

**Research Article****THE EFFECT OF EDUCATIONAL EXERCISES USING THE FOREST MODEL ON MENTAL PERCEPTION AND ATTENTION BY LEARNING THE SKILLS OF FORWARD AND BACKWARD ROLLING ON THE MAT OF FLOOR MOVEMENTS IN ARTISTIC GYMNASTICS FOR FEMALE STUDENTS*****Dr. Abeer Ali Hussein**

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Abstract

Recent years we have observed rather significant changes in the sports field as a result of the scientific and technological progress that is taking place in the sphere of physical education sciences and sports sciences along with other sciences, with special references to motor learning a special emphasis having been made to mental processes. Learning is one of the critical aspects of the educational process, which distinguishes the life of a living individual starting from the moment of birth. Hence, within this vein, human activity of all sorts is not devoid of learning and motor instruction up to his death. This is especially important in order to relate to students' teaching and learning since learning models and their methods refers to what students gain from learning in terms of knowledge and positive attitudes. Amongst the most effective paradigms for education one can mention the paradigms of Forrest with enjoyment. In the given approach, cognition enables learners comprehend the basics, facts, and information concerning the content of the educational material and understand their connection. The Forrest model must be regarded as the process of participation and live communication and stands for the consolidation of the imagination and insisting on the evolution of mental perceptions and visions within the mind of the recipient. It encompasses the story and the ways of telling it orally and graphically to learners; using the change of tones and pitches in the voice, imitation of various characters and using of colors as per the performers' preference. Thus, it mediates the situation and the state it denotes by using all the energy, including gestures, signals, and so on, that affect the learner's arousal and imagination as well as motivates him/her while learning. Cognitive factors are highly involved in enhancing the efficiency of the general and specific sports movement including those in artistic-gymnastics which have the most qualitative and efficient constructive role in building the four- main physical attributes and capacities that are fundamental for producing sports movement. Observing the increased legitimate interest in mental abilities nowadays in the developed countries, one can identify the need to apply more elaborate measurement instruments which would enlighten us to the effectiveness and details of those processes in each learner, as well as the application of computerized technology to ascertain some of the mental abilities of the female gymnasts so as to enlighten the teachers of the potential of their learners. Cognition with regard to attention and mental imagery where Selective attention category is of significant importance as it features as one of the most important types of attention in the sports field while (external) mental imagery is also of significant value as it is amongst the most important types of mental imagery for female students in gymnastics because of the read that is provided the female students. Such things as the timely reaction to an event and making the right decision or the fast switch to another decision through all the views which the students have, and a lot of other things which are given to the contemporary students today through the computerized psychological laboratory technology. Traditional instructional practices were not apparent in the recent teaching practices especially in individual games, whereby there was no consideration of individual differences, especially in the game of gymnastics due to the difficulty of performance, and; the possession of a good level of mental and cognitive ability is essential in getting the technical performance of the skills concerning the front and back hand jump on the ground movement mat. Gymnastics is included into the category of sports games that occupies a significant position and is essential at the level of competitions and festivals, thus starting to build up its audience. It remains one of the most crucial fundamental prerequisites of educational curricula in faculties of physical education and sports sciences as these games are somewhat challenging and sophisticated in most of the skills and movements in the six devices while each of those devices is endowed with its own privacy, laws, rules, and requirements.

Keywords: Forrest model, Mental perception, Skills, Rolling, Gymnastics, Students.

INTRODUCTION

Hence, since the artistic gymnastic skills on the floor movements mat (rolling forward and backward on the floor movements mat) are some of the difficult movement which are learnt by female learners and because the ability to transfer the skills from hands, legs and the torso in an integrated manner is a coordinated process which requires thinking at a broader dimension and outside the norm. Thus, in order to bypass the reported points of difficulty in performance, the researcher has to prepare exercises using the Forrest model that does not comprise the model and methods used by the subject teacher. The main aim and objective of these are to enable the learners to operate at a level higher than the normal level to offer educational solutions for the enhancement of their mental

capacity and artistic work and the fulfilment of the simple goal of Educational unit. That is why this research is valuable as the application of the Forrest model is one of the innovative approaches towards learning in general, and more specifically, specialized learning of some artistic gymnastic skills for female students. In addition, the acquisition has a significant role in assisting female learners in finding appropriate solutions to educational challenges in the course of performance since they can visualize the skill mentally before they implement it; the technique assists in enhancing the learners' attention by triggering brainstorming. To get to an acceptable level of achievement of the technical dimension of the skills by the learners within the given time for their performance.

Research problem

The primary objective of the educational process refers to the correct model and method that transfers knowledge to the

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learners to attain the best level. Therefore, it can be stated that the kind of the educational program and the modern models provided by the subject teacher play a major role in achieving, acquiring and developing of the skills, especially the skills that are considered as the difficult and high compatible and consistent in Performance; because there are many details during the Performance; Thus, the researcher intended to overpass this research problem by surveying the gymnastics teachers about the level of female students about the difficult and Performance and there is weakness in mental perception and attention, Thus she used different educational method from that adopted by the subject teacher for enhancing and developing the students' mental processes and for teaching the research skills through the exercise adopted towards the accomplishment of the overall stated goal of education process.

Research objectives

1. In the implementation of educational and methodological exercise according to the Forrest model in mental visualization and attention, the subject of gaining some of the skills in forward and backward rolling on the mat of floor movements in artistic gymnastics for female students, for the benefit of the experimental group.
2. Determining the impact of the educational exercises based on the Forrest model on mental perception and attention by studying the skills of forward and backward rolls on the floor in MA in artistic gymnastics for females.

Research hypotheses

1. It was understood that there is a positive influence of educational exercise via the Forrest model on mental visualization and focus in learning the skills of forward and backward rolling on the floor movement mat in artistic gymnastics for the female students.
2. Determine the sunders/reacts of the effect for the experimental and control group.

Areas of research

1-5-1-The human field: third year female students of the College of Physical Education and Sport Science University of Karbala.

Time range: 14 November 2023 to 24 May 2024 1-5-2

1-5-3- Spatial field: Hall with closed gate - College of Physical Education and Sports Sciences - University of Karbala.

RESEARCH METHODOLOGY AND FIELD PROCEDURES

Research methodology

The researcher used the experimental method in the style of equal groups with pre-tests.

The research community and its sample

According to the female students of the stage three (College of physical education and sport sciences- University of Karbala) using simple random sampling technique, the research population consisted of (55) students. In the selection of the sample, a simple random method was used and they were grouped into two groups namely; the experimental group of (50) and the control group of (50), out of this total of (50) , (5) were selected for the experiment. reconnaissance.

Homogeneity of the research sample: The determiners that are used in the English language are and, are not and other such differing forms to express affirmation or negation

Due to the need to achieve the homogeneity of the basic sample members among themselves in some extraneous variables (growth variables) that the researcher considered may affect the independent variable in the development of the dependent variable, the researcher extracted descriptive statistics indicators by way of arithmetic mean, mode, standard error, standard deviation, coefficient Torsion as presented in – Table (1).

From what appears for Levin's results in the table above, we see that the sum of the values was not significant, and this indicates significance, and this indicates the homogeneity of the research sample.

Methods, devices and tools used in the research

Means of collecting information:

- Arab and foreign sources
- Observation and interview.
- Testing and measurement.
- Internet information network.

Devices and tools used in the research:

- DeeL laptop
- Electronic calculator: (laptop) (Lenovo) to assist with study procedures (printing) (number 1).

Table (1). It shows the homogeneity of the basic sample members in growth variables

Torsion coefficient	Standard error	Standard deviation	Median	Arithmetic mean	High degree	Low degree	Sample	Unit of measurement	Variables	No.
-0.11	00676	03702	1.58	1.5787	1.65	1.50	30.00	cm	length	1
0.54	1.00179	5.48153	69.00	68.4333	79.00	60.00	30.00	kg	weight	2
-0.84	34818	1.90703	22.00	21.4667	24.00	19.00	30.00	year	Age	3

- The spinning wheel device: An educational device that is a spinning wheel for learning the skill of standing on the hands on the floor mat.
- Sponge rugs: (50) rugs.
- Wooden box: number (50).
- 1 camera (Sony), Japanese made
- Trampoline device.
- Electronic stop watch.
- Balance beam.

Field research procedures

The educational program using the Forrest model: The researcher applied the educational units using the Forest educational model to members of the experimental group, which are as follows:

Experimental group: The educational program commenced on 1/19/2024 being Sunday and ambitiously ended on 3/20/2024 also being Sunday. It included proper exercises for the educational units to learn the researched skill and special duties using the (Forest Model) method leading them the way they prefer to follow because of aptitude and desire and utilizing their potentiality in right manner to enhance their mental vision and concentration. I was interested in The researcher made sure there were no differences between the groups in all aspects of the educational units, as it advanced to (8) educational units.

Preparing exercises for the Forrest model: The given exercises were based on scientific sources and the outcomes of the exploratory experiment conducted by the researcher.

In light of this, special exercises for each skill were determined during field procedures, as follows: In light of this, special exercises for each skill were determined during field procedures, as follows:

- The exercises were conducted in the artistic gymnastics hall of the College of Physical Education and Sports Sciences/University of Karbala, researcher; where the researcher developed four exercises pertaining to each of the four basic skills for each.
- The length of the program is (8) weeks and in total is 200 clock hours or sixteen (16) course/education units. This is in support with the recommendation of both Clay Zink ((Klinzing) and Sharky ((Sharky,()) who states that units per week should be ideally between (2). -3) The choice of the unit and the number of weeks should not be less than six weeks so that.
- The exercises were, as previously pointed out, provided by the subject teacher and administered under the guidance of the researcher. The exercises were administered in the applied subsection of the main part of the educational activity, which takes (50) minutes.
- The educational units consisted in describing and demonstrating each of the skills to be performed on artistic gymnastics equipment (front roll, back roll, handstand). The time of the educational part took (15) minutes of the spacing of the time of the main section. The skill was exhibited in full and then transitioned to the amounts and

principal parts of the levels of the skill's execution (hand positioning, head position, torso, tension, etc.). However, the learner starts at a complex level of the specifics of the situation and later focuses on the components that comprise it. In other words, when the skill is introduced to the student, he wakes up to it and halts. On its basic components and aspects so that he would have a holistic understanding of the skill.

- It is clear that the researcher employed the progress principle by going through simple exercises to the compatibility level then proceeded to more complicated exercises.
- The researcher stayed with the allowed time of (12. 5) minutes to do each exercise in the manner he arrived at through the exploratory experiment. He restricted the student to wait for her position among the female students to perform the exercise and there is a break between repetitions given deep breath for counts (5) in order to get strength. Through the reconnaissance experiment, their psychological and physical health status were determined.
- The researcher utilized other supporting items namely a glove, a wall, an academic bench, a trampoline, foam mats, a wooden box, and an academic spinning wheel apparatus; further, the researcher drew a geometrical figure on the floor.

Exploratory experience: The researcher conducted a reconnaissance experiment on a group of (5) female students who were randomly selected from the research community to perform mental visualization and attention tests.

Procedures for determining mental perception and attention: As for the preparation of the tools used in the present study, the author reviewed the scientific sources and references necessary to identify the mental perception and attention of the female students of the third stage in the College of Physical Education and Sports Sciences and determined the group of mental abilities most important for learning forward and backward rolling skills to the female students in the gymnastics lesson and included them in a questionnaire form and administered it to a group of experts. And specialists in the motor learning field and specialists in gymnastics. After the questionnaires were collected, using tape-recording, the opinions of experts were counted by statistical analysis with the law of relative importance to select the most important mental abilities among female students highlighted by the experts and specialists, as in Table (2).

Determine tests of attention and mental perception: After determining the appropriate mental abilities for third-year female students at the College of Physical Education and Sports Sciences, University of Karbala, the researcher designed another questionnaire to nominate the tests that measure mental abilities. The "Roedt" scale was chosen* Attention methods expressed by (Muhammad Hassan Allawi) which It was nominated by experts, and the Reiner Martens ** test for mental visualization and expressed by (Muhammad Al-Arabi), who confirmed the validity of the two scales, in measuring methods of attention and mental visualization, at a rate of (90%) through the use of the Kendall agreement coefficient, since the value of the Kendall correlation coefficient was (0.901).

Table 2. It shows the degree of importance of determining the selected mental abilities according to the opinions of (10) experts and specialists

Acceptance of Nomination		Importance Percentage	Importance Degree	Mental Abilities	
No	Yes				
	✓	%83	100	external focus of attention	
	✓	%88	105	tolerance to external stimuli	
	✓	%75	90	internal focus	
	✓	%92	110	internal stimulant tolerance	Attention Methods .1
✓		%42	50	narrow focus of attention	
✓		%38	45	Reduction	
✓		%46	55	Treatment	
	✓	%67	80	Visual perception	
	✓	%70	85	Auditory visualization	Mental Imagery and Its Axes 2
	✓	%92	110	Sensori-kinesthetic perception	
✓		%58	70	Emotional perception	
✓		%42	50	Distance perception	
✓		%46	55	time perception	
✓		%33	40	Awareness of vertical space	Perception 3
✓		%33	40	Awareness of horizontal space	
✓		%42	50	Perception of place	
✓		%38	45	Power perception	
✓		%42	50	Intelligence	4
✓		%38	45	Thinking	5
✓		%46	55	Creativity	6
✓		%25	30	Reaction	7
✓		%29	35	Ability to relax	8

4-3-2- Tests (mental perception and attention)

Reiner Martinez mental visualization test ()

The researcher used the Arabicized and standardized version of the Martinez Mental Visualization Scale (1982) by Muhammad Al-Arabi and Majid Ismail. The scale includes a description of four mathematical situations:

- a. Practice on your own
- B. Practicing with others
- C. View colleague
- Dr. Performance in the competition

As the learner imagines herself realistically whenever possible, the perception of the situation is then evaluated in light of four dimensions.

- a. How do you see the image (visual axis)
- B. How clearly do you hear sounds (auditory axis)
- C. How do your body muscles feel during performance (sensory-kinesthetic axis)
- Dr. How do you characterize your mood (emotional axis)

After completing the mental visualization process, evaluate yourself according to a five-dimensional rating scale as follows:

- A- Lack of a mental image of the activity (none)
- B- There is an image but it is not clear (unclear)
- T- A moderately clear image (medium)
- D- A very clear picture (clear)
- C- A very clear image (very clear)

First: Imagine practicing on your own:

Choose a gymnastics skill, let it be the forward roll, and you perform it in the hall without anyone being with you, then close your eyes for a minute and try to imagine yourself performing the skill in this place, focusing on hearing the

surrounding sounds during the performance, feeling and feeling your body, and being aware of your condition. Mental and emotional.

Second: Visualize the practice with others

Now imagine yourself performing the skill of the backhand jump as well, but with the presence of the school and the students, and this time you made a clear mistake in the performance. Close your eyes for a minute and imagine yourself in this situation and the remarks that will be issued by the school after that.

Third: Imagine watching a colleague

Think of a colleague performing a skill, but she makes a mistake and fails to perform the skill. Close your eyes for a minute and imagine this colleague of yours failing to perform the skill.

Fourth: Visualize the performance in the competition

Imagine yourself playing in an important tournament or competition, and you are performing the skills you have learned beautifully, and there is an audience present in the hall, all of them encouraging you and chanting your name. Now close your eyes for one minute and imagine yourself in this state.

Note: Estimating the degree of mental imagery is as follows:

Visual perception: All degrees in statement (1) for the four situations =

Auditory perception: All degrees in phrase (2) for the four situations =

Sensory-motor perception: All degrees in statement (3) for the four situations =.....

The score ranges between (4) as a minimum and (20) as a maximum. The higher the score, the more competent you are with mental visualization.

Evaluation: After completing the visualization process, we have to know our score in this test, and the score is calculated by summing the scores for each axis separately. My agencies:

The first area: focusing broad external attention:

It is the method by which the learner pays attention to several external variables at the same time.

The second area: Overloading of external stimuli:

This is the method in which the learner is characterized by the ability to pay attention without making mistakes due to her confusion and excessive bearing of the burden of many different external stimuli at the same time.

The third area: focusing broad internal attention:

It is the method by which the learner pays attention to several internal variables at the same time.

Fourth area: Overloading internal stimuli:

This is the method in which the learner is characterized by the ability to pay attention without making mistakes due to her confusion and excessive bearing of the burden of many different internal variables at the same time.

Scientific foundations of tests:

The researcher extracted the scientific foundations of tests for mental perception and attention:

- 1- Validity of the test: The researcher used content validity on a group of experienced and specialized people to ensure the validity of the test.
- 2- Test stability: The researcher began applying the tests to the exploratory group, then re-administered the test after (7) days, and it was noted that it gave the same test results as the previous week. .

Pre-test

The researcher conducted (2) introductory units on the work and selected skills, the first introductory unit on Tuesday, corresponding to (1/19/2024), and the second introductory unit on Wednesday, (1/20/2024). Then he began conducting the pre-measurement on members of the basic sample of female students. The third stage of the College of Physical Education and Sports Sciences / University of Karbala, numbering (50) students, on Thursday (1/21/2024) for research variables, obtaining data, and recording them in special forms in preparation for treating them statistically and revealing the equality of the two research groups.

Equivalence of the two research groups

For the purpose of revealing the equality of the two research groups (control and experimental) in the variables investigated, the researcher sought to extract values (arithmetic means and standard deviations) for members of the two groups and for all variables under research that are concerned with learning, represented by (gymnastic skills), and when inferring the significance of the differences between the means through the use of a test (t) For independent and equal samples, the results of the statistical analysis showed non-significant differences between the arithmetic means and for all variables, which confirms the equality of the two groups for all variables, as shown in Table (3).

A form to evaluate skill in artistic gymnastics: The competence was assessed by the arbitrators in the area of artistic gymnastics by in giving the student a mark of (0-10) on the skill. The researcher used 3 specific arbitrators and (3) tries were made for each student and they were photographed. After that, the performance was assessed through a Photo-Realization of the production to the arbiters (The preparation was split into Preparation (3) degrees, Main Part (5) degrees and Conclusion Part (2) degrees.

Post-test: After going through the process of the application of the exercises in line with the sensorimotor pattern of the group members of the experimental group that comprised (8) educational units, the researcher administered the post-test to all the members of basic experiment sample originating from

Table 3. It shows the equality of the two research groups (control and experimental) in the variables investigated

Significance level	T value	Significance level	Levin value	Standard error	Errors	Means	Sample	Groups
0.74	0.34	0.08	3.24	0.33	1.29	2.67	15	Control
				0.22	0.83	2.53	15	Experimental
0.83	0.22	0.31	1.08	0.19	0.72	1.67	15	Control
				0.24	0.91	1.60	15	Experimental
0.76	0.31	0.73	0.12	0.47	1.84	9.33	15	Control
				0.43	1.68	9.13	15	Experimental
0.94	-0.08	0.65	0.21	0.56	2.17	9.53	15	Control
				0.62	2.41	9.60	15	Experimental
0.80	0.26	0.24	1.42	0.41	1.59	10.33	15	Control
				0.67	2.59	10.13	15	Experimental
0.66	0.44	0.45	0.60	0.51	1.98	14.07	15	Control
				0.55	2.12	13.73	15	Experimental
0.89	0.14	0.81	0.06	0.67	2.61	13.40	15	Control
				0.69	2.66	13.27	15	Experimental
0.91	0.11	0.47	0.52	0.87	3.36	13.60	15	Control
				0.77	3.00	13.47	15	Experimental
0.95	0.06	0.45	0.59	0.67	2.60	15.20	15	Control
				0.83	3.20	15.13	15	Experimental

the two groups; control and experimental groups on the Thursday April, 25, 2024 The environment in which the post test was administered was similar in all aspects to that of the pre-test Prior to the test, data collection and its registration in special forms for statistical analysis.

Statistical methods

The researcher used the Statistical Portfolio for the Social Sciences (SPSS) to process

THE RESULTS ARE PRESENTED, ANALYZED AND DISCUSSED

Presenting, analyzing and discussing the results to the research groups

After completing the research procedures, which include the steps for implementing all tests (pre- and post-tests) and obtaining the raw scores for the tests. For the purpose of achieving the second goal of the study, which includes identifying the effect of educational exercises based on the Forrest model on mental perception and attention by learning the skills of forward and backward rolling on the mat of floor movements in artistic gymnastics among female students of the College of Physical Education and Sports Sciences at the University of Karbala, the researcher sought to study the pre- and post-measurement teams for the members of the research group. Experimental and controlled.

Presenting, analyzing, and discussing the results of the pre- and post-measurement teams for members of the control group: In order for the researcher to be able to identify the difference between the pre and post measures among member in the control group the researcher endeavored to analyze the data collected during the pre and post-trial statistically for the purpose of extracting the statistical descriptive measures represented by the arithmetic means, standard deviation and standard error for the following variables; attention methods, mental imagery, forward rolling on Floor movements mat, back rolling on the floor mat and mentally tally. It's evident that the control group members' pre- and post-measurements for the variables (attention methods, aspects of mental imagery, forward rolling on the ground movement mat, and backwards rolling on the ground movement mat)

differ significantly, both in terms of the values of the arithmetic means and when considering the significance of these differences. According to the results of the (T) test for correlated samples, the value of (T) between the pre- and post-measurements of the forward roll on the ground motion mat variable was 5.77, which is higher than its tabulated value of 14.2 at a significance level of 0.05 and 14 degrees of freedom. Similarly, the value of (T) for the rear roll on the ground motions variable was 9.91, which is higher than its tabulated value. Lastly, the value of (T) for visual perception was 2.25, which is higher than its tabulated value at the significance level of 0.05. at the level of significance (05.0) and degree of freedom (14), whereas the computed value of (T) for auditory perception was (2.65), which is higher than its tabular value. This further supported the idea that the support group members' pre- and post-test arithmetic means were significantly different. A female police officer. According to the researcher, the subject teacher's chosen method of instruction has an effect on the students' capacity to master artistic gymnastics floor routines. The control group followed the subject teacher's approved method of instruction, which included appropriate repetitions with each lesson, continuous exercises that were appropriate for the students' abilities, and a progression in the difficulty of the movements and the skills they demonstrated. This is in line with the claim made by Najah Mahdi Shalash and Akram Muhammad (2000), who reasoned that training and repeated attempts are crucial to the process of acquisition. Training also plays a significant role in the individual's interaction with the skill, helping them manage their movements and achieve proper synchronisation among the movements that make up the skill, allowing for purposeful, proper, sequenced, and timely movements that improve learning.

Communicating with the experimental group by presenting, analysing, and debating the results of the pre- and post-measurement teams: The researcher aimed to statistically analyse the data and extract the values of the quantitative descriptive statistics of the arithmetic mean, the standard deviation, and the standard error of all the variables related to the research, including attention methods, aspects of mental imagery, forward rolling on the mat of movements, back rolling on, and so on. This would allow them to compare their pre- and post-measurements with those of the experimental group.

Table 4. It shows the difference between the pre- and post-measurements of the control group members for the investigated skills

Significance level	T value	Standard error	mean difference	Errors	Means	Test	Variables
0.00	5.77	0.36	2.07	1.16	4.73	بعدي	Front roll
				1.29	2.67	قبلي	
0.00	9.91	0.26	2.53	0.94	4.20	بعدي	Backward roll
				0.72	1.67	قبلي	
0.04	2.25	0.80	1.80	2.85	11.13	بعدي	Visual perception
				1.84	9.33	قبلي	
0.02	2.65	0.80	2.13	2.23	11.67	بعدي	Auditory visualization
				2.17	9.53	قبلي	
0.10	1.75	0.65	1.13	3.00	11.47	بعدي	Sensory-kinesthetic perception
				1.59	10.33	قبلي	
0.01	3.22	0.48	1.53	1.84	11.33	بعدي	Visualize. Emotional
				2.65	9.80	قبلي	
0.00	3.76	0.99	3.73	3.10	17.80	بعدي	Focus. External
				1.98	14.07	قبلي	
0.00	3.81	1.01	3.87	2.81	17.27	بعدي	Tolerance to an external stimulus
				2.61	13.40	قبلي	
0.02	2.54	1.23	3.13	3.95	16.73	بعدي	internal focus
				3.36	13.60	قبلي	
0.02	2.74	1.12	3.07	2.79	18.27	بعدي	internal stimulant tolerance
				2.60	15.20	قبلي	

Table (5). It shows the difference between the pre- and post-measurements of the experimental group members of the investigated skills

Standard error	T value	mean difference	Errors	Means	Test	Variables	
						After	Before
0.00	11.91	0.36	4.27	0.94	6.80	After	Front roll
				0.83	2.53	Before	
0.00	13.51	0.32	4.27	0.74	5.87	After	Backward roll
				0.91	1.60	Before	
0.00	13.43	0.54	7.20	1.35	16.33	After	Visual perception
				1.68	9.13	Before	
0.00	7.63	0.80	6.13	1.49	15.73	After	Auditory visualization
				2.41	9.60	Before	
0.00	6.20	0.86	5.33	1.81	15.47	After	Sensory-kinesthetic perception
				2.59	10.13	Before	
0.00	10.85	0.52	5.67	1.55	15.40	After	Visualize. Emotional
				1.49	9.73	Before	
0.00	11.65	0.93	10.80	4.29	24.53	After	Focus. External
				2.12	13.73	Before	
0.00	7.42	1.06	7.87	2.72	21.13	After	Tolerance to an external stimulus
				2.66	13.27	Before	
0.00	5.67	1.21	6.87	2.74	20.33	After	internal focus
				3.00	13.47	Before	
0.00	5.70	1.45	8.27	7.05	23.40	After	internal stimulant tolerance
				3.20	15.13	Before	

It is evident that the experimental group's pre- and post-test results for all variables (attention methods, aspects of mental imagery, forward rolling on the floor movement mat, and backwards rolling on the floor movement mat) differ significantly in terms of both the arithmetic means and standard deviations. Based on the results of the (T) test for correlated samples, we can infer and draw conclusions about the discrepancies and differences between mathematical settings. For example, for the frontal roll variable on ground movements, the calculated value between the pre- and post-measurements was (11.91), which is greater than the tabulated value (14.2) at a significance level of (05.0) and a degree of freedom of 14. Similarly, for the back rolling variable on ground movements, the calculated value was (13.51), which is greater than the tabular value. This proves that the Forrest model workouts have a noticeable impact on learning artistic gymnastics floor motions, such as front and back rolling on the mat. Since the educational units included a variety of fast and slow movements based on movement time, frequency, and distance, as well as a group of movements for the torso, arms, legs, and head, the researcher found that these exercises activated the largest number of muscles. There was also the usage of an instructional pamphlet and a display screen. The experimental group was able to learn and master the skill of rolling forward and backwards on the ground movements mat because all of this contributed to the development of the mental talents indicated by (attention methods and mental images). As a result, the three primary components of any effective learning system the instructor, the student, and the subject matter are critically dependent on one another. The researcher is of the belief that fostering a sense of wonder and a desire to learn in the student can improve their LJ and LT relations, broaden their experience domain, and inspire them to engage in a variety of classroom activities. especially if the lesson plan that uses the Entertaining Forest model of instruction piques the students' curiosity, encourages them to

seek out more information, and ultimately leads to higher levels of intrinsic motivation and the development of novel For this reason, lesson plans that incorporate the Forrest model's tenets help students retain more information from their experiences, which in turn improves their learning. As a result of their unique qualities, they contribute to the problem-solving process while also holding the key to necessary diversification and renewal. Training exercises based on the Forester model are very beneficial because they appeal to more than one sense of the learner. This is because research by educational psychologists has shown that when students are presented with information using more than one sense, they retain more of it, which speeds up their learning and increases their experience. For this learning and acquisition of the above researched skills, the researcher infers that the students responded to all the learning requirements through the educational units as the most effective means of highlighting energies, sustaining the requisite level and attaining the goals as the researcher postulate In display of the skill on the computer screen is to keep abreast with the scientific advancement that is always occurring in all fields of knowledge and learn through the correct display which this game lacks several models.

Displaying and analyzing the results of the dimensional measurements between the research groups

The third objective of the study was to determine whether there were any differences in the effectiveness of the Forrest model compared to the teacher-approved approach in enhancing mental abilities (attention, mental imagery, and level of performance on gymnastics equipment). To this end, the researcher sought to extract the post-measurement values of the arithmetic mean, standard deviation, and standard error for the data of the experimental and control groups, as shown in Table (6).

Table 6. It shows the difference in post-measurements for individuals in the experimental and control groups

Standard error	T Value	Standard Error	Error	Mean	Sample	Groups	Variables
0.00	5.35	0.24	0.94	6.80	15.00	تجريبية	Front roll
		0.30	1.16	4.73	15.00	ضابطة	
0.00	5.38	0.19	0.74	5.87	15.00	تجريبية	Backward roll
		0.24	0.94	4.20	15.00	ضابطة	
0.00	6.39	0.35	1.35	16.33	15.00	تجريبية	Visual perception
		0.74	2.85	11.13	15.00	ضابطة	
0.00	5.89	0.38	1.49	15.73	15.00	تجريبية	Auditory visualization
		0.57	2.23	11.67	15.00	ضابطة	
0.00	4.43	0.47	1.81	15.47	15.00	تجريبية	Sensory-kinesthetic perception
		0.77	3.00	11.47	15.00	ضابطة	
0.00	6.55	0.40	1.55	15.40	15.00	تجريبية	Visualize. Emotional
		0.47	1.84	11.33	15.00	ضابطة	
0.00	4.93	1.11	4.29	24.53	15.00	تجريبية	Focus. External
		0.80	3.10	17.80	15.00	ضابطة	
0.00	3.82	0.70	2.72	21.13	15.00	تجريبية	Tolerance to an external stimulus
		0.73	2.81	17.27	15.00	ضابطة	
0.00	2.90	0.71	2.74	20.33	15.00	تجريبية	internal focus
		1.02	3.95	16.73	15.00	ضابطة	
0.00	2.62	1.82	7.05	23.40	15.00	تجريبية	internal stimulant tolerance
		0.72	2.79	18.27	15.00	ضابطة	

It is therefore evident that whereas there was disparity and dissimilarity between the means and standard deviations of the two gross body dimensions and all mental parameters, forward and backward roll. While using (T) test for independent and equal samples to infer the probability about the differences of the arithmetic means and, therefore, assess the statistical significance of the differences showed that in the case of the forward roll variable the calculated value of (T) was equal to 5.35 and in the case of the backward roll variable the calculated value was equal to 5.38. This means that there is a high level of significance in the two dimensions between the two groups (control and experimental) and it's more favored by the members of the experimental group because the arithmetic mean values in all. .. Variables in relation to study and research. According to the findings of the statistical analyses of the data Collected based on the data analysis, it was emerged that at the level of (0.05) there is a statistical significance in all rational variables which are the methods of attention and mental perception. The researcher lays this to the fact that the organizational práce operates in accordance with this type of educational units where consideration is given to the sensory systems of the female students. It resulted in the students' participation during competitive scenarios following training frameworks conceptualized from clear, and unambiguous guidelines, objectives, and principles, where-in each student strived to showcase her capability and capacity to achieve an intended goal. Hall Wessel, quoting Ali Fahmi Al-Baik, points out, "The most practice involves more than one sense, method and style in a manner that resembles competition To To acquire some of the sports skills is to deliver them with more than one sense, method and style. The researcher claimed that these outcomes as the motor and skill exercises executed within the educational units with different form used to modified and strengthen the foundational base involved to fine-tune the forward and backward rolling skills performance. Among the aspects of learning as per educational practices and processes, the foundational concerns of motor skills are wholly comprehensible in the student's mind in an attempt to regulate them and this matrix also appealed to the best kinds of educational applications that fueled the students' activity, motivation as well as enthusiasm for performance because it was based on the desire and volitional learning style of the student along with the nature of learning that was aligned with the concept of the game

The researcher also attributes this to the clarity of the results in front of the students while performing the selected exercises that were set according to clear and specific standards, in which the individual error is It is decided and specific, and the student responsible for it feels that she is the product of her performance alone and cannot attribute it to others, and this in itself urges her to exert more effort, and this is consistent with what (Hassan Shehata Rabie, 1998) pointed out: "The tutor's feeling of success during competitive work leads to His motivation in the educational situation and striving to wager his competitor by presenting his best accomplishments" f. With the help of the educational units that apply the Forrest model, the information can be provided in the most accurate and comprehensible manner, while the student may study the visual objects; the student may review the different aspects of the skills' movements, and she acquire the opportunity to engage and interact with the program or the experiment from the scientific point of view, as well as she is provided with the right chance during an open time segment that is consequently devoted It is not precise and restores the communication between the student and the program based on positive presence and comments. Hence, it initiates deep thinking, analysis, observation, science and skill enhancement, the mental and inventive abilities of the female students through sets of exercises formulated using the Forrest model which accords with the differences in the female students so that, there is a room leadership opportunity for the female student because, it postively impacts the learner in accordance with the content of the program and, such that the learner is made more interactive than being a mere receptor It offers the chance to the student to learn and gain new approaches, methods and several schedules by which she can interact with different individuals, discover other cultures and assume a separate part in them. In its turn, motor skills are learned through the sensations and interaction in the context of an educational program.

Conclusions

- A number of conclusions were drawn by the researcher based on the study's results, including: The study's findings led the researcher to draw several conclusions, such as:
- Think about the components and abilities of women's artistic gymnastics' forward and backwards rolls on the mat and floor exercises, and build lesson plans on the Forrest model of attention and mental modelling.

- Third-year female gymnasts at the University of Karbala's College of Physical Education and Sports Sciences favoured the following learning style: using the Forrest model to improve their focus and perception as they mastered the forward and backwards rolls performed on the mat or floor.

Recommendations

- It is better to focus on the educational model that gives a chance to the student to study according to his preferences, wishes, and capabilities offering the right to pass according to his desire.
- As for the students in Colleges of Physical Education and Sport Sciences, it would be better to Perform a similar study for the other subjects and stages.

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