



The Effect Of The Directed Quest Strategy For People With Kinetic Performance Difficulties In Learning The Volleyball Passing Skill For Students

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Abstract

The purpose of this paper is to knowledge the effect of using the directed Quest strategy for those with difficulties in kinetic performance in learning the skill of passing for volleyball for students. The researcher used the experimental method for two groups (experimental and control). The research sample consisted of (40) students from the second stage in the College of Physical Education and Sports Sciences, University of Wasit, and the sample was divided The research was divided into two equal groups, each group consisted of (20) students. The results of the research were summarized in the presence of statistically significant differences between the average scores of the students in the post measurement for those who studied using the directed Quest strategy and those who studied using the usual method. The differences were in favor of the experimental group, in light of the research results. The researcher recommends using the directed Quest strategy for those with difficulties in kinetic performance in learning the skill of volleyball passing for students, urging those in charge of teaching to use the directed Quest strategy and encouraging them to employ it in teaching.

Keywords: Quest Strategy, Teaching, Volleyball Passing Skill, Quest Strategy, Kinetic Performance.

Introduction

One of the most important features of physical education and sports sciences is that it is innovative and changes as its patterns change and progress due to the constant change and development that occurs in the levels of sports and the problems they face. One of the priorities that has a distinct role in our lives is the issue of learning. "We must move away from adherence to educational practices just because they are... most used" (Wajih Mahjoub. 2003). We find that most researchers are working on innovation in the use of

educational methods for the purpose of achieving a better level of learning. Directed Quest is one of the important strategies in the learning process, as this type contributes to facilitating learning through progression and according to the difficulty of performing the skill to be learned. In order for us to reach the process of learning skills to the required level, these skills must be analyzed into their stages and the difficulties facing the learner must be known. By using, the appropriate method that achieves the desired benefit in acquiring skills and being able to perform them smoothly and accurately while saving the effort and time required to implement them. The game of volleyball is one of the games that is distinguished by its popularity and ease of practice by different age groups, in addition to the technical and tactical development of its various skills, including the skill of passing, Hence, the importance of researching the use of this strategy among learners and providing appropriate learning opportunities through optimal investment of effort and time for the purpose of achieving effective learning becomes clear.

Research problem

The process of teaching sports skills requires the adoption of multiple educational methods and strategies, and the primary purpose is to know the most appropriate one for serving the game and its skills. Due to the researcher's experience in the field of teaching, and through his follow-up of many educational units for second-year students at the College of Physical Education and Sports Sciences/ University of Wasit, he noticed the presence of students who have difficulty in kinetic performance.

For the skills of playing volleyball in general and the skill of passing in particular, as it is one of the basic skills in volleyball, and in light of the above, the researcher decided to study this problem by adopting a directed Quest strategy to find out its impact and importance in the educational process, which would save effort and the extent of its impact on the variables of the study. To alleviate these difficulties and be able to perform skills better, away from the current style, with the aim of contributing to arriving at facts that will help specialists develop appropriate educational curricula for them in the future.

Research objective

- Knowing the effect of the Quest strategy directed to those with kinetic performance difficulties on some kinetic abilities of second-year students.
- Knowing the effect of the targeted Quest strategy for those with kinetic performance difficulties in learning the volleyball passing skill for second-year students.
- Knowing the superior effect of the directed Quest strategy and learning the skill of passing for volleyball and the method followed.

Research hypotheses

- There are statistically significant differences between the survey strategy directed at people with kinetic performance difficulties, the volleyball passing skill, and the method used in the post-tests.
- There are statistically significant differences between the results of the pre- and post-tests in learning the volleyball passing skill for students in the experimental group (with kinetic performance difficulties) and the control group.

Research fields

- **Human field:** Students of the second stage in the College of Physical Education and Sports Sciences, University of Wasit, for the academic year 2023-2024 AD.
- **Time field:** (16/10/2023) to (27/2/2024)
- **Spatial field:** Indoor halls and outdoor volleyball court at the College of Physical Education and Sports Sciences, University of Wasit

Research methodology and field procedures Research Methodology

The researcher adopted the experimental method because it suits the nature of the problem, which is a “randomly selected, equal groups design with pre- and post-tests, as it is the only method that can truly test the hypotheses of cause or effect relationships” (Allawi and Ratib, 1999).

Community and sample research

The research community was represented by the students of the second academic year at the College of Physical Education and Sports Sciences/ University of Wasit for the academic year 2023/2024, who numbered (163) students representing (6) academic divisions, after excluding the students who practiced the game of volleyball, who numbered (6) students, and the number The remainder of the research population (157) students were then distributed to the evaluators, to determine the performance difficulties values for the two skills mentioned above. The kinetic performance difficulties score was calculated by the student obtaining half or more of the performance difficulties score, which amounts to (11). degree, noting that the total degree of difficulties in the scale is (21) degrees, and in order to isolate students who have difficulties in kinetic performance, the arithmetic mean was extracted from the values of difficulties in kinetic performance in the skill. The student who obtains (11) degrees in the skill of crushing multiplication and (13) marks in the blocking wall skill will be as follows ($11 + 13 / 2 = 12$), so he will be included in the difficulties group, and the student who obtained (10) marks or less will be among the normal group who do not have difficulties in kinetic performance. After the calculation process, it turns out that the number. The students who have difficulties in kinetic performance are (75) students representing the research community, including (20) students from Section (A), (12) students from Section (B), (20) students from Section (C), and (12) students from Division (D), and (11) students from Division (E). In a random lottery manner, Division (D and E) was chosen to represent the sample of the two exploratory experiments, while Division (C and F) represented the adult research sample. The number of students who have difficulties in kinetic performance is (40) students in the experimental (A) section, (20) students, and the control (C) section (20) students, representing a percentage of (53.333%) of the research population of (75) students, which is a percentage Suitable for truly and faithfully representing the research community.

Means of collecting information, devices, tools and means of collecting information

Means of collecting information

- Arab and foreign references and sources.
- Note.
- Personal interviews.
- A questionnaire form to survey the opinions of experts and specialists to determine the validity of the two measures of kinetic performance difficulties for the two appended volleyball passing and receive skills.

- A questionnaire form to evaluate the level of skill performance for the skills of smashing and blocking in volleyball.
- A questionnaire form to seek the opinions of experts and specialists on the suitability of exercises for the passing and receive skills in volleyball.

Devices and tools used in the research

- (1) Dell laptop calculator, made in China.
- (1) Japanese Canon video camera with stand. · Digital electronic stopwatches of Chinese origin (2).

Tools used in research

- Legal volleyball court.
- Legal (MIKASA) volleyballs of Japanese origin, number of (10) balls.
 - Plastic signs (4).
- Colorful, circular collars measuring (60) cm, number (8).
 - DVDs for chiropractors (12).
 - Leather measuring tape of Chinese origin (25 m). · Red adhesive tape (1).
 - 20 tennis balls.
 - Colored circular numbers (20).
- Fox type whistle (2).

Field research procedures

Determining the validity of the two measures of difficulties in kinetic performance for the skills of passing and receiving volleyball

After reviewing some of the available literature and studies related to our current study, and with the aim of ensuring the validity of the statements of the two scales of difficulties in kinetic performance for the skills of passing and receiving volleyball, the researcher prepared a questionnaire, which was presented to (11) experts and specialists in the specializations of (kinetic learning, sports training, And testing and measuring with volleyball) to express their opinion on the validity of the statements of the two scales, as they all agreed on the validity of the statements of the two scales without any modification of any statement, with an agreement rate of (100%), as (K2) was used to identify valid statements from others.

Nomination of skill performance tests for the passing and receive skills in volleyball

In order to evaluate the skill performance of the passing and receive skills in volleyball, the crushing skill test was nominated to measure the level of skill performance of the passing skill and the receive skill. For the purpose of evaluating the technical performance of members of the control and experimental groups, the calculated pre- and post-tests under study were filmed, and after the filming was completed, the video recording was transferred. To compact discs (CD) to make it easier for arbitrators to review the students' artistic performance and set appropriate grades for them, so that the researcher can process the data statistically in order to arrive at the final results of the performance.

Tests used in the research

The researcher gave a quick idea about the tests, their importance, and the need for them before starting to perform them. A model was given for each test through explanation, presentation, and clarification, in order to increase the testers' enthusiasm and excitement in participating and exerting their maximum efforts by interacting with the tests with motivation to achieve the best results.

Passing skill test (Hassanein and Moneim. 1997)

1. Purpose of the test: to measure the level of skill performance by experts.
2. Performance specifications: The tester performs an overhead tackle repeatedly (controlling the ball), and each tester is given three attempts.
3. Registration: The laboratory's performance in the three attempts is evaluated by experts, and the grade is divided as follows:
 4. The preparatory part: degree (3).
 5. The main part: degree (5).
 6. The concluding part: degree (2).

Receiving skill test (Samir, 2004)

- Evaluating the technical performance (technique) of the transmission receiving skill through the three sections of the skill (preparatory, main, and final).
- **Tools used:** A legal volleyball court, 3 legal volleyballs, and a previously prepared performance evaluation form.
- **Performance method:** The tested player performs the skill of receiving the serve, from a standing position, for three consecutive attempts, as shown in Figure.
- **Scoring:** Three evaluators evaluate the three attempts of each tested player, and three marks are awarded for each evaluator, noting that the final evaluation score for each attempt is (10) grades divided into the three skill sections, which are (3) for the preparatory section, (4) grades for the main section, and (3) grades for the final section. The best grade for each evaluator is then selected, and by extracting the arithmetic mean of the best three grades, the final score for each tested player is extracted.

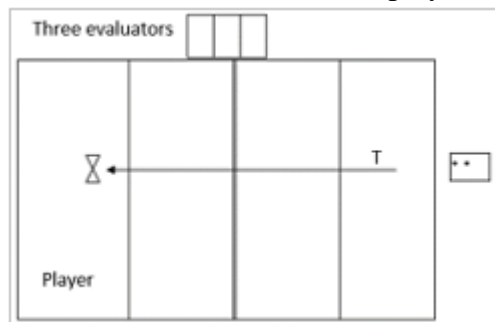


Fig 1: Shows the receiving skill test

First exploratory experiment

It is specific to the two scales for those with difficulty in kinetic performance of the skills of passing and receiving volleyball, as it was conducted on a sample consisting of (11) students from Division (H) who were chosen to have difficulty in kinetic performance of the two skills under research and they were outside the main research sample, and the experiment aimed to do the following.

Second exploratory experiment

It is specific to skill tests, as this experiment was conducted on a sample of (12) students from Division (D) who were randomly selected. They had difficulty in the kinetic performance of the two skills under study and they were outside the main research sample. To establish the stability of the tests and exercises, they were repeated after a week under the same conditions. The experiment aimed to do the following:

1. Identify the validity of the tools used in tests and exercises at the level of the sample members.
2. Ensure the validity of the tests and the extent of sample reactivity in their implementation.
3. Identify the suitability of exercises for the level of the sample members.
4. Know the extent of the ability to absorb and apply exercises.
5. Determine the understanding of the assistant work team and the extent of accuracy in implementing tests and measurements.
6. Knowing the difficulties and problems that the researcher may face in his research.
7. Knowing the distances and heights at which the camera should be placed.
8. Prepare safety requirements for testers.
9. Determine the time spent on carrying out tests and measurements.
10. Knowing the scientific foundations of tests (stability, validity, and objectivity).

Pre-tests

The researcher gave an introductory lecture about the tests before starting to perform them. A model was given for each test through explanation, presentation, and clarification, to increase the testers' enthusiasm and excitement to participate with motivation to achieve the best results. After that, tests were conducted in the passing and receive skills using the two scales, and under direct supervision. From the researcher, taking into account fixing the conditions related to the tests, namely the place, time, devices and tools used, and the method of implementing the tests, with the aim of creating the same conditions as much as possible in the post tests. The researcher took into account the following points:

- Give the sample enough time to warm up.
- Passing testing supplies, including devices and tools.
- Conducting tests for all sample members in the same place.

Equivalence of the two research groups

For the purpose of starting with a single starting point, the researcher tends to conduct a pre-test or several pre-tests for the purpose of equivalence between the control and experimental groups within...the characteristics that the sample possesses before the influence of the independent variable in order to determine their level (Al-Kazemi. 2012), "and in order for the researcher to be able to attribute the difference to the experimental factor, must that the experimental and control groups be completely equivalent in all their conditions except for the experimental variable that affects the experimental group (Majeed. 1987) and in order to achieve this, the researcher conducted the process of equivalence between the two research groups in all the variables used under research, and the (t) test was adopted for independent samples, and the results showed there are no significant differences between the two groups, which confirms their equality

Main experience

1. Before starting to apply the directed Quest method, the students of the experimental group were given an introductory unit to make the students able to recognize the following:

- Identify the concept of the method prepared by the researcher.
- Identify the objectives and procedures of the method that will be adopted.
 - Identify the reasons that call for adopting this method. 2. The educational units are graded from easy to difficult. 3. The time of one educational unit is (90) minutes. 4. The subject teacher implemented the experiment himself for the two groups. The experimental group studied using the directed quest method and the control group studied using the method used in the college, under the supervision of the researcher.
- 5. The teacher corrects and gives individual and group feedback to the experimental group.

Post-tests

After completing the application of the vocabulary of the educational units using the directed Quest method over the course of (8) educational units, post-tests were conducted for both the control and experimental groups, taking into account the conditions related to the tests, namely the place, time, tools used, and the method of implementing the tests, with the aim of creating the same conditions as much as possible as In the pre-tests in order to identify the level of learning that occurred in the skill tests under study, one day for each of the two groups, and under the direct supervision of the researcher.

Statistical methods

The search data was processed through the Statistical Package for the Social Sciences (SPSS).

Results and Discussion

Presentation and analysis of the results of the technical performance test for the passing and receive skills of the control group

Table 1: Shows the arithmetic means, standard deviations, and calculated and tabulated (t) values between the pre- and post-tests for the technical performance (technique) and accuracy tests for the passing skill for the control group.

Tests	Pre-test		Post-test		Level Type sig	
	Arithmetic mean	Standard d	Arithmetic mean	Standard d		
Technical performance test for passing skill	3.71	0.35	6.55	0.45	0.02	Sig
Technical performance test for receive skill	3.47	0.52	6.70	0.60	0.03	Sig

Second exploratory experiment

It is specific to skill tests, as this experiment was conducted on a sample of (12) students from Division (D) who were randomly selected. They had difficulty in the kinetic performance of the two skills under study and they were outside the main research sample. To establish the

stability of the tests and exercises, they were repeated after a week under the same conditions. The experiment aimed to do the following:

1. Identify the validity of the tools used in tests and exercises at the level of the sample members.
2. Ensure the validity of the tests and the extent of sample reactivity in their implementation.
3. Identify the suitability of exercises for the level of the sample members.
4. Know the extent of the ability to absorb and apply exercises.
5. Determine the understanding of the assistant work team and the extent of accuracy in implementing tests and measurements.
6. Knowing the difficulties and problems that the researcher may face in his research.
7. Knowing the distances and heights at which the camera should be placed.
8. Prepare safety requirements for testers.
9. Determine the time spent on carrying out tests and measurements.
10. Knowing the scientific foundations of tests (stability, validity, and objectivity).

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- Give the sample enough time to warm up.
- Passing testing supplies, including devices and tools.
- Conducting tests for all sample members in the same place.

Equivalence of the two research groups

For the purpose of starting with a single starting point, the researcher tends to conduct a pre-test or several pre-tests for the purpose of equivalence between the control and experimental groups within. The characteristics that the sample possesses before the influence of the independent variable in order to determine their level (Al-Kazemi. 2012), "and in order for the researcher to be able to attribute the difference to the experimental factor, must that the experimental and control groups be completely equivalent in all their conditions except for the experimental variable that affects the experimental group (Majeed. 1987) and in order to achieve this, the researcher conducted the process of equivalence between the two research groups in all the variables used under research, and the (t) test was adopted for independent samples, and the results showed there are no significant differences between the two groups, which confirms their equality

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 - Identify the objectives and procedures of the method that will be adopted.
 - 1· Identify the reasons that call for adopting this method.

2. The educational units are graded from easy to difficult.
3. The time of one educational unit is (90) minutes.
4. The subject teacher implemented the experiment himself for the two groups. The experimental group studied using the directed quest method and the control group studied using the method used in the college, under the supervision of the researcher.
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Post-tests

After completing the application of the vocabulary of the educational units using the directed Quest method over the course of (8) educational units, post-tests were conducted for both the control and experimental groups, taking into account the conditions related to the tests, namely the place, time, tools used, and the method of implementing the tests, with the aim of creating the same conditions as much as possible as In the pre-tests in order to identify the level of learning that occurred in the skill tests under study, one day for each of the two groups, and under the direct supervision of the researcher.

Statistical methods: The search data was processed through the Statistical Package for the Social Sciences (SPSS).

Results and Discussion

Presentation and analysis of the results of the technical performance test for the passing and receive skills of the control group

Table 2: Shows the arithmetic means, standard deviations, and calculated and tabulated (t) values between the pre- and post-tests for the technical performance (technique) and accuracy tests for the passing skill for the control group

Tests	Pre-test		Post-test		Level Type sig	
	Arithmetic mean	Standard deviation	Arithmetic mean	Standard deviation		
Technical performance test for passing skill	3.71	0.35	6.55	0.45	0.02	Sig
Technical performance test for receive skill	3.47	0.52	6.70	0.60	0.03	Sig

Table 2 shows the arithmetic means, standard deviations, and value significance between the pre- and post-tests for the technical performance test for the passing skill and for the control research group.

The results showed that the arithmetic mean in the pre-test is (3.71) with a standard deviation of (0.35). In addition, the arithmetic mean in the post-test is (6.55) with a standard deviation of (0.45). The level of significance is (0.02), which is less than (0.05), and this indicates that

there is a significant difference in favor of the post-test. The results of the receive skill test showed that the arithmetic mean of the control group in the pre-test is (3.47) with a standard deviation of (0.52). And the arithmetic mean in the post-test is (6.70) with a standard deviation of (0.60). The level of significance is (0.03), which is less than (0.05), and this indicates that there is a significant difference in favor of the post-test.

Presentation and analysis of the results of the technical performance test for the passing and receive skills of the experimental group

Table 3: Shows the arithmetic means, standard deviations, and significance value between the pre- and post-tests for the technical performance test for the passing skill and for the experimental research group.

Tests	Pre-test		Post-test		Level Type sig	
	Arithmetic mean	Standard deviation	Arithmetic mean	Standard deviation		
Technical performance test for passing skill	4.05	0.56	7.75	0.49	0.01	Sig
Technical performance test for receive skill	4.20	2.61	7.23	1.25	0.02	Sig

The results showed that the arithmetic mean in the pre-test is (4.05) with a standard deviation of (0.56). And the arithmetic mean in the post-test is (7.75) with a standard deviation of (0.49). The level of significance is (0.01), which is less than (0.05), and this indicates that there is a significant difference in favor of the post-test.

The results of the receptive skill test showed that the arithmetic mean of the control group in the pre-test is (4.20) with a standard deviation of (2.61). And the arithmetic mean in the post-test is (7.23) with a standard deviation of (1.25). The level of significance is (0.02), which is less than (0.05), and this indicates that there is a significant difference in favor of the post-test.

Presentation and analysis of the results of the post-test of the technical performance of the passing and receive skills for the control and experimental groups:

Table 4: Shows the arithmetic means and standard deviations between the post-test for the control and experimental groups.

Tests	Control group	Experimental group	Level Type sig	
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		Arithmetic mean deviation	Arithmetic Standard deviation			
Technical performance test for passing skill	6.55	0.45	7.75	0.49	0.01	Sig
Technical performance test for receive skill	6.70	0.60	7.23	1.25	0.00	Sig

Table 4 shows the arithmetic means and standard deviations between the post-test of the control and experimental groups. The arithmetic mean of the post-test in passing skill for the control group is (6.55) with a standard deviation of (0.45). The arithmetic mean in the post-test for the experimental group is (7.75) with a standard deviation of (0.45). 0.49). the level of significance is (0.01), which is less than (0.05), and this indicates that there is a significant difference in favor of the experimental group.

The results showed that the arithmetic mean of the post-test in receive skill for the control group is (6.70) with a standard deviation of (0.60). In addition, the arithmetic mean in the post-test for the experimental test is (7.23) with a standard deviation of (1.25). The level of significance is (0.00), which is less than (0.05), and this indicates that there is a significant difference in favor of the experimental group.

Discussing the results of the skills of passing and receiving the serve in volleyball

The results showed that there were significant differences between the pre- and post-tests, in favor of the post-tests, for both groups.

The researcher attributes the reason for these differences for the experimental group to the use of the survey method in the educational curriculum, which facilitated the process of understanding, absorbing and realizing the skill, through a clear progression in presenting the skills of passing and receiving the transmission in its three sections. (Preparatory, main, final), and this was confirmed by some sources, as “the use of illustrative images that were included in the paragraphs of the educational curriculum has allowed the learner to understand, perceive, and assimilate the nature of the movement, as well as dividing the movement” (Ali. 2000).

In addition, this device allows the learner to watch the technical performance of the skill to be learned, and display it slowly, so that the learner can understand the detailed parts of it. All of these factors contributed to teaching the members of the research sample quickly, and this was confirmed by the results, which it led to an improvement in skill performance by increasing desire and excitement, as well as saving the time and effort expended by the trainer.

The researcher also attributes the reason for this development to the use of special exercises based on repetitions that the research sample performed during the educational units and within the educational curriculum, which increased the process of learning acquisition, as the sources emphasized that “the many repetitions that the learner practices during practical application helped On the acquisition of learning” (Ali. 2000).

The results presented in the tables above also showed significant differences between the two groups, in favor of the experimental group in the post-test.

The researcher attributes the reason for this superiority to the use of the wave survey method, which worked to explain the technical performance (technique) of the two skills investigated, that is, giving information to the learner who has difficulty with kinetic performance, will make it easier for the learner to know the technical errors that he may fall into, and the weak points in his performance. Thus, he will understand the detailed parts of the skill better, which are consistent with what he learned previously, and thus this method differs from the learning method to which the control group was subjected, as the learners in this group relied on the information given by the professor, which is not considered an important and essential factor. In understanding the kinetic duties of people with kinetic performance difficulties without identifying them and choosing the appropriate method for them. "This method is an important and large source of information regarding performance, such as the degree of error, and it works to direct the learner towards achieving a specific goal or standard, in addition to contributing to strengthening the bond between the stimulus and the kinetic response, and it also works to encourage appropriate kinetic responses upon repeating the performance." Because encouragement clarifies to the learner what is required of him in the correct manner" (Al-Imam. 1988).

Conclusions and Recommendations

Conclusions

1. Using the directed quest method helped achieve better results in learning the skills of passing and receiving the transmission, in addition to saving the time and effort expended by the trainer in delivering the material to be learned.
2. Using the directed quest method facilitated the learning process in a way that helped the learner understand and absorb the detailed parts of the skill to be learned.
3. Using the directed Quest method contributed significantly to understanding the detailed parts of the skill (technical performance) better than using it with internal feedback (without a trainer).
4. The educational curriculum that uses the directed quest method provides the learner with the ability to better depict the technical performance of the skills of passing and receiving transmissions.

Recommendations

1. Emphasis on the use of modern methods in the educational process, as they provide greater benefit, and at various age levels.
2. The necessity of using the directed quest method in learning other sports skills in volleyball.
3. The possibility of using the directed quest method not only to learn basic skills, but also the possibility of integrating these skills to reach the correct playing style, which is the desired goal.
4. Conduct other studies on different age groups and for both genders in volleyball and other sports.

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