

# THE EFFECT OF AN EDUCATIONAL CURRICULUM USING ULTRA-INTERFERENCE MEDIA ON SOME LEARNING OUTCOMES FOR EFFECTIVE WEIGHT-BEARING STUDENTS AGED (13-15) YEARS

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## ABSTRACT:

*The thesis aimed to prepare questions related to the (cognitive) learning outcomes of the experimental group, and to prepare an educational curriculum using ultra-interference media, the effectiveness of pushing gravity for middle school students, and identifying the effect of using ultra-interference media in some of the learning outcomes in performing the performance of gravity for middle school students.*

*The researchers hypothesized that there were statistically significant differences between the pre and post tests in some learning outcomes in the effectiveness of pushing the weight of the experimental and control groups.*

*The two researchers discussed theoretical studies that contained topics related to the research topic, which is the concept of hypermedia, the contents of hypermedia and the components of hypermedia media (hypermedia) and the requirements of producing educational programs designed according to the characteristics of hypermedia, and also touched on the cognitive aspect and the skill aspect of learning outcomes and the technical stages of effective payment Gravity.*

*The researchers chose the experimental approach with the two control and experimental groups for each activity and the pre and post tests, and this method is one of the important methods to reach the results accurately.*

*The researchers identified the research community, and they are a group of middle school students aged (13-15) years in Maysan Governorate who participated in the championship of the provincial schools in the square and this field. The research sample was chosen by the intentional intent to provide the conditions and conditions that suit the research procedures, as they were (20) As a student of the effectiveness of pushing the weight and they were divided into two groups, each group consisting of (10) control and (10) experimental, for the academic year 2018-2019.*

*The appropriate statistical treatments have been used to reach the results, after which the results were presented, analyzed and discussed, and the two researchers reached the most important conclusions, in light of the research results, which include the following:*

- *There is a noticeable improvement in raising the scientific knowledge of middle school students participating in the experiment (experimental research sample) for the effectiveness of pushing the weight, and this is a result of the theoretical material in the questions prepared by the researcher (cognitive test).*
- *The technical performance has improved in all the technical stages of the activity under study (pushing the weight), and this is a result of the application of the program prepared by the researchers, which is the high-interference media (Hypermedia).*
- *Hypermedia has a significant role in influencing positively some of the learning outcomes used in the research.*

## INTRODUCTION

The thesis aimed to prepare questions related to the (cognitive) learning outcomes of the experimental group, and to prepare an educational curriculum using ultra-interference media, the effectiveness of pushing gravity for middle school students, and identifying the effect of using ultra-interference media in some of the learning outcomes in performing the performance of gravity for middle school students.

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- There is a noticeable improvement in raising the scientific knowledge of middle school students participating in the experiment (experimental research sample) for the effectiveness of pushing the weight, and this is a result of the theoretical material in the questions prepared by the researcher (cognitive test).
- The technical performance has improved in all the technical stages of the activity under study (pushing the weight), and this is a result of the application of the program prepared by the researchers, which is the high-interference media (Hypermedia).
- Hypermedia has a significant role in influencing positively some of the learning outcomes used in the research.

## MATERIALS AND METHODS:

The researchers determined the research community, and they are a group of middle school students aged (13-15) years in Maysan Governorate who participated in the championship of the provincial schools in the square and this field. The research sample was chosen by the intentional intent to provide the conditions and conditions that suit the research procedures, as their number was (20) As a student for the effectiveness of pushing the weight down, they were divided into two groups, each group consisting of (10) control and (10) experimental groups, for the academic year 2018-2019.

The following tools have been used

Arab and foreign sources.

Programs used in the design and preparation of hypermedia (Hypermedia).

:A set of programs that were used in the research, as follows

- .Camtasia Studio -
- .Adobe audition -
- .Photoshop Photo Marketing (Adobe Photoshop CS6) -
- .Multimedia Builder 4.9.8 -
- ).10 (laptop calculators -
- .An external hard disk to save recorded films -
- ).2 (video camera -
- One (1) photography camera.-
- .CD-DVD -
- .Playground and square field -
- Weights (20) weights (5 kg).-
- .Medical balls -
- ).Model (player -

The researchers conducted the first exploratory experiment on middle school students who are (10) ages (13-15) years without a research sample on 02/20/2019 corresponding to Wednesday. The researchers conducted an exploratory experiment about the possibility of running the educational program or the educational method on all Computer operating systems.

On Thursday 21/29 corresponding to Thursday, the two researchers conducted the second exploratory experiment in the playground of the Scout Camp of the General Directorate of Education of Maysan on students from the research community, numbering (10) from the middle stage and its purpose is to ensure that the researchers control their experiment at a later time.

Table (1)

Equivalence of the sample is shown for the control and experimental groups

indication	Sig	Calculat ed t	Control group		Experimental group		Variables
			standar d deviat ion	Arithm etic mean	standar d deviat ion	Arithm etic mean	
Not significant	.288	1.096	1.47464	13.8090	1.35520	14.5030	The disc

Moral <(0.05) at the degree of freedom (18) and below the significance level (0.05)

First test:

Performance evaluation test for gravity effectiveness (Al-Fadhli& Faisal, 2010, p. 115)

Test name: Weightlifting performance evaluation test.

The goal of the test: To measure the performance of the ballast's effectiveness

The equipment used: square and field stadium, weights (5 kg), weight (3), tape measure.

Method of performance: The learner carried the disk at the start signal and then performed the effectiveness of pushing the weight into the throwing circle.

The educational curriculum for the main experiment was applied to the experimental sample, starting on Thursday 28/2/2019, as follows:

- Curriculum duration (7) weeks, the number of units (2) educational units per week.

- The exercises were implemented in the main unit of the educational unit, with a time of (45) minutes.

- The control group applied the usual exercises by the educational process operator and under the supervision of the two researchers.

Tribal tests:

The researchers conducted tribal tests on all members of the experimental and control samples, on Saturday, February 23, 2019 at four o'clock in the afternoon, and the tests included a performance evaluation test and a cognitive test of the effectiveness of pushing the weight, and they also processed the results of tribal tests for the control and experimental groups by statistical means Appropriate, in order to avoid the influences that may affect the results of the research despite the fact that the sample represents one mixture, and was treated using statistical means (arithmetic mean, standard deviation, and the value (T) of the correlated samples, in order to return the differences to the world Hope the pilot, and to start from the point of initiation, to verify the parity of the sample, as shown in tables (1).

Registration:

The player was given three attempts, and the evaluation was made from (10) scores via a CD with the evaluation form that was submitted to the experts.

The second test:

The researcher has prepared a set of questions for the cognitive test in the aspects of informational learning (technical stages, common mistakes, effectiveness law) for the activities under study in the light of the educational curriculum prepared by the researcher. The questions prepared by the researcher were presented to the experts specialized in this field, as it was nominated ( 10) Questions for each activity. Each question includes four answers. The student chooses the correct answer from them so that each correct answer has one score and the total score (10) degrees. The objective method in preparing the test scientifically and educationally has been taken into account in terms of the validity of the scientific subject and its suitability to the level of students and clearness H articulate.

Post-test:

The post-tests were conducted on Sunday 21/4/2019, and the researchers were keen on the importance of similar conditions for the pre- and post-tests, and the researchers addressed the results between the pre- and post-exams of the control and experimental groups by appropriate statistical means, for the purpose of knowing the significance of the differences or not in the exams examined, It was handled using the statistical bag (SPSSver.12) and the EXCEL program within the Microsoft package to extract (mean, standard deviation and tabular value (T)

**RESULT AND DISCUSSION:**

The results of the pre and post tests of the two research groups:

Table (2) shows the arithmetic mean, the standard deviation and the calculated value (T) between the pre and post tests of the experimental and the control groups for the efficacy of gravity

indication	Sig	Calculat ed t	Standard deviation of differences	Media teams	Post-test		Pre-test		Variables
					standard deviation	Arithmetic mean	standard deviation	Arithmeti c mean	
moral	.000	10.410	.18981	1.97600	.77400	7.5240	.49984	5.5480	Experimenta 1
moral	.003	4.088	.06678	.27300	.18216	5.5450	.20832	5.2720	Control

Moral <(0.05) at freedom degree (9) and below the significance level (0.05)

In Table (2), we find that the calculated value (Sig) is less than (0.05) and this means that the difference is significant and in favor of the post-test of the two groups (experimental and controlling) for all technical stages of effectiveness of pushing the weight and the researcher attributes this to a good and adequate explanation of the educational process of the two research groups in this The activity and presented a good model for both groups, which led to drawing a clear mental image for the learner of this activity.

Likewise, the number of educational units had a significant impact on events of change and improvement in the overall level of performance, as the number of units was unified for both groups, which is (13) educational units.

The researcher believes that the focus on the part of the educational process in the application of the educational program for both groups is on the basic steps in learning performance for each stage, for example, emphasizing putting fingers on the tool accurately in the stage of holding the weight in order to reach the maximum push of the tool in the final stage, which is the stage of pushing the weight The same applies to the balling and gliding stage, as it was emphasized to

put the body in the balling stage and to bend the legs from the knee joint and the weighted leg of the free and slippery man as soon as possible and rotate to face the field of throwing to reach the correct performance.

Also, the spotlight was highlighted by the person in charge of the educational process on the most important points related to the law of effectiveness of pushing gravity and technical errors regarding performance, which enabled the learner to create the correct and clear picture of the learner and refer to it whenever he needed it.

Likewise, the self-feedback used by the learner through the freedom of the learner to see the educational method when it is needed, which can contribute greatly to increasing the effectiveness of learning and its integration into educational situations and experiences and in turn leads to correcting mistakes and drawing the correct paths for the performance of learners to achieve better performance. This is indicated by Schmidt 2000 that repeated performance and feedback increase learners' energy and motivation, reinforce correct performance and reduce erroneous performance.

:After-test results for the two research groups

Table (3) shows the mean, standard deviation and calculated (T) value between the experimental and control groups for the efficacy of gravity in the post test

indication	Sig	Calculated t	Control group		Experimental group		Variables
			standard deviation	Arithmetic mean	standard deviation	Arithmetic mean	
Moral	.000	7.870	.18216	5.5450	.77400	7.5240	Gravity

Moral <(0.05) at the degree of freedom (18) and below the significance level (0.05)

In Table (3), we find that the calculated value of (Sig) is less than (0.05) and this means that the difference is significant and in favor of the post-test of the (experimental) group for all the technical stages of the effectiveness of pushing the weight where the researcher believes that the reason for the progress of the members of the experimental group is due to the use of ultra-interference media Which had a great impact on learning as the media expresses the presentation of ideas and information by interconnecting any of the written texts, graphics, pictures, video clips and sound effects, and displaying them as educational experiences for the student to control and choose among the elements that he interacts with.

(Majid Haidar states) "The method of hypermedia allows the learner to use the information or part of it in a suitable sequence. "

The researcher attributes this progress in performance to the use of computers as a modern technique in learning skills after effective performances in communicating complex concepts and complex skills, and helps to shorten time and draws the attention of students to longer periods of learning in the traditional way.

This was confirmed by (Ibrahim Al Far) by saying that computer learning is more effective than learning in the traditional way, and it is an important method of teaching methods and methods, including the possibilities that can be used to increase and accelerate student learning.

The use of hyper-interfering methods (hypermedia) is of great importance in observing the individual differences between students and also increasing the eagerness and motivation of the educated student, and as Mustafa Badran 1995 pointed out that the use of a hyper-intermediary method (hypermedia) enables the teacher to meet the individual differences between learners and give Each of them experiences that suit them, which increases their positives, arouses their enthusiasm and helps them to think positively and ultimately leads to quality learning, that is, the teacher's use of different educational media achieves different educational purposes .

The hypermedia media also gave a certain amount of information to the experimental research sample, which led to their understanding and acceptance of it, and this was confirmed by (Youssef Qattami 2000) that "when the individual's

stock of information increases, his ability to solve problems facing him increases, both in the theoretical aspect." Or in performance "

Likewise, to display and correct the most common errors of skill to reach the best performance helped the learner to avoid making these mistakes during the motor performance and explained more correctly the correct performance of each of the technical stages of the activity under study. In this regard, (AsmaaHikmat), quoting ("Dive Cross"), indicates that the wrong performance does not divert the student's focus from the correct performance and must be dealt with as learning experience, which corrects the error in order to perform his best.

The researcher believes that the experimental group following the ultra-interference media method was better than the control group that used the traditional method.

(Cockerton and Archimill 1997) indicate that the use of ultra-interfaced media as an Egypt for information and put learners in a positive image, and super-interfaced media systems can create an active atmosphere for influential learning.

As the super-interfaced media is to build information elements that are interconnected in a non-linear way, and help enrich student information, and increase its effectiveness by stimulating and energizing it, and through it the student turns data into information and information into knowledge.

This is in agreement with (Maysa Nadeem), who argued that the use of super-interfaced media leads to the presentation of the material in an orderly, accurate and codified manner, and this led to learning and excellence of the experimental group.

Cognitive test results for the efficacy of gravity for the experimental and control groups:

Table (4) shows the mean, the standard deviation, and the calculated value (T) between the experimental and control groups for the efficacy of gravity in the cognitive test

indication	Sig	Calculated t	Control group		Experimental group		Variables
			standard deviation	Arithmetic mean	standard deviation	Arithmetic mean	
Moral	.001	4.123	1.07497	6.4000	.73786	8.1000	Gravity

Moral <(0.05) at the degree of freedom (18) and below the significance level (0.05)

In Table (4), we find that the calculated value of (Sig) is less than (0.05), and this means that the difference is significant and in favor of the experimental group in the results of the cognitive test of the effectiveness of pushing the pomace, and the researcher attributes the reason for that to the educational method prepared by the researcher, which is the highly interfering media for what it contains of Adequate information has been entered and used in the educational medium, and through informing the experimental group while practicing educational units about the modern educational method and the educational program, and through their use of many senses and applying them to what they learned, their results in the cognitive test came to be moral and better than the control group , Has "said Marzano, that in order to be able to use the

information in our daily lives day after day should store it in a conscious memory in many cases, and that the most powerful memory strategies are using different (such as sensory perceptions).

(Amna Abdel Hafeez) states that the ultra-interfaced media is a method of building informational elements that are interconnected in a non-linear manner, and helps enrich the student's information (the learner), and increases his effectiveness by stimulating and stimulating it, and through it the student (the learner) transforms the data into information and information into knowledge

Successful education depends on exploration and experimentation, and practice and mastery does not only come to learning skills and plans, but it is necessary to provide the practitioner with information and knowledge

related to the practicing activity, that is, it requires a sincere effort to provide the practicing individual with basic knowledge aspects and scientific principles due to him in his practice of motor skills by achieving enjoyment. A complete understanding of the nature of the sports activity practiced, and experts indicate that the clear superiority of the athlete is confirmed in the combination of practice of activity and knowledge. The researcher believes that the use of super-interfaced media as having a clear effect on the combination of knowledge and practice of the activity.

### CONCLUSIONS:

Through the results of the research, the researcher concluded the following conclusions:

- The technical performance has improved in all the technical stages of the activity under study (pushing the weight), and this is a result of the application of the program prepared by the researchers, which is the high-interference media (Hypermedia).
- Hypermedia has a marked role in positively affecting some of the learning outcomes used in the research.

### ENDORSEMENT:

Kindly to the results of the research and its conclusions, and to the positive impact of the educational curriculum used on the variables under consideration, the researcher recommends the following:

- The circulation of the program prepared for the ultra-overlapping media in the colleges of physical education, sports science, schools and educational centers to teach the effectiveness of pushing the weight around the country to contribute to raising the technical level of performance.
- Holding conferences, lectures, and symposia to clarify the importance of technology and the use of computers in the educational and training field, as a technical medium that helps in creativity and mastery of learning.
- Using super-interfaced media to teach students of colleges of physical education and sports science during lectures for practical lessons.
- The introduction of super-interfering media in the training process for the age groups in order to master learning to achieve achievement.

### Annex (1)

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-1 An evaluation form

Performance appraisal form for gravity effectiveness (pilot group)

Total scores		Or (switch)		Stability phase (coverage)		The throwing stage		Weighting stage (phase building force)		Hold the disc or stand by		Student ID	sequence
after	Before	after	Before	after	Before	after	Before	after	Before	after	Before		
												Student (1)	1
												Student (2)	2
												Student (3)	3
												Student (4)	4
												Student (5)	5
												Student (6)	6
												Student (7)	7
												Student (8)	8
												Student (9)	9
												Student (10)	10

.2- evaluation form

Performance appraisal form for gravity effectiveness (control group)

Total scores		Or (switch)		Stability phase (coverage)		The throwing stage		Weighting stage (phase building force)		Hold the disc or stand by		Student ID	sequence
after	Before	after	Before	after	Before	after	Before	after	Before	after	Before		
												Student (1)	1
												Student (2)	2

												Student (3)	3
												Student (4)	4
												Student (5)	5
												Student (6)	6
												Student (7)	7
												Student (8)	8
												Student (9)	9
												Student (10)	10

.3- Knowledge test form

Cognitive form of gravity effectiveness (experimental group)

the answers	questions	sequence
Finger phalanges The palm of the hand The fingertips All of the above choices	The load is carried on	1
The back leg The two men together The front man The front leg is focused on the back leg	During standby pause the body weight is on	2
60 degrees 70 degrees 80 degrees 90 degrees	While standing, the humerus should move away from the body at an angle of its magnitude	3
3 kg	The weight of the weight is for the junior class	4

4 kg 5 kg 47.26 kg		
2.10 meters 2.13.5 meters 2.15.5 meters 2.50 meters	The diameter of the counterweights	5
2 Centimeters 3 Centimeters 4 Centimeters 5 Centimeters	The width of the push strip lines	6
If the contestant touches any part of his body the upper edge of the stop plate  If the competitor does not touch any part of his body, the stop plate is required  If he touched the stop plate from the inside  If he moves inside the circle while throwing	The attempt is unsuccessful	7
Touching the weight in his first landing in the Strip  Touching the heaviness in his first drop of the strip line  The options above are correct  The first and second options are wrong	The attempt is a failure, then	8
20 seconds 25 seconds 30 seconds 35 seconds	The specified performance time for each player is	9
Three attempts Four attempts Five attempts	If the number of contestants is 8 contestants or less, the number of attempts shall be for each player	10

Six attempts		
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An educational unit model for effective weightlifting

A computer learning module template

The first and second educational units: Number of students: 10 students The goals of the educational unit: Learn the pause and skill of effective in pushing the weight

Date: 2/28/2019 Today: Thursday

Teaching unit time: 90 minutes, four o'clock

Notes	Used equipments	Organizational form	Physical and skill activity	Time	Sections of the educational unit
					Preparatory section
		▼▼▼▼▼▼ ■	Create tools, stand students, record absences, start greeting	5minutes	Introduction
Maintaining the distance between each student to perform the exercises properly		◀◀◀◀◀◀◀◀ ◀◀◀◀◀◀◀◀ ■	Walk → Walk on the combs with the arms raised high with hands tangle → Walk on the two legs → Jogging with the arm moving in a circle forward and then backward → Touch the ground alternately → Regular jog → Regular belt	7minutes	Warming up
Ensure that exercises are correctly applied to all members of the sample		■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Arm Exercise: (Stand) Jumping side to side with the arms raised aside ... (1-4)  Stem exercise: (stand, waist) bend the torso in front and down and press in position three times (1-4)  Two-leg exercise: (standing, waist) jumping aside (1-4)	10minutes	Physical exercises
				68minutes	The main section

Confirmation of keeping calm inside the stadium, and focusing on the curriculum in the computer	A laptop computer 10	□ □ □ □ □ □ x xxxxx	Collective viewing of today's lecture and interaction with the program presented through the computer with clarification by the researcher and the work team to learn about the skill and its details	15minutes	Educational activity
Confirm the use of a computer that includes the skill program when alerting the teacher of a skill error or forgetting any part		* * * * * ☐ * * * * *	The application of the program (Hypermedia) by students in the stadium, each according to his ability to understand what came in the CD-ROM that includes an explanation and details of the performance of a skill (hold the disc and standby	45minutes	Applied activity
		▼▼▼▼▼▼ ☐	Calming exercises, then perform the salutation and leave	8minutes	The final section