

# Building a legal knowledge test for volleyball for third-grade students of the College of Physical Education and Sports Sciences for Girls

<sup>1</sup>A. M. D. Naima Zaidan Khalaf

**Abstract:**

*Volleyball has witnessed a remarkable development in the game of volleyball, and this development included legal and skill rules, players' specialties, playing methods and their plans, and that the modern trend is distinguished in measuring knowledge, which is one of the accurate objective evaluation methods, and occupies a great degree of importance and on which the correct behavior is based in the application of legal rules. When judging, which must be used with tests related to sports, and legal knowledge is very important for balls, because the more the legal knowledge of volleyball and the methods of its application increases, the student is better able to develop her ability to arbitrate upon the evaluation test, and legal knowledge of the game of volleyball is one of the important things that should be.*

**Keywords:** Volleyball, legal knowledge, evaluation methods

## **I. Introduction**

The student must understand and comprehend an appropriate amount of issues related to the legal knowledge of the game. Since the outputs of the Faculties of Physical Education and Sports Sciences for Girls is a project (school) in the future, it becomes imperative to be familiar with the laws of games, including the game of volleyball, so the student must have an appropriate amount of knowledge in order to be able to face all these changing and multiple situations that she faces in performing skills Volleyball during the match, and to possess a greater amount of legal knowledge to use when it is a judge or to use it together to answer when it is subject to evaluation through the tests that it undergoes, which are among the requirements of the stage for the purpose of success, or to have sufficient knowledge of this knowledge when it is a school Ahmad Al-Muwafi (2004) believes that the process of providing the learner with information is not limited to mere knowledge per se, but must extend

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<sup>1</sup> University of Baghdad College of Physical Education and Sports Sciences for Women

to the ability to employ it so that it is applicable, so the learner's acquisition of that theoretical information and his ability to employ it may lead to the development of skills and mental abilities. And to improve the level of the level of motor performance and its development and the ability to act quickly in light of changing circumstances, and this knowledge and theory may contribute to raising the level of the student in the type of activity The Practitioner (1:48)The importance of the research is evident in that it deals with legal knowledge, which is the basis for evaluating third-grade students in the College of Physical Education and Sports Sciences for Girls through building a legal knowledge test for volleyball for third-grade students of the College of Physical Education and Sports Sciences for Girls, through which we can identify the level of The legal knowledge of female students.

#### **Research problem:**

The research problem crystallized through the researcher's experience as a teacher of volleyball and found that female students do not possess the legal knowledge that qualifies them to pass the knowledge test for legal rules in volleyball because there is no objective test used to measure the legal knowledge of female students and build such a test intended to serve female students and teachers in the college to know The level of legal knowledge of their female students.

#### **Research objectives:**

1. Building a legal knowledge test for volleyball for third-grade students of the College of Physical Education and Sports Sciences for Girls.
2. Evaluating the level of legal knowledge of volleyball for third-grade balls of the College of Physical Education and Sports Sciences for Girls.

#### **Research fields :**

The human field: Female students of the third grade in the College of Physical Education and Sports Sciences for Girls.

Temporal domain: from 4/1/2018 to 9/5/2018.

Spatial domain: Hall of the College of Physical Education and Sports Sciences for Girls.

## **II. Research methodology and field procedures:**

Research Methodology The researcher used the descriptive method in the survey method, due to its suitability to the nature of the research.

#### **Research Community and Sample:**

The research community included the third-grade female students in the College of Physical Education and Sports Sciences for Girls, whose number is (125) female students. As for the research sample, it consisted of (119) as shown in Table (1).

Table (1) shows a description of the research sample						
Community name	Number of students	Sample experiment Exploratory	Construction sample	Legalization sample	Female students excluded	percentage
College of Physical Education and Sports Sciences for Girls	<b>125</b>	<b>10</b>	<b>50</b>	<b>60</b>	<b>5</b>	<b>%95.2</b>

Means of collecting information, tools and devices used:

- Sources and references
- Internet information network
- Information gathering form
- Data dump form
- Questionnaires
- Pens
- Stopwatch (1)
- HP laptop (1)
- Helping team work

**Stages of building the test legal knowledge:**

**Determine the purpose of the test:**

The researcher determined the purpose of the test for the purpose of identifying the legal knowledge of the third stage students of the College of Physical Education and Sports Sciences for Girls at the University of Baghdad.

First: Analyzing the content: The researcher analyzed the content of the game law, which consists of (9 chapters) in order to formulate the test statements.

Second / Preparing and drafting test phrases in its initial form: (80) phrases were formulated for the law of volleyball of the multiple choice type, and the formulation of questions was taken into account, learning levels according to Bloom's classification, and in light of this the researcher relied on the first three levels only because the mental field categories Graduated in difficulty and students are not able to analyze, synthesize and evaluate, so the first three levels were adopted, which are:

- Knowledge 45%
- understanding 20%
- implementation 35%

And their total constitutes 100% of the mental field,

As the researcher prepared the test map (table of specifications) based on the relative weight of the number of pages of each chapter of the content chapters and on the basis of the relative importance of each level of mental knowledge and as shown in Table (2), as (the table of specifications has many benefits, the most important of which is that it gives the material The study has its real weight and helps to measure its behavioral goals), (63-2) and the number of test statements reached (80), as the number of knowledge level statement reached (38) and the level of understanding (14) statements and the level of application (28) statements. As indicated in Table (2), for each statement there are three alternatives, one of which is correct. Thus, the test is ready in its preliminary form to be presented to experts and specialists to ensure its validity.

Table (2) shows a table of specifications for the importance of terms and levels of learning legal knowledge						
Num	The content of international law in volleyball	number of pages	Number of questions	Remember questions 45%	Understanding questions 20%	implementation questions 35%
1	Chapter 1	5 pages	8	4	1	3
2	Chapter 2	4 pages	6	3	1	2
3	Chapter 3	5 pages	8	4	1	3
4	Chapter 4	9 pages	14	6	3	5
5	Chapter 5	5 pages	8	4	1	3
6	Chapter 6	4 pages	6	3	1	2
7	Chapter 7	3 pages	5	2	1	2
8	Chapter 8	7 pages	12	6	2	4
9	Chapter 9	8pages	13	6	3	4

	Total	42 pages	80	38	14	28
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Table (3) shows the value of ( $K^2$ ) and the percentage of experts' agreement on the validity of the terms of the legal knowledge test of volleyball

Num	Value of ( $K^2$ )	percentage	T	Value of ( $K^2$ )	percentage	T	Value of ( $K^2$ )	percentage
1	16	100%	28	9	87.5%	55	16	100%
2	2.25	*68.75%	29	6.25	81.25	56	12.25	93.75%
3	12.25	93.75%	30	12.25	93.75%	57	6.25	81.25%
4	6.25	81.25%	31	16	100%	58	4	75%
5	4	75%	32	9	87.5%	59	9	87.5%
6	9	87.5%	33	12.25	93.75%	60	12.25	93.75%
7	12.25	93.75%	34	6.25	81.25	61	9	87.5%
8	9	87.5%	35	12.25	93.75%	62	16	100%
9	16	100%	36	4	75%	63	16	100%
10	16	100%	37	16	100%	64	12.25	93.75%
11	12.25	93.75%	38	9	87.5%	65	6.25	81.25
12	9	87.5%	39	12.25	93.75%	66	12.25	93.75%
13	6.25	81.25%	40	9	87.5%	67	4	75%
14	16	100%	41	6.25	81.25%	68	16	100%
15	4	75.%	42	4	81.25%	69	9	87.5%
16	1	*62.05	43	16	100%	70	12.25	93.75%
17	16	100%	44	4	75.%	71	9	87.5%

18	12.25	93.75%	45	16	100%	72	6.25	81.25%
19	6.25	81.25%	46	9	87.5%	73	4	81.25%
20	9	87.5%	47	6.25	81.25	74	2.25	*68.75%
21	12.25	93.75%	48	12.25	93.75%	75	4	75.%
22	4	75%	49	16	100%	76	16	100%
23	12.25	93.75%	50	4	75%	78	9	87.5%
24	2.25	*68.75%	51	9	87.5%	79	16	100%
25	6.25	81.25	52	2.25	*68.75%	80	4	75%
26	16	100%	53	12.25	93.75%			
27	16	100%	54	6.25	81.5%			

**Prepare test instructions:**

A set of instructions was specified that shows the performance of the test and answered it correctly. A statement was not left to reach the purpose for which the test was developed. It also included an example of how to answer it.

**Exploratory experience:**

In order for the test statements to be clear, the researcher conducted an exploratory experiment on 4/17/2018 at ten in the morning on a sample consisting of (10 students representing a percentage of (20%)), and they were randomly selected from the research community, and the results came:

1. Clarity of test statements.
2. Determine the time taken to answer the test statements, and it was (35) minutes.
3. The researcher did not encounter any difficulty in applying the scale, as she is a teacher in the same college.

**Test correction:**

The test is corrected by placing a score for each statement according to the response of the student according to the correction key prepared for the test in which the researcher specified (one score) for the statement whose answer is correct and (zero) for the statement whose answer is wrong as all the test statements were multiple

choice and according to the three levels of Bloom's Classification (Remember - Understand - Apply) so that the scale of the scale is (59) degrees in the case of correct answers to all the statements correctly.

**The main experience** (applying the scale to a construction sample):

The researcher applied the test of legal knowledge of volleyball prepared by the researcher on the building sample, which is numbering (50) students, to analyze his statements statistically and choose the right ones through practically the difficulty and ease of expressions as well as their distinctive ability.

1. Ease and difficulty factor:

Some test designers adopt the degree of ease of a statement in order to understand its difficulty and arrange it according to its difficulty, as the relationship between ease and difficulty is directly as follows:

$$\text{Ease factor} + \text{difficulty factor} = 1 \text{ (one true)}$$

The degree of difficulty, ease, and ability to differentiate in the method of (the two peripheral groups), where the two peripheral groups represented a percentage of (27%) students, and under the conditions and instructions, and after the end of the main experiment, the researcher collected data from the construction sample members and arranged them in tables and processed them statistically as shown in Table (4).

2. The coefficient of distinction was extracted for the purpose of reaching the discriminatory strength of the paragraphs, so that the test is homogeneous in its expressions and its ability to correlate the phrases as shown in Table (4).

**The scientific basis for the test:**

**Logical honesty:**

The test phrases were presented to a group of experts and specialists and they made their observations, and the researcher took them and modified the phrases in the light of the comments of experts and specialists. And the specialists and they judge him that he efficiently measures what he is set for (184-3).

**Stability:**

The researcher extracted the stability factor by testing and retesting after an interval of (14) days, and the stability factor reached (0.842).

**Objectivity:**

The objectivity was represented by the degree of agreement of the experts, meaning that the test gives the same degree despite the different correctors.

**Statistical means:**

The researcher used the statistical bag SPSS

**Research results:**

Table (4) shows the difficulty factor, ease and discrimination coefficient for each of the legal knowledge test phrases

(T) phras e	Factor		Phras e evalu ation	(T) phr ase	Factor		Phras e evalu ation	(T) phr ase	Factor		Phras e evalu ation	(T) phr ase	Factor		Phras e evalu ation
	Difficu lty and ease	Discri minat ion			Difficult y and ease	Discrimi nation			Difficul ty and ease	Discri minat ion			Difficul ty and ease	Discri minat ion	
1	<b>0.307</b>	<b>0.40</b>	Valid	29	<b>0.615</b>	<b>0.76</b>	Valid	48	<b>0.746</b>	<b>0.65</b>	Valid	58	<b>0.384</b>	<b>0.12</b> <b>***</b>	Invali d
2	<b>0.230</b>	<b>0.60</b>	Valid	27	<b>0.615</b>	<b>0.42</b>	Valid	46	<b>0.769</b>	<b>0.39</b>	Valid	59	<b>0.769</b>	<b>0.44</b>	Valid
3	<b>0.769</b>	<b>0.73</b>	Valid	35	<b>0.538</b>	<b>0.48</b>	Valid	54	<b>0.230</b>	<b>0.53</b>	Valid	60	<b>0.879</b> <b>**</b>	<b>0.22</b> <b>***</b>	Invali d
4	<b>0.692</b>	<b>0.38</b>	Valid	23	<b>0.230</b>	<b>0.22</b> <b>***</b>	Invali d	42	<b>0.384</b>	<b>0.36</b>	Valid	61	<b>0.692</b>	<b>0.58</b>	Valid
5	<b>0.515</b>	<b>0.38</b>	Valid	24	<b>0.461</b>	<b>0.44</b>	Valid	43	<b>0.746</b>	<b>0.62</b>	Valid	62	<b>0.615</b>	<b>0.73</b>	Valid
6	<b>0.384</b>	<b>0.48</b>	Valid	25	<b>0.184</b> <b>*</b>	<b>0.14</b> <b>***</b>	Invali d	44	<b>0.461</b>	<b>0.58</b>	Valid	63	<b>0.692</b>	<b>0.73</b>	Valid
7	<b>0.230</b>	<b>0.56</b>	Valid	26	<b>0.923</b> <b>**</b>	<b>0.18</b> <b>***</b>	Invali d	45	<b>0.384</b>	<b>0.15</b> <b>***</b>	Invali d	64	<b>0.879</b> <b>**</b>	<b>0.28</b> <b>***</b>	Invali d
8	<b>0.780</b>	<b>0.54</b>	Valid	22	<b>0.384</b>	<b>0.61</b>	Valid	41	<b>0.746</b>	<b>0.58</b>	Valid	65	<b>0.769</b>	<b>0.42</b>	Valid
9	<b>0.230</b>	<b>0.58</b>	Valid	28	<b>0.692</b>	<b>0.68</b>	Valid	47	<b>0.384</b>	<b>0.13</b> <b>***</b>	Invali d	66	<b>0.376</b>	<b>0.58</b>	Valid
10	<b>0.692</b>	<b>0.73</b>	Valid	20	<b>0.461</b>	<b>0.73</b>	Valid	39	<b>0.746</b>	<b>0.62</b>	Valid	67	<b>0.769</b>	<b>0.58</b>	Valid
11	<b>0.307</b>	<b>0.13</b> <b>***</b>	Invali d	30	<b>0.461</b>	<b>0.48</b>	Valid	49	<b>0.461</b>	<b>0.62</b>	Valid	68	<b>0.538</b>	<b>0.76</b>	Valid

12	<b>1**</b>	<b>0.19</b> <b>***</b>	Invalid	31	<b>0.769</b>	<b>0.76</b>	Valid	50	<b>0.384</b>	<b>0.41</b>	Valid	69	<b>0.538</b>	<b>0.66</b>	Valid
13	<b>0.307</b>	<b>0.58</b>	Valid	32	<b>0.615</b>	<b>0.64</b>	Valid	51	<b>0.384</b>	<b>0.60</b>	Valid	70	<b>0.692</b>	<b>0.48</b>	Valid
14	<b>0.538</b>	<b>0.14</b> <b>***</b>	Invalid	33	<b>0.615</b>	<b>0.38</b>	Valid	52	<b>0.746</b>	<b>0.47</b>	Valid	71	<b>0.746</b>	<b>0.54</b>	Valid
15	<b>0.915</b> <b>**</b>	<b>0.12</b> <b>***</b>	Invalid	34	<b>0.879</b> <b>**</b>	<b>0.18</b> <b>***</b>	Invalid	53	<b>0.769</b>	<b>0.58</b>	Valid	72	<b>0.923</b> <b>**</b>	<b>0.21</b> <b>***</b>	Invalid
16	<b>2.230</b>	<b>0.42</b>	Valid	21	<b>0.230</b>	<b>0.41</b>	Valid	40	<b>0.692</b>	<b>0.44</b>	Valid	73	<b>0.384</b>	<b>0.39</b>	Valid
17	<b>0.769</b>	<b>0.48</b>	Valid	36	<b>0.692</b>	<b>0.62</b>	Valid	55	<b>0.230</b>	<b>0.44</b>	Valid	74	<b>0.769</b>	<b>0.48</b>	Valid
18	<b>0.780</b>	<b>0.60</b>	Valid	37	<b>0.846</b> <b>**</b>	<b>0.19</b> <b>***</b>	Invalid	56	<b>0.651</b>	<b>0.47</b>	Valid	75	<b>0.692</b>	<b>0.66</b>	Valid
19	<b>0.461</b>	<b>0.54</b>	Valid	38	<b>0.098</b> <b>*</b>	<b>0.12</b> <b>***</b>	Invalid	57	<b>0.692</b>	<b>0.66</b>	Valid				

\*Phrases with difficulty\*\*Phrases with ease\*\*\*Phrases that are weak

Table (4) shows that the ratio of difficulty and ease coefficient ranges between (0.076 - 0.923), so the expressions (12 - 15 - 25 - 26 - 34 - 37 - 38 - 60 - 64 - 72) are considered because they are easy and difficult items that are omitted from the test.

It is clear from the same table that the coefficient of excellence for the test statements ranges between (0.12 - 0.73), so the expressions (11 - 12 - 14 - 15 - 23 - 25 - 26 - 34 - 37 - 38 - 45 - 47 - 58 - 60 - 64) - 72) Weak that was omitted from the exam, and thus the test became composed of (59) phrases in its final form.

### III. Conclusions and recommendations:

#### Conclusions:

1. Building a legal knowledge test as a means of indirect measurement adopted by teachers and specialists in volleyball to evaluate students

2. The test that was built is valid for testing the legal knowledge requirements of third-stage students of the College of Physical Education and Sports Sciences for Girls - University of Baghdad

### **Recommendations**

1. Adopting standardized and structured tests as scientific research tools in determining the legal knowledge test of volleyball.

2. Adopting the test that was built as a tool to assess the legal knowledge of female students in volleyball.

3. Adopting the test by female teachers to assess the legal knowledge of volleyball among female students of the College of Physical Education and Sports Sciences for Girls.

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