

## **Building a Digital Sports Communication Scale for Physical Education Teachers in the Governorate of Babylon**

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### **Abstract**

The importance of the research lies in building a measure of digital sports communication for physical education teachers in Babylon governorate and identifying the differences in digital sports communication for physical education teachers in Babil governorate according to gender.

As for the research problem: through the researcher's work as a teacher specializing in physical education in a school in Babylon governorate, he noticed that there is a weakness in the media side in sports and scouting competitions among some teachers as a result of the teachers' lack of interest in these competitions by those in charge of sports despite considering it the building block essential for improving the athletic level, as well as the lack of interest in digital sports communication in school sports and its effective role in society, considering that digital sports communication as a media and development aspect for the teacher and as an incentive to crown the persevering and distinguished students and to praise the efforts of the participating teachers as a moral motive, and as a serious attempt by the researcher to know the role of digital sports communication and the advancement of school sports through communication digital Sportsman and its role in this field.

As for the objectives of the research: it is to build a digital sports communication scale for physical education teachers in Babylon governorate and to identify the digital sports communication for physical education teachers in the Babylon governorate as well as to identify the differences in the digital sports communication of physical education teachers in the Babylon governorate according to gender. About imposing research, there are differences in the digital mathematical communication of physical education teachers in Babylon governorate according to gender. While the research methodology, the researcher used the descriptive method by surveying, correlational relations, and comparative studies. As for the research community and its sample, it consisted of teachers of physical education in Babylon governorate.

**Keywords:** digital sports communication.

### **Introduction:**

In light of the interest in the sporting aspect in most parts of the world, digital sports communication has become an essential element of sports societies, regardless of the degree of development of this society to become our friend for sport in various events and activities in general, as digital communication is one of the most important techniques that use mass communication means it is characterized by the characteristics that made it the most widespread in all parts of the world, and the recipient has become inclined to choose specific and intended programs that he himself requests and interacts with more than receiving programs that he was

accustomed to in the past, and with the tremendous development in digital communication technology, there has become what is known as digital press, digital radio and digital phone, as well as digital interactive television, educational platforms (YouTube) and various other means of communication, and the means of storing information and smart phones, which in turn provide specific and selected programs by the viewer at the time he wants, as well as converting from a passive recipient to a positive recipient who effectively tracks the materials presented.

The school is the first place to practice sporting activity on a regular basis, besides the systematic lesson of sports education and indoor sports activity, there is another color of sports activities, which is the outdoor sports activity that concerns sports and scouting teams that represent the school in participating in competitions with other schools, and accordingly, the outdoor sporting activity forms part of the community's mirror image of the school. Therefore, it was necessary for this part to be given the best ideas and perceptions about school activity, as the different sports teams represented by the best players for each school and the preparation of scouting teams, the school façade is considered a mathematical one and the title of its progress as it contains many educational benefits and values that in turn contribute to achieving the goals of the general school sports program, examples of which are leadership training and cooperation, development of emotional maturity, self-reliance and other educational goals, and for this importance the researcher has studied the role of digital sports connection for physical education teachers in Babylon governorate.

### **Research problem:**

Despite the continuous calls in scientific seminars and conferences that urge the activation of the role of school sports and sports and scouting competitions, and through perusal, the researcher sees through his work as a teacher specializing in physical education in a school in Babylon governorate, a weakness in the media aspect in sports and scouting competitions for some teachers as a result teachers' lack of interest in these competitions on the part of those in charge of sports despite considering them the basic building block for improving the level of sports, as well as the lack of interest in digital sports communication in school sports and its effective role in society, considering that digital sports communication as a media and development aspect for the teacher and as an incentive to crown the persevering and distinguished students and to praise the efforts of the participating teachers as a moral motive, and as a serious attempt by the researcher to know the role of digital sports communication and the advancement of school sports through communication digital Sportsman and its role in this field, through the researcher's review of previous studies, he did not find a study targeting or interested in the teachers' segment, as well as the media side, and the extent to which he sheds light on the posts as a matter of honor, reward and praise for the great role and efforts made by teachers to do their best to promote their teams and raise the name of their schools in scouting competitions and posts. Paying attention to the media and highlighting this important segment as an appreciation for their efforts exerted and for the presence of talents that must appear through participation in sports and scouting competitions.

### **Research objectives:**

- 1- Building a digital sport communication scale for physical education teachers in Babylon governorate.
- 2- Identify to the digital sports connection for physical education teachers in Babylon Governorate.
- 3- Identifying the differences in the digital sport communication of physical education teachers in Babylon governorate according to gender.

### **Research hypothesis:**

- 1- There are differences in the digital sport communication of physical education teachers in Babylon governorate according to gender.

### **Research fields:**

**The human field:** Physical education teachers in Babylon governorate.

**Time domain:** from 15/1/2020 to 10/1/2021.

**Spatial field:** Middle, and high schools in Babylon governorate.

**Research Methodology:** The researchers used a descriptive approach using a survey method and correlations to match the nature of the research.

**Research community and sample:** The research community is represented by teachers of physical education \*, where the total number is (679) teachers of physical education distributed to (506) teachers and they make up (75%) and (173) female teachers and constitute (25%) of the research community for male and female teachers Physical Education and Sports Sciences. And since the sample is (part of all or some of all) <sup>(1)</sup>.

Where the sample was the exploratory experiment It included physical education teachers in Babil Governorate by (71) male and female teachers, and by (10%) of the research population of (679) male and female physical education teachers, in order to identify the strengths and weaknesses of the scale. As for the construction sample ,the building sample consisted of (170) male and female physical education teachers, representing (25%) of the research population of (679), by which (127) teachers made up (75%) of the building sample, and by (43) schools constituting (25%) ) From the building sample, they were randomly selected by the stratified method.

**Main application sample:** The application sample included (149) teachers of physical education who constitute (22%) of the research population of (679), and by (111) teachers make up (75%) of the application sample and (38) teachers make up a percentage of ( 25%) of the application sample were randomly selected, and the application sample was distributed in the form of layers depending on the gender variable.

**Tools, means and devices used in the research:** The researcher used the following tools:

- Observation.
- personal interview.
- The questionnaire.
- Scales.

**Methods of collecting information:**

- Arab and foreign scientific sources and references.
- Associated studies and research.
- International Electronic Information Network (Internet).

**Methods of data analysis:**

- Statistical means.
- Information gathering form.
- Electronic calculator (kenko) type, count (1)

**Auxiliary means:**

- (1) computer type (HP).
- Stationery.

**Field research procedures:**

- Building a digital sports communication scale in sports and scouting competitions.
- Determine the goal of building a digital sports communication scale.

The aim of building the scale is to develop a specific tool to measure and determine the level of digital sports communication for teachers of physical education in Babil Governorate, and for the purpose of identifying the relationship of digital sports communication for physical education teachers in Babil Governorate according to gender.

**Determine the fields of digital sports communication scale:** After reviewing the literature, studies and standards related to both fields of digital sports communication, the researcher conducted many interviews with a number of experts in sports administration, media, psychology, measurement and evaluation, where (5) areas were identified for the digital sports communication scale. After collecting and unpacking the data, the ( $K_i^2$ ) test was used to accept the fields of the scale. Fields that got a value of ( $K_i^2$ ) greater than the tabular value of (3.84) were accepted, and four fields were accepted excluding the field (planning) in the digital mathematical communication scale as shown in table (1).

Table (1) Results of the  $K_a^2$  test for expert opinions on the validity of the digital sports communication scale domains.

N	Fields	Experts number	Agree	Disagree	$K_a^2$	Sig type
1	Planning	15	8	7	0.06	Non sig
2	Cognitive	15	15	0	15	Sig
3	Educational psychological	15	13	2	8.06	Sig
4	Social	15	14	1	11.26	Sig
5	Informational	15	15	0	15	Sig

**Determine the method and principles of writing the paragraphs of the digital sports communication scale:** The developed (Likert) method was relied on in formulating alternatives to the scale paragraphs, which is considered one of the common methods in measurement and research, as it presents the respondent with a position and asks him to determine his answer by choosing an alternative from several alternatives having different weights <sup>(2)</sup>.

**Determine the method of formulating the paragraphs of the Digital Sports Communication Scale and alternatives to the answer:** After reviewing the sources and scientific research related to the Digital Sports Communication Scale and their fields, (50) paragraphs were formulated distributed into (4) domains, distributed as follows: The first area (knowledge) consists of (13) paragraphs and the second area (psychological educational) consists of (13) paragraphs, the third area (social) consists of (12) paragraphs, and the fourth area (information) consists of (12) paragraphs.

**Determine the validity of the paragraphs of the digital sports communication scale:** To clarify the validity of the paragraphs, it was presented to the experts and specialists in the media, sports administration, educational and psychological sciences, sports psychology, testing and measurement, as well as if it needs to delete, amend or merge some similar paragraphs, and table (2) shows that.

Table (2) shows the opinions of experts and specialists in the paragraphs of the mathematical communication scale and the calculated and tabular ( $Ki^2$ ) values.

N	Fields	Paragraph numbers	Total paragraphs	Experts Number		$Ki^2$		Sig type
				Agree	Disagree	Calculated	Tabular	
1	Cognitive	1-2-3-4-5-6-7-8-9-10-11-12-13	13	14	1	11.26	3.84	Sig
2	Educational psychological	1-2-3-4-5-6-7-8-9-10-11-12-13	13	13	2	8.06		Sig
3	Social	1-2-3-4-5-6-7-8-9-10-11-12	12	14	1	11.26		Sig
4	Informational	1-2-3-4-5-6-7-8-9-10-11-12	12	15	0	15		Sig

**The Exploratory Experience of the Digital Sports Connectivity Scale:** Its purpose is to identify the clarity of the instructions for the digital sports communication scale questionnaire in its initial form, as this was done on a sample of (71) and (10%) from the research community and by (52) teachers and (19) female teachers, in order to find out the strengths and weaknesses of scale thus, the scale, with its appropriate instructions and paragraphs, is ready for application to the building sample.

**The main experience:** The main experiment was carried out by applying the digital mathematical communication scale to the total building sample (149) with (127) teachers and

(43) female teachers in order to conduct a preliminary statistical analysis for the scale paragraphs from 1/9/2020 until 20/12/2020.

**Objectivity of response to sport connectivity scale:** The method of repeating a group of paragraphs was followed for being more acceptable, and it is one of the methods used to reveal the objectivity of the response to the scale paragraphs.

**Digital sports contact scale correction:** It is intended to set a score for the subject's response to each paragraph of the scale, and then these scores are combined to find the total score for each field and then the total score for each question using the correction key as the correction key "is the tool by which the examiner reveals the answers that indicate the existence of the result. Which is measured "<sup>(3)</sup>, and the highest overall score that can be obtained is (5) and the lowest score is (1). Then the grades are collected and the total score is extracted for each form from the building sample forms, from which the degrees of digital mathematical communication are determined for each teacher or teacher from among the building sample members, and since the digital mathematical communication scale consists of (50) paragraphs, thus, the highest score can be obtained (250) while the lowest score can be obtained (50). Then the scores of the digital mathematical communication scale were calculated for male and female teachers through their answers to the paragraphs, and their scores ranged between (133 -248) with a mean (201,429) and standard deviation (26,010).

As for the weights of the answer, they were according to the alternatives to the answer, and they are as follows, (they apply to me to a very large extent, they apply to me to a large extent, they apply to me in a moderate degree, they apply to me to a small degree, they apply to me to a very small degree) as for the weights of the answer, they were successively (5-4-3 -2-1).

### **Digital sports communication scale paragraph analysis:**

#### **First: Preliminary analysis of the paragraphs of the digital sports communication scale:**

##### **The two end groups:**

- Detecting the discriminatory ability of the paragraphs of the digital mathematical communication scale, as this method is one of the appropriate methods for distinguishing the paragraphs, from the statistical analysis of the sample of (170) male and female teachers, and to calculate the discerning ability of the paragraphs, the following steps were followed.
- The workers' scores are ranked on the scale from highest to lowest.
- Assigning 27% of the forms obtaining higher grades and 27% of the forms obtaining lower grades, "as the research of Mehers Wilham (1973) and Kelly (1993) confirmed that the adoption of 27% gives size and differentiation" <sup>(5)</sup> as the number of each group is 46 individuals, so the total is 92, so the degree of freedom is 90.
- Calculating the discrimination coefficient for each of the 50 paragraphs of the digital sport communication scale, using the T-test for two independent samples by the Statistical Bag for Social Sciences (spss). (0.05) and a degree of freedom (90), which is (2.000), and the results of the statistical analysis of the paragraphs showed that the

paragraphs of the digital mathematical communication scale are all distinct except for paragraph No. (1,18,19) unmarked as its value was (1,287).

Table (3) shows the arithmetic mean, standard deviation of the upper and lower groups, the T-value, the computed T-value, and its significance in calculating the discriminatory power of the paragraphs of the digital sport communication scale.

N	Lowest group 27%		Highest group 27%		T-value	Sig level	Sig type
	Mean	Std. deviation	Mean	Std. deviation			
1	3.304	0.552	3.934	0.611	5.190	0.000	Sig
2	3.782	0.840	4.500	0.505	4.959	0.000	Sig
3	3.434	0.980	4.608	0.493	7.251	0.000	Sig
4	3.369	1.102	4.369	0.826	4.922	0.000	Sig
5	3.630	0.826	4.760	0.565	7.660	0.000	Sig
6	3.434	0.980	4.413	0.617	5.724	0.000	Sig
7	2.934	0.711	4.587	0.497	12.900	0.000	Sig
8	3.239	1.099	4.304	0.695	5.555	0.000	Sig
9	3.065	1.123	4.130	1.024	4.752	0.000	Sig
10	2.826	0.926	4.500	0.658	9.991	0.000	Sig
11	3.304	0.591	4.782	0.417	13.855	0.000	Sig
12	3.152	0.665	4.565	0.501	11.502	0.000	Sig
13	3.043	0.893	4.282	0.834	6.875	0.000	Sig
14	3.173	0.995	4.500	0.623	7.656	0.000	Sig
15	3.369	0.927	4.717	0.455	8.847	0.000	Sig
16	3.413	0.685	4.434	0.778	6.678	0.000	Sig
17	3.282	0.779	4.260	0.905	5.555	0.000	Sig
18	2.978	0.856	4.804	0.401	13.101	0.000	Sig
19	3.087	1.050	4.543	0.721	7.753	0.000	Sig
20	3.717	0.544	4.739	0.772	7.332	0.000	Sig
21	3.282	0.807	4.782	0.417	11.197	0.000	Sig
22	3.260	0.880	4.521	0.912	6.744	0.000	Sig
23	3.130	0.859	4.587	0.580	9.528	0.000	Sig
24	3.673	0.944	4.630	0.878	5.031	0.000	Sig
25	3.500	0.722	4.478	0.722	6.494	0.000	Sig
26	3.326	0.967	4.543	0.689	6.950	0.000	Sig
27	3.043	0.941	4.500	0.505	9.242	0.000	Sig
28	3.087	1.151	4.869	0.340	10.070	0.000	Sig
29	3.217	1.113	4.804	0.401	9.092	0.000	Sig
30	3.282	0.958	4.804	0.401	9.935	0.000	Sig
31	3.369	0.878	4.847	0.363	10.549	0.000	Sig
32	3.587	0.617	4.934	0.249	13.727	0.000	Sig
33	3.456	1.004	4.782	0.417	8.269	0.000	Sig
34	3.434	0.806	5.000	0.000	13.155	0.000	Sig
35	2.934	0.928	4.891	0.314	13.534	0.000	Sig
36	3.369	0.770	4.847	0.363	11.770	0.000	Sig
37	3.413	0.932	4.760	0.431	8.896	0.000	Sig

38	3.217	0.916	4.760	0.565	9.720	0.000	Sig
39	3.760	0.923	4.782	0.512	6.561	0.000	Sig
40	3.673	0.731	4.739	0.534	7.970	0.000	Sig
41	3.195	0.748	4.695	0.465	11.539	0.000	Sig
42	3.391	1.144	4.652	0.604	6.607	0.000	Sig
43	3.304	1.171	4.782	0.512	7.842	0.000	Sig
44	3.608	0.714	4.652	0.604	7.564	0.000	Sig
45	3.630	0.609	4.652	0.604	8.074	0.000	Sig
46	3.173	0.824	4.587	0.717	8.768	0.000	Sig
47	3.369	0.710	4.652	0.706	8.684	0.000	Sig
48	3.521	0.960	4.673	0.473	7.298	0.000	Sig
49	3.934	0.800	4.652	0.604	4.853	0.000	Sig
50	3.608	0.855	4.673	0.473	7.385	0.000	Sig

(V) tabular value = 2.000 degree of freedom = 90 level of significance = 0.05

**Coefficient of internal consistency:** The value of this indicator was extracted by using the Pearson correlation coefficient between the score of each paragraph and the total score of the scale, the degree of each paragraph and the total score of the field to which it belongs, and the field score with the degree of the total scale for all of the sample members who are (170) male and female teachers in Babil Governorate by the statistical bag (spss ).

Table (4) shows the correlation coefficient between the paragraph score, the overall score of the scale and the statistical significance of the paragraphs of the digital sports communication scale and correlation coefficient between paragraph score, total field score.

N	R	Sig level	Sig type	N	R	Sig level	Sig type
1	0.267	0.000	Sig	26	0.568	0.000	Sig
2	0.279	0.000	Sig	27	0.671	0.000	Sig
3	0.506	0.000	Sig	28	0.739	0.000	Sig
4	0.424	0.000	Sig	29	0.652	0.000	Sig
5	0.580	0.000	Sig	30	0.679	0.000	Sig
6	0.490	0.000	Sig	31	0.687	0.000	Sig
7	0.734	0.000	Sig	32	0.740	0.000	Sig
8	0.562	0.000	Sig	33	0.565	0.000	Sig
9	0.408	0.000	Sig	34	0.663	0.000	Sig
10	0.618	0.000	Sig	35	0.720	0.000	Sig
11	0.635	0.000	Sig	36	0.721	0.000	Sig
12	0.611	0.000	Sig	37	0.730	0.000	Sig
13	0.573	0.000	Sig	38	0.665	0.000	Sig
14	0.590	0.000	Sig	39	0.567	0.000	Sig
15	0.981	0.000	Sig	40	0.612	0.000	Sig
16	0.570	0.000	Sig	41	0.712	0.000	Sig
17	0.452	0.000	Sig	42	0.528	0.000	Sig



18	0.757	0.000	Sig	43	0.652	0.000	Sig	
19	0.504	0.000	Sig	44	0.448	0.000	Sig	
20	0.509	0.000	Sig	45	0.499	0.000	Sig	
21	0.661	0.000	Sig	46	0.646	0.000	Sig	
22	0.626	0.000	Sig	47	0.616	0.000	Sig	
23	0.639	0.000	Sig	48	0.636	0.000	Sig	
24	0.370	0.000	Sig	49	0.391	0.000	Sig	
25	0.542	0.000	Sig	50	0.634	0.000	Sig	
Second: - The relationship of the paragraph degree to the degree of field								
field	N	R	Sig level	Sig type	N	R	Sig level	Sig type
Cognitive	1	0.371	0.000	Sig	8	0.721	0.000	Sig
	2	0.377	0.000	Sig	9	0.561	0.000	Sig
	3	0.647	0.000	Sig	10	0.680	0.000	Sig
	4	0.486	0.000	Sig	11	0.722	0.000	Sig
	5	0.700	0.000	Sig	12	0.660	0.000	Sig
	6	0.688	0.000	Sig	13	0.557	0.000	Sig
	7	0.779	0.000	Sig				
Educational psychological	14	0.596	0.000	Sig	21	0.697	0.000	Sig
	15	0.732	0.000	Sig	22	0.635	0.000	Sig
	16	0.619	0.000	Sig	23	0.649	0.000	Sig
	17	0.503	0.000	Sig	24	0.525	0.000	Sig
	18	0.747	0.000	Sig	25	0.638	0.000	Sig
	19	0.665	0.000	Sig	26	0.654	0.000	Sig
	20	0.600	0.000	Sig				
Social	27	0.784	0.000	Sig	33	0.567	0.000	Sig
	28	0.806	0.000	Sig	34	0.809	0.000	Sig
	29	0.810	0.000	Sig	35	0.781	0.000	Sig
	30	0.844	0.000	Sig	36	0.755	0.000	Sig
	31	0.821	0.000	Sig	37	0.811	0.000	Sig
	32	0.686	0.000	Sig	38	0.737	0.000	Sig
Informational	39	0.623	0.000	Sig	45	0.622	0.000	Sig
	40	0.640	0.000	Sig	46	0.622	0.000	Sig
	41	0.697	0.000	Sig	47	0.775	0.000	Sig
	42	0.544	0.000	Sig	48	0.707	0.000	Sig
	43	0.657	0.000	Sig	49	0.493	0.000	Sig
	44	0.592	0.000	Sig	50	0.634	0.000	Sig
Third: - The correlation relationship between the scores of the fields and the overall score of the								

digital sports communication scale.				
N	fields	R	Sig level	Sig type
1	Cognitive	0.844	0.000	Sig
2	Educational psychological	0.902	0.000	Sig
3	Social	0.891	0.000	Sig
4	Informational	0.911	0.000	Sig

### Psychometric properties of digital mathematical communication scale:

**Validity:** Truthfulness means "that the test measures what it was set for, that is, the honest test measures the job that it claims to measure and does not measure anything else in place of it or in addition to it" <sup>(6)</sup>.

**Validate the content:** The truthfulness of the content means "the degree with which the test measures what it is designed to measure in the community" <sup>(7)</sup>, and that the process of judging the validity of the content is a logical truth, in contrast to the individual judgment, which is a self-effort. This truth is done by taking the opinions of experts and specialists and this is what done by the researcher.

**Constructive validity (validity of hypothetical formation):** That the validity of the construct is the most characteristic type of truthfulness of the concept of honesty, which is sometimes called the sincerity of the concept or the validity of the hypothetical formation, "because it indicates the extent to which the scale is measured to form a hypothesis or a certain psychological concept." The test is considered true "to the extent that the subject's score expresses the characteristic or concept in which our knowledge adds something new" <sup>(8)</sup>. This validity in the scale was verified through statistical analysis using skew, discriminatory ability and internal consistency.

**Reliability:** Reliability is one of the basic characteristics of psychological measures with regard to the advancement of validity, because an honest measure is considered constant, while a fixed scale is not valid. The static test is "a test that has a high degree of accuracy, proficiency, consistency and objectivity of what was put to measure" (). It also means that the test is not affected by the change of external factors or circumstances, which indicates the reliability of the individual's response, regardless of changing circumstances. Reliability was calculated by the following.

**Split-Half:** This method relies on splitting the scale paragraphs into two parts, the odd and even paragraphs, and to verify the homogeneity of the two halves, the F-ratio was extracted and when compared with the tabular value at a significance level (0.05), it was found that there is no significant function and thus achieving the condition of homogeneity between the scores of the two halves and the scale, then the correlation coefficient was extracted Pearson between the scores of the odd and even paragraphs of the digital mathematical communication scale. The researcher also used the Spearman Brown equation to extract the reliability coefficient for the scale as a whole.

**Alpha Cronbach Coefficient:** This type of consistency is called internal homogeneity and it is one of the most common vocabulary and the most appropriate for the measures, and it refers to

"the strength of the links between the paragraphs in the test." Since it is the intervertebral correlation vocabulary rate that determines the Cronbach's alpha coefficient. The Fakronbach equation was applied to the members of the basic sample of (170) male and female teachers using the statistical bag (spss). The reliability coefficient was extracted for the digital mathematical communication scale, where the correlation coefficient reached (0.967), while the Spearman Brown coefficient reached (0.983), as for the Alpha Cronbach coefficient. It was (0.983).

**Applying the scale to the application sample:** After the construction of the scale involved in the research was completed, it was applied to the final application sample, which numbered (149), with (111) teachers and (38) female teachers.

**Statistical methods:** The researchers used the statistical portfolio for social sciences (spss) to process the data contained in his research, and the statistical methods that were adopted are: -

- Alpha Cronbach equation
- Standard error
- Simple correlation coefficient
- Mean
- Std. Deviation
- Correlation coefficients
- Chi-squar
- Standard error
- T test

## **Conclusions and recommendations:**

### **Conclusions:**

- The digital sports connectivity scale that was built is valid for measuring the digital sports connectivity of physical education teachers in Babil governorate.
- The motivation measure for participating in sports and scouting competitions, which was built, is valid to measure the motivation to participate in sports and scout competitions for physical education teachers in Babil Governorate.
- The existence of a positive correlation between digital sports communication and motivation to participate in sports and scout competitions for physical education teachers in Babil Governorate.
- The majority of physical education teachers are constant followers of digital sports communication, which in turn increases motivation to participate in sports and scout competitions for physical education teachers in Babil Governorate.
- Digital sports communication plays a role in the delivery of sports information and the development of the knowledge, educational and training level, developments in law and scouting games to physical education teachers in Babil Governorate.
- The means of digital sports communication have a role in assisting physical education teachers to practice their work and they play a role in communicating the problems and obstacles facing physical education teachers.
- The research sample (physical education teachers) has a good degree in achievement motivation, and thus serves the school sport and selects talents as the basis for Iraqi sports.

### **Recommendations:**

- Benefit from the digital mathematical communication scale that the researcher built as an objective tool for researchers and the possibility of using it in their research and study.
- Benefit from the measure of motivation to participate in sports and scouting competitions for physical education teachers, which the researcher built as an objective tool for researchers and the possibility of using it in their research and studies.
- Conducting other studies to reveal the relationship of digital mathematical communication with some other variables.
- The necessity of following up on the means of digital sports communication by physical education teachers that have a role in the delivery of information and developments in laws and training and the delivery of obstacles to those responsible for school sports activities.
- The need to pay attention to sports topics, programs, sports and scouting competitions transmitted by the means of digital sports communication, because of their influential role in selecting talents and raising motivation to participate.
- The necessity to activate the documentary aspect of sports and scouting competitions with the help of specialists to develop workers on digital sports communication because of its positive consequences for school sports.

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## Appendix(1)

## Digital sports communication scale.

N	Paragraph	It applies to me very very much	It applies to me very much	Apply to me in a medium degree	It applies to me to a small degree	It applies to me in a very small degree
1	It helps me in exchanging sports information between the teachers.					
2	It is interested in various sports news, especially those interested in sports and scouting competitions.					
3	I can learn about new developments in laws in all sports					
4	It helps me develop through self-learning.					
5	It enables me to recover previous information as a feedback					
6	It enables me to constantly search for training developments					

7	It helps me to give a clear picture of my teaching and training capabilities					
8	Contributes to the identification of modern teaching methods and the possibility of their development.					
9	It helps me to learn about recreational games and business in scouting camps					
10	I can get acquainted with the scouting camps from different countries and the extent of the development of creativity and entrepreneurial works.					
11	It helps me to get acquainted with the latest training methods to suit the nature of the competition					
12	Enable me to use modern means and techniques in teaching					
13	Urging students to follow sports programs and websites that provide them with useful information					
14	It makes me more confident and stable about participating to know the laws and conditions for participating in sports and scouting competitions.					
15	He urges me to be a positive element in my sporting milieu, which is a catalyst in the success of competitions.					
16	It helps me reveal the extent of interest in the competitions communication.					
17	I can show my energies and creativity to distinguish from others					
18	Consolidating the principles and values of upbringing and a healthy social environment for everyone through sports and scouting competitions.					
19	Contributes to raising the spirit and ethics of sports, through sports and scouting competitions.					
20	It push me to appear in a decent manner by praising the distinguished teachers					
21	It push me to prove the capabilities of my team among the participating teams.					
22	It makes me more interested and ready to participate by noticing the interest of others					
23	Raising the motivation of other teachers by publishing the achievements of the participating schools					
24	I can control my emotions on the field and be a model for students					

25	It helps me to constantly communicate with students and encourage them to play sports					
26	Encouraging players to invest their spare time					
27	Contributes to communicating with parents and obtaining their consent to participate in scouting competitions and camps.					
28	Contributes to informing parents of the achievements of their children and being proud of them					
29	Contributes to the follow-up of the academic level by teachers with the cooperation of their parents.					
30	Notify students that the teacher and parents are in full contact to follow up on his academic and athletic level.					
31	It keeps me in touch with supervisors in sports and scouting activities					
32	It helps me communicate with teachers and form social relationships.					
33	It helps me learn about peoples' culture and get to know teachers from different countries.					
34	Communicating with the participating students and strengthening the relationship between them to be more harmonious					
35	An effective way for teachers and students to communicate with their families to check on them in the event of participating in scouting camps and staying for days in the camp					
36	The teacher communicates with the school team to determine the date of training in a manner that does not affect the academic level.					
37	Communicating with the school team, knowing their problems, and trying to find solutions and guide them					
38	Contributes to informing parents of the achievements of their children and being proud of them					
39	Through digital sports communication, announcing the results of the participating teams and praising them					
40	Honoring distinguished students after performing the ceremony of raising knowledge and publishing their achievements					
41	Disseminating the scouting teams' posts and their distinguished level of performance continuously through the means of digital sports communication					

42	Praise the scout team participating in the scouting camps and the role of each of them in representing the school in the best way.					
43	Show talents and the possibility of selecting them and refining their talents.					
44	Helps parents watch their children participate in sports and scout competitions					
45	The continuous development in the means of digital sports communication has made it the best way to communicate with society					
46	Through digital sports communication is fair to the distinguished teacher participating in sports and scouting competitions to be a model for others.					
47	The teacher's feeling of great interest in the means of communication with sports and scouting competitions is an incentive to prove oneself and show it at the best level					
48	Announcing the participating and winning schools in sports and scouting competitions makes the school administration in continuous cooperation to show their levels in a decent manner					
49	Show the importance of school sport, as it has an impact on raising and nurturing future generations					
50	Giving a beautiful picture of the nature of competitions to make it interesting for others.					
51	It does not help me develop through self-learning.					
52	I cannot show my energies and creativity to distinguish from others					
53	It does not help me to show talent and the possibility of selecting them and refining their talents.					