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Skill exercises according to sensory modeling to develop individual defensive skills for junior handball

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Abstract

The importance of the research was to prepare a set of skill exercises according to the preference of sensory modeling for some individual defensive skills in the handball game, as well as to identify the effect of skill exercises according to the preference of sensory modeling in learning some individual defensive skills in the handball game. Through the researchers' observations of the matches and their experience as former players and coaches, they noticed a decline in the level of performance of defensive skills, especially individual ones during matches, and even some training units were lacking some defensive exercises. The ability to maintain the same defensive efficiency during the match, which prompted the researcher to delve into solving one of the problems that hinder the progress of Iraqi handball through the use of skill exercises according to sensory modeling to develop some individual defensive skills in the handball game.

While 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 sensory) for young handball players. 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. The practical application of motor performance is one of the best educational tools used when teaching any motor skill to young players in handball.

Keywords: Skill exercises - sensory modeling - individual defensive skills

Introduction

The developed world is witnessing at the present time a great development in sports achievements as a result of the continuous effort exerted by scientists through the interaction of physical education sciences with other sciences in its various fields and specializations. Individuality goes in line with the progress of sports training sciences.

Handball is one of the important team games that has spread in many countries of the world because of its beauty in individual and collective technical performance alike and because of its speed in performance at the level of individuals and teams and in the defensive and offensive side, which instructs to take care of physical requirements. And the modern technical and planning that must be taken into account when generalizing the training curricula for the game and how to implement it and defense in handball are among the important issues that the coach must take into account with this type of basic handball skills. As the multiplicity of types of defense in the recent period has added additional responsibility to the players, and good defense has become of great value and the importance of this is appreciated by both the player and the coach so that they do not find any difficulties in the operations of coverage and conversion from one form to another according to the requirements of playing. 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. During the development of skill exercises according to modeling, they sought to develop some individual defensive skills in the game of handball.

Research problem

Through the researchers' observations of the matches and their experience as former players and coaches, they noticed a decline in the performance of defensive skills, especially individual ones during matches, and even some training units were lacking some defensive exercises. The ability to maintain the same defensive efficiency during the match, which prompted the researchers to delve into a solution to one of the problems that hinder the progress of Iraqi handball through the use of skill exercises according to sensory modeling to develop some individual defensive skills in the handball game.

Research objective

- Identify on the preference for sensory modeling of young players in handball.
- Preparing a set of skill exercises according to the preference of sensory modeling of some individual defensive skills in the handball game.
- Identify the effect of skill exercises on the preference for sensory modeling in learning some individual defensive skills in the game of handball.
- Identify which sensory modeling preferences are best in each group to learn some individual defensive skills in handball.

Research hypotheses

- There are statistically significant differences between the tribal and remote tests of the effect of preference for sensory modeling (Audio, visual, kinesthetic) in learning some individual defensive skills in the handball game 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 learning some individual defensive skills in the handball game.

Research fields

Human field

Young players in the handball training center in Al-Qasim.

Time field: The period from 13/ 1/2022 to 2 /6/2022.

Spatial field: The closed Hall in the training center in Al-Qasim.

Research methodology and field procedures

Research Methodology

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

The research community and its sample: The research community was determined by the young players in the training center for handball in Al-Qasim for the season 2021-2022 AD, which numbered (25) players, the sensory modeling scale was applied to them, and then the researchers chose a sample in a simple random way with a number of (18) players and they were divided into three groups equally.

Homogeneity of the sample: for the purpose of knowing the homogeneity of the research sample before carrying out the experiment and to prevent influences that affect the results of the tests in terms of the differences in the sample members represented by (Length - mass - chronological age - training age) homogeneity was carried out between the research sample to adjust the variables by means of the torsion coefficient, as shown in Table (1).

Table 1: Shows the homogeneity of the research sample in the variables:

Variables	Measure Unit	Mean	Std. Deviation	Median	Skewness
Length	Cm	167.67	5.89	167	0.34
Mass	Kg	64.62	10.76	64	0.17
Age	Month	192.24	6.96	192	0.10
Training age	Month	48.05	1.39	84	0.12

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

Sample equivalence: The researchers 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	Freedom degree	Mean squares	F. value calculated	F. value tabular	Sig type		
Opposing test	Between	3.39	2	1.66	0.52	2.20	Non sig		
	Inside	163.66	15	3.86					
Test various defensive moves	Between	2.54	2	1.24	0.38		2.20	Non sig	
	Inside	375.94	15	8.96					
Two-way block test	Between	1.66	2	0.83	0.28			2.20	Non sig
	Inside	114.84	15	2.67					

At a degree of freedom (2-15) and a probability of error (05.0).

Means of collecting information

Tools used in the research

- Observation.
- Sensory modeling scale form for the research sample members.
- Objective tests.

Devices and tools used in the research

- A device for measuring mass.
- A leather measuring tape (20 m) to measure the length.
- A computer, a laptop type (DELL) of Chinese origin.

- A video camera type (SONY) of Chinese origin.
- A whistle type (FOX) number (2).
- A legal handball court.
- A number of figures (12) characters.
- Chalk.
- Adhesive tape.
- An electronic stopwatch of Chinese origin, number (2).
- Number of handballs (10).

Determine the search variables

Sensory Modeling Preference Validity Test: (Ibrahim, Firas Suhail, 2011, p. 67-68) ^[1]

The researchers used the (Firas Suhail) scale to find out the preference for sensory modeling for the research sample, and then it was presented to the experts and specialists 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 researchers applied it, which is a paper-and-pencil test, and the scale aims to identify the players' preferred learning system and helps the coach choose the appropriate activities for them 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. The forms were distributed to the members of the research sample on 17/1/2022 at four o'clock in the afternoon, after which the forms were collected and the players were categorized according to their answers to the test paragraphs according to the test key, which consists of three paragraphs (a, b, c) which are to determine the three preferred systems (Audio, visual and kinesthetic).

Determining the validity of individual defensive skills for junior handball

For the purpose of determining the validity of the basic defensive skills of handball players for the junior category. After reviewing the scientific sources and references and personal interviews conducted with a number of experts in the field of the game, the researchers prepared a

questionnaire form to survey the opinions of experts and specialists (11) experts were collected and their data was unloaded to choose the validity of defensive skills. Table (3) shows the skills adopted by the researcher according to the (Ka^2) test.

Table 3: Shows the validity of defensive skills according to the selection of experts and specialists

N	Skills	Validity		Calculated Ka^2	Sig type
		Validity	Not Validity		
1	Oposing	11	0	11	Sig
2	Defense against passing	3	8	2.27	Not Sig
3	Defensive coverage	6	5	0.09	Not Sig
4	Block	11	0	11	Sig
5	Defensive moves	11	0	11	Sig
6	stop to attack	5	6	0.09	Not Sig

Determining the validity of individual defensive skills tests for junior handball

For the purpose of determining the validity of basic defensive skills tests for junior handball players. After reviewing the scientific sources and references and personal interviews conducted with a number of experts in the field of the game, the researchers prepared a questionnaire form to survey the opinions of experts and specialists (11) experts were collected and their data was unloaded to choose the validity of defensive skills and table (4) shows the skills adopted by the researcher according to the (Ka^2) test.

Table 4: Shows the validity of defensive skills tests:

N	Skills	Validity		Calculated Ka^2	Sig type
		Validity	Not Validity		
1	Attacking (opposing) and leaning backwards with handball	11	0	11	Sig
2	Attacking (opposing) and returning to the defensive position with handball	6	5	0.09	Not Sig
3	Two-way defensive wall test	11	0	11	Sig
4	Two-way defensive wall test with slope	6	5	0.09	Not Sig
5	Test the defensive moves of both sides	8	3	2.27	Not Sig
6	Test various defensive moves	11	0	11	Sig

Experimental Experiment

The researchers conducted a reconnaissance experiment on (2/2/2022) at three o'clock in the afternoon on a sample other than the research sample, numbering (6) players who were not included in the main experiment and from the research community itself, and after (5) days, the experiment was repeated on the individuals themselves on (7/2/2022) and its aim was:

1. Recognize the difficulty and ease of the test.
2. Correcting errors, if any, during the implementation of the training curriculum.
3. After conducting tests for the performance of the sample to determine its suitability.
4. Training the assistant work team and knowing the extent of its ability.
5. Determining the time taken for the tests concerned with the research.

The scientific basis of the tests used

Validity: The honest test is "the test that measures what it was designed for". Accordingly, the researcher used the content validity, which is called logical honesty, as it depends on the opinions of experts and specialists in confirming that the test measures the phenomenon for which

it was actually established, and this is what was confirmed by Experts unanimously agreed that the tests measure what they were designed for. (Obeidat, Thouqan & Adas, Abd al-Rahman, (2000, p. 167) ^[2]

Reliability: is that the test gives approximately the same results if it is re-applied to the same individuals and under the same conditions. Therefore, the researchers used the retest method to find the reliability coefficient, (Al-Talib, Nizar & Al-Samarrai, Mahmoud, 1981, p. 142) ^[3]. The first test was conducted (2/2/2022) and then it was re-applied a second time after five days (7/2/2022), taking into account that all the conditions under which the first test is established. The researchers used Pearson's simple correlation coefficient law to extract the reliability coefficient, and it was found that the tests have a high degree of stability as shown in Table (5).

Objectivity

It is one of the important conditions for a good test, which means "there is no influence of subjective judgments by researchers, or objectivity is available without discrimination and subjective intervention by the experimenter, and whenever it is not affected by subjective

judgments, the value of objectivity increases" (Mahjoub, Wajih, 1993, p. 225) [4]. Pearson among the arbitrators'

results, and all the tests were of high objectivity, as shown in Table (5).

Table 5: Shows the reliability and objectivity coefficient of the tests:

N	Test name	Reliability coefficient	Objectivity
1	Attacking (opposing) and leaning backwards with handball	0.96	0.94
2	Two-way defensive block test	0.93	0.96
3	Test various defensive moves	0.94	0.95

Pre-test

The selected skill tests under discussion were conducted on 10/2/2022, and all test requirements were prepared and the auxiliary work team attended.

Applying skill exercises according to sensory modeling (Audio, visual and kinesthetic)

The skill exercises prepared by the researchers were carried out by the trainer and under the supervision of the researchers. The skill exercises were carried out on the three mixed experimental groups:

1. The first mixed experimental group (Emphasis on the auditory system).
2. The second mixed experimental group (Emphasis on the visual system).
3. The third mixed experimental group (Emphasis on the kinetic system).

The researchers have taken into consideration the following.

1. The trainer implemented the skill exercises for the three mixed experimental groups.
2. The focus of the researchers on the trainer to correct errors and give feedback as needed, ie individually and collectively to the three experimental groups. For the period from 15/2/2022 to 9/4/2022 in Al-Qasim Club Hall, the educational unit time was (90) minutes.

Noting the following important points in the process of developing exercises

1. The exercises used should be appropriate to the level of the sample.

2. There should be a gradation in the level of difficulty of the exercises used in one educational unit and within the entire curriculum.
3. That the exercises used achieve their purpose.
4. Take into account the use of devices and tools to improve learning and increase suspense.

Post-test

The researchers conducted the post-tests on 10/4/2022 in Al-Qasim Club Hall, after completing the implementation of the skill exercises and with educational units amounting to (16) units.

Statistical Means: The program was used in the statistical package (spss), which are:

- 1- Arithmetic mean.
- 2-Standard deviation.
- 3-median.
- 4-skew coefficient.
- 5-simple correlation coefficient.
- 6-T-test for correlated samples.
- 7-Analysis of variance.

Presentation and discussion of the results

Presenting and analyzing the results of the individual defensive tests for the three systems and for each group in the performance of skills (opposing, blocking and various defensive moves) in the pre and post tests and discussing them

Presenting and analyzing the results of the arithmetic means, standard deviations, and the T-test for the auditory system group in the performance of skills (Opposing, blocking and various defensive moves) in the pre and post tests and their discussion

Table 6: Shows the arithmetic means, standard deviations and the (T. test) of the group (Auditory) in the performance of Opposing skills, blocking wall and various defensive moves) in the pre and post-tests:

Group (Audio)	Skills	Pre-test		Post-test		(T) calculated	Sig level'	Sig type
		Mean	Std. Deviation	Mean	Std. Deviation			
Audio	Opposing	9.42	1.54	17.22	0.84	8.32	0.000	Sig
	Block	11.82	2.43	16.41	2.32	6.51	0.000	Sig
	Defensive moves	4.26	0.89	11.43	1.28	10.27	0.000	Sig
Visual	Opposing	9.80	1.69	15.42	2.31	1.63	0.079	Non Sig
	Block	11.34	2.52	14.55	2.80	4.90	0.000	Sig
	Defensive moves	4.30	0.71	9.11	2.11	0.91	0.058	Non Sig
Sensory	Opposing	9.60	1.32	14.62	2.62	2.78	0.069	Non Sig
	Block	11.70	2.93	13.33	3.31	3.11	0.000	Sig
	Defensive moves	4.24	0.87	7.31	2.77	2.54	0.071	Non Sig

Discussing the results of the pre and post-test of the auditory group in skills

Through what was presented in Table (6), which shows the arithmetic means, standard deviations, and the (T. test) test for the group (Auditory) for the level of performance of individual defensive skills (Interview, wall and various defensive moves) in the pre and post-tests. The results showed significant differences for learners with the (Audio)

system, and the researchers attributed 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 under study from the teacher of the subject and "showing the importance of audio aids when using the word during movement." Correcting errors and directing, through which the learner compares orally between what must be done and what is

actually done and mentally comprehend it and complete the motor coordination and then speed up the educational process” (Suber, Qasim lazam, 2012, p.74) ^[6]. As for the learners with the (visual) system in the same group, their results were significant in the wall test, and the researcher attributes this development to the effectiveness of the exercises used in the educational units. The researchers attribute this to the fact that the most time in the explanation was for learners with the auditory system, as well as the difficulty of technical performance of skills, as the difficulty of skill performance for any skill needs sufficient time to communicate it to the learner. Full awareness of all movement details “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, and the identification of the treatment contributes to the ease and flow of motor performance of the skill” (Arab, Muhammad Jassam & Kazem, Hussein Ali, 2009, p. 216) ^[7]. As for the learners with the (sensory) system in the same group, their results were significant in the wall test, and the researchers attribute this development to the effectiveness of the

exercises used in the educational units. People with a sensory system receive and perceive movement as a result of sensing movement through the actual performance of 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 sufficient time to receive the skill. And because this skill requires time to perform, “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 the performance” (Joseph O'Connor, 2010, p. 20) ^[8]. and this did not prevent the appearance of significant differences in the other tests as a result of the educational exercises, which included in their applied aspects audio-visual sensory methods and stimuli.

Presentation and analysis of the results of the arithmetic means, standard deviations, and the (T. test) test for the visual system group in the performance of skills (Opposing, Block and various defensive moves) in the pre and post tests and their discussion:

Table 7: Shows the arithmetic means, standard deviations and the (T. test) test for the (visual) group in the performance of interview skills, blocking wall and various defensive moves) in the two pre-tests

Group (Audio)	Skills	Pre-test		Post-test		(T) calculated	Sig level ¹	Sig type
		Mean	Std. Deviation	Mean	Std. Deviation			
Audio	Opposing	9.59	1.43	15.37	1.12	6.23	0.000	Sig
	Block	11.68	2.30	12.30	2.40	1.50	0.082	Non sig
	Defensive moves	4.65	1.17	5.37	1.67	2.47	0.061	Non sig
Visual	Opposing	9.10	1.18	16.68	2.48	6.38	0.001	Sig
	Block	11.15	2.55	15.06	2.53	5.55	0.001	Sig
	Defensive moves	4.84	0.84	9.24	1.34	4.64	0.000	Sig
Sensory	Opposing	9.11	1.51	14.11	1.41	3.11	0.000	Sig
	Block	11.44	2.54	11.38	2.46	3.76	0.000	Sig
	Defensive moves	4.21	1.55	6.55	1.65	2.45	0.069	Non sig

Discussing the results of the pre and post-test of the visual group in skills

Through what was presented in Table (7), which shows the arithmetic means, standard deviations, and the (T. test) test of the (Visual) group for the performance level of skills (Interview, wall and various defensive moves) in the pre and post-tests. The results showed insignificant differences for the learners with the (Audio) system in the tests of the wall and defensive moves, 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 form by means of light and sound waves to what the brain perceives as sight and sound” (Al-Salti, Nadia Samih & Al-Rimawi, Muhammad Odeh, 2009, p. 154) ^[9]. As for the interview skill, 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, 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, that is, 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 a preliminary conception of the appearance of the new movement in its general form, as well as perceive the important parts of the new movement. It also retains the impression of that movement or skill, and if we make the model again and in a slow way, the learner can be a picture again more clear than the first picture of the movement (Ibrahim, Marwan Abd al-Majid, 2002, p. 96) ^[10]. As for the learners with the (sensory) system in the same group, their results were not significant in the skill of defensive moves in the post tests. The researcher attributes this to the fact that the exercises used were done by the method of observation (displaying the model), and this did not have an effective effect because the learners are of the sensory representational system. The owners of the sensory representation system are characterized by their tendency to move more than the audio-visual systems, and they have a good memory during the performance application (Arab, Muhammad Jassam & Kazem, Hussein Ali, 2009, p. 219)

[7]. As for the interviewing and blocking skills, their results were significant in the post-tests. The researcher attributes this development to the fact that the skill exercises used in the educational units had a positive effect.

Presentation and analysis of the results of the arithmetic means, standard deviations, and the T-test for the sensory system group in the performance of skills (Opposing, Block, and various defensive moves) in the pre and post tests and their discussion

Table 8: Shows the arithmetic means, standard deviations, and (T. test) of the (Sensory) group in the performance of interview skills, blocking wall and various defensive moves) in the two pre-tests

Group (Audio)	Skills	Pre-test		Post-test		(T) calculated	Sig level`	Sig type
		Mean	Std. Deviation	Mean	Std. Deviation			
Audio	Opposing	9.34	1.73	14.33	1.23	6.43	0.000	Sig
	Block	11.71	3.32	12.02	2.57	2.68	0.094	Non sig
	Defensive moves	4.49	1.53	5.66	1.92	1.11	0.068	Non sig
Visual	Opposing	9.27	1.50	13.10	2.31	3.19	0.097	Non sig
	Block	11.14	3.71	12.11	3.21	1.91	0.074	Non sig
	Defensive moves	4.17	1.37	5.99	1.90	1.30	0.057	Non sig
Sensory	Opposing	9.62	1.16	16.36	1.70	7.70	0.000	Sig
	Block	11.61	2.68	15.19	2.73	6.93	0.000	Sig
	Defensive moves	4.44	0.83	8.41	1.18	5.44	0.000	Sig

Discussing the results of the pre and post-test of the sensory group in skills

Through what was presented in Table (8), which shows the arithmetic means, standard deviations, and the (T. test) of the (Sensory) group for the level of performance of skills (Interview, wall, and various defensive moves) in the pre and post-tests. The results showed significant differences for the learners with the system (Audio) in the interview test, and the researchers attribute this to the effectiveness of the exercises used in the educational units. As for the tests of the wall and defensive moves, the results of the remote test were not significant, and the researchers attributed this to the fact that the exercises used for that group depended on the sensory representational system. That is, the learners in that group with the auditory system did not receive information according to their preferred system. "The auditory system is characterized by the fact that they learn more through discussion and dialogue and remember what they hear more than what they see" (1). As for the learners with the (Visual) system, the results were insignificant in the tests of the wall and defensive moves. The group did not take the 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 researcher attributed this to the individual differences in skill performance among the learners. As for the interview test, the results of the post-test were significant, and the researchers attributed this to the fact that the members of that group, especially in this test, were more accurate in storing information. "The higher the

accuracy of the information stored in the memory, the easier it is to recall" (Jarwan, Fathi, 1999, p. 47) [12]. As for the learners with the sensory system, the results were significant in the post-tests, and the researchers attribute this improvement to the fact that the learners with the sensory system, which is their preferred representative system for receiving information. Direct motor coordination cannot happen as a result of digesting information 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 earns him some experience of real motor work, that is, a sense of work and a sense of control over the body when performing " (Suber, Qasim lazam, 2012, p. 75) [6]. The researchers attribute that improvement to the skill exercises, which in turn provided an adequate opportunity to feel the movement and an appropriate period of repetition, which made the kinesthetic perception become entrenched as a sensory effect of the skills, and then this was reflected in the form of a store of information linked to the motor aspect and it was easy for the individual to recall that information, as well. This superiority in results can be attributed to "the sensory tendency to move and the strength of memory compared to the other two systems" (Hammad, Mufti Ibrahim, 2013, p. 78) [13].

Presenting and analyzing the results of the F-test for analysis of variance (ANOVA) for the best system in each group in the performance of skills in the post-tests and their discussion

Table 9: Shows the results of the analysis of variance (ANOVA) test (F) for the skill tests of the best system in each group in the post-test:

Skills	Contrast source	Sum of squares	Freedom degree	Mean squares	F. value calculated	F. value tabular	Sig type
Opposing test	Between	5.62	2	2.6	0.85	2.20	Non sig
	Inside	38.44	12	3.22			
Test various defensive moves	Between	4.14	2	2.07	0.316		2.20
	Inside	8.47	12	6.72			
Two-way block test	Between	2.81	2	1.42	0.92	2.20	
	Inside	17.27	12	1.46			

At a degree of freedom (2-15) and a probability of error (0.05).

Discussing the results

Discussing the results of the F-test for analysis of variance (ANOVA) for the post-tests of the best system in each skill group under consideration

It is clear from the results presented in Table (9) that the calculated (F) values are smaller than the tabular (F) value, which indicates that there are no significant differences between the best systems for the three experimental groups (audio, visual and sensory). Significance of the best system in each group, since each group received 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 minds" (Abd Matar, Shaima & Yousef, Yacoub, 2010, p. 30) [14]. 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 the 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. The presentation of the model is one of the most important means used, provided that the presentation is correct by the model" (Suber, Qasim lazam, 2012, p. 75) [6]. 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 "The practical application of motor performance, which includes training, tests and competitions, is one of the best scientific educational tools used when teaching any motor skill" (Suber, Qasim lazam, 2012, p. 75) [6]. The researchers also attribute the reason for this to the impact of diversity in the exercises that the researchers adopted during the practical application of skills and the use of a set of auxiliary educational tools in terms of shape and color for the purpose of using them during the application of skill exercises, which made the educational process interesting and enjoyable during the application, which helped to get rid of From the state of boredom and boredom that the learner may be exposed to when using the exercises followed, which in its aspects are far from suspense and excitement. There are "several exercises to stimulate the learner's motives towards the activity or the game in order to learn and practice its skills, and among these exercises are facilitating the opportunities for motor learning and the clarity of the appropriate goal for learning and developing the skill, as well as balancing the satisfaction of the learner's needs" (Al-

Dulaimi, Nahida Abd Zaid, 2011, p. 29) [16]. Because motivation is a necessary condition for obtaining learning, as the stronger the motivation of the learner, the closer he is to good performance, which does not require great effort and time. A new atmosphere that raises the learner a kind of pleasure and rush to perform these exercises and repeat them without causing him feelings of boredom or boredom" (Adnan, Ban, 2007, p. 141) [17].

Conclusions and recommendations

Conclusions

- The skill exercises used were effective in improving the skill side of the three mixed experimental groups (audio, visual and sensory) for young handball players.
- 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 to young players in handball.
- The motor skills are learned by paying attention and repetition for many times and for a long time, and this is the direct reason for learning the sensory group.

Recommendations

- The necessity of introducing coaches to the preference for sensory modeling of players, and developing 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.
- Conducting studies similar to the current study, but on samples from those with common systems.

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