



Designing and codifying a test to measure the speed and ability to pass and receive the ball in a collective fast attack for Iraqi handball club players

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Abstract

Design and codify a test to measure the speed and ability to pass and receive the ball in a collective fast attack for Iraqi handball club players. The recent amendments to the rules of the law of the game have contributed effectively to raise the pace of competition by increasing the speed of the game's rhythm to revolutionize this field. Therefore, most international and local teams have begun to change training methods to reflect this on the style of playing and the concentration of those teams has shifted to the fast attack that is characterized by ease and scoring goals quickly to achieve victory so that the dominant character of the game becomes fast rhythm playing. All handball players should have the capabilities that qualify them to meet the requirements of the game which helps to determine the level of ball passing skills among handball players in a collective fast attack to perform shots on goal skillfully with high accuracy. Hence, it requires the availability of means or tests to measure the capabilities of the players, and here lies the importance of this study, but if these tests are found, they are rare or not sufficient for the purpose, and here lies the problem of the study. Therefore, the researchers agree to delve into this matter to develop appropriate solutions by designing a modern measurement method or

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a special test so that researchers, coaches and handball players alike can benefit from the test as a humble service from the researchers of this paper towards the game. The study is conducted on some club players participating in the Iraqi Handball League. The main goal of this study is to design and codify a special test to measure the ability of the players to perform a fast collective attack. Additionally, as for the areas of study, the researchers rely on some club players participating in the Iraqi Handball League. The study is performed on 10th Mar, 2021 until 20th Jul, 2022. The procedures of the test are conducted in the stadiums of the clubs participating in the Iraqi Handball League. The study employs a general qualitative approach. The researchers also employ quantitative methods to highlight the percentages, the arithmetic mean, the standard deviation, the simple correlation coefficient, the T test, the standard score, and the modified standard score. The researchers conclude from the results they achieved that this test, which is designed and codified, is characterized by high accuracy and adequacy, and can be used to measure the speed and ability to pass and receive the ball in the collective fast attack of handball players which is the reason for designing such test. The researchers support employing such tests to measure the speed and effectiveness of handball players' performance of the fast attack process in order to properly evaluate their performance before and during the championships. The researchers also urge to devise other tests on different samples.

Keywords: Hand, handling, fast attack, standard scores, test innovation, standard levels.

Introduction

Tests in the field of sport have regularly contributed effectively to determine the level of players and highlight their strengths and weaknesses. Every sport event has a goal that the athlete constantly strives to achieve. Hence it is necessary to know the player's exact level before and during competitions since this step gives the coach a comprehensive overview of the level of his players and on a regular basis. Tests will also show the coach results that can be used and analyzed so that he can evaluate and correct if there is a deviation from the set goal, ensuring the continuous development of the level of capabilities of the players. All objective tests must be supported by solid scientific evidence to give Tangible and accurate results that can be relied upon to determine the level of the player. Therefore, tests in sport games have become of great importance. "Thus we notice that conducting tests and measurements in sport games, whether applied individually or collectively, has become of great importance in the work of coaches in terms of the integrity of the curriculum" (Rashid, 2008, p. 332)

Handball is one of those team games which are widely played all over the world. Like other sports, players must master all defending and attacking skills according to their style of play. "Handball is a game that has its own basic skills, and all of these defending and attacking skills are developed to serve the players in order to reach the opposing team's goal" (Moushriq Khaleel Fathi, 2022, p. 216). The moment the attacking team loses the ball, it moves from attack to defense, and the players must return to their defensive areas to organize themselves into one of the known defensive formations, then the opposing team begins to attack in an organized manner according to a specific plan, through passes between the attacking team to go towards the

opposing team's court. "Ball handling is one of the important skills in the game of handball, through which it is possible to reach the opposing team's goal and good handling are no less important than the shooting process." (Mohsen Al-Mousawi, 2019, p. 504).

The team can launch a fast attack until the team loses the ball or they score a goal against the opposing team. Handball players must also have speed in its various forms, as these players seek to score goals to win matches by approaching the opposing team's field and reaching the goal successfully. (Salih et al., 2024) The handball attack takes place in waves, including a fast attack individually, which requires the player to launch the ball into the opposing team's court at maximum speed to score a goal, or in the form of a fast, collective attack in which more than one player participates by passing the ball between them accurately through short or long passes taking into consideration different playing situations during the matches. (HalalAtiyah et al., 2024) to bypass some defenders who return quickly, randomly, and irregularly to their defense areas. "The issue here goes back to the attacking formation system that relies on "On speed" (Radi Al-Sudani, 2010, p. 53). This rapid movement is permitted according to the rules of the game and is not subject to restrictions as long as there is no legal violation that prevents them from progressing. (Abdulhussein et al., 2024)

The recent amendments to the rules of the law of the game have contributed effectively to raise the pace of competition by increasing the speed of the game's rhythm to revolutionize this field. Therefore, most international and local teams have begun to change training methods to reflect this on the style of playing and the concentration of those teams has shifted to the fast attack that is characterized by ease and scoring goals quickly to achieve victory so that the dominant character of the game becomes fast rhythm playing. (Kadhim, 2024b) All handball players should have the capabilities that qualify them to meet the requirements of the game which helps to determine the level of ball passing skills among handball players in a collective fast attack to perform shots on goal skillfully with high accuracy. To solve the research problem, the researchers conclude that the tool designed for use in the study is valid for measuring what it is designed for and performed the task well. (Kadhim, 2024a) The researchers also conclude that the designed test has become standardized and can be used easily and conveniently. The test can be considered an objective criterion as it is more realistic and compatible with the nature of the player's performance during the match, in addition to reaching the standard levels for this test that allow coaches and researchers to determine the true level of the players. The researchers highlight the necessity of using this test and this tool for coaches and researchers in the future, because this test is considered an authentic standard that reflects the level of the player's shooting accuracy. (Moushriq Khaleel Fathi, 2022, page 294)

The coach needs a test to determine the level of the players. However, tests in this area are rare and even if they exist, these tests are outdated. A modern test is invented that measures the accuracy of shooting by jumping forward from the goal area line for handball players to solve this problem. **The study aims** to design and codify a test to measure the accuracy of shooting by jumping forward from the goal area line as a result of a fast attack by handball players and determines the standard levels for the players. (Kadhim et al., 2021) The descriptive approach is applied in this study in the form of a survey of the club teams participating in the Iraqi Handball

League Championship, moreover, an innovative tool is employed to measure shooting accuracy which leads to reach a solution to the research problem. **The researcher conclude** that the tool Designed to be used in the study is valid for measuring what it is designed for as that tool performs the duty accurately. It is also concluded that the designed test has become standardized and can be used easily and conveniently.(Kazar & Kazim, 2020) This test can be considered an objective criterion as it is more realistic and compatible with the nature of the player's performance during the match as well as reaching standard levels planned in the goals of the study that allows coaches and researchers to determine the real level of players.(Easa et al., 2022) Therefore **the researcher recommends** the necessity of using this test and this tool for coaches and researchers in the future because this test is considered a real standard that reflects the level of shooting accuracy of the player.

Study prepared by Hana Jalal Fathallah (Hanna Jalal Fathallah, 2013, page 228)

(Fast attack and its relationship with long passing skills and arrangement of participated teams of championship in Kurdistan region universities for hand ball)

The aim of the research is to gain knowledge about fast individualistic attack, long passes with variant distances, arrangement of participated teams of championship in universities of hand ball in Kurdistan region; the researcher chooses the sample intentionally, which are college chosen players of Kurdistan region /Iraq, for hand ball (for men); in 2010-2011.They are (60) players and representatives. Then the researcher prepares the form for fast attack test & long pass variant level skill & throwing the ball from near and far in order to take the opinion of adapts. Then the researcher uses quantitative method which is percentages to reach the results of the research. Finally, the researcher arrives at these important points; there is a relationship between fast individual attack & long pass skill for Sulaimanya chosen players and the relationship between fast singular attack with throwing the ball from near skill for Duhok chosen players. The highest percentage ratio for fast individual attack with long pass skill & throwing the ball from near places for the benefit of college of Sulaimanya & Duhok chosen players.

Study by Ahmed Khamis Rady: (Radi, 2016, p. 250) Building specific speed and its relationship to the time of performing the third wave of the blitz (fast center), and its success in handball.

The study aims to build a test to measure the speed of the handball player in Iraq, and to set standard levels for this test. The research also aims to identify the relationship between the speed of the game of handball and the time of performing the third wave (the fast center), and how applicable the test can be. The researcher uses the descriptive approach and the research community is represented by the players of the six teams participating in the final Super League. The research sample on which the test s applied for the purpose of construction and standardization amounts to (70) players. Al-Karkh Club is chosen to show the relationships between the specific speed and performance time of the third wave in the fast attack and the way the test is applicable in handball after obtaining the scientific foundations and the discriminating

ability. The researcher concludes that the test proves significant effectiveness and validity in measuring the speed of the handball player in Iraq and that the specific speed has a relationship with the performance time of the third wave of the fast attack of the handball players. These results are proved through the successful attempts of fast attacks during the matches. The researcher underlines the importance of using the test to measure the speed of the handball player in Iraq. All previous studies dealt with the fast attack and they are similar to the current study as all studies used the descriptive approach, however there are differences in the objectives, problem, and sample between one study and another and between the current study. Mashreq Khalil Fanhi's study dealt with the individual fast attack, but our current study deals with the collective fast attack.

The sample of the second study consists of college students which forms the difference with the current study. The study of Ahmed Khamis is similar in terms of the first goal, but the second goal was to find correlations between the speed of the game of handball and the time of performing the third wave (fast center) and its success. All of these studies reach solutions to the problem and achieve the aimed objectives. The goal of our research is to work on designing and codifying a special test to measure the speed and ability to pass and receive the ball in a collective fast attack. As for the areas of study, the researchers rely on some of the club players participating in the Iraqi Handball League. The test is applied on 10th Mar, 2021 until 20th Jul, 2022. The test is conducted in the stadiums of the clubs participating in the Iraqi Handball League.

The mechanism and tools:

The researchers use the descriptive approach using the survey method to achieve the goals and solve the problem. The research community is selected and it consists of (15) clubs participating in the Iraqi Handball League, (Al-Jaish, Al-Shurta, Al-Karkh, Karbala, Al-Futwa, Al-Taawoun, Al-Kut, Diyala, Basra Municipality, Al-Musayyab, Al-Khaleej Al-Arabi, Kufa, Nasiriyah, Naft Maysan, Al-Hashd). The research sample is selected from some of the players of those clubs, the total number of which are (172) players out of (217) players, with a percentage of (79.26%), after excluding a number of players, table (1). The construction sample is 72 players and the rationing sample is 172 players. The researchers use some tools, including a regular handball court, (4) signs, colored adhesive tape, a stopwatch, a whistle, and a computer. To achieve the first part of the research, the researchers conduct two experiments. Two surveys, to ascertain the ease and difficulty of the test and to confirm the scientific foundations of the test represented by obtaining the coefficient of validity, consistency and objectivity, as well as the discriminatory ability, then determining the levels and standards.

Table (1) the no. of clubs and the no. of players participating

N o	The clubs participating	The overall players	The tested players	
1	Al-Jaish	18	15	
2	Al-Shurta	19	19	
3	Al-Karkh	18	16	
4	Karbala	18	17	
5	Al-Futwa	13	11	
6	Al-Taawoun	12	10	
7	Al-Kut	16	10	
8	Diyala	14	11	
9	Basra Municipality	11	9	
10	Al-Musayyab	12	11	
11	Al-Khaleej Al- Arabi	13	6	
12	Kufa	12	8	
13	Nasiriyah	14	11	
14	Naft Maysan	14	10	
15	Al-Hashd	13	8	
	Total	217	172	the percentage = %79.26

The scientific foundations of the test are validity, reliability, objectivity, and discriminating ability. The researchers obtain the validity and stability of the test (discriminant validity) through retesting, using the Pearson correlation coefficient. Objectivity is achieved by matching the test scores of two arbitrators with the Pearson correlation coefficient, check table (2).

The scientific foundations	correlation coefficient	Truthful spirit	The type of correlation
Stability	0.99**	0.000	Moral
Objectivity	0.98**	0.000	Moral

Table (2) To calculate the discriminatory power, the raw scores of the test are arranged in ascending order using (27%) of the lower scores and (27%) of the higher scores to differentiate between the two groups, using the T-test in Table (3). The test became in its final form as follows:

The variables	The lower group		The higher group		The calculated value of T	Truthful morality	The difference type
	\bar{Y}	S	\bar{Y}	S			
Test	18.4263	.09912	20.2421	.73130	-10.725	.000	Moral

Table (3) the percentages and standards of higher and lower groups

- **Test name:** A test to measure the speed and ability to pass and receive the ball using a collective fast attack for handball players.
- **The aim of the test:** to measure the speed and ability to pass and receive the ball using a collective fast attack for handball players.
- **Tools:** a regular handball court, a whistle, 4 handballs, 3 markers, sticky tape, and a stopwatch.
- **Method of performance:** The player stands at the corner of the court on a point drawn on the ground above the free throw line. After hearing the whistle signal, the timing begins with the stopwatch. The player initiates passing the ball in a long, whippy hand from head level to the teammate standing on the opposite side of the court at a point far from the midfielder line and the sideline which is a distance of (1) meter inside his court. The player sets out to begin a fast attack into the opposing team's court towards the mark fixed at the center of the midfield line. The player turns to his side to change his direction after he receives the ball from the same fellow player and advances with it. After that the player passes it to the other teammate player who is standing on the opposite side of the previous player, at a point that is also (1) meter away from the free throw line and the sideline, on the opposing team's court. The player runs towards the other person stationed at the seven-meter throw line and turns around behind him to change his direction and comes back and receives the ball from his teammate, advances with it, and then passes it to the same player. The first teammate goes at full speed to return and receive the ball from him and advance it until he reaches the free throw line. He raises the ball to take the approximate steps to shoot by jumping forward high from the goal area line towards the goal. The time is stopped the moment the ball leaves his hand, Figure (1).
- **Performance conditions:**
 1. The tester begins to perform after the whistle signal from the arbitrator.
 2. The tester must turn behind the screen before passing to the teammate.
 3. The attempt is repeated after taking a rest for a minute if the tester loses the ball or makes a legal error, such as walking with the ball.
- **Register:**

1. The unit of measurement for the test is time (seconds).
2. The time taken for the tester is calculated from the moment the whistle starts until it finishes the test, taking into account the accuracy of the colleague's handling of the ball and receiving it. If the ball falls from him and he is able to regain control of the ball and completes the test. Five seconds will be added to the test time. If the ball falls and the player does not control it or even if the player drops the ball a second time, he is retested after a short rest period.

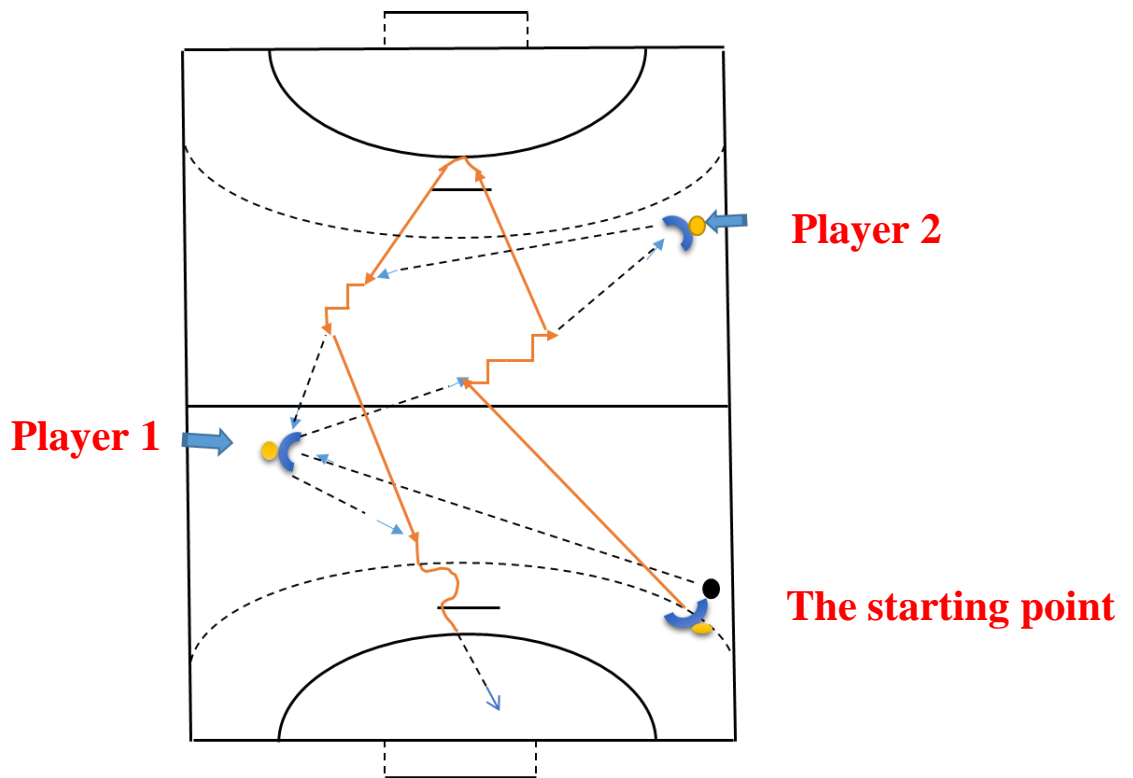


Figure (1) shows the performance of players in speed of passing and receiving test with collective fast attack

The researchers use statistical (quantitative) methods using SPSS, represented by percentage, arithmetic mean, standard deviation, simple correlation coefficient (Pearson), T test, standard score, and modified standard score.

Presentation of results: The arithmetic mean, standard deviation, and spraining coefficient are obtained as shown in Table (4).

Table (4) shows the arithmetic mean, standard deviation, and spraining coefficient of the test sample.

A test to measure the speed and ability to pass and receive the ball in a collective fast attack for Iraqi handball club player.	arithmetic mean	standard deviation	spraining coefficient
	18.1605	1.04258	.8870

Table (4)

Table (5) shows the raw grades and standard scores which are moified for the sample.

No	Raw grade	Standar d score	Modif ied standa rd	No	Raw grade	Standar d score	Modifi ed standar d	No	Raw grad e	Standard score	Modifi ed standa rd
1	21.60	3.29907	82.99	59	18.50	.32567	53.26	117	17.60	-.53758	44.62
2	21.60	3.29907	82.99	60	18.50	.32567	53.26	118	17.60	-.53758	44.62
3	21.10	2.81949	78.19	61	18.50	.32567	53.26	119	17.60	-.53758	44.62
4	21.10	2.81949	78.19	62	18.50	.32567	53.26	120	17.60	-.53758	44.62
5	21.10	2.81949	78.19	63	18.40	.22975	52.30	121	17.60	-.53758	44.62
6	20.50	2.24399	72.44	64	18.40	.22975	52.30	122	17.60	-.53758	44.62
7	20.50	2.24399	72.44	65	18.40	.22975	52.30	123	17.60	-.53758	44.62
8	20.10	1.86033	68.60	66	18.30	.13384	51.34	124	17.60	-.53758	44.62
9	20.10	1.86033	68.60	67	18.30	.13384	51.34	125	17.50	-.63349	43.67
10	20.10	1.86033	68.60	68	18.30	.13384	51.34	126	17.50	-.63349	43.67
11	19.90	1.66850	66.68	69	18.30	.13384	51.34	127	17.50	-.63349	43.67
12	19.90	1.66850	66.68	70	18.20	.03792	50.38	128	17.50	-.63349	43.67

13	19.80	1.5725 8	65.73	71	18.20	.03792	50.38	12 9	17.5 0	-.63349	43.67
14	19.80	1.5725 8	65.73	72	18.20	.03792	50.38	13 0	17.5 0	-.63349	43.67
15	19.50	1.2848 3	62.85	73	18.20	.03792	50.38	13 1	17.5 0	-.63349	43.67
16	19.50	1.2848 3	62.85	74	18.20	.03792	50.38	13 2	17.5 0	-.63349	43.67
17	19.50	1.2848 3	62.85	75	18.10	-.05800	49.42	13 3	17.5 0	-.63349	43.67
18	19.50	1.2848 3	62.85	76	18.10	-.05800	49.42	13 4	17.5 0	-.63349	43.67
19	19.40	1.1889 1	61.89	77	18.10	-.05800	49.42	13 5	17.5 0	-.63349	43.67
20	19.40	1.1889 1	61.89	78	18.10	-.05800	49.42	13 6	17.4 0	-.72941	42.71
21	19.40	1.1889 1	61.89	79	18.10	-.05800	49.42	13 7	17.4 0	-.72941	42.71
22	19.30	1.0930 0	60.93	80	18.10	-.05800	49.42	13 8	17.4 0	-.72941	42.71
23	19.30	1.0930 0	60.93	81	18.10	-.05800	49.42	13 9	17.4 0	-.72941	42.71
24	19.30	1.0930 0	60.93	82	17.90	-.24983	47.50	14 0	17.4 0	-.72941	42.71
25	19.30	1.0930 0	60.93	83	17.90	-.24983	47.50	14 1	17.4 0	-.72941	42.71
26	19.30	1.0930 0	60.93	84	17.90	-.24983	47.50	14 2	17.3 0	-.82533	41.75
27	19.30	1.0930 0	60.93	85	17.90	-.24983	47.50	14 3	17.3 0	-.82533	41.75
28	19.20	.99708	59.97	86	17.90	-.24983	47.50	14 4	17.3 0	-.82533	41.75
29	19.10	.90117	59.01	87	17.90	-.24983	47.50	14 5	17.3 0	-.82533	41.75
30	19.10	.90117	59.01	88	17.90	-.24983	47.50	14 6	17.3 0	-.82533	41.75
31	19.10	.90117	59.01	89	17.90	-.24983	47.50	14 7	17.3 0	-.82533	41.75
32	19.10	.90117	59.01	90	17.80	-.34574	46.54	14 8	17.3 0	-.82533	41.75
33	18.90	.70933	57.09	91	17.80	-.34574	46.54	14 9	17.2 0	-.92124	40.79
34	18.90	.70933	57.09	92	17.80	-.34574	46.54	15 0	17.2 0	-.92124	40.79
35	18.90	.70933	57.09	93	17.80	-.34574	46.54	15 1	17.2 0	-.92124	40.79

36	18.90	.70933	57.09	94	17.80	-.34574	46.54	15 2	17.2 0	-.92124	40.79
37	18.90	.70933	57.09	95	17.80	-.34574	46.54	15 3	17.1 0	-1.01716	39.83
38	18.80	.61342	56.13	96	17.80	-.34574	46.54	15 4	16.9 0	-1.20899	37.91
39	18.80	.61342	56.13	97	17.80	-.34574	46.54	15 5	16.9 0	-1.20899	37.91
40	18.80	.61342	56.13	98	17.80	-.34574	46.54	15 6	16.9 0	-1.20899	37.91
41	18.80	.61342	56.13	99	17.80	-.34574	46.54	15 7	16.9 0	-1.20899	37.91
42	18.80	.61342	56.13	10 0	17.80	-.34574	46.54	15 8	16.9 0	-1.20899	37.91
43	18.70	.51750	55.18	10 1	17.80	-.34574	46.54	15 9	16.9 0	-1.20899	37.91
44	18.70	.51750	55.18	10 2	17.80	-.34574	46.54	16 0	16.9 0	-1.20899	37.91
45	18.70	.51750	55.18	10 3	17.80	-.34574	46.54	16 1	16.8 0	-1.30491	36.95
46	18.70	.51750	55.18	10 4	17.70	-.44166	45.58	16 2	16.8 0	-1.30491	36.95
47	18.60	.42159	54.22	10 5	17.70	-.44166	45.58	16 3	16.7 0	-1.40082	35.99
48	18.60	.42159	54.22	10 6	17.70	-.44166	45.58	16 4	16.7 0	-1.40082	35.99
49	18.50	.32567	53.26	10 7	17.70	-.44166	45.58	16 5	16.7 0	-1.40082	35.99
50	18.50	.32567	53.26	10 8	17.70	-.44166	45.58	16 6	16.5 0	-1.59266	34.07
51	18.50	.32567	53.26	10 9	17.70	-.44166	45.58	16 7	16.5 0	-1.59266	34.07
52	18.50	.32567	53.26	11 0	17.70	-.44166	45.58	16 8	16.4 0	-1.68857	33.11
53	18.50	.32567	53.26	11 1	17.60	-.53758	44.62	16 9	16.4 0	-1.68857	33.11
54	18.50	.32567	53.26	11 2	17.60	-.53758	44.62	17 0	16.3 0	-1.78449	32.16
55	18.50	.32567	53.26	11 3	17.60	-.53758	44.62	17 1	16.3 0	-1.78449	32.16
56	18.50	.32567	53.26	11 4	17.60	-.53758	44.62	17 2	16.2 0	-1.88040	31.20
57	18.50	.32567	53.26	11 5	17.60	-.53758	44.62				
58	18.50	.32567	53.26	11 6	17.60	-.53758	44.62				

The normal curve is then divided into seven levels for this test, Figure (2)

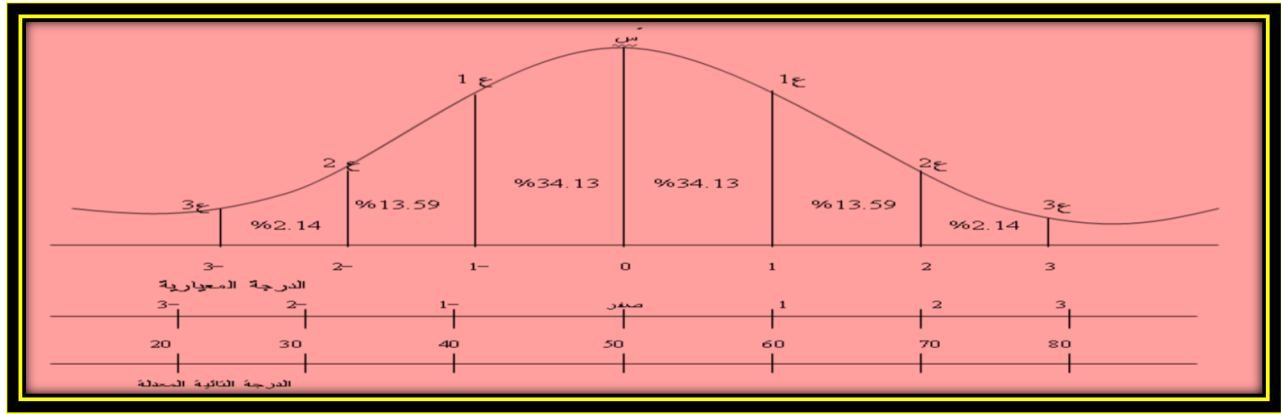


Figure (2) it shows the percentages of the standard levels the sample achieved in the test

From what is shown in Table (5), one understands that the modified standard scores for the test measuring the speed and ability to pass and receive the ball in the collective fast attack of handball players are limited to the lowest modified standard score, which is (31.20), which corresponds to a raw score (16.20), and the highest modified standard score (82.99) which corresponds to a raw score of (21.60) noting that the test is calculated in time. The test proves that the shorter the performance time, the better the tester's performance.

The standard levels	The rate of the modified standard grade	The rate of the standard levels
Excellent	39- 30	39.83 – 31.20
Very good	49- 40	49.42 – 40.79
Good	59 – 50	59.97 – 50.38
Average	69- 60	68.60 – 60.93
Accepted	79 – 70	78.19 – 72.44
Weak	89 – 80	82.99
Very weak	—	—

Table (7) shows the percentages of standard levels achieved by the sample in the test.

The test		Less than 40 Excellent	From 40-49 Very good	From 50-59 good	From 60-69 Average	From 70-79 acceptable	From 80-89 weak	More than 90 Very weak
<ul style="list-style-type: none"> • A test to measure the speed and ability to pass and receive the ball using a collective fast attack for handball players. 	repetition	20	78	47	20	5	2	—
	rate	11.627	45.34	27.32	11.627	3	1.2	—

Table (7) shows that the highest frequency is in the very good range, and the lowest frequency is in the very weak range, as the sample do not achieve any spread in it and the percentages of the standard levels that the sample achieve in this test are at a level less than (40) which demonstrate an excellent level and it achieved spread. Twenty sample members are included in this group. The level that reaches more than (90) is considered very weak. None of the sample members has spread in it so the level is considered excellent, which is the first level. The sample achieves a percentage greater than what is essentially determined for it by the natural curve. However, (Farhan et al., 2016) most of the sample's performance is concentrated in the second level (Very good) and the percentage is much higher than what is determined for it according to the natural curve. As for the third level (good) it comes in a secondary place in terms of its spread as its percentage is more than what is determined initially according to the natural curve. As for the fourth level, (average), the sample also spread at a greater rate than that determined for it by the natural curve. On the fifth level (acceptable), the researchers notice that the sample's spread is also less than that determined for it by the natural curve. On the sixth level (weak) the sample's spread is also less than the determined rate. From the above, one can say that the test ranges from excellent to very good, which achieves the goal of this research.

It indicates that the test in general is not very easy and is not very difficult. The researchers agree that handball players have the ability to perform this test with distinction because most of the teams' training depends on fast attacks so that these teams can go along with each other on the field to win the matches. (Mousa & Kadhim, 2023) The reason why the sample is not spread equally at all levels is the performance of the two players for the test. This test depends on the speed of performance as well as the player's ability to pass with high accuracy

and receive the ball while advancing by running at high speed, despite the obstacles included in the test. The players are being able to change direction and advance again to shoot at the goal which requires players to master handball skills. "Handball is a game that has its own basic skills and all of these defending and attacking skills are found to serve the players in order to reach the goal" The opposing team" (Abbas, Mahmud; Khaleel, Moushriq Fathi;, 2019, p. 216). The speed of advancing the ball to the opposing team's court is considered a very important factor in building a fast handball attack. "The kinetic speed in handball is the tool that determines the extent of successfully initiating and ending attacks." (Al-Ugaili, Kazem, and Shuhaib, 2015, p. 58)."

Conclusion:

The researchers conclude from their findings that this test, which is designed, built and codified, is characterized by high accuracy and adequacy and can be used to measure the speed and ability to pass and receive the ball in a collective fast attack by handball players despite the obstacles that the player encounters during performance represented by changing direction, turning around other players, passing and receiving the ball. The researchers find that the test is compatible with the nature of performance during the course of play. Therefore, the test is considered an objective test, and standard levels have been designed for it through which coaches can identify the level of performance of their players before and during the championships. Hence the test is established and the goal of this research is achieved. The researchers urge to use such tests to measure the speed and effectiveness of the performance of handball players during a fast attack in order to properly evaluate their performance before and during championships. The researchers also highlight the importance of inventing other tests in this field or designing tests for different samples in terms of age groups for male and female players.

References

- Abbas, Mahmud; Khaleel, Moushriq Fathi;. (2019). Comparing Some Biomechanical Variables of One Leg and Two Legs Jump Shot In Handball. *Journal of Physical Education*, 31(2).
- Abdulhussein, A. A., Dheyab, A. S., Abdulkareem, O. W., mutar Albadri, E. H., Hammood, A. H., Musa, M. F. A. H., Kadhim, M. J., & AbdulMageed, T. S. (2024). AN ELECTRONIC SYSTEM ACCORDING TO THE COOPERATIVE METHOD AND ITS IMPACT ON DEFENSIVE MOVEMENTS IN YOUTH BASKETBALL. *International Development Planning Review*, 23(1), 1253–1266.
- Ahmed Khamis Radhi. (28 6, 2016). Building special speed and its relationship to the time of performing the third wave of the quick attack (the fast center), and its success in handball. *Journal of the College of Physical Education - University of Baghdad*, 2, pp. 250-266. doi: [https://doi.org/10.37359/JOPE.V28\(2\)2016.281](https://doi.org/10.37359/JOPE.V28(2)2016.281)
- Ahmed Khamis Radhi Al-Sudani. (28 6, 2010). The reality of some defensive applications used and their relationship to the results of the Iraqi teams participating in the Asian Clubs Championship in Saudi Arabia 2009 in handball. *Journal of Physical Education*, 2, pp. 51-74. doi: [https://doi.org/10.37359/JOPE.V22\(2\)2010.692](https://doi.org/10.37359/JOPE.V22(2)2010.692)
- Ammar Darwish Rashid. (2008). Comparison of standard levels of some physical and functional abilities among handball and team games players. *Journal of the Faculty of Physical Education*, 2, pp. 330-390. doi:[https://doi.org/10.37359/JOPE.V20\(2\)2008.775](https://doi.org/10.37359/JOPE.V20(2)2008.775)
- Easa, F. A. W., Shihab, G. M., & Kahdim, M. J. (2022). the Effect of Training Network Training in Two Ways, High Interval Training and Repetition To Develop Speed Endurance Adapt Heart Rate and Achieve 5000 Meters Youth. *Revista Iberoamericana de Psicología Del Ejercicio y El Deporte*, 17(4), 239–241.
- Farhan, A. F., Kadhim, M. J., & Shihap, G. M. (2016). 972 *The effectiveness of injury prevention program on reducing the incidence of lower limb injuries in adolescent male soccer players*. BMJ Publishing Group Ltd.
- HalahAtiyah, M., Alhamayd, Q. A., QasimKhalaf, S., AmerAbdulhussein, A., JawadKadhim, M., KohChoonLian, D., HashimHammood, A., & YahyaFaris Mohsen, G. (2024). EXTRAPOLATION OF THE MACHINE AND ITS EFFICIENCY IN DEVELOPING THE SKILL PERFORMANCE AND ACCURACY OF DRIBBLING IN YOUTH FOOTBALL. *International Development Planning Review*, 23(1), 1037–1047.
- Hana Jalal Fathallah. (September 30, 2013). Fast attack and its relation to the skill of passing the ball at different distances, close and long shooting, and the ranking of the participating teams in the Kurdistan Region Universities Handball Championship 2011. *Journal of Physical Education Sciences*, 3, pp. 228-250.
- Kadhim, M. J. (2024a). Digital Literacy and Its Importance in the Modern Workforce. *International Journal of Social Trends*, 2(2), 44–50.
- Kadhim, M. J. (2024b). Social Networks' Place in Contemporary Political Movements.

International Journal of Social Trends, 2(2), 51–59.

Kadhim, M. J., Shihab, G. M., & Zaqair, A. A. (2021). The Effect of Using Fast And Direct Cooling after Physical Effort on Some Physiological Variables of Advanced Football Players. *Annals of the Romanian Society for Cell Biology*, 25(6), 10014–10020.

Kazar, F. H., & Kazim, M. J. (2020). THE EFFECT OF AN ACCELERATED REHABILITATION METHOD BY USING THE AQUEOUS MEDIUM TO REHABILITATE WORKING MUSCLES ON THE KNEE JOINT AS A RESULT OF INJURY TO THE ATHLETIC CRUCIATE LIGAMENT. *International Journal of Research in Social Sciences and Humanities*, 10(2), 331–335.
<https://doi.org/10.37648/ijrssh.v10i02.031>

Mahmoud Musa Al-Akeili, Muhammad Mahmoud Kazim, and Muhammad Hamza Shahib. (28 3, 2015). A comparative study of the weak and strong legs and their relationship to shooting accuracy and jumping accuracy from the corner in handball. *Journal of Physical Education- University of Baghdad*, 1, pp. 55-67.
[doi:https://doi.org/10.37359/JOPE.V27\(1\)2015.520](https://doi.org/10.37359/JOPE.V27(1)2015.520)

Mousa, A. M., & Kadhim, M. J. (2023). Nmusing An Innovative Device To Improve The Efficiency Of The Anterior Quadriceps Muscle Of The Injured Knee Joint After Surgical Intervention Of The Anterior Cruciate Ligament In Advanced Soccer Players. *Semiconductor Optoelectronics*, 42(1), 1504–1511.

Moushriq Khaleel Fathi. (2022, 5). 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. *Ibero-American Journal of Exercise and Sports Psychology*, 5, pp. 294-298.

Salih, I. H., Yaseen, A. M., Naseer, K. J., Attieh, A., & Kadhim, M. J. (2024). THE IMPACT OF COMPETITIVE SPEED EXERCISES ON JUNIOR BOXERS' EFFECTIVENESS OF SKILL PERFORMANCE AND COUNTERATTACK SPEED. *International Development Planning Review*, 23(1), 149–162.

Ruqayyah Abdul-Ridha Mohsen Al-Moussawi. (23 5, 2019). The effect of various movement games on developing the skill of handling in handball, at the age of (9-11) years. *Journal of Physical Education*, 4, pp. 500-518.
[doi:https://doi.org/10.37359/JOPE.V27\(4\)2015.689](https://doi.org/10.37359/JOPE.V27(4)2015.689)