DESIGNING AND CODIFYING A SPECIALIZED TEST TO EVALUATE THE SKILL PERFORMANCE OF EMERGING FOOTBALL PLAYERS

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ABSTRACT

The research aimed to design and codify a composite skill test for junior football players, while the research problem lies in the lack of composite skill tests for junior football players, so the researchers decided to study this problem and develop solutions to it.

As for the research fields, they included the human field, which was represented by the players of Maysan governorate clubs in junior football, and the temporal domain was determined for the period from (10/10/2021) until (01/12/2021), while the spatial field was in the arenas of the clubs studied.

The researchers used the descriptive approach in the survey method, and the research sample consisted of (100) players from Maysan province clubs for junior football, and the (SPSS) system was used to obtain the results of the research, and the researchers concluded the following:

A composite skill test for junior football players has been designed and codified.

The test is characterized by simplicity and uncomplexity, so it is suitable for the research sample in terms of ease of administration.

Standard grades and levels have been found, which is a logical numerical function that serves as a guide for coaches and specialists in the field of the game to compare the performance of the individual and the group to which he belongs. The researchers recommended the following: Adopting the composite skill test designed by the researchers as an objective means and an evaluation tool that is consistent and approaching the level of performance during the competition.

Using grades and standard levels by adopting internal criteria to judge the level of players and then the possibility of knowing the level of the training curriculum.

Keywords: Design, Evaluation, Skill Performance, Football, Juniors

INTRODUCTION

Tests and measurements are one of the necessary scientific means in the field of physical education, the objective test and accurate scientific measurement have a great role in giving the real indicator of the player's abilities, so it is necessary to benefit from them to promote sports events in general and in the game of football in particular, and that the data obtained using objective tests are accurate and decisive and give the ability to identify many basic indicators, including diagnosis, classification, prediction and guidance, which serve workers

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in the sports field, and that the presence of Such a test in research can help football coaches and players to know, identify and develop players' skill levels and preparations. (Ibrahim Osman, 2015) adds that "the standardized test is very carefully planned and its items are studied where they are subject to experimental application, and its results are analyzed to include in its final form those items that meet all the conditions of validity (honesty, consistency, objectivity)."

Therefore, the importance of research lies in the use of a skill assessment test, which we believe is one of the most important criteria that the trainer must rely on in the selection process; Which enableshim to choose suitable players with abilities) physical, skill, tactical) Adapted to the type of event, in addition to that it is a phrase About raising awareness for various trainers who make themistake of relying on Observation and matches as criteria for the selection process for junior footballers.

From this point of view, the researchers designed and codified a composite skill test for young football players and extracted standards by applying the test to standard groups and thus the process becomes easy to evaluate. (Mohamed Abdel Fotouh, 2011) "the process of collecting information and data and arranged and interpreted to help take a decision on the players and guide them according to their preparations and tendencies and this process is through performance tests and does not include this process diagnosis, treatment and prevention of the evaluation process".

Research Problem

The game of football needs codified tests that keep pace with the development in the game due to the change of laws and fast play that needs high efficiency of players, and through the follow-up of studies and literature that have been written about this game and to the best of the knowledge of the researchers there is a lack of tests related to the selection of emerging players; The level of performance of the players skillfully and this lacks accuracy, objectivity and credibility, as the coach's use of the objective test, which is according to Scientific standards and foundations to identify the level of physical performance and skills have become an inevitable reality Indisputable.

Therefore, the researchers decided to enter into this problem and work to solve it.

Research Objectives:

- 1- Designing and codifying a specialized test to evaluate the skill performance of young football players
- 2- Finding standard scores and levels for the test designed for young football players.

Research Areas:

Human field: Junior players of Maysan football clubs for the sports season (2021-2022).

Spatial area: Playgrounds of the surveyed clubs.

Time Domain: For the period from (10/10/2021) to (01/12/2021).

Research methodology and field procedures:

Research Methodology:

The method is the scientific path followed by the researchers to solve a specific problem and that the research methodology fits with the objectives and the problem to address it (Zafer Hashem Al-Kazemi: 2012) so the researchers adopted the use of the descriptive approach in the (survey) method as the appropriate approach to solve the research problem, and achieve its objectives.

Research community and sample:

One of the things that must be taken into account in the field of research is the selection of the sample that represents the community in a real way, and the research sample was determined according to scientific methods, and after inquiring about the size of the total community from the Football Sub-Federation of Maysan Governorate, the size of the total expected research sample reached (100) players, at the level of error required for the study of (0.05) according to the procedure of the equation of the expected sample size (Mona Ahmed Al-Azhari & Mustafa Hussein Bahi, 1999).

The sample of ascertaining the scientific foundations of the test reached (20) players, in order to conduct the extraction of the scientific foundations of the test.

Means, devices and tools used:

Means of collecting information:

Arab and foreign references and sources, personal interviews with experts and specialists, a questionnaire polling the opinions of experts and specialists on the classification of the most important complex skills in the game of football, a questionnaire polling the opinions of experts and specialists on the validity of the test for the variables under study.

Devices and tools used:

Personal computer (laptop) type (Compaq 610), electronic stopwatch (1/100) of the second type (Diamond) number (2).

Legal football field, leather tape measure (50 meters), colored adhesive tapes, doll (3), football balls size (5) number (10), whistle number (2).

Field research procedures:

Designed test nomination:

The researchers prepared the initial version of the test under study, and put it in a special form for the purpose of presenting it to a group of experts and specialists, as their number reached (13) specialists and experts, and after receiving the answers and in light of their opinions, they were discussed with them on modifying, deleting or adding some of the details of the test, after which the researchers worked with the opinions of experts and working with their recommendations to serve the objectives of the research, as the test was designed and prepared in its final form, which will be applied to the sample of construction and legalization, knowing that the test has obtained an agreement ratio (100%).

Exploratory Experiment:

After obtaining an agreement on the proposed test, the researchers conducted a preliminary exploratory experiment by applying the test in a field application, to find out the time it takes to carry out the test, the difficulties that the researchers may face, the adequacy of the assistant work team, as well as the division of duties among them and the validity of the devices and tools, and to ensure the safety of the devices used.

Scientific Parameters of the Test:

After the test under study was applied in the exploratory experiments, the scientific foundations of the test were extracted.

Validity:

The researchers used the truthfulness of the content or content through the questionnaire form that was distributed to experts and specialists, to survey their opinions on the ability of the test to measure what it was developed for.

Differential honesty:

It means "the ability of the proposed test to differentiate between people with a high degree of trait or trait on the one hand, and those with a low degree of the same trait or trait on the other hand" (Mohamed Hassan Allawi & Mohamed Nasreddin Radwan: 2008), and this honesty is one of the best types of honesty, as the data inspired by the experiment can be processed statistically to see the test's ability to distinguish between two groups that differ in a significant level.

The researchers used the (t) test for independent samples (asymmetrical), and after processing the data statistically, it was found that the test under study has a discriminatory (strength) between the two groups because the significance values are smaller than the significance level (0.05).

| | Lower Gr | oup | Top Gro | υρ Value (τ) | | Significance |
|-------------------------|----------|-----------------------|---------|-----------------------|------------|--------------|
| Test Name | Mean | standard deviation | Mean | standard deviation | Calculated | values |
| Composite Skill Test | 1.55 | 0.06 | 1.94 | 0.02 | 28.98 | 0.001 |

Table 1: Shows the discriminatory ability (strength) of the composite skill test

Reliability:

The stability of the test means "the availability of conditions that include the accuracy of the application of the performance of the evaluation more than once or more than one individual to obtain the same data, and if the test is repeated for an equal group of individuals, it gives almost the same results (Ali Salman Abdul Tarfi: (2013) and on this basis the stability coefficient was extracted using the correlation coefficient (Pearson)), as the results showed high stability coefficients by observing the significance values, which are less than the

^{*} Significant at the level of significance $\leq (0.05)$

significance level (0.05), which indicates the significance of the correlation as shown in the table below.

Table 2: Shows the stability coefficient of the test and the significance values

| | the test | measruing unit | Coefficient of stability | Significance values | |
|---|-------------------------------------|----------------|--------------------------|------------------------|--|
| 1 | Composite Skill Performance Test | degree | 0.755 | 0.008 | |

^{*} Significant at the level of significance $\leq (0.05)$

Objectivity:

Objectivity of testing "is concerned with describing the individual's abilities as they actually exist and not as we want them to be; that is, the estimators do not differ in judging something or a particular subject" (Ali Samoum Al-Fartous, 2015)

Through the second application of the test on the players, the researchers found the simple correlation coefficient Pearson (Pearson) between the results of the arbitrators and shown in detail in the table below, and notes that the values of significance less than the level of significance (0.05), which indicates the significance of the correlation between the arbitrators and the high objectivity of the test.

Table 3: Shows the objectivity coefficient of the test and the significance values

| | | the test | | Objectivity coefficient | Significance values |
|---|---|-------------------------------------|--------|-------------------------|------------------------|
| - | 1 | Composite Skill Performance Test | degree | 0.985 | 0.000 |

^{*} Significant at the level of significance $\leq (0.05)$

Finalized composite skill test:

Test name: Composite skill performance test in different directions.

Purpose of the test: Measure the speed and accuracy of complex skill performance.

Tools used: legal football field, 12 legal footballs, tape measure, whistle (2), doll (6), legal target divided into squares, small targets with dimensions (50 cm \times 75 cm) representing the accuracy of handling.

Age and gender level: Junior players.

Performance Description: The tester stands behind the sign (starting area) and when the start signal is heard, the tester rolls the ball for a distance of (2 meters), then he talks to the three players in the form of (doll) and the distance between them (1 meter), then he handles the small target, which is a distance of (5 meters), then he handles the ball for a distance of (10 meters) and completes the attempt on the third small cave, which is (15 meters) away, then

he sets off quickly to score the three cards trying to hit the divided target that It is (16 meters) away from the scoring area, then return to the starting point as soon as possible and without stopping from the left side so that the laboratory repeats the second attempt in the same way as the first attempt.

Performance Conditions:

- **Confirmation** of the validity of skill performance in accordance with the law of the game.
- ❖ The player repeats the test (2) repetitions without stopping.
- ❖ The time of performance of the repetitions (the total time of the test) is calculated.

How to register:

 \checkmark In terms of time, it is calculated in (1/1000) of a second.

In terms of handling accuracy, the maximum score is (18) degrees, which are (3) degrees multiplied by (6) attempts and divided as follows:

- > If the ball enters the small target without touching any part of the target, the laboratory is given (3) marks.
- ➤ If the ball enters the small target after touching any part of the target, the laboratory is given (2) marks.
- ➤ If the ball touches one of the sides of the small target and goes out of the goal, the laboratory is given (1) score.
- ➤ If the ball does not enter the small target without touching any part of the target, the tester is awarded (zero).
- Unit of measurement (degree).

In terms of scoring accuracy and divided as follows:

In terms of accuracy of scoring skill, the maximum score is (30) degrees and the minimum is (zero) degrees.

- ✓ The laboratory is calculated (5) degrees when scoring in field No. (5), with dimensions of (1 meter× 70 cm.
- ✓ The laboratory is calculated (4) degrees when scoring in field No. (4), with dimensions (1 meter× 74 cm.
- ✓ The laboratory is calculated (3) degrees when scoring in field No. (3), with dimensions of (1 meter× 1 meter.
- ✓ The laboratory is calculated (2) degrees when scoring in field No. (2), with dimensions of (1 meter× 2.44 meters.
- ✓ The laboratory is calculated (1) score when scoring in field No. (1), with dimensions (3.32 meters× 2.44 meters).
- ✓ Calculated for the laboratory (zero) of grades if the ball goes out of the goal.
- ✓ If the ball touches one of the posts or the crossbar and enters, it is calculated for the laboratory (the same degree in each field).
- ✓ Unit of measurement (degree).

Note: The total score (scoring accuracy scores) is calculated divided by the total test time: Total accuracy scores = (degree the test)

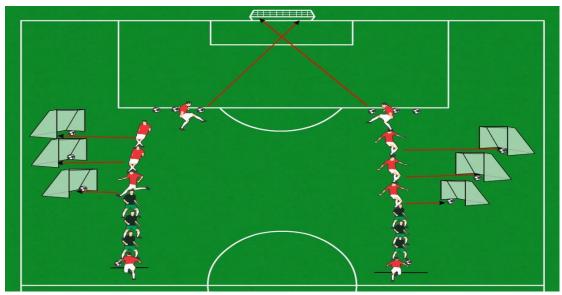


Figure (1)

Demonstrates a test (composite skill performance in different directions)

Main (basic) experience:

After the results of the exploratory experiments confirmed the safety and validity of the implemented procedures and included the conditions and scientific specifications of the test as well as their suitability of the research sample, the composite skill test was applied to the rationing sample consisting of (100) players from Maysan province clubs for junior football.

Statistical means:

The following statistical systems were used:

Microsoft Excel system to download and separate data and calculate standard scores in a sequential manner.

Ready-made statistical bag (SPSS. Ver21):

Presentation, analysis and discussion of results:

Finding the grades and standard levels (standardization) for the composite skill performance test:

The researchers seek to complete the procedures for codifying the test of skill performance compound by finding grades and standard levels of the sample of rationing of (100) players, through which can judge the measurement of the level of testing when the main research sample, the researchers have set the standard levels using the method of distribution of Kaos (natural distribution) "It is one of the most common distributions in the field of physical education because many of the qualities and characteristics that are measured in this area is approaching their distribution from the natural curve" (1), Table (4) shows the statistical parameters of the test results, and Table (5) shows the raw scores, the Za'i standard score, and the adjusted standard score for the sample scores after arranging them in ascending order:

Table (4) Shows the statistical parameters of the results of the composite skill performance test for the rationing sample

| Test name | mean | median | Standard deviation | Standard error | skewness | Highest score | Lowest degree | extent |
|-----------------------------------|------|--------|--------------------|-------------------|----------|---------------|---------------|--------|
| Composite skill performance | | 1.169 | 0.157 | 1.085- | 0.096 | 1.98 | 1.40 | 0.58 |

Table (4) shows that the arithmetic mean of the rationing sample of the results of the composite skill performance test was (1.173), the median (1.690), with a standard deviation (0.157), and the standard error was (-1.085), while the torsion coefficient was (0.096) and the highest score was (1.98) and the lowest degree was (1.40) and the range (0.58), and to determine the grades and standard levels of this test, the table below shows the raw grades, the standard Za'i degree and the modified standard degree for the degrees of the rationing sample. After arranging it in ascending order.

Table (5): Shows the raw grades and the standard grade of Za'i and adjusted in ascending order for the composite skill performance test

| Sequen ce | Raw grade | Z degree | T grade | Sequen ce | Raw grade | Z degree | T grade |
|--------------|--------------|----------|---------|--------------|-----------|----------|---------|
| 1 | 1.40 | -2.13 | 28.66 | 51 | 1.69 | -0.29 | 47.13 |
| 2 | 1.42 | -2.01 | 29.94 | 52 | 1.70 | -0.22 | 47.77 |
| 3 | 1.47 | -1.69 | 33.12 | 53 | 1.70 | -0.22 | 47.77 |
| 4 | 1.48 | -1.62 | 33.76 | 54 | 1.70 | -0.22 | 47.77 |
| 5 | 1.49 | -1.56 | 34.39 | 55 | 1.73 | -0.03 | 49.68 |
| 6 | 1.51 | -1.43 | 35.67 | 56 | 1.73 | -0.03 | 49.68 |
| 7 | 1.52 | -1.37 | 36.31 | 57 | 1.73 | -0.03 | 49.68 |
| 8 | 1.52 | -1.37 | 36.31 | 58 | 1.76 | 0.16 | 51.59 |
| 9 | 1.52 | -1.37 | 36.31 | 59 | 1.76 | 0.16 | 51.59 |
| 10 | 1.53 | -1.31 | 36.94 | 60 | 1.76 | 0.16 | 51.59 |
| 11 | 1.54 | -1.24 | 37.58 | 61 | 1.76 | 0.16 | 51.59 |
| 12 | 1.54 | -1.24 | 37.58 | 62 | 1.76 | 0.16 | 51.59 |
| 13 | 1.55 | -1.18 | 38.22 | 63 | 1.76 | 0.16 | 51.59 |
| 14 | 1.55 | -1.18 | 38.22 | 64 | 1.77 | 0.22 | 52.23 |
| 15 | 1.55 | -1.18 | 38.22 | 65 | 1.77 | 0.22 | 52.23 |
| 16 | 1.60 | -0.86 | 41.4 | 66 | 1.77 | 0.22 | 52.23 |
| 17 | 1.60 | -0.86 | 41.4 | 67 | 1.83 | 0.61 | 56.05 |
| 18 | 1.60 | -0.86 | 41.4 | 68 | 1.84 | 0.67 | 56.69 |
| 19 | 1.61 | -0.80 | 42.04 | 69 | 1.84 | 0.67 | 56.69 |

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| 20 | 1.61 | -0.80 | 42.04 | 70 | 1.84 | 0.67 | 56.69 |
|----|------|-------|-------|-----|------|------|-------|
| 21 | 1.61 | -0.80 | 42.04 | 71 | 1.88 | 0.92 | 59.24 |
| 22 | 1.62 | -0.73 | 42.68 | 72 | 1.88 | 0.92 | 59.24 |
| 23 | 1.62 | -0.73 | 42.68 | 73 | 1.88 | 0.92 | 59.24 |
| 24 | 1.62 | -0.73 | 42.68 | 74 | 1.90 | 1.05 | 60.51 |
| 25 | 1.63 | -0.67 | 43.31 | 75 | 1.90 | 1.05 | 60.51 |
| 26 | 1.63 | -0.67 | 43.31 | 76 | 1.90 | 1.05 | 60.51 |
| 27 | 1.63 | -0.67 | 43.31 | 77 | 1.91 | 1.11 | 61.15 |
| 28 | 1.64 | -0.61 | 43.95 | 78 | 1.91 | 1.11 | 61.15 |
| 29 | 1.64 | -0.61 | 43.95 | 79 | 1.91 | 1.11 | 61.15 |
| 30 | 1.64 | -0.61 | 43.95 | 80 | 1.94 | 1.31 | 63.06 |
| 31 | 1.65 | -0.54 | 44.59 | 81 | 1.94 | 1.31 | 63.06 |
| 32 | 1.65 | -0.54 | 44.59 | 82 | 1.94 | 1.31 | 63.06 |
| 33 | 1.65 | -0.54 | 44.59 | 83 | 1.94 | 1.31 | 63.06 |
| 34 | 1.65 | -0.54 | 44.59 | 84 | 1.94 | 1.31 | 63.06 |
| 35 | 1.65 | -0.54 | 44.59 | 85 | 1.94 | 1.31 | 63.06 |
| 36 | 1.65 | -0.54 | 44.59 | 86 | 1.95 | 1.37 | 63.69 |
| 37 | 1.66 | 048 | 45.22 | 87 | 1.95 | 1.37 | 63.69 |
| 38 | 1.66 | -0.48 | 45.22 | 88 | 1.95 | 1.37 | 63.69 |
| 39 | 1.66 | -0.48 | 45.22 | 89 | 1.95 | 1.37 | 63.69 |
| 40 | 1.66 | -0.48 | 45.22 | 90 | 1.95 | 1.37 | 63.69 |
| 41 | 1.66 | -0.48 | 45.22 | 91 | 1.95 | 1.37 | 63.69 |
| 42 | 1.66 | -0.48 | 45.22 | 92 | 1.96 | 1.43 | 64.33 |
| 43 | 1.67 | -0.41 | 45.86 | 93 | 1.96 | 1.43 | 64.33 |
| 44 | 1.67 | -0.41 | 45.86 | 94 | 1.96 | 1.43 | 64.33 |
| 45 | 1.67 | -0.41 | 45.86 | 95 | 1.97 | 1.50 | 64.97 |
| 46 | 1.68 | -0.35 | 46.5 | 96 | 1.97 | 1.50 | 64.97 |
| 47 | 1.68 | -0.35 | 46.5 | 97 | 1.97 | 1.50 | 64.97 |
| 48 | 1.68 | -0.35 | 46.5 | 98 | 1.98 | 1.56 | 65.61 |
| 49 | 1.69 | -0.29 | 47.13 | 99 | 1.98 | 1.56 | 65.61 |
| 50 | 1.69 | -0.29 | 47.13 | 100 | 1.98 | 1.56 | 65.61 |

Note that (x = 1.735) + p = 0.157)

Table (6): Shows the standard levels of the composite skill performance test in the rationing sample

| Standard Grade | Adjusted standard grade | Standard level | Number of players (Duplicates) | Percentage |
|------------------|-------------------------|----------------|--------------------------------|------------|
| (- 2) and below | 29 and under | Very weak | 2 | 2% |
| (-1.99) (-1) | 30 – 39 | Weak | 13 | 13% |
| (-0.99) (0)) | 40 - 49 | Acceptable | 42 | 42% |
| (0.01) (1)) | 50 - 59 | medium | 16 | 16% |
| (1.01) (2)) | 60 – 69 | Good | 27 | 27% |
| (2.01) and above | 70 and up | Very good | 0 | 0% |
| Total | | 100 | 100% | |

(n = 100)

Table (6) shows that the sample number was within a very weak level (2) by a percentage (2%), the sample number was within a weak level (13) by a percentage (13%), the sample number was within an acceptable level (42) by a percentage (42%), the sample number was within a good level (27) by a percentage (16%), the sample number was within a good level (27) by a percentage (27%), and the sample number was within a very good level (0) by a percentage (0%), and thus it achieved The results of the composite skill performance test (5) standard levels were distributed to the sample normally, as shown in Figure (2).

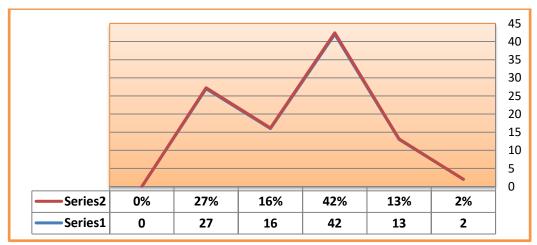


Figure (2) shows the level, frequency and percentages of the composite skill performance test for the rationing sample

Discuss the results of the scores and standard levels of the composite skill performance test: It is clear from this that the sample has been distributed in (5) standard levels and was concentrated in three levels (acceptable, medium and good) and the researchers attribute the reason for this to the fact that the composite skills of football are important elements that must be possessed by the player, as the implementation of a series of skills inside the stadium during matches is essential to resolve the result of the match and this came as a result of the

rapid development in modern defensive or offensive playing methods, which need very high technical and physical skills as well as These skills need a good level of awareness, perception, accuracy, focus and attention of the players, which contributes positively to the skill performance, and this is what he pointed out (Zulfiqar Saleh Abdul Hussein 2015) that complex skills are the totality of the activities performed by the player on the field according to certain goals that require responses to achieve them, and the performance must be an appropriate way with the situation to be accomplished or achieved, and this performance is always supported by harmony between stimuli and responses, as well as speed, accuracy and timing. 1).

As well as the skill preparation is not a substitute for physical performance, but the integration between the physical side and the skill side makes the player to perform the skill in the ideal way, which focuses the coach on the choice of compound exercises that are quite similar to what happens in the games and works to train the players on them in order for the players to get used to their performance with the same strength, speed and accuracy that must be performed by the matches and sees (Adel Abdul Basir) that the skill preparation is of great importance in sports training, especially the junior category Which aims to ((teach them motor and basic skills and try to master and install them for the purpose of reaching the best possible level)). (2)

CONCLUSIONS AND RECOMMENDATIONS

Conclusions:

- ❖ A composite skill test for young footballers has been designed and codified.
- ❖ The test is simple and uncomplicated, so it is suitable for the research sample in terms of ease of administration.
- ❖ Standard scores and levels have been found, which is a logical numerical function that serves as a guide for coaches and specialists in the field of the game to compare the performance of the individual and the group to which he belongs.
- ❖ The test showed that there is a discrepancy between the scores of the sample members after obtaining different scores, and this shows the ability of the test to distinguish between the members of the research sample.

Recommendations:

- Adopting the composite skill test designed by the researchers as an objective method and an evaluation tool that is consistent and approaching the level of performance during the competition.
- The use of grades and standard levels by adopting internal criteria to judge the level of players and then the possibility of knowing the level of the training curriculum.
- Other tests should be designed for different samples and categories of both sexes.

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REFERENCES

- 1. Adel Abdel Basir: (1999) Mathematical Training and Integration between Theory and Practice, 1st Edition, Cairo, Book and Publishing Center.
- 2. Ali Salman Abdul Tarfi: (2013) Applied Tests in Physical Education (Physical-Kinetic-Skill), Baghdad, Dar Al-Kutub and Documents.
- 3. brahim Osman Hassan: (2015) Psychological and Educational Foundations of Measurement and Evaluation, 1st Edition, Khartoum, p 64
- 4. Gaber Abdel Hamid and Ahmed Khairy: (1973) Research Methods in Education and Psychology, Cairo, Dar Al-Nahda Al-Arabiya.
- 5. Mohamed Hassan Allawi, Mohamed Nasreddin Radwan: (2008) Measurement in Physical Education and Sports Psychology, Cairo, Dar Al-Fikr Al-Arabi for Printing and Publishing.
- 6. Mona Ahmed Al-Azhari and Mustafa Hussein Bahi: (1999) The Origins of Scientific Research in Educational, Psychological, Social and Sports Research, 1st Edition, Cairo, Al-Kitab Publishing Center.
- 7. Muhammad Abu Al-Fotouh Hamed: (2011) Educational Evaluation between Reality and Hope, Al-Shaqri Library for Publishing and Distribution, Medina, p4.
- 8. Zafer Hashem Al-Kazemi: (2012) Practical applications of writing theses and educational and psychological theses (planning and design), Baghdad, Dar Al-Kutub and Documents.
- 9. Zulfiqar Saleh Abdul Hussein: (2015) Futsal (Education Training), 1st Edition, Al-Ghadeer Printing and Publishing Company, Basra.