rules of the game, prompting coaches to change their patterns in the training curriculum, in line with this amendment, Om n through our observation, we found that the few tests available to measure correction accuracy near, are either to be duplicates, afflicts the laboratory boredom **(Mustafa, 1999)**, or do not give the result that they were intended precisely , and most of them do not use the tools and devices modern in the measuring and here lies the problem of the study, and has become to be creating a new test fit this development, and measures the accuracy of the correction, so Systematically researcher on the development or innovation test new, to measure the accuracy of the near correction, the study aimed to design and rationing test to measure the accuracy of the correction near the circle of the cercal players with hand ball, tool design special help prove handball and divide it to measure the accuracy of the correction near. (Wajih, 2002) As for the areas of research, it was conducted on players of Iraqi clubs championships participating in the Iraqi Handball League, for the period from 2-17-2017 until 30-4-2017, and in the stadiums of those clubs

Literature review

Study of Dr. Ibrahim Zuhdi, *Developing a test to measure the ability to shoot through the accuracy and endurance of performance in basketball, College of Physical Education for Girls-Alexandria University.* One of the rules on which the training process is based is assessment and measurement methods, so the research problem is summarized in that the majority of tests designed to measure the ability to aim from a single distance (close, medium, or far) or from one angle (180 °, 45 °, or 90 °) From the center of the ring, and I found that the results of these tests are valid indicators of the ability of basketball players to shoot from under the basket, or from free throws, or from correct corrections, or from the right and left of the board, and the researcher found that the assessment of the basketball player needs to be developed in order to comply with the amendments of the law And the performance requirements in the game in terms of accuracy, speed, and endurance, which imposes on basketball players the mastery of shooting from all different distances and angles of the playground, regardless of their different positions in the game, as a test was designed to measure its ability to accurately aim and withstand the speed of performance, and the study aimed to: A test to measure the player's ability to shoot, to become a valid means of measuring the ability to shoot through the accuracy and tolerance of performance from different areas and angles of basketball players, and the researcher used the descriptive approach in the survey method , and the research sample included several samples of Study population according to the specific purpose of each stage of the research **(Ali, 1994)**

Methodology

Procedures and tools: The researcher used the descriptive approach by the survey method to solve the problem according to the following steps:

First - the design of the instrument used to measure the accuracy of the aiming: Designing a special modern instrument to measure the accuracy of voting installed inside the goal structure and dividing it into several sections (correction areas), the purpose of which is to measure the accuracy of the vote close to the goal from the line of the goal area, which are iron rods connected with each other, fixed inside the goal structure to divide the goal into (one Ten sections), and the thickness of the columns that consist of them is (8 cm) to match the thickness of the goal structure, and each of the correction points has a test score of its own, as it was given a specific weight, through agreement of the players' opinions about the most important areas of correction in the goal in terms of ease and difficulty from the point of view They looked at them, and the information was collected through a special form that was distributed to them so that the score of the player being shot is on my side in the middle of the goal, the highest score, followed by the upper middle area, and then the shooting area at the top right, then the right side, then the left side area, and then the upper left area,(**Abdul-Jalil, 1981)** Then the bottom left area, then the bottom center area, and finally the bottom right, figure (2).

*Second - Test design***:** The test is designed to measure the accuracy of the close shooting of the circle players, which are two locations on the goal area line, the first on the left side of the field, away from the side line the left side of

the playing field (8.5m), And the second - right pitch away from the lateral line right (8.5m), Too, learn the ground with adhesive tape and placed constructive mode above the reference , the lab then stands to deduce the place he stood before and during the correction, as the laboratory stands on the line of the goal area, and the goal behind it area first correction and after receiving the ball from the colleague, the wrap torso back to face the net and near , tyro first of the box and ends with the last of the box, and each of the three correction zones on the line of the goal area aiming for the player , including (9) times, to become our to the total for corrections (27) once, and gives the for player rest period between each shot and another period of 5 seconds, It gives (15) seconds. When moving from one aiming area to another, Figure (1) 2002
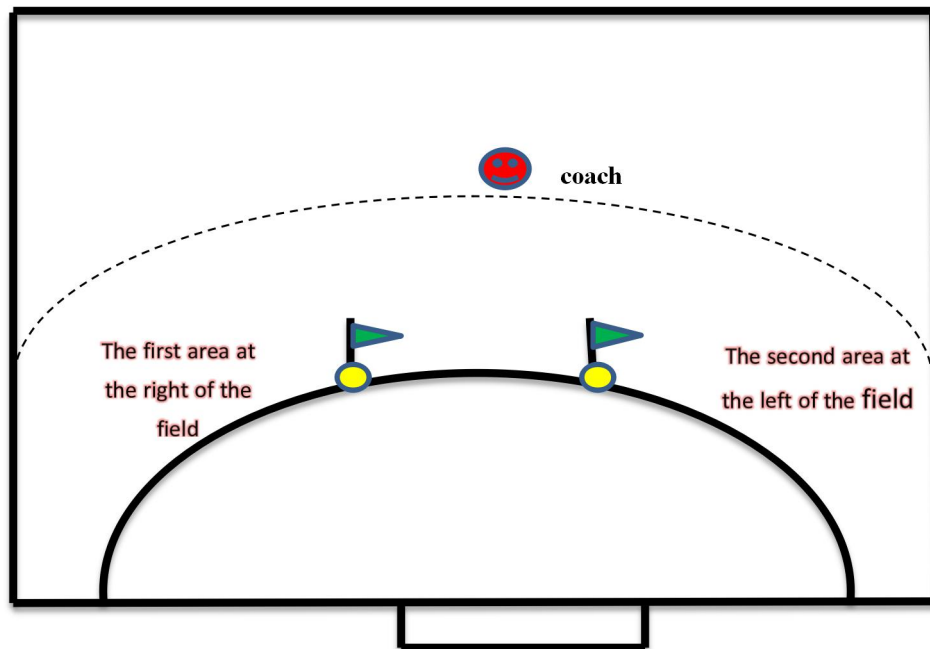
Figure (1) it shows the tow close shooting locations for handball cercal players.
*Notice***:** The research community was identified (10) of the Iraqi Handball League clubs in Iraq, and some of the players of those clubs were represented, Table (1).

Table (1) it shows the number of clubs, the total number of players, the number of members of the sample, and their percentage

No	Club	Number of Players	Number of tested players
1	Karkh	15	15
2	Army	14	12
3	the police	13	13
4	Al-Musayyib	12	11
5	Karbala	14	14
6	Bully	12	11
7	Sulaymaniyah	13	12
8	Kut	13	11
9	Diyala	14	14
10	Basra Municipality	12	12

Total	132	125
		Percentage = 94.7%

And it was used by the handball stadium Qanona- (12) Cr of Ad- (2) constructive mode (media) - Safrh- hours Toukat- form a questionnaire poll of Alaobein- tool designed by the researcher, made of rods iron to divide the goal into (9) sections (areas shooting).

Pilot experiments: It was conducted the first several exploratory experiments was the tool and test entirely designed on paper was conducted several amendments to it later, and in the stadium Karkh Club in practice, as conducted experiments on (5), players get to know the length of time it takes to test and duration of the two - way rest, well to check The validity and safety of the tool used , and the test was performed with this field experiment on (2-25-2017) and another experiment to modify the test course and evaluate it on (3-3-2017).

The scientific foundations of the test : For the purpose of codifying a new test, the validity, consistency, objectivity, and discriminatory power of this test was extracted (1).

Table (2) It shows the scientific basis for consistency, objectivity, for testing the accuracy of the close shooting of handball players

The scientific foundations of the test	Correlation coefficient	Sig	Link type
Persistence	0.967 **	0.000	Moral
Objectivity	1**	0.000	Moral

Validity of the test: The differential validity of the test was extracted by conducting the test on the construction sample in Table (3). And it has been to reach the stability of the test using the simple correlation coefficient, to read the test first and second after the return, table (2). As for the objectivity of the test, it was reached through our registration of the scores of referees, in our view this was identical, the fact that the goal was divided into clear and numbered correction areas, and the result of the simple correlation that appeared for the scores of the referees was equal to (1). It was reached to a force discriminatory test, after that the T. monotonic test scores sample in descending order,**(Faisal, 1996)**from highest to lowest grade, and choose the ratio (27%) of the upper grades and the proportion (27%) m n minimum, as the number of players for the group senior group Dunya (34) for the purpose of distinguishing between them, Table (2).

Table (3) It shows the mean, standard deviation, and test value (T) The moral of the sample

| Variables	Top group		Lower group		Values T	Sig	Moral
	ý	S	ý	S			
	92.50	7.444	41.32	6.992	29.219	0.000	moral

At the significance level of 0.01

- **The test in its final form:**

Test name: (Measuring the accuracy of shooting close to yen positions on the goal area line for handball players).
The test of the nearby shooting accuracy of goal area line of the handball

The goal of the test: measurement accuracy correction near the site j n assigned for the near to straighten my part right and left on the line of the goal area of the handball players form (1). A special tool was designed for this, which are iron bars that are linked together, with joints to fold or disassemble to make it easy to carry and move. They are fixed inside the goal structure with hooks to divide the goal into (9 sections), and the thickness of the columns formed from it (8 cm) to match the thickness of the goal structure, to become correction of this section, including areas of a square and the other rectangular, and each section has its own measurement, measuring squares angles upper goal and lower (50 × 50 cm) and rectangles side (50 × 84 cm), either rectangles upper and lower in the middle of the goal (50 × 84 cm) and the remaining area in the central goal is to be measured (8 4 × 184 cm.).
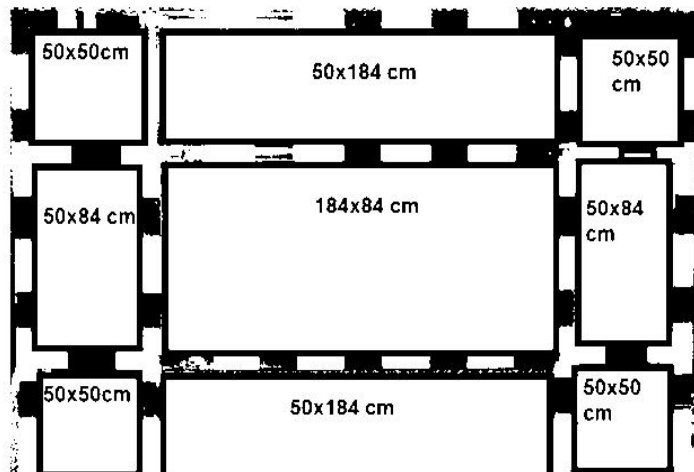
Figure (2) Shows the measurements of target areas and serialized

Performance way: based on the test explains to the player details of the test and asked that to shooting the ball near sequentially as shown in figures on the shooting areas, sounded the area number one, ending in the area number nine, as in form (2), Which is the area divided by the tool that hanged in the goal to measure the accuracy of the correction of the ball player from the two correction logic marked on the goal area line the test player stands at the first point on the right of the playing field, and looks towards the court and the goal behind it, and upon hearing the whistle signal from the test administrator, the teammate passes the ball to him when he receives it and then turns his body back towards the goal to aim the ball, Provided that there is a positive rest period for the player between one shot and another, for a period of (5 seconds), and after he completes throwing all the balls (nine) from the first scoring area, he is given a rest (15 seconds) Then he performs the same work, but this time at the second scoring area on the left side of the playing field, which is 3 meters away from the first, so that the total number of balls is (18) balls (9) throws for each scoring area as shown in Figure (2).

*Registration***:**

- The highest score (10) is calculated for the player if he enters it in the shot area No. (5) In the middle of the goal.
- (9) Degrees are calculated if he entered it in the area No. (2) Above the middle.
- An (8) score is calculated if it is entered in area No. (1), in the upper right.
- (7) Degrees are calculated if you enter it in area No. (4), right side.
- (6) Degrees are calculated if you enter it in area No. (6), on the left side.
- (5) Scores are calculated if entered in area No. (3), in the upper left.
- (4) Degree is calculated if entered in area No. (9), in the lower left.
- Calculates (3) degrees, if you enter it in area No. (8), below the middle.
- (2) Degree is calculated if entered in area No. (7), bottom right.
- A score of (1) is calculated if it bounces off the suspended object and does not enter the intended target area, and the reason is that it is inside the goal.
- No score is calculated if it bounces off the goal structure, goes outside the goal, or the laboratory touches the goal area line.

*The following were used***:** percentage, mean, standard deviation, skew factor, test (T) Simple correlation coefficient (Pearson), as a statistical method for the study.

Results:

Table (4) it shows the mean value, standard deviation, and torsion modulus of the build sample for testing

the test	Arithmetic mean	standard deviation	Coefficient of torsion
	66.0000	20.42295	0.077

The extraction of the arithmetic mean value, standard deviation and coefficient of torsion of the members of the sample, and after it has been tested the ultimate picture test, was conducted steps of rationing on the sample of the number (125) players, as it has been obtained on standard grades of crude grades test designed to sample, shift after to modified standard degrees Table (5).

Table (5) It shows the raw scores and what is acceptable for the modified standard and standard scores

No	Raw grade	Standard score	Modified standard	No	Raw grade	Standard score	Modified standard	No	Raw grade	Standard score	Modified standard
1	30.00	-1.76272	32.37	43	56.00	-.48965	45.10	85	76.00	.48965	54.90
2	31.00	-1.71376	32.86	44	56.00	-.48965	45.10	86	77.00	53861	55.39
3	31.00	-1.71376	32.86	45	56.00	-.48965	45.10	87	77.00	53861	55.39
4	33.00	-1.61583	33.84	46	56.00	-.48965	45.10	88	78.00	58757	55.88
5	33.00	-1.61583	33.84	47	57.00	-.44068	45.59	89	78.00	58757	55.88
6	33.00	-1.61583	33.84	48	57.00	-.44068	45.59	90	78.00	58757	55.88
7	33.00	-1.61583	33.84	49	58.00	-39172	46.08	91	80.00	68550	56.86
8	34.00	-1.56686	34.33	50	59.00	-34275	46.57	92	80.00	68550	56.86
9	34.00	-1.56686	34.33	51	59.00	-34275	46.57	93	81.00	73447	57.34
10	35.00	-1.51790	34.82	52	59.00	-34275	46.57	94	81.00	73447	57.34
11	37.00	-1.41997	35.80	53	60.00	29379	47.06	95	83.00	. 83240	58.32
12	37.00	-1.41997	35.80	54	61.00	-.24482	47.55	96	84.00	88 136	58.81
13	38.00	-1.37101	36.29	55	61.00	-.24482	47.55	97	85.00	93033	59.30
14	38.00	-1.37101	36.29	56	62.00	-19586	48.04	98	87.00	1.02826	60.28
15	39.00	-1.32204	36.78	57	63.00	-.14689	48.53	99	87.00	1.02826	60.28
16	39.00	-1.322 04	36.78	58	63.00	-.14689	48.53	100	87.00	1.02826	60.28
17	39.00	-1.32204	36.78	59	63.00	-.14689	48.53	101	88.00	1.07722	60.77
18	43.00	-1.12618	38.74	60	63.00	-.14689	48.53	102	89.00	1.12618	61.26
19	43.00	-1.12618	38.74	61	65.00	-.04896	49.51	103	89.00	1.12618	61.26
20	43.00	-1.12618	38.74	62	65.00	-.04896	49.51	104	89.00	1.12618	61.26
21	44.00	-1.07722	39.23	63	66.00	.00000	50.00	105	89.00	1.12618	61.26
22	45.00	-1.02826	39.72	64	66.00	.00000	50.00	106	90.00	1.17515	61.75
23	45.00	-1.02826	39.72	65	66.00	.00000	50.00	107	90.00	1.17515	61.75
24	45.00	-1.02826	39.72	66	67.00	04896	50.49	108	91.00	1.22411	62.24
2 5	46.0 0	-. 97929	40.21	6 7	68.0 0	099793	50. 98	10 9	91.00	1.224 11	62.24
26	48.00	-88136	41.19	68	68.00	099793	50.98	110	92.00	1.27308	62.73
27	48.00	-88136	41.19	69	68.00	099793	50.98	111	93.00	1.32204	63.22
28	49.00	-83240	41.68	70	68.00	099793	50.98	112	93.00	1.32204	63.22
29	49.00	-83240	41.68	71	69.00	14689	51.47	113	95.00	1.41997	64.20
30	49.00	-83240	41.68	72	69.00	14689	51.47	114	95.00	1.41997	64.20
31	49.00	-83240	41.68	73	70.00	19586	51.96	115	98.00	1.56686	65.67
32	51.00	-.73447	42.66	74	71.00	24482	52.45	116	98.00	1.56686	65.67
33	51.00	-.73447	42.66	75	71.00	24482	52.45	117	99.00	1.61583	66.16
34	51.00	-.73447	42.66	76	72.00	29379	52.94	118	100.00	1.66479	66.65
35	51.00	-.73447	42.66	77	73.00	. 34275	53.43	119	100.00	1.66479	66.65
36	52.00	-68550	43.14	78	73.00	. 34275	53.43	120	100.00	1.66479	66.65
37	52.00	-68550	43.14	79	73.00	. 34275	53.43	121	101.00	1.71376	67.14
38	53.00	-.63654	43.63	80	74.00	39172	53.92	122	101.00	1.71376	67.14
39	54.00	-58757	44.12	81	75.00	44068	54.41	123	102.00	1.76272	67.63
40	54.00	-58757	44.12	82	76.00	.48965	54.90	124	103.00	1.81169	68.12
41	54.00	-58757	44.12	83	76.00	.48965	54.90	125	104.00	1.86065	68.61
42	54.00	-. 58757	44.12	84	76.00	.48965	54.90				

The section of the natural curve to (5) sections according to the percentage of cases that fall between the standard marks normal distribution as the proportion (80 %) of the grades fall to the limits of five of deviations, m T distributed

between positive and negative, and this means that there is a deviation One standard between those levels is to test the accuracy of close shooting for the circle players from the goal area line Figure (3).
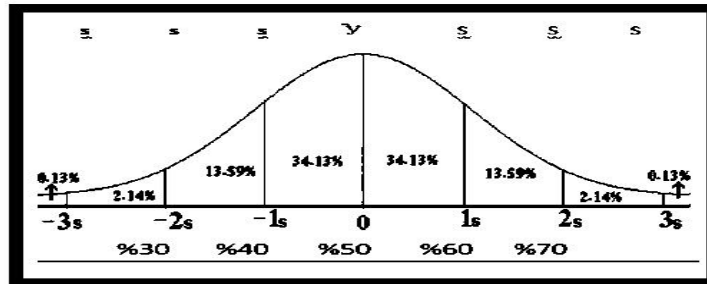

Figure (3) it shows the percentages of the standard levels the sample achieved in the test

Table (6) Shows the percentages of standard levels achieved with the SLR accuracy test

	Weak	Acceptable	Average	Good	very good
Levels	From 20-29	From 30-39	From 40-49	From 50-59	From 60-69
Repetition	0	24	38	35	**28**
The ratio	0%	19.2%	30.4%	28%	**%22.4**

As it was not achieved in the first level (weak), i.e. the proportion of the distribution of the sample, but in the level mechanisms of the second (acceptable) , the rate was higher due to its natural distribution, and the level of the third of the (average) percentage was lower than the ratio scheduled By normal distribution, as for the fourth level (good) , **(Fouad, 1979)** the percentage was higher than what was determined for the normal distribution curve, and for the fifth level (very good) , the sample achieved higher percentages than the normal distribution curve, so we understand from this that the sample spread over (4 (Levels only , Table (6), and this indicates that the test was appropriate for the sample, and the reason for this from the researcher 's point of view is that the coaches of these clubs have training experience , and the players of these clubs have the ability to shoot accurately on the goal from the areas close to qualify them Kind of performing this test with appropriate success .

For me becomes classification as follows:

1. From 20 to 2 9 is poor.
2. 30 to 3 9 is acceptable at 19.2%
3. 40 to 49 average, 30.4%.
4. 50 to 59 is good, and it was 28%.
5. 60 to 6, 9 is very good, 22.4 percent.

Conclusions

The tool used to test the accuracy of close aiming was successful, and the test was also successful in its turn, suitable for the sample, and it became a standardized test that can be generalized.

We recommend that this test should be adopted in scientific research in the future, and coaches can use it to find out the levels of their players, and this test can be modified to suit other age groups and for both genders, and the tool designed with this test can be used to build and codify other tests that measure the accuracy of correction for the rest of the playing areas, and j n true researcher to conduct studies in the future interested in building and legalization of tests on different skills other hand samples reel.

The proposed test is used to measure the ability to correct through the accuracy and tolerance of performance

Recommendations: Use the proposed test as an aid in assessing the level of basketball players in shooting and setting standard levels for this test.

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