

Design and codification of the compound test in catching and delivering of the pivot player in holding the opponent, tackling towards, and going back of the defence player of the handball

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Abstract

The process of handing over or receiving the pivot player to and from the colleague that occurs during matches in defense situations aims to reduce his risk and get rid of the possibility of seizure and numerical superiority, then pounce on the opposing back-line player who poses a danger to the goal, as it needs concentration and harmony. High between the two defenders, they come through continuous training, and they depend on the speed of performance and the correct timing between them to ensure the delivery and reception of the circuit player on the line of the goal area, so it was required that tests be available for sports skills in all games and handball and in particular defensive ones due to their scarcity, and the importance of this study comes from During the creation of a special modern test that measures this skill for the benefit of researchers, coaches and players alike, a small contribution from the researchers to serve the game of handball.

Keywords : *innovation, compressive defense, defense cooperation, moves, standard levels.*

Introduction

Most of the skillful and technical capabilities of handball players are a series of sequential movements intended to transfer the ball to the opposing team's court through attack, and to confront the opposing team's players, cutting the ball and preventing him from scoring a goal in the defense state, and as it is known that the game has a variable environment in which it changes the positions are sudden and unexpected during play, most of the player has mastered the skills of hand attacking football, including defense and I was able to him it is the direction of the motor trajectory suddenly is the other to the path of another true in such as those positions during the defense, the player makes a great effort because of the rapid movements resulting in the continuing of the fatigue and lack of focus on attacking movements to respond by wrong movements rival player (**Marwan, 2010**) As the success of the defender in addressing the striker depends on the mastery of skills handball individual defense and collective, The defensive skills of individual progress defense to attack, (tackling) and the pressure on the opponent and try to cut and deflect the ball back to replace Askew and inherent defensive focal player and disposal of booking and wall Denial, either defensive moves collective P is coverage for advanced fellow forward, receiving and taking the focal player from his colleague. (**Abdul- Jalil, 1981**) The delivery process or received a focal player from a colleague that occur during the games in defense cases the purpose of which reduce the severity and eliminate the possibility of booking and numerical superiority, then the onslaught on the player line back rival, (**Wajih, 2005**) which is dangerous for the goal, as you need to focus and harmony defenders, the two expressions of training continued, and supports that the speed of the performance of the proper timing between them to secure the delivery and receipt of the player circle on the line of the goal area, and prevented him from receiving the ball from a teammate or performance of the booking process, the late availability of complete freedom for A defender b attacking the ball carrier and attacking him defensively on the free throw line, trying to block or attack the remote player to thwart the attack or cut and disperse the ball and return with an inclination and receive the pivot again from the teammate. (**Ali, 1994**) To find out the possibilities of the players in this application of the work of the cooperative between colleagues Ba defense the right way, has become the duty training intensively for a long time to master. (**Faisal, 1996**) The training of modern is known as requires blending a host of other science to improve the quality of the players and her tests

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and measurements, which are effectively for to know the status of the players during the period of preparation before entering tournaments and during for the purpose of evaluating the errors to be later developed and improved level , a step in the right direction and give a comprehensive picture of the level of the players performance, so ask it the availability of tests for sports skills in all games and the game of handball and Especially defensive, including its scarcity , and the importance of this study comes through the creation of a special modern test that measures this skill for the benefit of researchers, coaches and players alike, a simple contribution from the two researchers in the service of the game of handball. (Vivian, 1984) (Fouad, 1979).

Research problem : Through the researchers following up on the matches of the Iraqi League clubs and the national teams, they noticed a clear weakness of most of the teams in the process of handing over and receiving the pivot player , as well as the skill tests installed with handball, especially defensive ones, are rare, and if they exist, they are certainly old and do not meet the requirements of a ball game modern hand that the recent events of significant changes to some of the rules of her and the laws of her ,and the light changed ABC training and it became necessary to devise a special test to measure the viability of the player yen defenders on the delivery and receipt of the focal player the goal area for the line to advance quickly to the free throw line and performance His mission and get back a mile.

Aim of the research : To design and codify a combined test for defending players to measure the possibility of surrendering and receiving a circuit player and advancing forward to the handball match.

Research limitations:

- The human field, players of the Iraqi League clubs with handball.
- Time domain: 2 - 9 - 2019 - 20 - 11 - 2019
- Spatial field: handball courts for clubs participating in the Iraqi League.

Methodology

The researchers followed descriptive approach survey manner to fit in solving the problem of research , representing the research community clubs Iraqi League handball's (1 2), Nadia, who are : clubs (Karkh , and the police, the army, Musayyib and Karbala bully, Sulaymaniyah, Kut and Dagharah, And the municipality of Basra , Diyala and Al-Khaleej club. ” The sample was represented by the players of (10) clubs from these clubs.

Table (1)
The research community and the number of total players each club
And the number of the sample and the ratio percentage

sequence	Club	Number of Players	Number of tested players
1	Police Club	14	13
2	Army club	12	12
3	Student club	13	13
4	Al- Musayyib Club	10	10
5	Karbala Club	11	10
6	Bully Club	12	10
7	Sulaymaniyah Club	11	11
8	Al Kut Club	11	10
9	Fitch club	11	11
10	Basra Municipality	12	10
11	Diyala Club	10	0
12	Gulf Club	10	0
Total		137	110
Percentage		80.3%	

The researchers used a number of methods, tools and devices to obtain accurate data and information to achieve the goal of the study, including : a regular handball court, two hand balls, colored adhesive tape, a stopwatch, a whistle, and a computer and a camera for documentation, as the two researchers took several steps to achieve the first part of the study consisted to clarify the importance and the area to take advantage of this test , and areas of use and fields , and the beneficiary of the study . It pointed to the approach used, and reached the difficulty or ease of performance on the sample by conducting exploratory experiments several , and get a result The scientific foundations, validity , reliability, and objectivity, and finally , to determine the levels and standards for this test.

- **Design of a composite test to measure susceptibility Hand over and receive the circuit player and advance forward to meet the handball defending players.**

After several attempts by exploratory experiments designed this test through his painting on paper in preparation for the codification and dissemination, as the researchers doing experiments to draw the correct path for the test, which represents the progress fast forward after the delivery of the focal player for a colleague to defend against All the divisions threatened the goal and accompany him to that end its gravity, and then go back awry to its location, after which conducted the experience of five players from the club Dagharah on 2- 9 - 2019 to calculate the time it takes and the number of iterations that the player can do, taking into account the additional work in the delivery and receipt of the focal player for a colleague, then Another experiment was conducted on 9-20-2019 to calculate the number of repetitions that a player can perform within twenty seconds, which is a scoring formula for the test, after which the researchers reached the final test. (Wajih, 2005) (We calculated the scientific basis for the test stability test calculated by the honesty discriminatory sample table (3), either with respect to test the stability, P was the inference it accurately by using the coefficient of simple correlation, by obtaining the degree of testing and re - applied to the sample to obtain Two different readings, with regard to the objectivity of the test, it was reached through the significance of the simple correlation of the scores of arbitrators, Table (2).

Table (2) the scientific foundations show honesty, consistency, and objectivity to the test of measuring the delivery and reception of the circuit player and swooping in front of the tackling and referring to the defense players with handball

Scientific foundations	Correlation coefficient	The moral is the truth	Link type
Persistence	0.753**	0.000	moral
Objectivity	0.992**	0.000	moral

Below significance level (0.01)

It was the force account discriminatory, having been arranged test scores runway recursively by the form of ascending, has been using the method of groups of extreme sample, the researcher said with the adoption of the proportion (27%) of the grades lower and (27%) of grades supreme, and for the fact that grades (T) Calculated all spirits were able degrees' test to distinguish between the two groups, and this shows on the test distinguishes between the sample and can be applied to a table (3).

Table (3) The arithmetic mean, standard deviation, and value T to test the delivery and reception of the circuit player and pounce in front of the tackling and refer of the defending players with handball

Variables	Lower group		Top group		Values T Calculated	The moral is the truth	The type of difference
	\bar{y}	S	\bar{y}	S			
Test of receiving and delivering the circuit player and jumping in front of the tackling with the hand ball	20.61	528	18.06	460	19.966	000.	Moral

Below significance level (0.01)

• **The Final test:**

The test a delivery and reception of the circuit player and pounce in front of a tackling with the handball defending players.

The objective of the test: to measure the defending a handball player's ability to deliver and receive the circuit player and swoop in front to tackling and return with inclination.

Tools used: handball court, handball (2), tape, whistle, stopwatch.

Test method: the player stands on the goal area line over a 30-centimeter circle, starting point (A), The focal point stands next to him and when he hears the starting whistle he picks up the pivot player, moves him to the side and hands him over to the colleague over the point (B). The marker on the goal area line that is 1.5 meters away from the starting point, then attacks the player who threatens the goal on the free throw line above the point (C) (Which is 3 meters away from the delivery point, joins with it and accompanies it and brings it to the third point) Which is 1.5 meters away from the attack point on the free throw line, and then retracts with the starting point to receive the pivot again, the player repeats this process five times as soon as possible before stopping.

Test conditions :The player performs the test at full speed and stops when he completes five iterations, and the repetition in which the player's foot does not touch one of the circles drawn on the ground during his performance is not counted,

and he must repeat it and this process is at the expense of the performance time ,and the opposing pivot is asked to move with defender positively during the delivery process with making simple resistance.

Scoring :Correctly calculate the overall performance time for five iterations.

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The marker on the goal area line that is 1.5 meters away from the starting point, then attacks the player who threatens the goal on the free throw line above the point (C) Which is 3 meters away from the delivery point(B), joins with him and accompanies it and brings it to the fourth point) Which is 1.5 meters away from the attack point (C) on the free throw line, and then retracts to the starting point to receive the pivot player again, the player repeats this process five times as soon as possible before stopping.

Test conditions: The player performs the test at full speed and stops when he completes five iterations, and the repetition in which the player 's foot does not touch one of the circles drawn on the ground during his performance is not counted, and he must repeat again and this process is at the expense of the performance time, and on the other hand the opposing pivot is asked to move with defender positively during the delivery process with making simple resistance.

Scoring: Correctly calculate the overall performance time for five iterations.

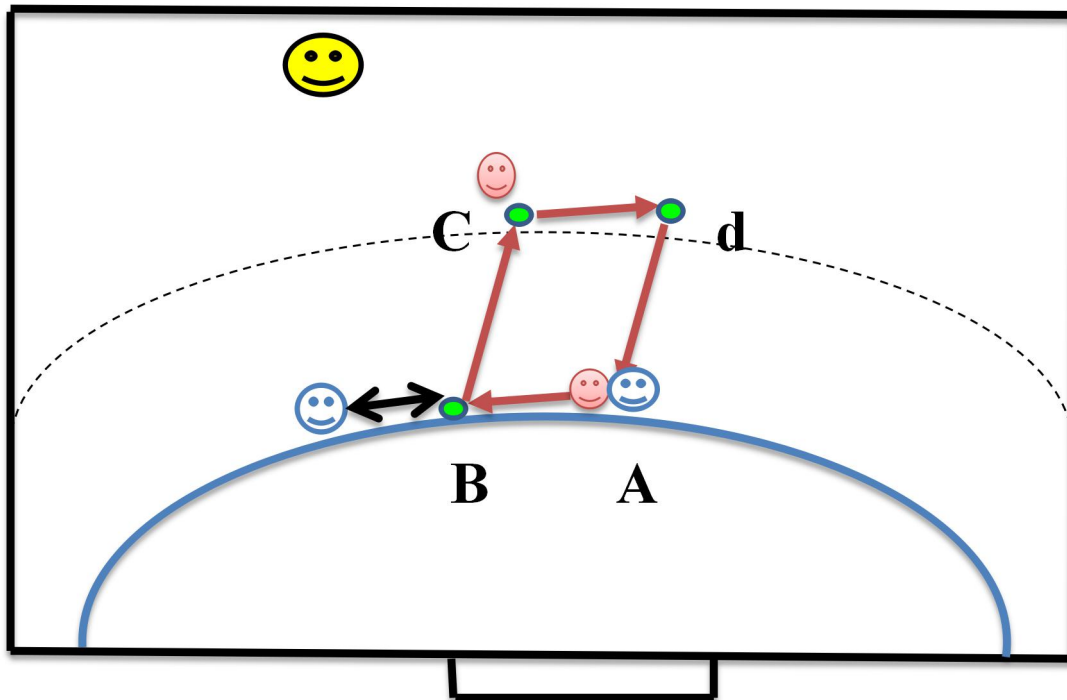


Figure (1) the path of the player to perform the test and the points that the he must pass

Results

After that the researchers analyzed the degrees of the sample raw statistically were extracted central arithmetic mean deviation standard coefficient convolution purpose to identify the sample homogeneity, table (4).

Table (4) the mean, standard deviation, and torsion modulus of the test sample.

Test of receiving and delivering the circuit player and jumping in front of the tackling and referring to the hand ball inclination	Arithmetic mean	standard deviation	Coefficient of torsion
	19.3357	1.06343	0.074

And then the normal curve was divided into seven levels for this test (Figure 2).

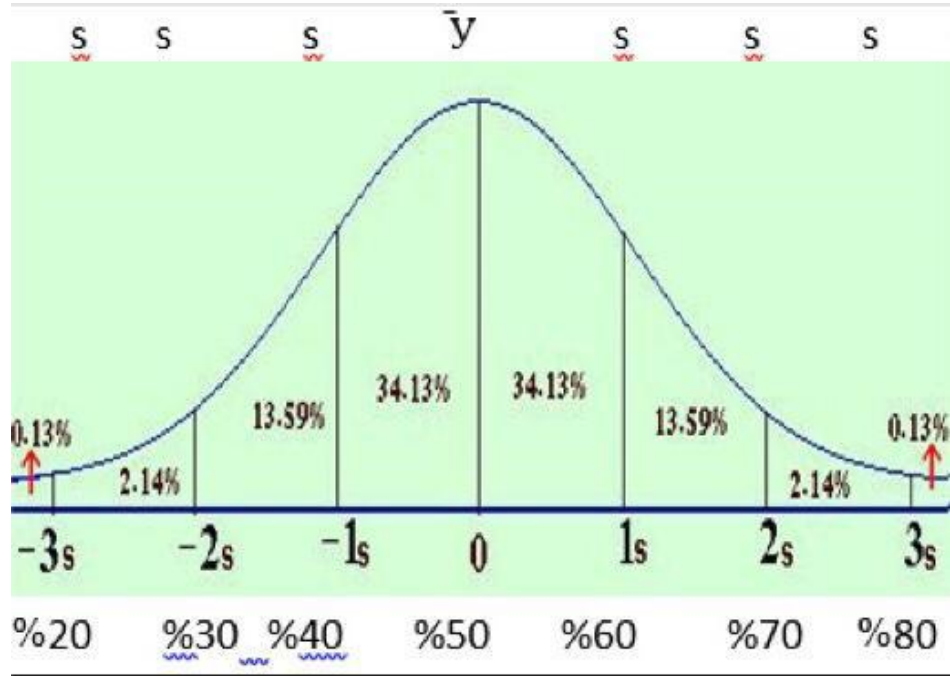


Figure (2) the percentages percentage levels of standard that achieved by the sample test
 Table (5) the raw scores, standardized scores, and standardized test scores

No	Raw grade	Standard score	Modified standard	No	Raw grade	Standard score	Modified standard	NO	Raw grade	Standard score	Modified standard
1	18.32	-.95515	40.45	38	19.46	11686	51.17	75	17.56	-1.66982	33.30
2	20.11	72809	57.28	39	18.11	-1.15262	38.47	76	18.19	-1.07739	39.23
3	17.23	-1.98014	30.20	40	19.54	19209	51.92	77	18.41	-.87051	41.29
4	17.64	-1.59459	34.05	41	18.36	-.91753	40.82	78	19.19	-1.3704	48.63
5	20.85	1.42396	64.24	42	19.38	04163	50.42	79	17.58	-1.65101	33.49
6	22.08	2.58060	75.81	43	18.42	86111	41.39	80	18.57	-.72006	42.80
7	20.17	78451	57.85	44	17.16	-2.04596	29.54	81	19.16	-1.6525	48.35
8	20.16	77511	57.75	45	19.56	21090	52.11	82	20.18	79392	57.94
9	19.16	-1.6525	48.35	46	18.39	-.88932	41.11	83	20.32	.92557	59.26
10	18.19	-1.07739	39.23	47	19.32	-.01479	49.85	84	19.34	.00402	50.04
11	18.48	-.80469	41.95	48	20.37	.97259	59.73	85	19.27	-.06181	49.38
12	18.13	-1.13381	38.66	49	21.52	2.05400	70.54	86	18.43	-.85171	41.48
13	19.27	-.06181	49.38	50	18.23	-1.03978	39.60	87	19.23	-.09942	49.01
14	19.43	08865	50.89	51	19.59	23911	52.39	88	19.21	-1.1823	48.82
15	18.56	-.72946	42.71	52	18.45	-.83290	41.67	89	20.28	88795	58.88
16	20.56	1.15125	61.51	53	21.27	1.81891	68.19	90	21.12	1.67785	66.78
17	20.18	79392	57.94	54	20.11	72809	57.28	91	20.17	78451	57.85
18	21.58	2.11042	71.10	55	20.34	94438	59.44	92	18.11	-1.1526	38.47
19	18.33	-.94574	40.54	56	19.35	01342	50.13	93	17.21	-1.9989	30.01
20	18.53	-.75767	42.42	57	18.59	-.70125	42.99	94	19.54	19209	51.92
21	19.11	-.21226	47.88	58	18.53	-.75767	42.42	95	18.33	-.94574	40.54
22	18.51	-.77648	42.24	59	19.11	-.21226	47.88	96	17.56	-1.6698	33.30
23	17.48	-1.74505	32.55	60	20.17	78451	57.85	97	19.22	-.10882	48.91
24	19.46	11686	51.17	61	20.12	73750	57.37	98	20.26	86915	58.69

25	18.29	-98336	40.17	62	18.58	-.71065	42.89	99	20.39	.99139	59.91
26	20.18	79392	57.94	63	19.17	-15584	48.44	100	17.23	-1.9801	30.20
27	20.19	.80332	58.03	64	18.53	-.75767	42.42	101	19.56	21090	52.11
28	20.38	98199	59.82	65	19.21	-11823	48.82	102	20.56	1.15125	61.51
29	19.13	19346	48.07	66	20.18	79392	57.94	103	21.27	1.81891	68.19
30	21.22	1.77189	67.72	67	20.01	63406	56.34	104	20.56	1.15125	61.51
31	19.28	-0.05240	49.48	68	20.12	73750	57.37	105	19.38	04163	50.42
32	19.53	18269	51.83	69	19.33	-.00539	49.95	106	19.36	02283	50.23
33	21.01	1.57441	65.74	70	20.09	70929	57.09	107	20.58	1.17006	61.70
34	20.15	76571	57.66	71	18.56	-.72946	42.71	108	20.11	72809	57.28
35	18.59	-.70125	42.99	72	19.54	19209	51.92	109	18.58	-.71065	42.89
36	18.57	-.72006	42.80	73	19.42	07925	50.79	110	18.34	-.93634	40.64
37	20.19	.80332	58.03	74	20.15	76571	57.66				

Through what was presented in Table (5), it was found that the modified standard scores for the test of delivery and receipt of a circuit player and pouncing in front of the tackling and returning with the handball defenders are confined to the highest modified standard score (75.81), which corresponds to a raw score (22.08), and the lowest score Modified standard, (29.54), Which corresponds to a raw score (17.16) that the test is calculated in the time taken for performance , and this means that the smaller the time taken, the more the player's ability to perform at a faster speed, taking into account the good performance of the performance, we understand through this that this test can measure what is set from for him and the coaches can handball adoption at the selection of the player Wen outstanding Wen defense , and stand on the levels and then develop their abilities defense .

Table (6) the percentages of the standard levels achieved by the sample by testing the defense. Measuring the delivery and reception of the circuit player, and pouncing in front of the tackling and referring to the defending players with handball

The paragraphs		Less than 30 is excellent	From 30-39 very high	From 40 - 49 high	From 50-59 average	60 - 69 is acceptable	From 70-79 low	More than 80 is very low
Speed test of short defensive moves	Repetition	1	14	40	42	10	3	0
	The ratio	0.90%	12.72%	36.36%	38.18%	9.0 %	2.72%	%0

Through Table (6), we can see the percentages of the standard levels achieved by the sample in this test at a level less than (30), excellent in which only one of the sample members spread, either at the level more than (80), the very low level, no achievement was achieved. the spread of individuals to sample it, so the level is excellent is the first level and achieved a sample rate of less than scheduled natural sinusoidal either the second level (very high) have won a significant proportion, but most of the sample performance of concentration in the fourth (average) you get the highest rate, to come third level (high) after him , and was accounted of a higher than scheduled in a natural curve, while the level of the fifth (acceptable), FH and j comes rank of the fifth in terms of the spread of the sample, the rate of less than a scheduled natural curve, and with regard to the level of the sixth, m reduce, we note that the spread of weak but greater than the scheduled natural curve, through what progress can say that the level of the test well was to average, which achieves the goal of the research, and we can say that the player has a defender take a the performance of this test is well and accurately high because steps Test the performance of the core duties defensive pitch, the reason for not spreading the sample members equally at all levels is due to the individual differences between the sample members and the different speed of the players in performing the test, and the nature of performance, which depends on taking it quick and short steps to move between the points placed on the ground test area, The effort exerted for additional work represented in the process of handing over, receiving the pivot player and presenting for the tackling, played an effective role in spreading the sample, and this is necessarily reflected in the speed of his performance for this test in this way, and accordingly the limits of the standard levels have become as shown in Table (7).

Table (7) the limits of the standard levels of the defense test, the measurement of the delivery and reception of the circuit player, and pouncing in front of the tackling and returning with a handball incline.

Standard levels	Adjusted T-score limits	Limits of standard levels
Excellent	20-30	29.54
very high	30-40	29.39 - 39.60
high	40-50	40.17 - 49.95
Average	50-60	50.04 - 59.95
Acceptable	60-70	61.51 - 68.19
Low	70-80	70.54 - 75.81
very low	80-90	—————

Conclusions

We conclude from the foregoing that this test has now become standardized and has achieved the goal of the study, and it can measure the ability of the defense player to deliver and receive the pivot player and pounce at a high speed in front of the tackling and return with inclination.

By the foregoing we see on the need for trainers' pays attention handball care of the defensive work cooperative skill of its importance for handball players, and recommend that we can be trained them to use to stand on their player's levels, and We need for rationing operations and other tests that measure the same skill or other skills defensive serve game handball, and can modify this test to serve some researchers and other coaches and players.

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