

COMPARATIVE STUDY BETWEEN PHYSICAL FITNESS TEST RESULTS OF THE IRAQI AND JORDANIAN INTERNATIONAL FOOTBALL REFEREES

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Abstract

The present study aims at identifying the difference between the levels of teams through holding a comparison between the physical fitness results of the Iraqi and the Jordanian international football referees. It also aims at figuring out their physical fitness strengths and weaknesses and the differences in the time they take for running the distances required in the tests. The most important conclusions are the presence of variation in tests' results between Iraqi and Jordanian international football referees as the reached numbers indicate, the existence of excellent training courses for Jordanian international football referees as shown by the numbers in the statistical table.

Besides, it was concluded that Iraqi international football referees were rather slow in running and the non-provision by those in charge of supervising these tests of sufficient periods of rest to them between the tests as adopted by the FIFA had a negative effect on the tests' results. As for the most important recommendations of the research, they include unifying the physical fitness training courses of referees in the two countries to become a common training curriculum and to be under direct supervision by Referees' Development Office in the two countries.

Keywords: Physical fitness. Test. Iraqi. Jordanian. Football. Referees.

Introduction

Physical fitness is the main pillar of sports performance in the field of competition sports and health related sports a matter that made it occupy a distinguished position among specialists. It did not lose its attraction and status over ages despite the appearance of a host of new terms describing the physical and health status of individuals. And this may be partly ascribed to the development which associated its various components and fields and assisted in foregrounding them.

In recent years, both the speed of exercising players and the duration of matches and games have much increased than before. Hence, referees and field referees, in particular, who usually run the same distance

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run by most of players of the two teams or even more, are required to enjoy greater level of fitness and exert further efforts. A referee is normally entitled to cover the different parts of the play field, be at a reasonable distance of incidents all the times, hastily return with the opposite attacks and not to allow any deliberate stop of play through punishing those players who do this, i.e., he has no rest time.

In recent years, Physical fitness tests have witnessed a change and are not as before anymore for more than one test are being applied and tests have become more precise in order to determine how far physically qualified referees are to fulfil the real needs of play. This kind of tests requires different types of exercises unlike the ones previously followed. For instance the previous tests relied completely on endurance and the referee was required to attend to the stadium, keep moving around the field for an hour or half an hour and leave at the end of the match. As for now exercises are more elaborate, well-studied and varied including, endurance, power endurance, speed and speed endurance exercises in order to assist the referee not to pass tests as was being believed by some but to enjoy the sufficient power and strength to lead a match for no less than 90 minutes.

Physical fitness in all its primary and secondary characteristics represents the pillar upon which the physical building of football referees can be established through regular exercises based on scientific criteria so as to enhance the acquired physiological and bodily capabilities and harnessing them in the right way. In the light of the aforementioned account, the significance of the research becomes clear as it attempts to identify the results of the practical tests of the Iraqi and Jordanian international football referees' physical fitness and holding a comparison between the two.

The role played by coaches is confined to setting training curricula and supervising them wherever possible because, in many large-area countries, it is usually hard to gather referees on a daily basis or even weekly to attend a common exercise. The main responsibility of developing a referee lies on the referee's shoulder himself due to the fact that they are the ones responsible for applying the curriculum so they have to be honest to themselves for it is far

from being enough to be present in the play field for one or two hours unless they apply the designed program in a right way, exert the necessary effort and be keen to do exercises. Unfortunately, many referees believe that the advantage gained from exercising depends on the length of time period spent by the referee at the stadium without a consideration of the real period of the proper exercising performed in the right way.

In order to illustrate how important this aspect is on the Asiatic level, it is fair enough to know that the regulations of the Asian Football Confederation (AFC) state that a referee shall be granted two opportunities only and if they were to fail passing physical fitness tests whether sequentially or sporadically, they are excluded from Asian referees lists.

For demonstrating this fact, discussing it and finding the proper solutions for it, the researchers conduct a comparative study between the physical fitness tests' results of the international referees in Iraq and those in Jordan so as to support and clarify their diagnosis with the numbers of these tests' results.

Research Methodology and Field Procedures

Methodology

Researchers employ the descriptive approach with the survey method because it suits the nature of the research problem.

Research population

The research population were selected from the international referees in Iraq (8 referees) and the international referees in Jordan (8 referees) for the sports season (2020- 2021) by the intentional way. And in order to consolidate the starting line, the researchers opted for homogenizing the research sample subjects in weight and height variables as shown in table 1 (Table 1).

Tools and Means Used in Conducting Research

Personal Interviews: The researchers had a number of interviews with individuals specialized and experienced in the fields of refereeing and tests and measurements and this resulted in a number of outcomes upon which

Table 1: Showing the homogeneity of the sample subjects.

Measure	unit	Arithmetic mean	Standard deviation	mean	coefficient of skewness
weight	kg	73.875	5.357	72.500	0,925
height	cm	176.500	4.106	174.500	0,627



Figure 1: Showing the start point of 40m* 6 test.

the research, its problem and appropriate scientific approach were determined.

Observation: observation is one important way of collecting data in research writing and it depends on careful purposeful viewing of phenomena under investigation by the use of the appropriate means and scientific disciplines relating to both the observer and the objects observed [1].

Results Registration forms

Sources and References

Devices and Equipment

1. Track and Field
2. Legal football stadium
3. Signs (28 sign)
4. Electronic stop watch (Diamond brand) made in Japan (4watches)
5. Canadian Fox brand whistle (4 whistles)
6. Photocells device
7. Metering tape (50 meter in length)
8. Referee flags (6 flags)
9. Colored cones (25 cone)

Field Procedures

Researchers used a comparative approach between the tests results of Iraq and Jordan international referees for the sports season (2020-2021).

Physical Fitness Tests of Football Referees [2].

The First Test. 40 meter*6 run

It involves international field referees as well as first level league referees.

The performance is measured through recurrent speedy runs for a specific distance (km/ hr) as follows:

- Six consecutive 40 m run attempts, the rest period between each two runs is (60) seconds.
- The start point is one meter and a half after the point at which the electronic timer is started.

Note: The test is carried out at the race track and wearing spikes type shoes is not permitted.

Procedures

The referees stand side by side and form a horizontal line while awaiting the start signal and when the signal is given, the referee can determine the start time.

The Time:

- (6,2) seconds for the international referee

All referees have to carry out 6 attempts in speed test (Figure 1).

The Second Test

The measurement: International field referees and first level league referees are subjected to the endurance test.

After the completion of speed test, a referee is given a rest for (6-8) minutes, then they immediately start their second endurance test .

- The sporadic test activity is carried out according to the specified speed and by one whistle.
- The test is conducted on a race track and wearing Spike brand running shoes is not permitted.

Time Spans

For international referees:

- To finish a (75) meter run within (15) seconds and after rest to finish a (25) meter jogging within (18) seconds.
- To finish a (75) meter run- (10) rotations around the track and (40) times to pass, the total distance is (4000) meter (Figure 2).

Statistical Means

The data obtained were processed by using a number of statistical means suitable for the objectives of the study and in order to reach conclusions the statistics software (SPSS) and (Excel) program were used.

Review, Analysis and Discussion of Results

Results` review

For holding a comparison between the Iraqi and the Jordanian international football referees` tests results, these results were reviewed and transformed into tables as an illustrative tool of the research" information analysis means finding the scientific, quantitative and qualitative results that prove or disprove questions as valid or not" [3] (Table 2).

The first 40 m run

The value of T calculated was (3.356) and of T tabulated, at a freedom degree of (14) and a level of significance of (0.005), was (2.145), accordingly, a presence of moral differences between the Iraqi and the Jordanian international referees` test results is concluded due to the fact that the T calculated is bigger than the T tabulated in favour of the Jordanian international referees.

The second 40m run

The value of T calculated was (3.504) and of the T tabulated, at a freedom

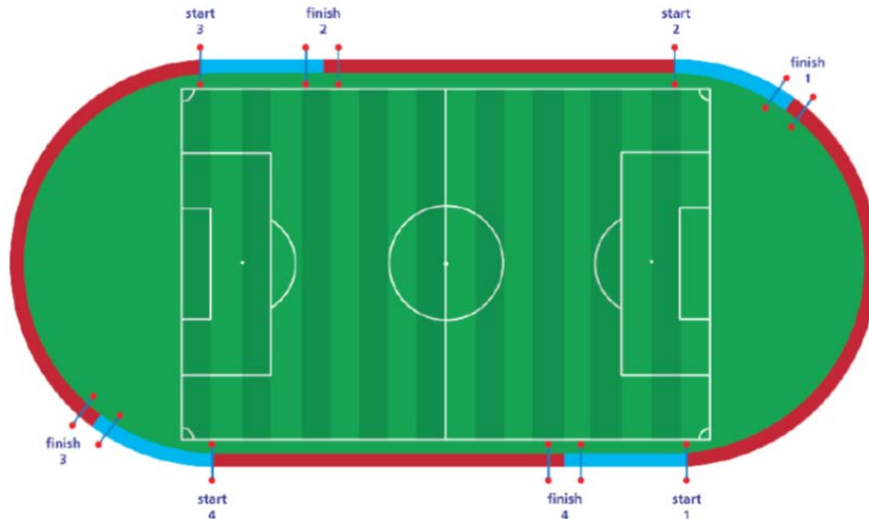


Figure 2: Showing the way of carrying out the international football referees endurance test.

Table 2: Showing differences in the Iraqi and the Jordanian international football referees` 40m speed test.

No.	Variables	Iraqi International Referees		Jordanian International Referees		T calculated	Level of Significance
		Arithmetic Mean	Standard Deviation	Arithmetic Mean	Standard Deviation		
1	40m speed test-first attempt	5.956	0.050	5.661	0.244	3.356	0.005
2	40m speed test-second attempt	5.894	0.050	5.710	0.140	3.504	0.004
3	40m speed test-third attempt	5.865	0.076	5.693	0.237	1.961	0.070
4	40m speed test-fourth attempt	5.945	0.080	5.789	0.211	1.958	0.070
5	40m speed test-fifth attempt	5.904	0.108	5.718	0.231	2.062	0.058
6	40m speed test-sixth attempt	5.875	0.085	5.763	0.180	1.598	0.132
7	speed rate	5.906	0.046	5.722	0.175	2.875	0.012

degree of (14) and a level of signigance of (0.004), was (2.145), accordingly, a presence of moral differences between the Iraqi and the Jordanian international referees` test results is concluded due to the fact that the T calculated is bigger than the T tabulated in favour of the Jordanian international referees.

The third 40 m run

The value of the T calculated was (1.961) and of the T tabulated, at a freedom degree of (14) and a level of signigance of (0.070), was (2.145), accordingly, the non-presence of moral differences between the Iraqi and the Jordanian international referees` test results is concluded due to the fact that the T calculated is smaller than the T tabulated.

The fourth 40 m run

The value of the T calculated was (1.958) and of the T tabulated, at a freedom degree of (14) and a level of signigance of (0.070) , was(2.145), accordingly, the non-presence of moral differences between the Iraqi and the Jordanian international referees` test results is concluded due to the fact that the T calculated is smaller than the T tabulated.

The fifth 40 m run

The value of the T calculated was (2.062) and of the T tabulated, at a freedom degree of (14) and a level of signigance of (0.058), was (2.145), accordingly, the non- presence of moral differences between the Iraqi and the Jordanian international referees` test results is concluded due to the fact that the calculated T is smaller than the tabulated.

The sixth 40 m run

The value of the T calculated was (1.598) and of the T tabulated, at a freedom degree of (14) and a level of signigance of (0.132), was (2.145), accordingly, the non- presence of moral differences between the Iraqi and the Jordanian

international referees` test results is concluded due to the fact that the T calculated is smaller than the T tabulated.

Speed rate

The value of the T calculated was (2.875) and of the T tabulated, at a freedom degree of (14) and a level of signigance of (0.012), was (2.145), accordingly, a presence of moral differences between the Iraqi and the Jordanian international referees` test results is concluded due to the fact that the T calculated is bigger than the T tabulated in favour of the Jordanian international referees.

8-As for the endurance tests, in the (75m x20) run the requirements were met within the time specified by the FIFA as fulfilling the international criteria which involve finishing a (75 m) run within (15) seconds, and after taking a rest finishing a (25 m) jogging within (18) seconds, observing that the number of rotations around the track required for passing the test is (10) and rotations to be performed (40) times. All Iraqi and Jordanian international referees selected as research population managed to pass this test for the required distance within the specified time.

Results` Analysis and Discussion

We observe a variation in the Iraqi and Jordanian international football referees` tests results as shown by the numbers in table no. (2). In the first (40 m) run, a big difference of (0.295) split second could be seen but the difference decreased in the second run to become (0.184) split second and decreased further in the third (40m) run to (0,172) "the sportsman has to train regularly and contiously for (8-12) hour weekly" [4].

The downward difference continued in the fourth run and it was (0,156) split second and likewise in the fifth run in which the greatest difference of (0,186) split second in speed rates in favour of the Jordanian referees appeared. The reason behind this may be attributed to short period of rest given between

tests" the real training of heart takes place during the rest periods between tests"[5].

While the results of the sixth run indicated the presence of less differences than the case in the previous runs and it was (0.112) split second in favour of the Jordanian international referees. This superiority on the part of the Jordanian referees is attributed to the multiplicity and frequency of tests they used to have.

The question of physical fitness is of paramount importance to the football referees. And this argument is stressed by (Mu`aid Al- Badri and Thamir Muhsin, 1987), as they state that " the issue of physical fitness is of exceptional importance for referees" [6], because it effects the accuracy of the decisions they take , since "fatigue has a negative effect on decision taking because when the referee gets fatigued due to lack of physical fitness, his reception of the surrounding stimuli grows weak and this , in turn, leads to slowing his response to the various incidents of the match" [7]. Lack of physical capability and fitness on the part of a referee would normally cause tiredness and taking wrong decisions , it is , therefore a must need they reach the required level of physical fitness to be qualified to lead this type of matches.

Accordingly," Modern International matches cannot be successfully led unless its referee enjoys a good level of physical fitness" [8], because modern football play is characterized by quick and sudden movements of players and the referee is therefore entitled to enjoy a high level of physical fitness in order to be capable of leading matches. Hence, a referee has to have a physical readiness as efficient as that enjoyed by the match players because a referee physically qualified would lead a match with a minimum or little mistakes in taking decisions, let alone, it would make him most of the time close to the spot of play incidents.

Based on the researchers` observation of the world cup matches organized in South Africa (2010) and Brazil (2014), it was found that a referee travels a distance of (12-14) km around the play field during a single match. For this reason both the Technical Committee and the Referee Committee issued instructions to the national football associations to entrust the task of training referees to specialized trainers so as to improve their physical capabilities to ensure that they can lead matches as successfully as possible. This came in response to the fact that "modern football matches can be led only by good physical fitness referees".

Conclusions and Recommendations

Conclusions

Based on the results obtained through carrying out tests on research population by the researchers and their use of the appropriate statistical means, the following conclusions were reached:

1. The results scored by the Jordanian international referees and shown in the statistical table indicate that they have excellent training programs.

2. The Iraqi international referees suffer of slow movement as shown by the results they scored and as marked in the statistical table.

3. Lack of sufficient rest period between speed tests of the Iraqi international referees, that the FIFA recommends, had a negative effect on their tests` results.

Recommendations

In the light of the conclusions reached by the researchers, they recommend the following:-

1. Those officials of the Iraqi Football Association`s central referees committee in charge of carrying out tests should provide the sufficient rest periods between tests as adopted by the FIFA.

2. Unifying the physical fitness training curricula of the Iraqi and Jordanian international referees to include the same training items and they should be supervised directly by the Referees Development Departments in the two countries.

3. Paying special attention to applied and field researches related to the field of football refereeing.

4. Holding conferences and organizing scientific symposia aimed at developing the skills and capabilities of referees in the various fields.

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