

## THE KNOWLEDGE OUTCOME OF THE FENCING LAW AMONG THE REFEREES, COACHES AND PLAYERS OF SOME ARAB COUNTRIES

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### Abstract

The study of the knowledge outcome of fencing law and its importance for Arab referees, coaches and players, it called on the researcher to use the descriptive approach in a comparison method between them. The researcher used an electronic cognitive test in some articles of the international law of fencing and distributed it through social networking sites to them. After data collection and statistical processing. The researcher reached the most important conclusions from them; The attribute factor (arbiter, coach, player) has an effective impact on the knowledge outcome of the fencing law. The state factor alone does not affect the level of the knowledge outcome of the fencing law. The interaction between the state and the trait did not reach the level of the knowledge outcome of the fencing law. The researcher recommends the following: The necessity of adopting the electronic test in the referees promotion tests. And work on holding regular training and arbitration courses and workshops on international fencing law for referees, coaches and players. And conducting other research on the articles of international fencing law in the English language, especially for first-class referees, for the purpose of preparing them for international promotion.

**Keywords:** Knowledge outcome. Fencing. Referee. Coach. Player

### Introduction

The need to recall and retrieve information, however important, of particular importance to the individual in general and to the sports individual in particular. From here knowledge is one of the vocabulary that must be through it increasing the individual's knowledge experience. It is important for referees, coaches, and players to know about the law, the rules, the art of performance, the terms and plans of all kinds of sport activity, it enhances an understanding of the correct skill performance through the knowledge it receives about the law subjects, especially fencing, because it gives the correct and clear path to mistakes committed by the player unintentionally, and through the knowledge the coach has with his long experience directing his players to overcome them in future competitions.

(Ernest & Young, 1991, 71) promise of knowledge "as what individuals need to know in order to do their jobs". While (Kidwell et al, 2000, 28) emphasized in his definition of knowledge as the level that surpasses data and information and is more related to the perceptions, skills and experiences possessed by the human element. (Darling, 1996, 1) refers to knowledge, defining it "that it is the invisible assets of the organization and that it includes extensive experience, distinguished management style and the accumulated culture of the

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organization." The integration of knowledge in terms of the use of information on sports and its laws contributes to the development of mental skills that enable athletes to take advantage of the information he acquired and the skills he learned and master it to serve the requirements and goals of sports and its development." (Al-Taie, Ghneim, 204, 2020).

The knowledge outcome is nothing but a collection of the various information that the individual possesses during his academic learning process and during the various courses or professional experiences he joined, which can be estimated by calculating the percentage of his knowledge attainment, and knowledge in the sports field is essential in the academic formation of the learner. The more he masters this knowledge and information and the ways of applying it, whether in the educational or training field, the more his applied ability increases, which improves his performance.. (Farahat, 2001).

A person, whether a referee, coach or a player, when he is out of practice, loses his skill and fitness, but can enjoy watching if he has enough knowledge, therefore, sports knowledge must be one of the top goals of a sports program and should be focused on any measurement of the right elements of the training process. There is no doubt that sports scientific knowledge is part of the human life that he uses whenever he wants, and in any case, to address all the problems he faces, and to solve them, besides, it is an indispensable element in the field of sports. (Al-Taie, Ghonim, 2020).

The knowledge outcome is considered one of the most important elements that help raise the athletic level of the players to the level of advanced competitions if the knowledge outcome is available in the fields of sports sciences, the most important of which are physical fitness, nutrition, injuries and biomechanics, in addition to the training aspect. The cognitive outcome of the players is the main element in the training process, especially in physical fitness. It also helps the player to quickly learn different physical skills and ease the application of tactical information. (Hour, 2003).

As Siclován sees it) that no matter how sophisticated the level of skill or physical preparation is, in many cases it is still unable to absorb and analyze many cases." Especially in important matches if they are not accompanied by a good level of information in finding suitable solutions for different game situations." (Siclován, 115, 2001).

Fencing is the sport of attack and defense between two competitors, each of whom tries to score touches on the other with a specific weapon (Foil - Epee - Saber). To score a touch, the opponent must be attacked, and a successful attack requires precision and mastery in choosing the right distance and timing (Tom, 1987).

The fencer in performance depends on the kinetic intelligence, where the fencer uses his intelligence in his skills to a large extent, whether he performs offensive or defensive skills. His skills are not randomized, but the result of using his own mental abilities that enable him to reach the best levels (Fredric, 1996).

The importance of research lies in its difference from previous studies that dealt with legal knowledge and focused on a sample of players, referees, trainers, or students from Iraq only, while this study included referees, trainers, and players from Iraq and other Arab countries which reinforce the results that researcher find out to know the degree or level of the legal knowledge.

The research problem is centered on finding the answer to the question: Are there any differences in legal knowledge among Iraqi referees, coaches, players and some Arab countries under consideration?

**The research aims to:** To identify the level of legal knowledge in fencing arbitration among the referees, trainers, and players of some Arab countries under consideration. Identify differences between referees, coaches, and players in legal knowledge of fencing.

### Research methodology and Field procedures

#### Research methodology

The researcher used the descriptive method in a comparative manner to fit the search problem and its objectives.

#### Research community and sample:

The research included a sample of referees, trainers, and players from the Arab countries (Iraq, Egypt, Jordan, Saudi Arabia, United Arab Emirates, Kuwait, Bahrain) and those with international rankings, first class, second and third degrees.

**Research Tool**

After reviewing the latest version of international fencing law through the International Fencing Federation website, as well as Al-Taie, Al-Fiqqi, 2017, the researcher prepared a multiple choices test for certain law subjects, especially the errors and sanctions (penalties) and arbitration signals, electronically. The test consists of (50) a multiple-choices items with three or four options, one mark for correct answer and zero for wrong answer, the total marks for the test are (50) and (25) is the pass mark, and the searcher was presented the test in its preliminary form to a group of experts and specialists (they are 9) to solicit their opinions, observations and guidance to determine the validity and clarity of the paragraphs and their proportionality for the level of the sample, and to put the proposed modifications, if found, in the light of the opinions and guidance of experts and specialists, some paragraphs have been amended and thus the reliability of test had been achieved. The researcher used the Kai squared (x2) to determine the validity of the paragraphs, so the results accepted all the paragraphs because they achieved values greater than the Kai(x2) tabular value (3.84) at the degree of freedom(1) and the level of significance (0.05) for the purpose of distributing it to the sample search.

**Exploratory Experience**

For the purpose of extracting the scientific basis of the test, the researcher conducted the test on a sample of (36) coaches, referees, and players from 2- 6/6/2020 in electronic form, and after the data was unloaded and organized descending to distribute it to the upper and lower groups and the researcher adopted 50% for the division of the sample. This process included detecting the difficulty of the paragraph, the discriminatory force, and the effectiveness of substitute error in the test paragraphs after applying the sample on construction and answer correction. The answers from both the upper and lower groups were analyzed statistically according to the following steps.

**a. The coefficient of the difficulty of the paragraphs :**

The difficulty factors for each test paragraph were calculated ranging from( 0.22 to 0.80). Ahmed Suleiman Auda (1999) believes that the paragraphs are good, if the odds of the paragraphs are between 20% and 80%. (Auda, 297: 1999))

**b. coefficient of Discrimination:**

After the application of the paragraph's strength equation, it is found that the paragraph has a range of (0.33-0.78), and the paragraph is acceptable if the force of its distinction exceeds (0.20)." Aldhafer, 13, 1999,) according to the Ebel criteria for acceptance of the paragraph.

**c) The two extreme groups manner (discriminatory ability):**

The researcher extracted the discriminatory ability of paragraphs by creating a value of (c) between members of the upper group and members of the lower group, the values calculated ranged from (2.557 to 17,000), which is greater than the (2.36) tabular value of (0.05) and (34) degree of freedom.

**d. Internal consistency**

In order to find the true internal consistency, the form of the simple correlation coefficient (pierson) was used between the degree of one paragraph and the total marks of the test and all of the individuals construction sample, as the values (r) calculated between (0.477 - 0.907) are greater than (r9) the degree of connotation (0.32) and the free degree of (34), thereby achieving the truthfulness of construction.

**Test Reliability**

To calculate the test reliability, the researcher used the half-segmentation method. After the paragraphs were divided into two equal parts, the correlation coefficient (0.88) was equal to half of the test for the test reliability coefficient and prediction formula was used for Sperman & Brown to find the whole test reliability coefficient. It was found to equal 0.94. and this reliability coefficient is appropriate because correlation Considers high if the parameter is greater than (0.70)." (Auda 279, 1999).

**Table 1:** shows research sample in Arab countries according to (referees, coaches, players).

Countries	Referee	Coach	Player	Total
Iraq	6	10	12	28
Egypt	22	10	8	40
Jordan	6	5	4	15
Saudi Arabia	10	5	7	22
United Arab Emirates	4	5	10	19
Kuwait	4	7	11	22
Total	52	41	52	145

The researcher also used the Cuder-Richardson method, where the value of standard deviation was Cuder-Richard Son (14,234), and the constant coefficient was 0.79. The standard error value for the Quadrotor-Richard Son test was 2,376.

**Objectivity**

Correcting a test that its paragraphs include multiple choices questions, and is usually objective, whether manual or automatic, because the correction and extraction of the results are not affected by the correctors' self-reliance for use of the test's correction keys, so a researcher here does not need to use the subject matter of a cognitive test, because the method of correcting a test is the same, to which not disputed by two.

Final form of Legal Knowledge Test of Fencing :

After finding the test validity and statistical analysis of its paragraphs to find the coefficient of difficulty, strength of discrimination, effectiveness of alternatives, and consistency, the test is ready for implementation, containing (50) optional items of (of multiple choice questions) and each item containing three or four options, one of them represent the right answer.

**The main Experiment**

The researcher distributed the test link to research sample on social media (Facebook and WhatsApp), with the help of some teachers working in the Arab federations fencing under consideration, with the purpose of delivering the test link to the referees, coaches, and players of these countries, and to leave the link open for ten days from 10-30 of June, 2020 for the purpose of receiving answers directly through the test link.

**Statistical methods**

The researcher used (SPSS) to process the data which he obtained, including (arithmetic mean, standard deviation, binary variation analysis), as well as difficulty and ease factors addition to discrimination factor, moreover the program that researcher used in the test setup analyzes the data directly.

**Findings & Discussion of Results**

Display the results of the arithmetic means and standard deviations for the search sample according to variable of country, class) (Table 2).

What table 2 shows is the difference in the statistical values of the research variables (referee, coach, player), it means the values of arithmetic mean and standard deviation achieved for the countries (Iraq, Egypt, Jordan, Saudi Arabia, UAE, Kuwait). In order for a researcher to know these differences in the uniformity of the sample and legal knowledge of variables (countries and class) (referee, coach, player), researcher used binary analysis of variations and tables 3 & 4 Below shows (Tables 3 and 4).

Table (3) shows the results of homogeneity test between countries using the Leveen Test (F), the results of which indicate that the value of F equals 1.608, as the level of calculated significance (0.071) is greater than the level (0.05) indicating that countries are not homogeneous in legal knowledge (Table 4).

The results of table (4) show that the class has an effect on average grades of legal knowledge, if a value of (F) equal (18,971), and the level of calculated significance (0,000) is below (0.05) and is of statistical significance.

The country factor had no impact on average grades of legal knowledge, if the value of (F) equal (1.959) and the level of calculated significance (0.089) is greater than (0.05) and is not statistical indication..

As interaction between the country and the class (country x class) has not reached the level of influence over the average degree of legal knowledge, if the (F) value is equal (1,046) and the level of the calculated significance (0.409) is greater than the level (0.05) and is not a statistical indication.

**Table 2:** shows the arithmetic means and standard deviations of the research sample according to the variable (state, trait).

Countries	Referee		Coach		Player		Total	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Iraq	36.000	6.663	31.900	3.665	29.500	7.634	31.750	6.536
Egypt	35.591	5.746	29.500	4.649	24.875	2.748	31.925	6.500
Jordan	35.500	5.320	35.600	6.189	30.250	7.762	34.133	6.312
Saudi Arabia	35.500	5.950	32.600	5.459	25.429	4.353	31.636	6.814
Arab Emirates	31.250	7.365	35.000	6.481	24.000	2.539	28.056	6.620
Kuwait	30.250	2.062	29.500	5.593	26.091	7.968	27.955	6.593
Total	34.865	5.797	31.756	5.257	26.519	6.166	30.993	6.772

**Table 3:** Shows the value of (F) and the error percentage for the homogeneity of the sample.

variable	F	df1	df2	Sig.
Country + adjective	1.608	17	127	.071

**Table 4:** shows the results of the binary variance analysis and the error ratio between the variable (Country + adjective).

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2469.412(a)	17	145.260	4.463	.000
Intercept	112824.526	1	112824.526	3466.417	.000
Country	318.793	5	63.759	1.959	.089
Adjective	1234.917	2	617.458	18.971	.000
Country + adjective	340.565	10	34.057	1.046	.409
Error	4133.581	127	32.548		
Total	145886.000	145			
Corrected Total	6602.993	144			

a R Squared = .374 (Adjusted R Squared = .290)

**Table 5:** shows the significant differences (the lowest significant difference LSD) between the Arab countries variable.

Countries	Mean Difference	Std. Error	Sig.	Statistical decision
Jordan, Emirates	6.0778(*)	1.99451	.003	Significant
Jordan, Kuwait	6.1788(*)	1.91032	.002	Significant
Saudi Arabia, Emirates	3.5808	1.81319	.050	Significant
Saudi Arabia, Kuwait	3.6818(*)	1.72014	.034	Significant
Iraq, Emirates	3.6944(*)	1.72355	.034	Significant
Iraq, Kuwait	3.7955(*)	1.62538	.021	Significant
Egypt, Emirates	3.8694(*)	1.61923	.018	Significant
Egypt, Kuwait	3.9705(*)	1.51431	.010	Significant

\* The mean difference is significant at the (0.05) level.

To know the significant differences between the Arab countries variable and the characteristic variable, the researcher (lower significant difference(LSD) and Tables (5) and (6) indicate this (Tables 5 and 6).

The results of table (5) when calculating the lowest LSD among members of the Arab countries indicate that the members of (Iraq, Egypt, Jordan, Saudi Arabia) excel in legal knowledge over the members of the two countries (UAE and (Kuwait)

The results of table (6), which indicates the values (the lowest LSD significant difference LSD) between (referee, coach, player) the superiority of referees over coaches and players, as well as the superiority of coaches over players in legal knowledge. The researcher attributes this to the fact that the nature of the referee's work requires them to constantly examine the subjects of international fencing law and the amendments thereof in order to perform their work in managing matches and making appropriate decisions about what is happening during the fencing match. Coaches need to be informed about international fencing law to help them with the training process and to clarify mistakes that may be committed by their players during the match and this is what research and studies have confirmed about the importance of knowledge in acquiring expertise to make the right decision at the critical times of the match, meaning that "knowledge is acquired through the use of the right decision to act" (Flax,1990).

Therefore, both the referee, coach and player need to constantly review the subjects of international law from time to time in order to use them to correct the mistakes of good and correct the performance of the skills (Al-Khouli and Annan,1999, 95) pointed out that understanding and comprehending the law of the game and its ability to apply and employ it well contributes to the success of the performance. "The deeper a athlete studies and analyzes it, the closer he discovers aspects of his success in performance,"

Knowledge on the other hand has a different approach when it comes to sports. It is an aspect of learning from pros or those who are participating in it at that given time. By being around them, you are curious about the sports, you ask questions and observe the skills that are being applied in the sport. In a nutshell, knowledge therefore can mean familiarity or awareness you gain

**Table 6:** shows the significance of the differences (the value of the lowest significant difference LSD) between the variable of the trait (referee, coach, player).

Adjective	Mean Difference	Std. Error	Sig.	Statistical decision
Referee- Player	8.3462(*)	1.11886	.000	Significant
Referee- Coach	3.1093(*)	1.19154	.010	Significant
Coach - Player	5.2369(*)	1.19154	.000	Significant

\* The mean difference is significant at the (0.05) level.

through experience. (Turban, et. al, 2003, 67) refers to knowledge as data or information that has been organized and processed to be able to communicate (understanding, experience, accumulated learning and experience) when applied to an ongoing problem or activity.

On the other hand, knowledge means relationships, links and connections of meanings that link mental images with information through practices and the experiences and experiences that emanate from them, i.e. linking information to practical reality and its applications. In this context, the level of knowledge can be stated as "one of the basic elements in an integrated chain that begins with signals and progresses to data, then to information, then to knowledge, and then to wisdom, which is the basis of innovation." Also, knowledge is the basis of wisdom and innovative creativity.(Harris, 1999, 92) Knowledge refers to engineering wisdom and expertise, and can include marketing, literature, and even sports, and is considered an important factor in the success of enterprises. (Badaraco, 1991, 187).

### Conclusion

The researcher finds out that; the attribute factor (arbiter, coach, player) has an effective impact on the knowledge outcome of the fencing law. The state factor alone does not affect the level of the knowledge outcome of the fencing law. The interaction between the state and the trait did not reach the level of the knowledge outcome of the fencing law. The researcher recommends the following: The necessity of adopting the electronic test in the referees promotion tests. And work on holding regular training and arbitration courses and workshops on international fencing law for referees, coaches and players. And conducting other research on the articles of international fencing law in the English language, especially for first-class referees, for the purpose of preparing them for international promotion.

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