European Journal of Humanities and Educational Advancements (EJHEA)
Available Online at: https://www.scholarzest.com
Vol. 4 No.7, July 2023
ISSN: 2660-5589

EFFECT OF SAT EDUCATIONAL MODEL ON CREATIVE ENERGY AND DISTINGUISHED WITH SPEED OF FEMALE STUDENTS

Rawaa Adil Khairullah [1]
1,2College of Physical Education and Sports Sciences/ Basrah University / Iraq
rawyhamnwyr@gmail.com
Intisar Ahmed Othman[2]
1,2College of Physical Education and Sports Sciences/ Basrah University / Iraq
Intsar.ahmed@uobasrah.edu.iq

Article history:

Received: May 11th 2023
Accepted: June 11th 2023
Published: July 18th 2023

Abstract:

Teaching models provide us with this necessary perception, as model here is how multiple conditions of learning and education process are related, and in many fields, model is a preliminary perception of theory, which paves way for study and understanding of phenomenon. Models are in its early stages, unlike theories, lacking to support that comes from accumulation of knowledge and information, which called on researcher to investigate modern models that develop creative capabilities of students. Among se models is educational model (SAT), to (hiba Farid Abu Lahia), which is a proposed model based on production of creative projects in arranged steps in which teachers move away from randomness And improvisation and benefit from modern technologies to prepare leaders who are able to make decisions and solve problems; So Aim of education are achieved information and challenges. Researchers used descriptive approach to measuring creative energy and experimental curriculum by designing two equal (control and experimental) groups with Pre and post -test. researchers identified research community in intentional way from first stage students in Faculty of Physical Education and Sports Sciences for universities of Baghdad and Basra, who numbered (106) students, where researchers chose building sample in random way, so (100) students reached a percentage of (94.3%). As for application sample (main experiment) reached (20) students who constituted a percentage of (18.86%) of research community that were divided into two controlled and experimental groups, each group reached (10) students. Researchers used speed force test and maximum part of each man separately. Most important recommendations were:

1- Results of this study must be circulated when teaching any skills of individual or group games in College of Physical Education and Sports Science.
2- It is necessary to include teaching in SAT educational model in continuous education courses to develop skills of faculty members in College of Physical Education and Sports Science to implement m.
3- It is necessary to pay attention to creative energy of students and invest it in order to improve scientific and practical level.

Keywords: SAT educational model; creative energy; Distinguished with speed.

1 - DEFINITION OF RESEARCH

1-1 INTRODUCTION

occurrence of developments in all scientific, educational and psychological fields, especially in educational field, as many changes in aspects and educational have indicated important results to human knowledge and requires effective participation of individual in lesson by linking new knowledge to cognitive structures that he has, and in Our academic work is striving towards effectiveness of teaching, and this requires analyzing situation and formulating a plan for that and employing subtle for certain models and periodic monitoring of performance, and n modifying paths during learning, especially for university students. Teaching models provide us with this necessary perception, as model here is how multiple conditions of learning and education process are related, and in many fields, model is a preliminary perception of theory, which paves way for study and understanding of phenomenon.

Models are in its early stages, unlike theories, lacking to support that comes from accumulation of knowledge and information, which called on researcher to search and investigate modern models that develop creative capabilities of students. Among se models is educational model (SAT) which is a proposed model based on production of creative projects in arranged steps in which teachers move away from randomness And improvisation and benefit from modern technologies to prepare leaders who are able to make decisions and solve problems; So that goals of education are achieved in era of information and challenges. Steam Model (STEAM.APROACH.OF.TEACHING) is named after link between previous learning with new learning, and this model is useful in building diagnostic tests to clarify skills that student master, and active participation in learning that leads to better retaining information and organizing knowledge an active way, link it to previous knowledge and make learner active on a continuous way. As for creative energy, it is defined as creative world that is available between individual and his internal and external environment in sense that it is within individual awareness in terms of his own internal potential and its suitability with External Ocean to continue and achieve best of behavioral product that leads to a creative state caused by creative energy. . And that physical fitness lesson needs a lot of attention to highlight creative energy of students, which can be clear through performance of required duties in lesson that needs to gain specific fitness characteristics that enable to perform movements with smoothness and ease. SAT Educational Model and know its impact on creative energy and some of physical fitness characteristics.

1-2 Research Problem:

Success of educational process requires attention in use of multiple and varied models in order to provide opportunities for optimal performance of sporting skill that reflects strength of learner on understanding of skill or movement parts and its components, and because physical education lesson is a lesson that depends greatly on concept and content of physical fitness of students, and because of students 'lack of se characteristics very important thing in this lesson, in addition to lack of level of creative energy that qualifies m to move towards development of education, and researchers took upon themselves to study this model and know its impact on creative energy and some of fitness characteristics.

1-3 Research objectives:

1- Numbers of educational units using SAT educational model to develop creative energy and gain fitness characteristics of female students.
2- Preparing special creative energy scale for female students.
3- Learn about effect of SAT educational model on creative energy and physical qualities of female students.

1-4 Research hypothesis:

1- There are moral differences with statistically between Pre and post -tests in control and experimental groups.
2- There are moral differences with statistically significant testing between two controlled and experimental groups.

1-5 Fields of Research:

1-5-1 Human Field: First stage students in Faculty of Physical Education and Sports Science - Basrah University
1-5-2 Spatial Domain: stadium and field in College of Physical Education and Sports Sciences
1-5-2 Time domain: 13/12/2022 until 28/2/2023.

1-6 Definition of terms:

1- STEM curve

It is a multidisciplinary curve, combining specializations of science, technology, engineering design, arts and mama tics together, in which student applies a set of applied scientific activities, digital and computer technology activities, art activities and concentrated activities around experience, solution to future problems, manual experience, scientific and logical thinking activities, decision -making, decision -making Together.(Muhammad Ramadan Al -Tantawi & Shaima Abdel Salam Salim: 2017).

2 - RESEARCH METHODOLOGY AND FIELD PROCEDURES:

2-1 Research methodology:

Curriculum is determined on basis of research problem, which is a procedure in order to reach facts and data with a change in how this data is related to research problem (Marwan Abdul Majeed Ibrahim: 2002). Researchers used descriptive approach to measuring creative energy and experimental curriculum by designing two equal groups (control and experimental) with a pre and post -test.

2-2 Research Society and Sample:

researchers identified research community in intentional way from first stage students in Faculty of Physical Education and Sports Sciences for universities of Baghdad and Basrah, who numbered (106) students, where researchers chose building sample in random way, so (100) students reached a percentage of (94.3%). As for application sample (main experiment) reached (20) students who constituted a percentage of (18.86%) of research community that were divided into two controlled and experimental groups, each group reached (10) students.

2-3 Data collection means:

1- Arab and foreign sources.
2- Note and experimentation.
3- Personal interviews.
4- Forces to record creative energy test data
5- Forms to record physical and motor abilities tests.

6- Special forms to collect information.
7- Information network (Internet)
8- Physical and motor capabilities tests
9- Assistant work team

2-3-1 tools and devices used in research:

1- Japanese manufactured electronic time hours (2).
2- Rulers (2).
3- A length tape of (50) m.
4- Glass white blackboard (1), and pens of a colorful blackboard (6).
5- An illustrative skill photo on (18) weapon paper.
6- Electricity connection with a length of (10) m number (2).
7- Varieties of (12)
8- Adhesive tape
9- A personal computer, not a HP.
10-Data Show.
11- Medical balance

2- 4 Tests used in Research

2-4-1 Test of strength distinguished by speed

1- First test:

Test Name: Bending and extending arms from putting place for bound tool is maximum number in (10) seconds (Hussein Qasim Hassan & Petsuissi, Ahmed: 1979)
Purpose of test: strength of speed of speed of arms muscles
Tools: a handball field, timing clock (2) whistle for start and end signal.
Test procedure: From inclined placement mode, noting that body take a good position and chest contact with ground while bunting arms, with registration of largest possible number in ten seconds.
Registration: number of times laboratory is calculated correctly

2- Second test:

Test Name: hop maximum possible distance in ten seconds for each leg separate
Purpose of test: measuring strength of speed of muscles of legs.
Tools: a handball field, whistle for start and end signal, registered calling on names and records results from measurement bar, metric measuring tape, timing clock (2).
Test procedure: drawing lines on ground and setting signs that use measuring in meter, player takes from standing position when hearing starting whistle with one leg along line depicted on ground on field at maximum possible speed to record largest distance. Same test is restored to leg.
Conditions:
1- You should not stay away or deviate from extension of line on ground.
2- Any part of Earth's body should not come into contact with Earth.
3- Each laboratory has one attempt.
Registration: distance is calculated from starting line until end signal (player's stop).

2-5 Exploration exploratory:

researchers conducted an exploratory experience on (11/28/2022) on Monday at ten in morning on sample of first stage students in College of Physical Education and Sports Sciences, and number was (6) students and applied tests on m in order to know following:
1_ knowing time taken to perform and implement tests.
2_ how appropriate tests are for sample.
3_ Learn about efficiency of assistant team.
4_ Learn about difficulties and problems facing researcher when conducting tests for purpose of overcoming m.

2-6 Pre --tests

Pre - tests of research sample were conducted on daily (Sunday and Monday), (11/12//2022) stadium of Faculty of Physical Education and Sports Sciences at Basrah University. Researchers took into account conditions related to tests in terms of time, place and tools used and method of implementation and assistant team. In order to work to provide m post- tests. To ensure that re are no moral differences between se groups, parity between m was made in Pre-tests that included physical and motor capabilities tests in physical lesson, and table (1) shows:

Table (1) Shows research sample in variables

Verbal's	Control group		Experimental group		T collected Value	sig	indictor
	M	S	M	S			
Creative energy	**152.750**	**22.911**	**151.583**	**23.449**	**1.385**	**0.194**	Non-moral

strength of arms is distinguished	**3.80**	**3.632**	**3.600**	**0.699**	**0.671**	**0.511**	Non-moral
strength of speed of two leg	**12.85**	**1.54**	**12.84**	**1.52**	**0.015**	**0.989**	Non-moral

2- 7 Educational units:

Special educational units have been prepared, educational model, which is appropriate for topic and research sample, and it has been presented to those with experience and specialization in field of teaching methods, in order to benefit from experiences and observations. Application of educational units for Sat educational model began on (Tuesday), (12/12/2022) at rate of one educational unit in first and period of application of educational units on Tuesday, 28/2/2023. Total time for one educational unit (90 minutes) was represented by According to following details:-

- Preparatory section and its time (25 minutes) contained introduction, warm -up and physical exercises.

Main section and its time (60 minutes), contained:-

- Educational activity (25 minutes), in which previous information is reviewed with a video showing a physical attribute and explanation according to SAT educational model, that is, teacher explains method of performing exercises and how to perform m and give a descriptive duty in which a set of exercises related to a specific adjective and a healthy diet that is appropriate for se exercises, calculate number of food calories, write number of times exercise is repeated, and way to perform exercise (with or without tools). A video clip containing a set of exercises related to this capacity is sent by communication sites.

As for applied part, its time was (35 minutes), in which exercises for physical attribute are applied, and y are linked to previous exercises through a set of exercises given by teacher.

- closing section and its time (5 minutes), in which a small, recreational game or calm exercises are practiced, and n give a duty to next lecture and n leave.
- Period of implementation of educational units for a period of 8 weeks, as number of total units reached (8) educational units, one educational unit was devoted to teaching each of qualities designated for research.

2-8 post- Tests:

After completing implementation of educational units prepared according to SAT educational model, dimensional tests of control and experimental research groups were conducted in two days (Wednesday and Thursday) 1-2 /3/2023 researchers have created same conditions in which tribal tests took place in terms of test time and testing sequence and using same auxiliary tools.

2-9 Statistical Means:

Researchers used a SPSS program analyze research data:

- Ratio.
- Arithmetic mean.
- Standard deviation.

Simple correlation coefficient (Pearson).

3- Presenting, analyzing and discussing results.

3- 1 View, analysis and discussion of results of Pre and post tests for experimental and control groups of research groups

Table (2)

Shows Pre- and Post-test and standard deviation of differences, standard error, value of (T) calculated by control group.

Tests	Pre arithmetic mean	post arithmetic mean	Differences Of arithmetic mean	standard deviation of differences	standard error	T collected Value	sig	indictor
Creative energy	**152.666**	**181.166**	**28.50**	**21.521**	**6.212**	**4.587**	**0.001**	moral
strength of arms is distinguished	**3.60**	**4.60**	**1.00**	**0.47**	**0.149**	**6.708**	**0.000**	moral
strength of speed of two leg	**12.48**	**14.05**	**1.21**	**0.32**	**0.101**	**11.91**	**0.000**	moral

Researchers attribute reason for difference, contrast and differences between two controlled and experimental groups that approach used by researcher had a clear impact on students' possession of a clear move program through acquisition of motor images and thus ability to summon m in appropriate position and response and this plays role in emergence of new responses that serve movement and performance .researcher agrees with (Wajih Mahjoub: 1996), " diversity of creative capabilities depends on quality of information in which a person behaves and deals with and affects medium that deals with means and mediators he deals with." Some of address lines, colors or words, as is case in art and literature, in sports activity, need for new movements and skills in order to win and show excellence. "Also, competition in some games has become equal, which made scientists seek to develop creative capabilities to show new movements that qualify Athlete to win. " , And researchers believe that reason for this development is that curriculum that used researchers contained diversity exercises that use parking and strength exercises and extent of possibility to overcome resistance, which is represented by weight of body or use of various tools and resistance, which increased development of this physical ability. researcher agrees with what mechanism (Qasim Hassan Hussein & Abdel -Latif Nassif: 1987) agrees "ability of muscular nervous system to overcome resistance or several resistors in which is a link between strength and speed, which means that athlete gets a distinctive characteristic called speed of power" and is required to provide speed of strength in athlete is characterized by following conditions:

1- High degree of strength
2- A high degree of speed
3- A high degree of motor skill, whose reasons are completely prepared between strength and speed factors.

4-2 View and discuss results Pre and Post -tests of experimental group of research variables

Table (3)
Shows Pre and post, standard deviation, standard error, value (T) of experimental group.

Tests	Pre arithmetic mean	post arithmetic mean	Differences Of arithmetic mean	standard deviation of differences	standard error	T collected Value	sig	indictor
Creative energy	**152.75**	**181.25**	**28.50**	**21.47**	**6.20**	**4.596**	**0.001**	moral
strength of arms is distinguished	**3.80**	**6.20**	**2.40**	**0.843**	**0.266**	**9.00**	**0.000**	moral
strength of speed of two leg	**12.84**	**16.29**	**3.45**	**0.62**	**0.196**	**17.583**	**0.000**	moral

Researchers also believe that reason for this development is that curriculum worked to mobilize situation involved in students, which led to creation of a state of flexibility in linking its internal capabilities and linking it to external environment in how to deal and respond to new kinetic situation, and that competition factor between female students What curriculum sought had a major role in developing physical capabilities among female students, and thus producing largest number of motor responses that are appropriate for internal components. researchers agree with what (Alexander Rochaka: 1989) referred to, " creative energy is energy that stems from within human being, which is affected by many aspects and influences that drive man to creativity and represented by circumstances and conditions that give creator some of characteristics that make him creative as a result of creative production as well as Enjoying a lot of skills and kinetics supported by perseverance and insistence that his product be distinguished in performance. "

4- 3 View and discuss results of post- tests two groups control and experimental

Table (4)
Shows calculations and normative deviations of two control groups, calculated (T) value and moral level variables

Tests	Control group		Experimental group		T collected Value	sig	indictor
	M	S	M	S			
Creative energy	**163.583**	**23.208**	**181.250**	**17.802**	**2.092**	**0.048**	moral

strength of arms is distinguished	**4.60**	**0.516**	**6.20**	**0.632**	**6.197**	**0.000**	moral
strength of speed of two leg	**14.050**	**1.477**	**16.29**	**1.045**	**3.914**	**0.001**	moral

Researchers attribute reason for this development that curriculum directly affected development of antiquity in performance by giving new exercises that are not familiar to students, which generated a state of increased creative capabilities during performance by creating a state of suspense and excitement among students and thus avoiding familiar in exercises used. researcher agrees with what mechanism indicated (Fakher Aqil: 1975) that idea is not antic or new except when it has not been previously before that this saying is of no value for world, because no way to confirm this. It is better to say that idea is new for its owner, and this requires "knowledge of history of person with idea, and idea should be unusual, long -term and bound by remote and smart."

4- CONCLUSIONS AND RECOMMENDATIONS:

4-1 CONCLUSIONS:

After dealing with results statistically and discussing m, researchers reached following conclusions:

1- Experimental group that studied SAT educational model exceeds control group in creative energy test.
2- Experimental group that studied SAT educational model exceeds control group in two-strength tests of arms and two leg.
3- Experimental group that studied SAT educational model exceeds control group in explosive force tests of arms and two leg.
4- Experimental group that studied SAT educational model over control group excels in speed test.
5- Experimental group that studied Sat educational model over control group excels in flexibility test.
6- Experimental group that studied Sat educational model over control group excels in fitness test.
7- Experimental group that studied Sat educational model over control group excels in balance test.
8- Experimental group that studied SAT educational model over control group excels in compatibility test.
9- Teaching of SAT educational model helped to make female students participate in educational process
10- Which contributed to removal from boredom.
11- SAT educational model helped to direct educational process, correct errors, guidance and guidance for female students during application.
12- Sat educational model is important in developing creative energy of students.

4-2 RECOMMENDATIONS:

1. Results of this study must be circulated when teaching any skills of individual or group games in College of Physical Education and Sports Science.
2. It is necessary to include teaching in SAT educational model in continuous education courses to develop skills of faculty members in College of Physical Education and Sports Science to implement m.
3. It is necessary to pay attention to creative energy of students and invest it in order to improve ir scientific and practical level.
4. Attention to conducting similar studies on samples of students at College of Physical Education and Sports Science

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