E-ISSN: 2707-7020
P-ISSN: 2707-7012
JSSN 2022; 3(2): 72-80
Received: 13-06-2022
Accepted: 06-08-2022

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Effect of skill exercises according to sensory modeling to developing psychological toughness and learning some shooting forms of handball for students

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Abstract
The importance of the research lies in the subject teacher's application of the skill exercises prepared according to the preference of sensory modeling over the research sample. It provided physical education teachers with a mechanism to apply these exercises to help them teach offensive skills in handball to students, the preparation of skill exercises to learn the forms of shooting with handball must take into account the sensory preference of the learner who receives the information. In view of the foregoing, the researcher wanted to study that problem, which can be summed up in the following question: Do skill exercises prepared according to the preference for sensory modeling have an impact on the development of Psychological hardness and learning forms of shooting hand reel? There is no doubt that knowing the answer to that question will lead to following the most effective exercises in the learning process, which will positively affect the improvement and acceleration of the learning process.
The aim of the research is to prepare skill exercises according to the preference for sensory modeling in the development of psychological toughness and to learn some forms of handball shooting for students of the second stage in the College of Physical Education and Sports Sciences, University of Kirkuk, as well as to identify the preference for sensory modeling for students of the second stage in the College of Physical Education and Sports Sciences, University of Kirkuk.
The most important conclusions were that the skill exercises used were effective in improving the skill side of the three mixed experimental groups (audio, visual and kinesthetic). Also, the model's presentation of the skills greatly contributed to the learning of the visual group, because the learner's vision of the skill helps him to know the movement path and the correct sense of the skill. Also, the practical application of motor performance is one of the best teaching aids used when teaching any motor skill.

Keywords: skill exercises, sensory modeling, psychological toughness

1. Introduction
The educational process is one of the areas that has received many scientific developments and changes for its pivotal role that it can play in building the learner and solving his problems, so many educational methods appeared in which the effort and activity in the learning process moves from the teacher to the learner, being the focus of the educational process. The game of handball is one of the important team sports spread in many countries of the world, and the number of its practitioners is increasing every day because it is one of the fun games that suit different ages, each according to his capabilities and abilities, so it suits both sexes, and this game has many advantages and characteristics of educational, physical and skill that made it differs from the rest of the other games, which made the number of followers of this game increase, and it competed with games that preceded it for a long time.
The concept of psychological toughness is one of the relatively recent concepts in the local and Arab scientific arena, and it is one of the important psychological features of the individual that helps him to successfully confront various situations, especially in the sports field, dealing with psychological trauma, difficulties, frustration, loss and daily problems, interacting smoothly with others and adapting to ideas and reality. It requires mental and physical health. The method of preferring sensory modeling is one of the cognitive methods that have attracted the attention of a number of researchers, as it is represented by the means of receiving information from the environment by human sensory mechanisms, and sensory modeling represented by sensations (audio, visual and kinesthetic) are preferences that can be used by the learner in all fields.

It is known that there are no single perfect exercises in teaching sports skills, so the process of choosing exercises depends on the variables and circumstances surrounding the educational process, and for that it became necessary for every teacher to search for modern exercises that take into account individual differences during their application if he seeks to succeed in his work. The importance of the research lies in the subject teacher's application of the skill exercises prepared according to the preference of sensory modeling over the research sample. It provided physical education teachers with a mechanism to apply these exercises to help them teach offensive skills in handball to students.

1.1 Research Problem

Through the follow-up of the two researches to the handball lessons for students in the college, it was found that one of the reasons for the weak forms of shooting in the game of handball is that the educational exercises used in the physical education lesson do not take into account the individual differences between the learners. The learners may differ in their sensory preferences, as those with (auditory) preference differ from those with (visual) preference and those with (kinesthetic) preference. Therefore, the researchers believe that the preparation of skill exercises to learn the forms of handball shooting should take into account the sensory preference of the learner who receives the information. In view of the foregoing, the researchers wanted to study this problem, which can be summed up in the following question: Do skill exercises prepared according to the preference for sensory modeling have an impact on the development of psychological toughness and learning the forms of shooting with handball? There is no doubt that knowing the answer to that question will lead to following the most effective exercises in the learning process, which will positively affect the improvement and acceleration of the learning process.

1.2 Research objective

- Identify the preference for sensory modeling for second stage students in the College of Physical Education and Sports Sciences, University of Kirkuk.
- Preparing skill exercises according to the preference of sensory modeling in developing psychological toughness and learning some forms of handball shooting for students of the second stage in the College of Physical Education and Sports Sciences, University of Kirkuk.
- Identify the effect of skill exercises on the preference for sensory modeling in developing psychological toughness and learning some forms of handball shooting for second-stage students in the College of Physical Education and Sports Sciences, University of Kirkuk.
- Identifying which of the sensory modeling preferences is better in each group for developing psychological toughness and learning some forms of handball shooting for second stage students in the College of Physical Education and Sports Sciences, University of Kirkuk.

1.3 Research hypotheses

- There are statistically significant differences between the pre and post-tests for the effect of preferring sensory modeling (audio, visual, kinesthetic) in developing psychological toughness and learning some forms of handball shooting for second-year students in the College of Physical Education and Sports Sciences, University of Kirkuk and for the three experimental groups.
- There are statistically significant differences in the post tests between the best system in each of the three experimental groups in developing psychological toughness and learning some forms of handball shooting for second-year students in the College of Physical Education and Sports Sciences, University of Kirkuk.

1.4 Research fields

1.4.1 The human field: A sample of students of the second stage in the College of Physical Education and Sports Sciences, University of Kirkuk for the academic year 2021-2022.

1.4.2 Time field: from 10/11/2021 to 15/3/2022.

1.4.3 Spatial field: Hall of sports and artistic activity in the education of Kirkuk.

2. Research methodology and field procedures

2.1 Research Methodology

The researchers used the experimental method (using equal groups design).

2.2 Research community and sample

The research community was determined by students of the second stage in the College of Physical Education and Sports Sciences, University of Kirkuk for the academic year 2021-2022 AD for the morning study. Their number is (252) students, divided into 6 divisions, 4 divisions for male students and 2 divisions for female students, and 3 divisions were selected from the students (A_B). _ C) The number of (131 students) and a sample was chosen in a simple random manner with a number of (45) students and they were divided into three groups equally: the auditory group 15 students, the visual group 15 students, and the sensory group 15 students.

2.2.1 Sample homogeneity: For the purpose of knowing the homogeneity of the research sample before carrying out the experiment and to prevent the influences that affect the results of the tests in terms of the differences in the sample members represented by (length - mass - age), homogeneity was carried out between the research sample to control the variables by The skew coefficient, as shown in Table (1).

Table 1: Shows the homogeneity of the research sample in the variables (height - mass - age).

N	Variables	Unit	Mean	Std. Deviation	Median	Skew ness
1	Length	Cm	176.67	5.89	176	0.34 +
2	Mass	Kg	74.62	6.76	74	0.17 +
3	Age	Year	20.06	1.08	20	0.10 +

It is evident from Table (1) that the values of the skewness coefficient of the measurements were limited to (+1), which indicates that the sample was distributed normally.

2.2.2 Sample equivalence: The researcher has equalized the sample (tribal tests) for the three groups in the skills under study as shown in Table (2).

Table 2: Shows the equivalence of the research sample for the three groups:

Skills	Contrast source	sum of squares	degree of freedom	mean squares	f-value calculated	f-value tabular	Sig type
shooting from head level	between	3.37	2	1.68	0.43	3.23	Non sig
	inside	161.60	42	3.84			
Shooting from falling	between	2.58	2	1.29	0.14		Non sig
	inside	376.90	42	8.97			
Shooting from jumping high	between	1.64	2	0.82	0.30		Non sig
	inside	112.80	42	2.68			
Mental toughness	between	5.13	2	0.94	0.37		Non sig
	inside	589.77	42	4.60			

At a degree of freedom (2- 42) and a probability of error (05.0)

It is evident from Table (2) that the calculated F values for all totals are less than the tabular value and therefore the research totals are equal in all variables.

2.3 Means of collecting information and tools used in the research

2.3.1 Means of collecting information

Observation. - Sensory modeling scale form. - Objective tests.

2.3.2 Devices and tools used in the research:

Mass measuring device - Leather measuring tape (10 m) for measuring length - Computer, laptop type (DELL) of Chinese origin. - Video camera type (SONY) of Chinese origin - Whistle type (FOX) number (2). - Accuracy boxes (50 x 50) Number (2). - Number 12 figures. - Chalk. - Adhesive tape. - Electronic stopwatch of Chinese origin (2). - Legal handball court. - Number of handballs (12). -

2.4 Determine the search variables

2.4.1 Sensory Modeling Preference Test: (Ibrahim, Firas Suhail, 2011, p. 54) [1].

The researchers adopted the Firas Suhail scale to find out the preference for sensory modeling for the research sample, then it was presented to the experts and specialists, numbering (11) experts to find out its suitability for the age stage of the sample. All the experts confirmed the validity of the scale for the sample. The paper and pen The scale aims to identify the students' preferred learning system and helps the teacher to choose the appropriate activities for students according to the appearance of the result in the test. The test consists of (20) paragraphs, each paragraph contains three choices. The answer is determined by the laboratory, i.e. one answer is chosen from the three answers. Classifying the students according to their answers to the test items according to the test key, which consists of three items (a, b, c) which are to determine the three preferred systems (audio, visual and kinesthetic).

2.4.2 Psychological Hardness Scale

The researchers adopted the (Yasmine Hamid Majeed) psychological hardness scale, which consists of (44) statements and answer alternatives (1,2,3,4,5). A degree was then presented to the experts and specialists, numbering (11) experts, to find out its suitability for the age stage of the sample. All the experts confirmed the validity of the scale for the sample. (Majid, Yasmine Hamid, 2015, p.67) [2].

2.4.3 Determining the forms of handball shooting for students

The vocabulary of the curriculum in handball for the second stage in the College of Physical Education and Sports Sciences at the University of Kirkuk has been relied upon, and they are:

1- Shooting from the level of the head. 2- Shooting from a fall. 3- Shooting by jumping high.

For the purpose of determining the validity of the tests for the forms of shooting skill, this was done by scanning handball messages and submissions to obtain a set of tests for these forms and placing them in a questionnaire form and presented to the experts and specialists in the field of handball, numbering (15) experts, and after collecting the forms and unloading the data, they were accepted The tests have significant significance through the (Ka^2) test and Table (3) shows that

Table 3: Shows the validity of the handball shooting forms tests for students.

N	Test	Validity		Ka^2	Sig type
		Validity	Non validity		
1	shooting test from the level of the head on the accuracy boxes (50 × 50)	13	2	8.08	Sig
2	shooting test from Head test on overlapping squares	9	6	0.6	Non sig
3	Shooting test from jumping high on the accuracy boxes (50 × 50)	15	0	15	Sig
4	Shooting test from jumping high on a target drawn on the wall and divided into 5 circles	5	10	1.67	Non sig
5	Drop shooting test on hand reel shooting accuracy squares	15	0	15	Sig
6	Drop shooting test at a target drawn on the wall and divided in degrees	9	6	0.6	Non sig

2.5 Experimental Experiment

The researchers conducted an exploratory experiment at (10) in the morning on (2/11/2021) on a sample of (10) students from the research community for the studied variables, and after (15) days on (17/11/2021) the experiment was repeated on individuals The purpose of the exploratory experiment was to:

1. Knowing the difficulties and problems facing the researcher before conducting the main experiment.
2. Knowing the validity of the devices and tools used.
3. Ensure the appropriateness of the tests used for the research sample.
4. Know the time taken for exams.
5. Finding the scientific bases for the tests (reliability and objectivity).

2.6 Scientific bases for the tests

2.6.1 Test validity: The test validity is meant as "the test's ability to measure what it was designed for or the characteristic to be measured" (Bahi, Mustafa & Omran, Sabri, 2007, p. 82) [3]. In order to obtain the validity coefficient of the tests used, the validity of the content or content of the tests was used, depending on a group of experts and specialists.

2.6.2 Test Reliability

It means test reliability: the test gives the same results if it is not repeated to the same group in the same circumstances, and for the purpose of obtaining reliability, the researcher used the (test and retest) method with an interval between the first and second tests (15) days. The reliability coefficient between the two experiments was extracted using the simple correlation coefficient (Pearson) law, and all tests proved to be characterized by high reliability, as shown in Table (4).

2.6.3 Objectivity of the tests: The objectivity of the test represents "the test in which there is no discrepancy between the opinions of the arbitrators, as the arbitration for the individual tested is more than one judgment" (Al-Yasiri, Muhammad & Abdul Majeed, Marwan, 2002, p. 80) [4], and to demonstrate the objectivity of the tests used, as the researchers relied on the score of two arbitrators and then a coefficient was found Simple correlation (Pearson) for the objectivity of the tests. The results showed that all the tests have high objectivity, as shown in Table (4).

Table 4: Shows the reliability coefficient and the objectivity coefficient of the tests

N	Tests	Reliability	Sig	Objectivity	Sig
1	psychological hardness scale	0.87	0.000	-	-
2	Shooting test from the level of the head on the accuracy boxes (50 × 50)	0.92	0.010	0.93	0.000
3	Shooting test from jumping high on the accuracy boxes (50 × 50)	0.89	0.000	0.91	0.020
4	Drop shooting test on hand reel shooting accuracy squares	0.90	0.000	0.92	0.000

2.7 Pre-test: The tests and the scale were conducted on the three research groups, which numbered (45) students, on 21/11/2020, in the closed hall for sports and artistic activity in Kirkuk education.

2.8 The main experiment: The skill exercises were carried out according to sensory modeling (auditory - visual - kinesthetic) on the three experimental groups on the students of the second stage in the College of Physical Education and Sports Sciences at the University of Kirkuk for the period from 11/28/2021 to 11/1/2022 The unit time was (90) minutes, distributed as follows:

1. Preparatory section: The total time for the preparatory section is (25) minutes and includes

a. Introduction and warm-up: The students are stopped in a unified arrangement and their absences are taken. After that, general exercises are given to the members of the whole body. The duration of this part is (15) minutes.

b. Physical exercises: In this part, special exercises are given to the parts of the body working in performance and focus on the muscles that bear the greatest weight during the process of performing the skills in the educational unit. The duration of this part is (10) minutes.

2. The main section: In this section, skill exercises are used through their application to learn the forms of shooting with handball, and its duration is (55) minutes and includes two parts.

a. The educational part: In this part, the focus is on the sensory preferences of students through the use of the auditory system of the first mixed experimental group, the use of the visual system of the second mixed experimental group, as well as the use of the sensory system of the third mixed experimental group, taking into account the exposure of each experimental group to a representative system that differs from the system representative of the other two experimental groups. As for the first mixed experimental group, in this part of the educational unit, the focus was on the sense of hearing, by emphasizing the explanation of the skill performance and how to perform, all through the explanation. As for the second mixed experimental group, the focus was on the sense of sight through the presentation of the skillful performance that The model or the model does the third experimental group, the focus was on the performance and feel of all parts of the movement.

b. Application part: In this part, the skill exercises of correction forms are practiced by the students, as corrections are made for the errors of skill performance by the teacher, as well as giving feedback to the students. During which, special exercises for shooting forms were applied, as three exercises were applied in each educational unit

3. The final section: In this section, calming and relaxation exercises are given, then some advice and directions are given to the students and the end of the educational unit. The duration of this section is (10) minutes.

2.9 Applying skill exercises according to sensory modeling (audio, visual and kinesthetic):

The skill exercises prepared by the two researchers were implemented by the specialized teacher of the subject and under the supervision of the researchers. The skill exercises were carried out on the three mixed experimental groups.

a. The first mixed experimental group (emphasis on the auditory system).
b. The second mixed experimental group (emphasis on the visual system).
c. The third mixed experimental group (emphasis on the kinetic system).
    1. The physical education teacher in the school implemented the skill exercises for the three mixed experimental groups.
    2. The focus of the researchers on the subject teacher to correct errors and give feedback according to the need for it, that is, individually and collectively for the three experimental groups.
    3. Compensate any educational unit in the event of an

official holiday or any circumstance that occurs during the period of application of the skill exercises.

2-10 Post-test: The researchers conducted post-tests on 1/13/2022 on the three research groups, and the same conditions were provided for the tribal tests.

2.10 Statistical means: -Arithmetic mean-standard deviation-median-skewness coefficient- simple correlation coefficient (Pearson), t-test for correlated samples- analysis of variance (ANOVA).

3. Presentation, analysis and discussion of the results

1-3 Presenting and analyzing the results of the arithmetic means, standard deviations, and the T-test for the auditory system group in the variables in the pre and post-tests, and discussing them:

Table 5: Shows the means, standard deviations, and the (t-test) test for the group (auditory) in the variables in the pre and post-tests

Groups	Skills	Pre test		Post test		Means Difference	Std. Deviation Difference	(T) Calculated	(T) tabular	Sig
		Means	Std. Deviation	Means	Std. Deviation					
Audio	Shooting from head level	2.13	1.51	4.20	0.89	2.07	1.87	3.39	2.78	Sig
	Shooting from falling	2.44	1.45	4.46	1.37	2.02	1.49	3.57		Sig
	Shooting from jumping high	2.20	0.83	4.40	1.14	2.2	1.09	3.66		Sig
	Mental toughness	120.11	13.60	129.2	10.32	9.09	3.19	8.48		Sig
Visual	Shooting from head level	2.19	1.30	3.37	0.94	1.18	2.49	1.60	2.78	Non sig
	Shooting from falling	2.35	1.59	4.17	0.82	1.82	1.29	4.94		Sig
	Shooting from jumping high	2.14	0.70	3.18	1.12	1.04	2.34	1.95		Non sig
	Mental toughness	118.15	12.33	123	9.12	4.85	3.26	6.58		Sig
Sensory	Shooting from head level	2.30	1.30	3.60	0.60	1.3	1.11	2.70	2.78	Non sig
	Shooting from falling	2.22	1.63	4.11	0.37	1.89	1.15	4.45		Sig
	Shooting from jumping high	2.10	0.83	3.60	0.70	1.5	1.07	1.51		Non sig
	Mental toughness	122.12	11.37	128.6	8.60	6.48	3.82	9.49		Sig

Table (5) shows the values of the arithmetic means and standard deviations for the variables and for each group in the pre and post tests and (t-test) values calculated for it when compared with the tabular value (2.78), and the results showed significant differences for the learners with the (audio) system, and their number was (5). The researchers attribute this to the fact that this improvement came as a result of the effectiveness of the educational methods used by explaining the details of the technical performance of the types of skills in question from the teacher of the subject, and "the importance of auditory aids when using the word during movement, correcting errors and guidance, through which the learner compares orally between what It must be done and what is actually done and absorbed mentally and to complete the kinetic compatibility, and then speed up the educational process" (Suppar, Qasim lazem, 2012, p. 74) [5]. As for the learners with the (visual) system in the same group, whose number is (5) learners, their results were significant in the tests of shooting from high jump and psychological hardness, and the researcher attributes this development to the effectiveness of the exercises used in educational units. The results appeared insignificant for learners with a visual system, The researchers attribute this to the fact that the most time in explanation was for learners with the auditory system, as well as the difficulty of technical performance of correction, as the difficulty of skill performance for any skill needs sufficient time to communicate it to the learner. Full awareness of all the details of the movement: "Emotions play an important role in the motor coordination of the skill and the coordination between the muscular and nervous system, which provides a sense of effort and resistance when performing the skill. Knowing the treatment contributes to the ease and flow of the motor performance of the skill (Arab, Muhammad Jassam & Kazem, Hussein Ali, 2009, p. 216) [6]. The results also agreed with the study of Bullock and others, (Bullock & Goggin 1995) that the members of the verbal learning group showed superiority over the members of the visual learning group. As for the learners with the system (sensory) in the same group, which numbered (5) learners, their results were significant in the two correction tests from jump high and mental toughness (Blalock, K, & Gog gin, N, 1995) [7], The researchers attribute this development to the effectiveness of the exercises used in the educational units. As for the correction from the level of the head and the correction from the fall, the results appeared insignificant. The researcher attributes the insignificance of the results to the fact that learners with a sensory system have their reception of movement and their awareness of it as a result of a sense of movement through performance. The actual movement of the movement, so through the use of the auditory representational system for the members of the first mixed group, we find that those with the sensory representational system did not take their time to receive the skill. And because this skill requires time in performance, "the owners of this system are characterized by a tendency to move more than the audio-visual systems and they have a good memory during the application of performance." Audiovisual sensory.

3.1 Presentation and analysis of the results of the arithmetic means, standard deviations, and the (t-test) test for the visual system group in the variables in the pre and post tests and their discussion:

Table 6: Shows the arithmetic means, standard deviations, and the (t-test) test for the (visual) group in the variables in the pre and post tests.

Groups	Skills	Pre test		Post test		Means Difference	Std. Deviation Difference	(T) Calculated	(T) tabular	Sig
		Means	Std. Deviation	Means	Std. Deviation					
Audio	Shooting from head level	2.15	1.48	3.97	1.00	1.82	1.30	3.20	2.78	Sig
	Shooting from falling	2.61	1.32	3.39	1.11	0.78	1.16	2.54		Non Sig
	Shooting from jumping high	2.31	1.14	3.80	0.64	1.49	1.10	2.45		Non Sig
	Mental toughness	116.10	8.37	125.21	7.38	9.11	4.60	8.06		Sig
Visual	Shooting from head level	2.24	1.14	4.60	0.40	2.36	1.87	4.37	2.78	sig
	Shooting from falling	2.13	0.98	4.45	0.65	2.32	1.02	4.06		Sig
	Shooting from jumping high	2.10	0.89	4.20	1.30	2.1	1.14	3.62		sig
	Mental toughness	119.44	9.39	126.47	7.33	3.07	5.13	7.30		Sig
Sensory	Shooting from head level	2.30	1.58	4.20	1.48	1.9	1.64	3.97	2.78	sig
	Shooting from falling	2.14	1.51	4.44	1.46	2.3	1.85	4.16		Sig
	Shooting from jumping high	2.18	1.34	3.12	1.67	0.94	1.10	2.45		Non sig
	Mental toughness	117.39	9.24	128.48	7.68	11.09	5,93	8.59		Sig

Table (6) shows the values of the arithmetic means and standard deviations of the variables for each group in the pre and post tests and the (t-test) values calculated for them when compared with the tabular value (2.78), the results showed that the differences were not significant for the learners with the (auditory) system, and they numbered (5) in the shooting high and shooting from falling tests. The researchers attribute this to the fact that the exercises used for this group depended on the visual representational system, meaning that the learner's awareness of skills is through viewing (model display), and since the learners in that group are auditory, they did not receive information according to their preferred system. All sensory information is in the form of currents of electrical flashes (neural impulses) that result from nerve stimulation and along certain sensory pathways. The brain does not see light waves and does not hear sound waves, but specialized units of nerves process the electrical flashes that are formed by light and sound waves to what the brain perceives It is sight and sound (Nadia Samih al-Salti & Muhammad Odeh al-Rimawi, 2009, p. 154) [8]. As for the correction from the level of the head and psychological hardness, there were significant differences, and the researchers attribute the emergence of such differences to the effectiveness of the exercises used in the educational units. As for the learners with the (visual) system in the same group, who are (5) learners, their results were significant. The researchers attribute this to the fact that the exercises used in the educational units were done by the method of observation (displaying the model), and since the learners in that group are people with a visual system, so their reception of information was according to their preferred system. In learning in general, seeing the different movements when performed as a model in front of the learner as a living model, i.e. a player or coach makes a model of the movement in front of the learner or through films or pictures. The learner's vision of the movement to be learned is one of the factors through which the learner can perceive an initial perception of the appearance (Ibrahim, Marwan Abdel-Majid, 2002, pg. 96) [9], The new movement in its general form as well as the awareness of the important parts of the new movement. It also preserves the impression of that movement or skill, and if we make the model again and in a slow way, the learner can again make an image more clear than the first image of the movement. Yaroub Khion asserted that "when there is a clear picture in the mind of the learner, we expect correct performance" (Khion, Yarob, 2010, p. 182) [10]. These results are in agreement with the study of Hadeel Abdul-Ilah Abdul-Hussein (2009) "The learner's vision of the skill helps him to know the movement path and the correct sense of the body, that is, to control the technical performance of it" (Abdel-Hussein, Hadeel, 2009, p. 70) [11]. As for the learners with the (sensory) system in the same group, which numbered (5) learners, their results were not significant in correcting from a fall. The researchers attribute this to the fact that the exercises used were done in a viewing method (model presentation), and this did not have an effective effect because the learners are with the sensory representation system." The owners of the sensory representation system are characterized by their tendency to move more than the audio and visual systems and they have a good memory during the application of the performance " (Arab, Muhammad Jassam & Kazem, Hussein Ali, 2009, p. 219) [6]. As for shooting from the head, shooting from high jumping and psychological hardness, their results were significant in the post tests. The researchers attribute this development to the fact that the skill exercises used in the educational units had a positive effect.

3.2 Presentation and analysis of the results of the arithmetic means, standard deviations, and the (t-test) test for the sensory system group in the variables in the pre and post tests and their discussion

Table 7: Shows the arithmetic means, standard deviations, and T-test for the sensory group in the variables in the pre and post tests.

Groups	Skills	Pre test		Post test		Means Difference	Std. Deviation Difference	(T) Calculated	(T) tabular	Sig
		Means	Std. Deviation	Means	Std. Deviation					
Audio	Shooting from head level	2.20	1.79	4.12	1.22	1.92	0.84	3.48	2.78	**Sig**
	Shooting from falling	2.07	1.38	3.03	1.15	0.96	2.35	2.60		Non Sig
	Shooting from jumping high	2.16	1.55	3.05	1.12	0.89	2.12	2.31		Non Sig
	Mental toughness	118.59	10.46	126.29	7.46	7.7	6.97	7.39		Sig
Visual	Shooting from head level	2.13	1.58	4.10	1.39	1.97	2.68	4.00	2.78	sig
	Shooting from falling	2.17	1.17	3.01	1.28	0.84	2.84	1.95		Non sig
	Shooting from jumping high	2.20	0.84	3.11	1.92	0. 91	1.34	2.61		Non sig
	Mental toughness	120.24	9.46	126.3	6.49	6.06	5.97	6.28		Sig
Sensory	Shooting from head level	2.16	1.14	4.79	1.73	2.63	1.51	3.91	2.78	sig
	Shooting from falling	2.27	1.34	4.34	1.53	2.07	0.90	3.77		Sig
	Shooting from jumping high	2.24	0.89	4.40	1.14	2.16	0.71	3.89		sig
	Mental toughness	118.48	9,30	125.11	6.95	6.63	5.83	7.46		Sig

Table (7) shows the values of the arithmetic means and standard deviations of the variables for each group in the tribal and dimensional tests and the (t-test) values calculated for them when compared with the tabular value (2.78), the results showed significant differences for the learners with the (auditory) system and their number (5) in the correction tests from the level of the head and mental toughness, the researchers attribute this to the effectiveness of the exercises used in the educational units. As for the shooting from high jump and shooting from falling tests, the results of the dimensional test were insignificant, and the researcher attributes this to the fact that the exercises used for this group depended on the sensory representational system, meaning that the learners in that group with the auditory system did not receive information according to their system. the favorite, Those with an auditory system are distinguished by the fact that they learn more through discussion and dialogue, and remember what they hear more than what they see (Arab, Muhammad Jassam & Kazem, Hussein Ali, 2009, p. 218) [6]. As for the learners with the (visual) system and their number (5), the results were insignificant in the tests of shooting from jumping high and shooting from falling, and the researcher attributes this to that the learners were people with a visual system. By looking, therefore, we find that the members of that group did not take enough time to form their perceptions according to their preferred system. It is the visual system, and we find a discrepancy in those results, as the researchers attributed this to the individual differences in skill performance among the learners. As for the correction tests from the level of the head and mental toughness, the results of the dimensional test were significant, and the researcher attributes this to the fact that the members of that group, especially in this test, were more accurate in storing information (Jarwan, Fathi, 1999, p. 47) [13]. As for the learners with the sensory system and their number (5), the results were significant in the post tests, and the researcher attributes this improvement to the fact that the learners are from the sensory system, which is their preferred representative system for receiving information. The practical application of motor performance is one of the best scientific educational means used when teaching any motor skill, and the direct impact on motor coordination cannot occur as a result of information digestion only, but through the method of education and positive practice of motor skills. And the actual participation of the learner in trying to perform the movement gives him some experience of the real motor work, i.e. the sense of work and the sense of control over the body when performing. As a sensory effect of skills, and then this was reflected in the form of a store of information related to the motor aspect, and it was easy for the individual to recall that information. This superiority in results can also be attributed to "the sensory tendency to movement and the strength of memory compared to the other two systems". The researchers believe that the sensory system provides information about the different shapes and sizes of materials, and that this helps the learning process, and this is confirmed by (Nizar Al-Talib and Kamel Lewis 1993) [14], as they see that "the sensory system provides information about the different shapes, sizes, and surface quality of materials, and balance devices provide important information For physical exercises that include leaning and rotating around the different axes of the body (Nizar Majeed Al-Talib & Kamel Taha Lewis, 1993, p. 167) [14].

3.3 Presentation and analysis of the results of the f-test for analysis of variance (ANOVA) for the best system in each group in the variables in the post-tests and their discussion

Table 8: Shows the results of the analysis of variance of the tests for the three best representative systems

Skills	Contrast source	sum of squares	degree of freedom	mean squares	F value Calculated	f-value tabular	Sig type
Shooting from head level	Between	5.60	2	2.8	0.87	3.88	Non sig
	Inside	38.40	12	3.20			
Shooting from falling	Between	4.18	2	2.09	0.31		Non sig
	Inside	8.45	12	6.70			
Shooting from jumping high	Between	2.80	2	1.40	0.98		Non sig
	Inside	17.20	12	1.43			
Mental toughness	Between	15.32	2	6.77	1.72		Non sig
	Inside	137.60	12	13.40			

4. Discuss the Results

Table (8) shows the results of the analysis of variance of the tests for the three best representative systems (audio, visual and kinesthetic) and the results showed that there were no significant differences between the best system in each group compared to the best system in the other groups, because the calculated (F) value was smaller than the (F) value. tabular at a degree of freedom (2-12) and a probability of error rate (0.05), The calculated (F) values for all tests were (0.87) (0.31) (0.98) (1.72), which were not significant when compared to the tabular (F) value. The researchers attribute the absence of significant differences to the best system in each group, since each group received the information and learned according to its own representative system. That is, the best system in the first mixed group represented by the auditory system was focused on, and by increasing the time of explanation of the skills in the educational units because of the important role of the explanation, especially on those with the auditory system who stood out from their peers with other systems "The explanation of the technical and formal aspects of motor skill And the direction of its path, its kinetic divisions, and the relationship of mechanical laws and their effect on them help to accelerate and bring the kinetic skill closer to the learner's perceptions and mind (Shaima Abed Matar & Jacob Youssef, 2010, p. 30) [15]. Therefore, the superiority of the learners with the auditory system was clear over the learners of the visual and sensory systems, because their reception of information was through the sense of hearing, which is their preferred sense. With regard to the best system in the second mixed group represented by the visual system, the focus was on increasing the display time for skills in the units. Educational because of the important role of displaying the skill, especially for people with a visual system "Through visual means, the learner acquires the visual perception of the new motor skill correctly by comparing what should be done and what has actually been done. Presenting the model is one of the most important means used, provided that the presentation is correct by the model" (Suppar, Qasim lazem, 2012, p. 74) [5]. who were clearly superior to their peers with other representative systems. As for the best system in the third mixed group represented by the sensory system, the focus was on increasing the time of motor performance of skills in the educational units, because those with the sensory representation system depend on the sense of movement in all its aspects and rely a lot on the practical application of movement. Tests and competitions are among the best scientific educational means used when teaching any motor skill." All of what was mentioned shows that a better system is not superior to other systems, because the members of each better system have received the information represented by the skills under study, each according to his preferred system. Therefore, their learning ratios were close and there was no preference for one system over another. This is consistent with what he sees (Saleem Omar and Akram Youssef 2011) that "building activities and events in the curriculum plan must be consistent with the nature of each sense and facilitate learning for it in its own way and style. Nor does the audio information stop on a visual scene, nor does the practice need to be satisfied with the rhetorical method, and it is nice that the curriculum mechanism in the teacher's guide expands, providing the teacher with practical and realistic models for everything that satisfies and activates the senses at its various patterns and (Salim Omar & Akram Youssef, 2011), p. 127) [16]. The researchers also see that the skill exercises were prepared in a manner commensurate with the age level of the sample, "despite all that the curriculum is hoped to provide, it is linked to the age level of the students. Hence, the flow of the curriculum, its interrelationship and its sequence through the age stages must be a tight and clearly defined sequence each year or stage prepared for the next, according to strong methodological standards (Salim Omar & Akram Youssef, 2011), p. 128) [16].

5. Conclusions and recommendations

5.1 Conclusions

- The skill exercises used were effective in improving the skill side of the three mixed experimental groups (auditory, visual and kinesthetic).
- The model's presentation of the skills greatly contributed to the learning of the visual group, because the learner's vision of the skill helps him to know the path of movement and the correct sense of the skill.
- The practical application of motor performance is one of the best teaching aids used when teaching 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 learning the sensory group.

5.2 Recommendations

- The necessity of introducing teachers and coaches to the preference for sensory modeling for students, as well as for players, and to develop educational and training curricula according to the degrees of their representative systems.
- Conducting comparative studies between boys and girls to find out the differences between both sexes in the results and the differences in their cognitive style.
- Conducting studies similar to the current study using other cognitive methods on different samples and different sporting events.

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