

# The effect of complex teaching on sensory modeling of some offensive handball skills

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## **Abstract**

*The researchers adopted the experimental approach to its appropriateness and the nature of the research. The research community consisted of second-stage students at the Faculty of Physical Education and Sports Science at Diyala University for the academic year 2018-2019 (213) students. The sample was chosen randomly by lottery (number 37). A student from one division is (b) among the people, who are (7) people, excluding Division (f) and Division (g) represented by the second stage students, and the sample was divided into three experimental groups according to the sensory modeling scale, and parity between research groups In learning some offensive skills with handball, the subject teacher applied the curriculum using the combined teaching method according to the preference for modeling in the main section of the research groups. The educational curriculum took (14) educational units and by (2) educational units for each group per week, and the time for the educational unit ( 90) minutes. The special program used in the statistical fields and spss system was used to extract the data of the research.*

**Key words :** complex teaching , sensory modeling , handball skills.

## **I. Introduction**

Learning is an important means to bring about the desired changes in individuals, as it is sufficient to change all aspects of life, including human behavior, where the individual is provided with religious and behavioral values, cognitive and skill aspects, and other different forms of activity so that he is prepared to contribute to building and advancing society.

Interest has increased in the present time to the necessity of teaching theories that are closely related to learning theories, and as a result of this interest a number of teaching theories appeared to be an extension of learning theories in the fifties of the twentieth century and was simple and inaccurate at first and then became more accurate and sobriety.

The quality of education, the extent to which educational goals are achieved, and the level of student performance are determined by the level of the teacher and his skill in classroom teaching. The role of the teacher in achieving educational goals is determined in three forms:

-The teacher is a conductor of knowledge, and this requires that he is familiar with the academic subject and mastered the methods of teaching it and its methods.

-The teacher as a model, and this requires that the teacher be highly qualified and a person influencing students and stimulating their thinking.

-The teacher is a symbol that greatly affects students' attitudes, inclinations and values.

Based on that, this development in the field of learning added new duties and responsibilities that lie with the teacher. One of the most important of these duties is to create an educational atmosphere appropriate to the needs of the learner and his inclinations, in addition to choosing the most appropriate methods that lead to achieving the goals in the least effort and the shortest time in a manner compatible with the type of game.

Therefore, it is imperative for the teacher to use new methods of learning in order to provide a variety of educational situations suitable for the largest number of learners, and this is what the combined teaching method provides in its dual and quadruple content as the first refers to learners learning in the form of dualities (leading learner, observant learner) while the second It indicates that two of the learners perform (two performances) and two more by observing the motor performance (the two notes), then the four learners exchange the performance between them so that each of them individually performs the role of the performer and the observer, and each passes over his three peers and exchanges with them rotating counterclockwise and thus Each learner performs the role of performer and observer in exchange with his three peers in his group several times. The method of preference for sensory modeling is one of the perceptual methods that have attracted the attention of a number of researchers. It is represented by means of receiving information from the environment through human sensory mechanisms, and the sensory modeling of sensations (auditory, visual and motor) are preferences that the learner can use in all fields.

The handball game is one of the games that have many requirements, motor and skill requirements that learners must learn and master and be familiar with their technical and scientific aspects, and this always requires modern methods and new techniques to develop proficiency in skill performance.

The importance of the current research is demonstrated through the use of a complex teaching method according to a preference for sensory modeling in learning some offensive skills with handball.

**Research problem:**

The primary goal of the educational process is to learn motor skills through controlling skill and planning performance together for the purpose of achieving effective and effective learning, so most learning methods are based on choosing the appropriate method to achieve the goals that each teacher is trying to reach.

Therefore, it has become necessary to reduce the methods that are used continuously in teaching, and to think about using non-followed methods in which the focus is on the learner's effort as an effective element in the educational process, including a complex teaching method for the purpose of improving the skill level performance of offensive skills with handball and with the assistance of their classmates. In addition to the need for learners to apply methods that take into account the individual differences between them, especially in the field of cognitive methods, including the sensory modeling method, as each learner has his own style of remembering and recalling the information in his memory of skills and movements that are represented by sensations (visual, auditory, kinetic) which is known as processing information, which is at the same time a source of individual differences.

Given the above, the researchers wanted to study this problem, which can be summarized in the following question: Does the combined teaching method according to the preference for sensory modeling have an effect on learning some offensive handball skills? There is no doubt that knowing the answer to that question will lead to adopting the most influencing methods in the learning process, which will positively affect the improvement and acceleration of the learning process.

**Research objectives:**

- Classifying the sample according to the sensory modeling (visual, kinesthetic, auditory).

-Knowing the effect of complex teaching style according to the preference for sensory modeling in learning some offensive skills with handball.

- Identify the preference for categorizing sensory modeling (visual, kinesthetic, and auditory) according to the combined teaching method of learning some offensive skills with handball..

**Research hypothesis:**

- There are statistically significant differences between pre and post tests in learning some offensive skills with handball, for the three experimental groups, and for the benefit of dimensional tests.

- There are statistically significant differences between dimensional tests in learning some offensive skills with handball and for the three experimental groups and for the benefit of the experimental groups

## **II. Research Methodology**

-The researchers used the experimental method, and the three-group design with pre and post test was chosen.

**Research community and samples**

The research community included the students of the second stage of the Faculty of Physical Education and Sports Science at Diyala University for the academic year 2018 - 2019, who were (213) students, and the sample of the research was randomly chosen by lottery (number 37) students from one division is (B) Which represents 17.37% of the community of origin among the people, who are (7) people, with an average of (30-40) students for each division, excluding Division (f) and Division (G) represented by the second stage students, and the results of (5) students were excluded from the repeaters And the players in the clubs, and the sample was divided into three experimental groups according to the sensory modeling scale, where the first experimental group (optics) and the second experimental group (kinesthesia) and the third experimental group (auditory).

**Research Tools**

To provide a set of devices and tools necessary for the purpose of using them to solve the problem, whatever those tools, and to make sure that these tools are suitable for research to achieve

hypotheses. In fact, the researcher used the devices, tools and means that helped the researcher to conduct his research, as follows:

- Legal handball court.
- KENKO Manual Calculator.
- Handball goals
- A tape measure of length (50) meters
- Whistle
- stopwatch
- Medical scale
- Men's hand balls (10).
- Correction boxes with iron dimensions (50 × 50) cm, count (2).

### **The Testes**

#### **Measured variables:**

- A scale of preference for sensory modeling.
- Measurement of compatibility, speed Handling and receiving on the wall.
- Continuous Dribbling test in a winding direction of 30 meters.
- Shoot the ball.

#### **Applied Test**

##### **Implement a sensory modeling preference test :**

The researchers applied the sensory modeling preference test to the research sample on Tuesday (22/11/2018) in the classroom in the College of Physical Education and Sports Science / Diyala University and with the assistance of the auxiliary team and taking into account the following- :

- Distribute the test scale with the pen to each laboratory.
- The researchers explained the test instructions clearly and indicated how to answer them.
- Ensure that all members of the sample understand the test and the response method.
- The researchers collected the scale from the students after completing the answer to it.

Then the researchers extracted the results of the sensory modeling preference test, and on the basis of the correction key of the scale, the results showed three types of individuals, namely (visual, kinesthetic, auditory) which represent the three experimental groups, but in different numbers, as the results of the scale showed that the visual group includes (8) Visual students, and the sensory group included (14) dynamic sense students, and the audio group included (10) audio students.

##### **Application of the educational curriculum:**

In order to achieve the goals of the research, the researchers prepared an educational curriculum with a complex teaching method according to sensory modeling on the three experimental

groups in the first semester of the academic year (2016/2018) and the experiment took the limited period from (27/11/2018 to 15/1/2019)

Where the curriculum included (14) educational units with the rate of two units per week, and the educational units were conducted in the closed sports hall in the College of Physical Education and Sports Science / University of Diyala where the time of one unit was (90) minutes.

### III. Results and discussed

View and discuss search results:

| Displaying the results of the arithmetic mean, standard deviations and (t.test) testing of the skills (handling, receiving, chopping and correction) of the three experimental systems in the pre and post tests as shown in Table (1) |                        |          |      |           |      |              |                |            |      |
|--|------------------------|----------|------|-----------|------|--------------|----------------|------------|------|
| Groups   | Skills                 | Pre-Test |      | Post-Test |      | A difference | Std difference | Calculated | Sign |
|  |                        | A        | Std  | A         | Std  |              |                |            |      |
| Optical  | Handling and receiving | 24.73    | 3.20 | 25.89     | 4.97 | 1.75         | 1.75           | 0.03       | Sign |
|  | Dridribbling           | 15.25    | 1.00 | 13.07     | 0.74 | 2.18         | 0.27           | 0.00       | Sign |
|  | shoot the ball         | 2.12     | 0.35 | 3.27      | 0.51 | 1.5          | 3.11           | 0.03       | Sign |
| Sensory  | Handling and receiving | 27.12    | 2.32 | 35.45     | 4.08 | 8.43         | 1.47           | 0.00       | Sign |
|  | Dridribbling           | 15.10    | 1.03 | 11.47     | 0.81 | 3.59         | 0.22           | 0.00       | Sign |
|  | shoot the ball         | 1.14     | 0.31 | 4.35      | 0.49 | 3.21         | 0.18           | 0.01       | Sign |
|  | Handling and receiving | 25.30    | 4.00 | 27.90     | 7.20 | 2.7          | 3.27           | 0.27       | Sign |
| Auditory   | Dridribbling           | 15.22    | 1.30 | 12.59     | 0.87 | 2.72         | 0.44           | 0.00       | Sign |

|  |                |      |      |      |      |      |      |      |      |
|--|----------------|------|------|------|------|------|------|------|------|
|  | shoot the ball | 2.00 | 0.47 | 3.59 | 1.59 | 0.51 | 0.04 | 0.05 | Sign |
|--|----------------|------|------|------|------|------|------|------|------|

The significance of the three dimensional tests of the three skills, the researchers attribute this to the fact that learners with a kinesthetic system which is their preferred system for receiving information through a sense of movement through the actual performance of the movement where "the owners of this system are characterized by a tendency to movement more than the other two systems (Al Basri , Auditory) and have a good memory while applying performance "1,2" The practical application of kinetic performance is one of the best scientific educational methods used when teaching any motor skill and that the direct impact on kinetic compatibility can not occur as a result of digesting information only, but through the method of education and practice The positive of the motor skills, and the actual participation of the learner in trying to perform the movement gives him some experience for the actual motor work, that is, the feeling of work and the feeling of control of the body when performing 3."

As for the learners with the audio system, their moral results appeared in favor of the post test, and the researchers attribute that that learners with the audio system for sensory modeling received the information by explaining the details of the technical performance of the skill by the teacher and then the students dialogue among themselves about the skill because the owners of this system love to listen Hearing to others when learning "and the audio system has the advantage that they learn more through discussion and dialogue and remember what they hear more than they watch. Where the importance of hearing aids appears when using the word during movement and correcting errors and direction, through which the learner compares orally between what must be done and what It actually takes place, absorbs it mentally, completes motor coordination, and then expedites the educational process. 4

The researchers see this accident progression that the use of the combined teaching method with the modularity of the two and the quadrilateral came proportionate and consistent and are based on each other in a scientific and effective manner which led to the student acquiring experience as a result of the application first and then the quadrant directly after which resulted in increasing this experience and mastering the skill as it has a perception My mind and remember the correct performance sequence as well as the continued feedback provided from the observers to the performers. That when you make each student a special role, one of them performs the movement and the other in the role of the observer, and the teacher deals only with the observant student who converts the teacher's decisions to the leading student, he corrects and gives his notes the student performing, then the roles are changed 5.

The researchers also see that the complex teaching method makes the student the focus of the educational process, which increases his motivation towards learning, and provides sufficient time for application and the provision of knowledge and information and helps to correct errors, and that placing the responsibility on the student makes him try to produce the best of what he has to accomplish and perform the skills for learning, and that The exchange of roles from leading to observation and vice versa increases responsibility and increases motivation to learn.

#### IV. Conclusions and recommendations

##### Conclusion

Through the above presented results and the researcher's analysis and discussion of these results, he reached the following conclusions:

-The combined teaching method according to the preference for sensory modeling is a influential method in learning some offensive skills for students with handball.

- The practical application of kinetic performance is one of the best teaching aids used when learning any motor skill.

- The motor skills are learned through attention and repetition for many times and for a long time, and this is the direct reason for the preference of sensory group learning.

##### Recommendations

Through what has been concluded, the researcher recommends the following recommendations:

- Emphasizing the use of the combined teaching method according to the preference for sensory modeling in learning some offensive skills with handball.

- The necessity of introducing teachers and trainers to prefer sensory modeling for students, and setting educational and training curricula according to the degrees of their representative systems.

- Conducting similar research and studies using the combined teaching method and comparing

it with other educational methods and in individual and group games and activities.

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