



FOLLOW-UP STUDY OF THE COMPOSITE SKILL PERFORMANCE DURING THE SPECIAL PREPARATION PERIOD FOR ADVANCED FOOTBALL PLAYERS

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Abstract

The objective of the study was to analyze the variations in the performance of complex skills among advanced Dijlah Sports Club football players during the special preparation period. This was done by conducting three repeated measurements with time intervals. The study also included the comparison of human field performance with advanced Dijlah Sports Club football players. The research period spanned from October 5, 2023, to July 22, 2023. The researchers employed a descriptive approach with repeated measurements to conduct their study. The research sample consisted of 20 players. The researchers administered complex skill performance tests and analyzed the data using the SPSS system. The findings indicated that the approach implemented by the trainer was suitable for the research sample. Furthermore, the results demonstrated a significant improvement in the compound skills of the participants, particularly in the third test. The researchers advised coaches to prioritize interdisciplinary testing due to their influence on assessing the effectiveness and appropriateness of the method employed for the players.

Keywords: Composite Skill, Performance, Special Preparation, Football Players

Introduction

The global advancement in sports across all countries is not a random occurrence, but rather a result of deliberate studies and research aimed at attaining the status of developed nations, achieving notable accomplishments, and winning championships (Weinberg & Gould, 2023). This serves as an indicator of a country's progress and urban development (Breda et al., 2018). It is crucial to focus on all stages of preparation (public, special, and competitions), as these stages are interconnected, particularly during the special preparation phase (Patatas et al., 2022). This phase requires mastery of complex skills due to its significance in defensive and offensive positions during competitions (Mitchell, Oslin & Griffin, 2020). Every team requires a multitude of tests to assess the players' current condition, including repeated measurements that offer coaches insights into their physical, technical, physiological, and psychological development (Till et al., 2023). These evaluations can only be achieved through standardized tests conducted at various intervals (Chaabene et al., 2018). Additionally, these tests help determine the effectiveness of the coaching curriculum (Fransen et al., 2018). Therefore, it is crucial to conduct research by administering challenging skill tests at specific times during the special preparation period. This research aims to determine the level of skill development resulting from the curriculum designed by the trainer. The curriculum acts as a guide for the



trainer before entering the competition period and helps evaluate the effectiveness of the training program. Additionally, it allows for adjustments to be made to the training loads related to the skill aspect.

Research Problem:

Given the importance of this topic, the researchers decided to identify the situation reached by the players and know their levels through some standardized follow-up skill tests. This will be a scientific evaluation that benefits from it. Field researchers of the game of football, who include former players and coaches as well as university professors, noticed that coaches aren't very interested in standardized follow-up tests, which indicate the extent to which players have developed their skill performance and the efficiency of their training schedule. All parties involved, including players and coaches.

Research Objectives

1. Identify the differences between the three follow-up tests for complex skill performance in the special preparation period for advanced football players.

Research Hypotheses

1. There are statistically significant differences between the three follow-up tests of composite skill performance in the special preparation period for advanced football players.

Research Areas

Human Area: A sample of the advanced players of the Tigris Football Club and the number of (20) players.

Time Area: Dijlah Football Stadium.

Spatial Area: Period from (10/5/2023) to (22/7/2023).

Research Methodology and Field Procedures:

Research Methodology:

The method is the scientific path followed by the researchers to solve a particular problem and that the research methodology fits with the objectives and the problem to address it and therefore the researchers used the descriptive approach in the style of correlational and predictive studies.

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 a real representation of the research community, as it is "the part that represents the community of origin, or the model on which the researchers conduct the entirety and the focus of their work on it" ⁽²⁾.

The research sample was represented by the players of the Tigris Sports Club in youth football, which numbered (25) players, and the researchers conducted the exploratory experiment on (5) players from outside the research sample, so that the final research sample became (20) players.

Means of gathering information, devices and tools used:

Means of collecting information:

- ❖ Scientific sources (Arab and foreign).
- ❖ Observation.
- ❖ Testing and measurement.
- ❖ Internet.
- ❖ Auxiliary staff.
- ❖ Information registration forms.

Devices and tools used:

The researchers used the following devices and tools: (electronic clock number (1), electronic manual computer number (1), electronic computer number (1), legal football number (10), sign number (5), whistle, terraces number (2), football field, tape measure, handball goal placed inside the big goal.



Identification of complex skill performance tests:

The researchers adopted the composite skill performance tests:

1. Receiving, running and scoring tests (Sawyer et al., 2002).
2. Receiving, dribbling and scoring tests (Kelly et al., 2020).
3. Receiving, running and handling tests (Buchheit et al., 2013).

Exploratory Experiment:

The exploratory experiment was conducted on a sample of (5) players from the Tigris Sports Club, in order to find out the time taken to carry out the tests, the difficulties that the researchers may face, and to know the possibility of the assistant work team, as well as the time taken by the tests.

Main experience:

The researchers applied the tests to the main research sample of (20) players under the same conditions in the exploratory experiment; the period between one test and the last (10) days was three follow-up tests.

Statistical media:

The ready-made statistical kit (SPSS) (vr21) was used for statistical treatments:

Presentation, analysis and discussion of results:

Presentation, analysis and discussion of the results of tests of some skill variables of the three tracking measurements of advanced football players:

The researchers presented the statistical features of the three traceability measurements of the values of the results of the composite skill tests, as shown in the grandfather (1), (2) and (3).

Table 1: Shows the values of the statistical features of the three tracer measurements in the results of the composite skill tests

Variables	Unit of Measurement	First test		Second test		Third test		Contrast smoothing (Leven)	Sig
		M	SD	M	SD	M	SD		
Receiving, running and scoring	Second	7.87	0.605	7.21	0.367	5.79	0.625	2.83	0.067
Receiving, dribbling and scoring	Second	7.61	0.871	6.93	0.463	5.57	0.760	2.14	0.126
Receiving, running and handling	Second	7.81	0.678	6.99	0.406	5.59	0.748	2.04	0.138

n = 20, non-significant and homogeneous when the significance level is greater than (0.05).

The results of Table (1) showed that the values of the arithmetic mean and the standard deviation of the results of the research sample in the variable measurement test (receiving, running and scoring) the first amounted to (7.872, \pm 0.605), and in the second tracking test the arithmetic mean and deviation became standard (7.211, \pm 0.367), and in the third tracer test the arithmetic mean became (5.799 \pm , \pm 0.625 the value of homogeneity of variance between the three measurements of this test (2.831) with a score of (Sig) (0.067), which is not a function at the level of significance (0.05), which indicates the homogeneity of the variance of the three tracer measurements, and is thus ready for tracer comparison for one sample. The values of the arithmetic mean and standard deviation of the results of the research sample in the variable measurement test (receiving, dribbling



and scoring) the first amounted to (7.614, + 0.871), and in the second tracer test the arithmetic mean and standard deviation became (6.934, \pm 0.463), and in the third tracer test, the arithmetic mean became (5.578, \pm 0.760), and the value of homogeneity of the variance between the three measurements of this variable was (2.146) by a degree (Sig) (0.126), which is not a function at the significance level (0.05), which indicates the homogeneity of the variation of the three tracer measurements and is thus ready for tracer comparison for one sample. The values of the arithmetic mean and standard deviation of the results of the research sample in the variable measurement test (receiving \pm , running and handling) the first amounted to (7.814, + 0.678), and in the second tracer test the arithmetic mean and standard deviation became (6.993, \pm 0.406), and in the third tracer test, the arithmetic mean became (5.590, \pm 0.748), and the value of homogeneity of variance between the three measurements of this variable was (2.048) by a degree (Sig) (0.138) is not a function at the level of significance (0.05), which indicates the homogeneity of the variation of the degrees of tracer measurements of the three tracers and is therefore ready for tracer comparison for one sample. In order to identify the differences in the three tracer measurements for each of the tests studied, their results were processed with the (F) test for repeated measurements of comparisons between the results of the same sample (Orthogonal Comparisons) as shown in Table (2.) and then analyzed:

Table 2: Shows the results of the (F) test for repeated measurements between the three tracer measurements in the composite skill tests

Variables	Source	SS	df	MS	F	Sig	Impact size
Receiving, running and scoring	Between groups	44.853	2	22.42	104.79	0.000	0.847
	Within groups	8.122	38	0.214			
Receiving, dribbling and scoring	Between groups	42.999	2	21.49	56.72	0.000	0.749
	Within groups	14.417	38	0.379			
Receiving, running and handling	Between groups	50.611	2	25.30	85.20	0.000	0.817
	Within groups	11.301	38	0.297			

n = 20 , number of measurements per test (3), significance level (0.05) (duplicate (F) value calculated function if the degree (Sig) \leq (0.05)

The results presented in Table 2 indicate that the sum of squares between the measurements was 853, while the error within the measurements was 8.122. The average squares between the measurements amounted to 22.427, with a degree of freedom of 2. Additionally, the error within the measurements was 214.0. With a degree of freedom of 38, the calculated value of F for repeated measurements was found to be 799.104, which is below the significance level of 0.000. This indicates that there is a significant difference at a significance level of 0.05. Furthermore, the effect size between the three measurements (receiving, running, and scoring) in the test was determined to be 0.847. In the assessment of the exam, which included receiving, dribbling, and scoring, the total of the squared differences between the measurements was 999. The error within the measurements was 8.122, and the average squares between the measurements was 21.499 with 2 degrees of freedom. The total error within the measurements was 379.0. With a degree of freedom of 38, the calculated value of F for repeated measurements was found to be 726.56, which is below the significance level of 0.000.



This indicates that there is a significant difference at a significance level of 0.05. Additionally, the effect size between the three measurements (receiving, dribbling, and scoring) in the test was 0.749. In the variable test, the sum of the squares between the measurements was 611, and the error within the measurements was 11.301. The average squares between the measurements was 25.306, with a degree of freedom of 2. The error within the measurements was 297.0. With 38 degrees of freedom, the calculated value of F for repeated measurements was found to be 205.85, which is below the significance level of 0.000. This indicates that there is a significant difference at the 0.05 level of significance. Additionally, the effect size between the three measurements (receive, run, and handling) in the test was found to be 0.817. Since the calculated values of (F) for repeated measurements of each of the three compound skill variables were statistically significant, the researcher intentionally conducted the Sidak test to assess the significance of this finding. The Sidak test compared the tracking arithmetic means of one sample with the values in Table (3).

Table 3: Shows the results of the Validity test for the significance of the differences between the arithmetic means of the three tracer measurements in the composite skill.

Variables		Teams' results Mediums	Sig
Receiving, running and scoring	1 - 2	*0.661	0.001
	1 - 3	*2.073	0.000
	2 - 3	*1.412	0.000
Receiving, dribbling and scoring	1 - 2	*0.680	0.012
	1 - 3	*2.037	0.000
	2 - 3	*1.357	0.000
Receiving, running and handling	1 - 2	*0.822	0.000
	1 - 3	*2.225	0.000
	2 - 3	*1.403	0.000

* **The difference is significant at the level of significance (0.05), n = (20)**

Table (3) demonstrates that the difference in the arithmetic means between the first and second measurements is 0.661, with a significance level of 0.001. This indicates that there are significant differences between the two measurements, favoring the second one. Similarly, the difference in the arithmetic means between the first and third measurements is 2.073, with a significance level of 0.000. This suggests significant differences between the first and third measurements, favoring the third one. Lastly, the difference in the arithmetic means between the second and third measurements is 1.412, with a significance level of 0.000. This indicates significant differences between the second and third measurements, favoring the third one. Based on the findings of the three tracking measurements (receiving, running, and scoring), we can infer that advanced player show a gradual improvement in their skill performance during the special preparation period. The difference in the arithmetic means between the first and second measurements was found to be 0.680, with a significance level of 0.012. This indicates that there are significant differences between the two measurements, favoring the second one. Similarly, the difference in the arithmetic means between the first and third measurements was 2.037, with a significance level of 0.000. The data shows that there are notable disparities between the first and third measurements, favoring the third measurement. Additionally, the difference in the average values between the second and third measurements is 1.357, which is statistically significant at a level of 0.000. This suggests that there are significant differences between the second and third measurements, with the third measurement being favored. Based on the findings of the three-tracking metrics (receiving, dribbling, and scoring), we can infer that advanced athlete show a gradual improvement in their skill performance during the period of special training. The difference in the arithmetic means between the first and second



measurements was 0.822, with a significance level of 0.000. This indicates a significant difference in favor of the second measurement. Similarly, the difference in the arithmetic means between the first and third measurements was 2.225, also with a significance level of 0.000. The results indicate significant differences between the first and third measurements, with the third measurement being favored. Additionally, the difference in arithmetic means between the second and third measurements was 1.403, which is statistically significant at a level of significance of 0.000. This suggests that there are significant differences between the second and third measurements, with the third measurement being favored. Based on the findings of the three tracer measurements (receiving, running, and handling), we can infer that advanced player show a progressive improvement in their skill performance during the period of special training.

Discuss the results of the three track tests of the composite skill performance of advanced footballers:

The previous tables demonstrate the moral outcomes achieved, indicating statistically significant differences in favor of the third measurement in all complex skill performance tests. This suggests that codified and pre-planned training programs assist players in enhancing their motor skills and achieving training objectives during this stage. The aim is to prepare players to reach their optimal athletic form and improve the results of specific exercises, which closely resemble competitive conditions. Throughout this period, the training load gradually increases, with a particular emphasis on intensifying special preparation exercises and competition exercises (Jayanthi et al., 2022; Skrygin et al., 2021). These exercises involve increasing the speed of performance or rhythm of movement, leading to adaptation and the advancement of complex skills for advanced football players. To ensure that the player can execute this skill at the optimal speed during matches, the coach should prioritize selecting exercises that closely resemble game situations (Silva et al., 2020). The coach should then gradually train the players on these exercises, gradually increasing the level of difficulty, so that the players become accustomed to performing the skill with the required strength and speed demanded in matches (Valerii, Mykhailo, & Taras, 2021; Mitchell, Oslin & Griffin, 2020).

Conclusions:

1. The findings indicated that the approach devised by the instructor is appropriate for the study participants.
2. The findings indicated a distinct progression in the composite abilities of the research participants, particularly in the third test.

Recommendations:

According to the results and conclusions reached by the researchers, the following recommendations were developed:

1. Coaches must prioritize the multidisciplinary exams as they provide valuable insights into the effectiveness and appropriateness of the method utilized for the players.
2. Utilizing the tests employed in the research as a measure of players' progress.
3. Performing analogous investigations for other stages based on various variables and for both genders.

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