

## **The effect of sports digital communication on the most important emotional determinants and some female students' volleyball skills**

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### **Abstract**

The purpose of this paper is to preparing a curriculum according to digital mathematical communication, and identifying the effect of sports digital communication on the most important emotional determinants and some female students' volleyball skills. The experimental approach was used in the experimental design of one experimental group (experimental). The research community was determined on (16) female students from the fourth stage in the College of Physical Education and Sports Sciences at the University of Kufa for the academic year 2022-2023, (5) female students were chosen to conduct the exploratory experiment on them, and a whole community was chosen to apply the main experiment. One of the most important results reached by the researcher is that : Use of the curriculum according to a sports digital communication program had a positive impact on the most important emotional determinants and some female students' volleyball skills ,and use of the curriculum according to a program for sports digital communication is better than the used method that affected the emotional determinants and some of the students' volleyball skills. One of the most important recommendations recommended by the researchers is that : Adopting the curriculum according to a sports digital communication program because of its positive impact on the most important emotional determinants and some female students' volleyball skills.

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### **Introduction:**

Kinesthetic learning is one of the important aspects that plays an important role in the progress of society because it comprehensively affects the upbringing of athletes, especially if it is based on modern scientific foundations, and that the learner (student) is the focus of the educational process and requires comprehensive and careful attention in providing requirements that serve the learning process It provides the opportunity to achieve the optimal performance of various sports skills, including volleyball, which has gained wide popularity and interest this is due to the aesthetics of the game and the strength it contains in defense and skill in attack. It is necessary to identify it in order to achieve the required level, proficiency and excellence in it. The educational curriculum that includes various exercises and works to develop them well, and that we take into account the auxiliary teaching aids that serve the

goal of the curriculum that we aim to achieve. By using a curriculum according to a program for sports digital communication in the most important emotional determinants and some volleyball skills for female students.

**Research problem:**

Through the researchers' observation of most educational units of the curriculum followed in the faculties of physical education and sports sciences in Iraq and access to the vocabulary of the curriculum and exercises that are used in the learning process, they noticed that most of the units do not contain modern means of communication that help and contribute to the most important emotional determinants and learning skills in volleyball, which contribute By reducing the effort in the learning process and from the foregoing, the researchers decided to prepare, apply and use a curriculum according to a program for sports digital communication in the most important emotional determinants and some volleyball skills for female students.

**Research objective:**

- Preparing a curriculum according to digital mathematical communication.
- Identifying the effect of sports digital communication on the most important emotional determinants and some female students' volleyball skills.

**Research hypotheses:**

- There is an effect of a sports digital communication program on the most important emotional determinants and some female students' volleyball skills.

**Research fields:**

- Human field: It included fourth-stage female students in the College of Physical Education and Sports Sciences at the University of Kufa for the academic year 2022-2023.
- Time field: (6/11/2022) to (30/3/2023)
- Spatial field: Indoor sports hall in the Faculty of Physical Education and Sports Sciences / University of Kufa.

**Research methodology and field procedures:**

**Research Methodology:**

The experimental approach was used in the experimental design of one experimental group (experimental).

**Community and sample research:**

The research community was determined on (16) female students from the fourth stage in the College of Physical Education and Sports Sciences at the University of Kufa for the academic year 2022-2023, (5) female students were chosen to conduct the exploratory experiment on them, and a whole community was chosen to apply the main experiment.

**Information Gathering:**

- The resolution.
- Scientific sources and references.
- Tests and measurements.

### Devices and tools used:

- (1) legal volleyball court.
- Volleyballs (10).
- (1) Dell (5040) calculator.
- Stationery.
- Duct tape.

### Field procedures

#### 1- Determine the measure of the most important emotional determinants and some volleyball skills and tests:

The researcher adopted the most important psychological determinants scale, which he built and standardized (Al-Jubouri. 2014.), As the scale originally consisted of (60) items that measure the most important psychological determinants of handball students (see Appendix 1) distributed over eight areas, the positive items reached (48) items, while the negative items reached (12) items, and the answer to the items is through five alternatives. The answer ranged from (1-5) for the positive paragraph and (1-5) for the negative paragraphs, which are (strongly agree, agree, not my opinion, disagree, strongly disagree), and as shown in Table (1).

Table (1) shows the distribution of the positive and negative items on the fields of the most important emotional determinants scale

No.	fields	number of positive paragraphs	positive paragraphs	number of negative paragraphs	negative paragraphs
1	Socio-kinetic cohesion	4	6 ,5 ,4 ,3	1	2
2	Self confidence	7	14 ,13 ,12 ,11 ,10 ,9 ,7	2	15 ,8
3	determination	8	25 ,24 ,23 ,22 ,21 ,20 ,17 ,1	2	19 ,18
4	motivation	9	,34 ,33 ,32 ,31 ,30 ,27 ,26 36 ,35	2	29 ,28
5	assertive behaviour	6	42 ,41 ,40 ,39 ,38 ,37	-	
6	Emotional balance	1	43	5	,47 ,46 ,45 ,44 48
7	Orientation towards competition and superiority	8	,55 ,54 ,53 ,52 ,51 ,50 ,49 56	-	
8	Psychological security	5	61 ,60 ,59 ,58 ,57	-	
Total			48		12

In order to apply the scale of the most important psychological determinants to female students, the researchers presented the scale (see Appendix 1) to a group of experts and specialists in the field of sports psychology, testing and measurement, for the purpose of evaluating it and judging them in terms of their validity in measuring the most important psychological determinants. The experts and specialists were briefed on the scale and test paragraphs, and through their opinions, the scale and its paragraphs were approved by agreement (100%).

### Selecting some volleyball skills and testing them:

Some skills were selected, namely (Preparation, reception and serve), and it was determined according to the skills of volleyball in the second stage, and its tests were determined after consultation with experts, and it was approved by agreement (100%).

### Description of tests of some volleyball skills:

#### 1- Technical performance tests for the passing skill (Al-Dulaimi and et. al., . 2015):

- Aim of the test: Evaluate the technical performance (technique) of the preparation skill through the three sections of the skill (preparatory, main, and final).
- Tools used A legal volleyball court, (3) volleyballs.
- Performance method: The tested student performs the preparation skill in the area specified for preparation, i.e. from center (3), trying to perform the preparation skill correctly and for three attempts, provided that the ball and the tested body do not touch the net, or cross the opponent's court.
- Registration: Three evaluators evaluate the three attempts for each tested student, and three marks are awarded for each evaluator, noting that the final evaluation score for each attempt is (10) degrees, divided into the three skill sections, which are (three) degrees for the preparatory section, and (five) degrees for the main section, and (two degrees) for the final section. After that, the best score for each evaluator is selected, and by extracting the arithmetic mean for the best three scores, the final score is extracted for each tested student, and the test is evaluated by the two judges as shown in Figure (1).

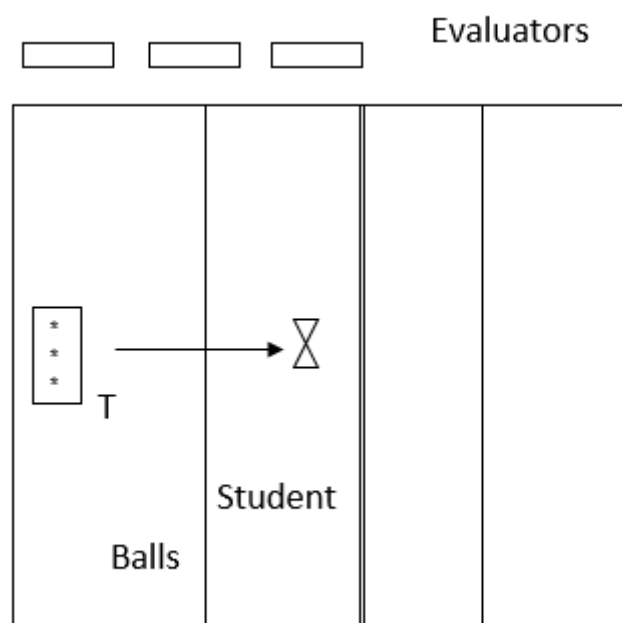


Figure (1) shows the evaluation of the technical performance (technique) of the preparation skill in volleyball

## 2- Testing the technical performance of the skill of receiving the serve in volleyball: (Al-Dulaimi and et. al., . 2015):

- aim of the test: to evaluate the technical performance (technique) of the skill of receiving serve through the three sections of the skill (preparatory, main, and final).
- Tools used: A legal volleyball court, (3) legal volleyballs.
- Performance method: The tested student performs the skill of receiving the transmission, from the standing position, for three consecutive attempts.
- Registration: Three evaluators evaluate the three attempts for each student tested, and three degrees are awarded for each evaluator, knowing that the final evaluation score for each attempt is (10) degrees divided into the three skill sections, which are (three) for the preparatory section, and (four) degrees for the main section, and (three) grades for the final section, after which the best grade is selected for each evaluator, and by extracting the arithmetic mean for the best three grades, the final grade is extracted for each laboratory, and the test was evaluated by the judges, as shown in Figure (2) .

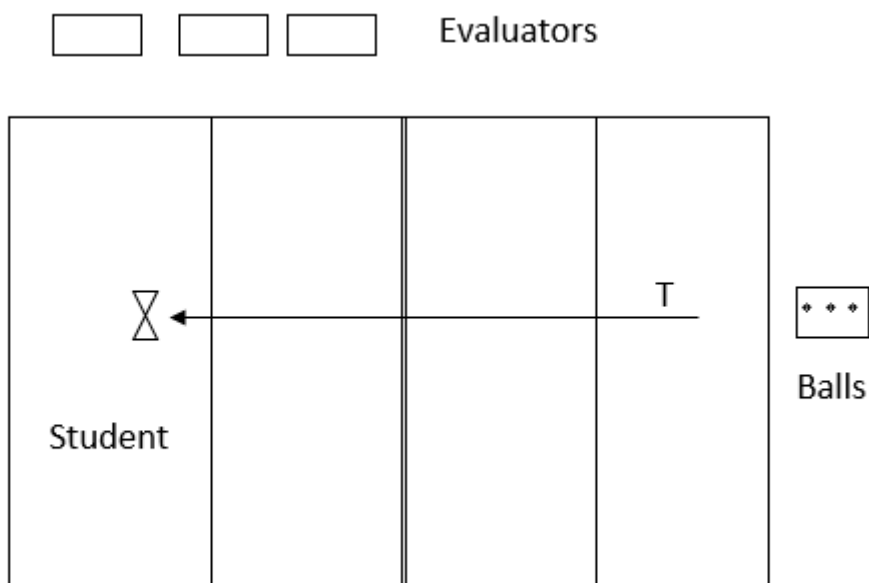


Figure (2) shows the evaluation of technical performance (technique) for the skill of receiving serve in volleyball

## 3- The test of evaluating the technical performance of the serve from above (tennis) (Al-Dulaimi and et. al., . 2015):

- The aim of the test: - Evaluating the technical performance (technique) of the skill of serving from above (tennis) through the three sections of the skill (preparatory, main, final).
- Tools used: - A legal volleyball court, (3) legal volleyballs.

- Performance specifications: The student performs the skill of serving tennis from the middle of the serving area specified by (9) meters to the opposite court, provided that the ball crosses the net trying to drop it in the opposite half of the court.
- Performance conditions:
  - Each student has (three) consecutive attempts.
  - The student gets a (zero) in the event that the ball falls outside the boundaries of the field or in the event that the service is performed in a manner that does not conform to the performance specifications.
- Registration: Three evaluators evaluate the three attempts for each tested student and give them three marks for each evaluator, noting that the final evaluation score for each attempt is (10) degrees, distributed over the three skill sections, which are (three) degrees for the preparatory section, and (six) Grades for the main section, and (one) grade for the final section, after which the best grade is selected for each evaluator, and by extracting the arithmetic mean for the best three grades, the final grade is calculated for each student, and the test is evaluated by the two judges, as shown in Figure (3).

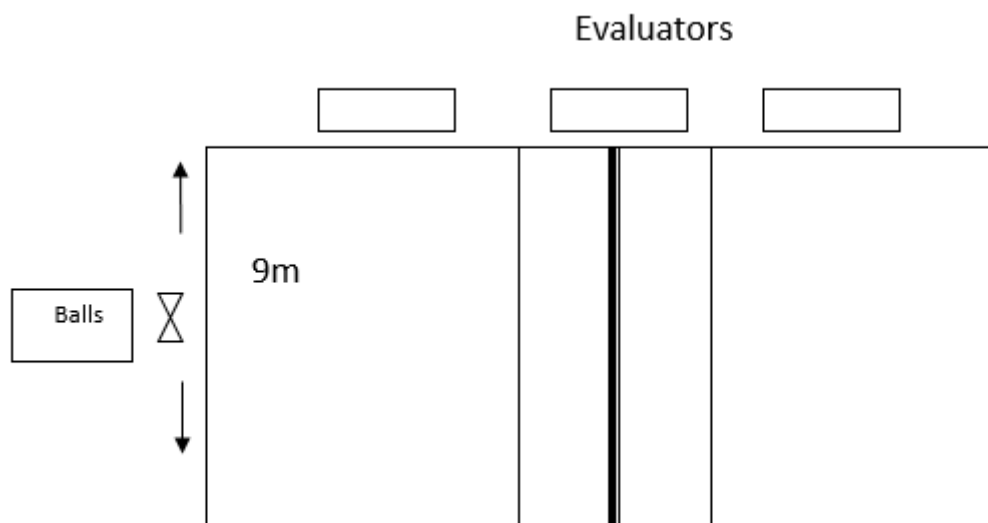


Figure (3) the evaluation of the technical performance (technique) of the serve served from the top shows tennis in volleyball

### Exploratory Experience:

The experiment related to the dependent variables was conducted on (10) students, at exactly ten o'clock in the morning on 8/12/2022, and the performance was evaluated by the arbitrators, and after (5) days had passed, the skills were evaluated again by the experts themselves, and the results were confirmed in Evaluation form.

### **Scientific Foundations:**

#### **First: Validity:**

Use (content validity) in the research after conducting an interview with experts and specialists ,as "content validity is one of the most usable types of validity."(Majeed and Al-Samarrai. 1999)

#### **Second: stability:**

It is "for the test to give the same results if it is reapplied to the same individuals under the same conditions," and based on that, the test stability coefficient was found by testing and re-testing on the survey sample, as it was conducted on 8/12/2022 and was repeated on 13/12/2023 for volleyball skills. As for the determinants scale, the test was re-tested on 19/12/2022 on the same sample and in similar conditions. The test stability coefficient was high, as all the selected tests achieved a high stability coefficient.

#### **Third: Objectivity:**

The objectivity of the test it is the test in which there is no discrepancy between the opinions of the arbitrators if the tested individual arbitrates more than one judge.(Al-Yasiri and Abdul-Majid. 2002) And the correlation was used between the results of the arbitrators it was found from the results that the test is highly objective.

#### **Pre-tests:**

The sample was organized and distributed to unit timings, and their names were recorded on Tuesday 22/12/2022, in cooperation with the subject teacher to explain the test procedures and students' performance thereof.

#### **Implementation of the educational curriculum:**

After conducting the pre-tests for the research group, the researchers did the following:

- Total units (10) educational units.
- Number of units per week (two educational units).
- The educational unit time is (90) minutes.
- The time for the main section (60 minutes) .
- The practical section time is (45) minutes.
- The exercises were applied to the experimental group.

**Post-tests:** The tests were conducted on Thursday, 9/3/2023.

**Statistical means:** The researchers used the Statistical Bag for Social Sciences Seventeenth Edition:

- Arithmetic mean.
- Standard deviation.

- (t-test) for correlated samples.
- The simple correlation coefficient (Pearson).

## Results and discussion:

### Presentation the results of the experimental group:

Table (2) shows the results of the experimental group

No.	Tests	Pre-test		Post-test		T value calculated	Level Sig	Type Sig
		Arithmetic mean	Standard deviation	Arithmetic mean	Standard deviation			
1	measure of the most important emotional determinants	175.17	7.14	190.66	5.66	8.44	0.000	Sig
2	Technical performance of the passing	3.51	0.71	6.64	0.64	15.32	0.000	Sig
3	Technical performance of the serve receiver	3.32	0.78	6.13	0.81	13.11	0.000	Sig
4	Technical performance of the serve	3.26	0.66	6.89	0.55	16.32	0.000	Sig

By displaying the results in Table (2), it was found that there are differences in the arithmetic mean and standard deviations of the results concerned with the tests before and after the experiment, and in order for the researcher to know the truth about these differences and discrepancies between the tests before and after the experiment, he used the t-test, in which the results indicated that all The results were significant, indicating the existence of a difference. In addition, it turns out that there are significant differences for the experimental group in all tests and in favor of the post-tests. The researchers attribute the emergence of such differences to the use and follow-up of modern means of communication that facilitated the learning process and developed the emotional aspects that affect the effectiveness of the selected skills. This is also due to the exercises that facilitated and increased the clarification of the required skills. Which was positively reflected in the results of good understanding and awareness of the features, characteristics and parts of the skill, and this was not available to the control group, as the "Exercises are very important in various sporting events, as they must be practiced without exception, especially qualitative exercises with modern means, in order to overcome and reduce effort, as well as the presence of elements of suspense and



excitement." (Ali Jalal El-Din). The researchers believe that the use of exercises contributes greatly to the development of abilities, because the ability to make decisions and perform properly is based on a good vision (Ali. 2000). Moreover, modern learning works to create a clear perception of movement because "The learning aid was able to clarify the difficult skills, give those clear explanations and visualizations, enrich them with illustrative images, and alert the learner to errors that may occur in performance." ( Hashem et al. 2022)

### **Conclusions and Recommendations:**

#### **Conclusions:**

Through the results of the research, the researchers were able to reach:

- Use of the curriculum according to a sports digital communication program had a positive impact on the most important emotional determinants and some female students' volleyball skills.
- Use of the curriculum according to a program for sports digital communication is better than the used method that affected the emotional determinants and some of the students' volleyball skills.
- Curriculum, according to a program for digital sports communication, had an impact on adjusting the accuracy of performance for the skills and the correct form.
- Curriculum is according to a program for digital mathematical communication, which reduces the effort exerted by the teacher and increases the suspense and excitement of the students.

#### **Recommendations:**

According to the findings of the researchers, the following is recommended:

- Adopting the curriculum according to a sports digital communication program because of its positive impact on the most important emotional determinants and some female students' volleyball skills.
- Reliance on modern means of communication as an essential part of the content of the educational curriculum for skills in volleyball.
- Designing curricula based on sports digital communication on skills from different sports.

#### **References:**

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### Appendix (1)

The final measure of the most important emotional determinants

Scale instructions:

The researchers want to do a scientific study, so you put in your hands a set of paragraphs that you are required to read and acknowledge to what extent they are expressive of your feelings about your performance, and then indicate the extent to which they apply or not to you, by placing a mark (√) in front of each paragraph under the appropriate alternative, knowing that Your answer will not be seen by anyone except the researcher and will only be used for the purposes of scientific research.

#### Answer instructions:

- 1- The answer is for all paragraphs.
- 2- There is no right or wrong answer.
- 3- There is no specific time for an answer.
- 4- After reading all the paragraphs, you will find five alternatives.
- 5- Put a tick (√) in the box under the alternative that agrees with you with each paragraph of the scale.
- 6- Not writing the name explicitly.
- 7- The results are for scientific research purposes and confidential.

No.	paragraphs	strongly agree	agree	not my opinion	disagree	strongly disagree
1	I am ready to answer all questions truthfully and honestly.					
2	My convictions in the administrative and technical leadership of the team are not at the required level.					
3	My team follows a strict system during training and competitions.					

4	My team's playing methods depend on exploiting the weaknesses of the opposing teams.					
5	The coach helped me improve my skills to serve the team.					
6	The team's playing methods help to show all the abilities and talents of the players					
7	I have the ability to make critical decisions when my team is under psychological pressure					
8	My performance is affected by the pressure of competition.					
9	I succeed when I focus well in the competition					
10	I can easily adapt to different playing situations.					
11	My self-confidence is the key to my success					
12	I invest all my emotional faculties successfully during the competition.					
13	I compete very hard to win.					
14	My confidence in my performance always makes me expect to win.					
15	I get confused when competition goes in favor of competitors.					
16	When I think of other teams I am optimistic and expect better performance.					
17	When I'm on the sidelines, I'm always ready to play.					
18	When I got injured, I felt like my sporting future was over.					
19	My desire to win decreases when a colleague is injured.					
20	You wanted the secret of my brilliance.					
21	I challenge the difficult conditions during the match.					
22	The will of the team helped us to face many difficult situations.					
23	My desire has helped me overcome many mistakes					
24	I can always defeat any opponent even if he is stronger than me.					
25	I train long and hard to improve my abilities.					
26	Outperforming competitors is one of my primary goals.					
27	I can handle any task my colleagues find					

	difficult					
28	I believe that luck leads to winning more than effort.					
29	I feel afraid before I get involved in the competition.					
30	I am ready to train continuously in order to succeed in my sport					
31	The audience's support gives me a great degree of satisfaction.					
32	My love for my game is the secret of my success in training and competition.					
33	I have a very high desire to be successful in my sport					
34	When I make a mistake, I do my best to make up for it.					
35	My determination makes me one of the best players.					
36	The audience's love pushes me to excel in my game.					
37	I face a competitor who is determined and challenged.					
38	I challenge the competitor by force within the framework of the law.					
39	I am not afraid of the competitor, even if he is of a high level.					
40	I am distinguished by firmness and discipline during competition.					
41	When things go wrong, I can fight as hard as I can.					
42	I don't give up easily even if my team is insufficient.					
43	I keep my balance when I get into a difficult situation during competition.					
44	I face pressure when I have a match with an opponent who is stronger than me.					
45	Difficulty concentrating when the coach talks to me before the game.					
46	When I make mistakes in the tasks that I learned from the coach, I lose my focus.					
47	I feel pressure when I feel that the audience is not happy with me.					
48	I get moody in some matches.					
49	I can do my best in difficult circumstances.					
50	When the coach encourages me, my enthusiasm increases.					

51	I strive to put my team in the first positions in the competitions.					
52	I maintain my level of performance and focus in matches.					
53	I am not afraid of the difficult skills of competitors.					
54	I make winning my motto when I play away.					
55	Playing my game is fun and challenging.					
56	I strive to challenge any difficult situation during competition.					
57	Always rest assured when I play with any team.					
58	I don't feel comfortable when I'm alone.					
59	I'm not selfish in my game, that's how my teammates describe me.					
60	I try to avoid unpleasant things when I'm facing a tough competitor.					
61	I remain optimistic even after I suffer a loss.					
62	I am sure that I have answered all paragraphs truthfully and honestly.					