# THE EFFECT OF ZOMBIE EXERCISES IN SOME BIOCHEMICAL AND FUNCTIONAL VARIABLES OF BASKETBALL PLAYERS

Asst. Inst.Nour Abdul Nabi Mohamed Hewitt Asst. Prof.Dr. Ashraq Ali Mahmoud Asst. Prof.Dr. Mohamed Abdul Nabi Mohamed Hewitt University of Baghdad / College of Physical Education and Sports Sciences

### **ABSTRACT:**

The objective of the study was to identify the effect of zomba training on some biochemical and functional variables of basketball players. The researchers applied the experimental research method to a sample of the athletes of the electric sports club. The sample of 12 players was divided into two groups, The control group used the usual trainer's training for the period from 20/11/2017 to 20/1/2018. Following the application of the biochemical and functional tests under study and the implementation of the training program and the conduct of the tests, the results were statistically treated using the bag Statistical Social Sciences (SPSS) version (V24), as the researchers conclude that it is possible to reach the training curriculum for training Alzumba have had a clear impact in the improvement Albaouhrkih and functional variables of the players basketball level.

#### INTRODUCTION

In spite of the development in various sports events individual and differential, which appear day after day, globally, continental and Arab, but we still lack in our country to some of the concepts in the training process to develop and evaluate the training curricula, as most trainers rely on their training on traditional methods away The use of curricula that call for joy and joy and reduce fatigue and shorten the time in order to reach the players to the required level and sport Zumba is one of the most modern and most widely used training tools because it has a direct and fundamental impact on the degree of development and development of all elements Fitness and comprehensive health, and different types of work to spread the spirit of challenge and fun, which is one of the basic programs that rely on the exercise of sports movements and vital rhythms Latin music in a manner that gives the same trainee spirit of fun and activity away from the boredom that accompanies traditional exercise. The aim of the zomba exercises is to improve strength, balance, compatibility, and periodic respiratory load. The

zombie exercises are very important in improving health and reducing the number of exercises. Diseases associated with obesity such as diabetes and high pressure.

The use of music during exercises or aerobic exercise (Zumba) is important because it helps the individual to communicate in performance without feeling tired or bored. Music, especially music with different rhythms, helps to elevate the positive emotional state of the athlete and avoid the routine. As the music is the key to the fitness classes of the zombie as the training depends on the change of rhythm and speed and the transfer of exercises from muscle toning to exercises strength, endurance and heart effort and replay again, as every major muscle group in the body affected Tader Pat Alzumba and the first thing that distinguishes Alzumba exercises that trainees Aaon these transfers taking place in the exercises because of their enjoyment of music

## MATERIALS AND METHODS:

#### **Research Methodology:**

The experimental approach was adopted by the experimental method of the experimental and control groups in order to suit the nature of the research. It is the best way to solve the research problem through which it is possible to achieve a goal This change of effects in this reality and phenomenon "

#### Search community and sample:

The limits of the sample of the research of the players of the Sports Electricity Club, the number of the sample (12) player was divided into two groups so that the first group (training zomba) and the second traditional exercises, and to verify that the results are distributed moderately among the players of the sample, (4) were selected from the Karkh Sports Club for the experimental procedures. They were homogenized in the variables of height, BMI, time and training. The values of the spindle coefficients were 0.90, 0.61, 0.67 and 0.71 respectively. Within the parameters (3+) which means to They are naturally grafted within the equatorial caw curve.

# Means of gathering information, tools and devices used in research:

The researchers used the following tools:

.Fitness balls (Swedish Ball) of Swedish origin -

)Characterization number (5 -

whistle number (2) -

.Rustometer for weight and length measurement of Italian origin -

Electronic stopwatch type (Omega) and (Han Hart) to measure time (2) -

.TV (LG) (42) inches -

Flash (8G) number (2)-

Measuring tools and tests in the study:

The researchers used the scientific sources to determine the necessary tests to measure some of the variables associated with the phenomenon to be measured. Accordingly, a set of biochemical and functional tests were selected to be an indicator of the development that appears after performing the exercises used in the research, as shown in Table (1)

Purpose of measurement	Name of test	
		sequence
The speed of the arms	Bend and extend the arms out of the resting position (10) tha	1
The speed-specific power of the two men	Bend and extend the two legs in full (15) seconds	2
Bear the power of the two men	Jump half squat	3
Fitness	Paro test	4
Dynamic Resilience Measurement (Bend, Spine and Rotate	Motor flexibility	5
Measuring the compatibility of both men and eyes	Compatibility	6
Measurement of anaerobic capacity and muscle fatigue index	(RAST) test for the index of muscle fatigue	7
Functional efficiency	Test the functional efficiency level of the respiratory apparatus	8

Table (1): SELECTED TESTS, THEIR PURPOSE AND THE SOURCES THEREOF

#### Field research procedures:

#### **Exploration Experience**

The researchers conducted an exploratory experiment on five players for Al-Karkh Sports Club on Sunday 12/11/2017 at 5:00 pm and at the closed Karkh Sports Club Hall

The aim of the exploratory experiment was to make sure that things were mechanical:

.Ensure the validity of tools and devices -

.The extent to which the sample understands and responds to the tests -

.The extent to which the Task Force applies its duties -

- Arranging the performance of tests and training in the registration of data in the form prepared for that.

- Ensure that the exercises used are validated and validated for the research sample.

#### Main experience

Tribal tests: from 18/11/2017 to 19/11/2017 The main experience: on 20/11/2017 until 20/1/2017 Remote tests: from 21/1/2018 to 23/1/2018

#### Suggested exercises

The researchers determined the movements and exercises appropriate for the times and frequencies appropriate to the sample of the research. As the sample of women (basketball players), the intensity of exercise depends on the frequency and include intensity (50-75%), through the The duration of performance and rest was determined so that the performance period for the first and second weeks was (15) minutes and included a period of rest (5) minutes, while the third week and the fourth was the performance period (17 minutes) and punctuated by a period of rest (3) minutes, The remaining weeks Vtm use of continuous training method, the researchers were keen to determine the pulse periodically sample through stops intervening training units in the first weeks with a view to identify the degree of severity of the impact of pregnancy during the unit as it was within the prescribed limits.

The duration of implementation of the curriculum was determined by (8) weeks, with (24) units represented by (3) training units per week, note that the training curriculum was implemented on 20/11/2017 . Until 20/1/2017

#### Statistical means

The Social Statistical Pouch System (SPSS) (V24), (statistical package for social sciences), was used to address the results of arithmetic mean values, standard deviation, intermediate, torsion coefficient, and T test.

## **RESULT AND DISCUSSION:**

Table (2) illustrates the statistical processes of the T-law to compare tribal and remote tests and their significance to the two groups of research (Zumba exercises - traditional exercises) in the variables under consideration

Significance of differences	Error Calculated		PF	F-	Post-test		Tribal Test		the group	Variables
of differences	level				Р	S-	Р	S-		
moral	0.000	8	0.81	2.66	1.16	10.16	1.37	7.50	Drills of the zombie	The speed of the arms
moral	0.004	5	0.40	0.83	1.32	8.16	1.36	7.33	Traditional drills	
moral	0.000	8.94	1.09	4	1.03	13.66	1.63	9.66	Drills of the zombie	The speed- specific
moral	0.049	2.58	1.89	2	2.48	11.16	2.78	9.16	Traditional drills	power of the two men
moral	0.002	6.12	2	5	0.89	29	1.67	24	Drills of the	Strength of

									zombie	arms
moral	0.013	3.79	0.75	1.16	1.32	25.83	1.63	24.66	Traditional drills	
moral	0.005	4.67	2.09	4	0.81	28.66	2.33	24.66	Drills of the zombie	Bear the power of the
moral	0.043	2.67	2.42	2.66	1.32	26.83	2.78	28.16	Traditional drills	two men
moral	0.001	6.81	1.06	2.96	1.44	26.14	2.04	29.10	Drills of the zombie	Fitness
moral	0.030	2.99	0.98	1.20	0.52	27.58	1.04	28.79	Traditional drills	
moral	0.001	7.31	1.67	5	1.26	41	1.78	36	Drills of the zombie	Flexibility
moral	0.017	3.50	1.04	1.50	1.09	39	1.37	37.50	Traditional drills	
moral	0.004	5.03	2.33	4.79	1.18	9.87	1.54	14.66	Drills of the zombie	Fatigue
moral	0.034	2.89	2.05	2.43	1.41	12.62	1.85	15.05	Traditional drills	
moral	0.001	6.89	1.41	3.97	1.77	12.04	1.87	8.07	Drills of the zombie	Functional efficiency
moral	0.034	2.88	1.18	1.39	0.80	9.26	0.84	7.86	Traditional drills	

## )if the error level is (0.05

Table (2) shows the calculated values (T) of the variables of the two programs (Zumba exercises - traditional exercises) respectively (8, 5, 8.94, 2.58, 6.12, 3.79, 4.67, 2.69, 6.81, 2.99, 7.31, 3.50, 5.03, 6.89, 2.88). The scores of Sig <0.05) were statistically significant at 0.05 and 2 degrees of freedom.

Table (4): The statistical operations of the T-law to compare between the remote tests and their significance to the two research groups (Zumba exercises - traditional exercises) in the variables under study

Signific ance of differen	Error level	Calcula ted value	PF	F-	Set of traditional exercises		of Zombie Training Set		the test
ces		(t)			Р	S-	Р	S-	
moral	0.020	2.76	0.72	2	1.32	8.16	1.16	10.16	The speed of the arms
moral	0.046	2.27	1.09	2.50	2.48	11.16	1.03	13.66	The speed-specific power of the two men
moral	0.001	4.84	0.65	3.16	1.32	25.83	0.89	29	Strength of arms

(IJRSSH) 2019,	Vol. No. 9, Iss	ue No. II, Apr-Jun
----------------	-----------------	--------------------

moral	0.016	2.87	0.63	1.83	1.32	26.83	0.81	28.66	Bear the power of the two men
moral	0.45	2.29	0.62	1.44	0.52	27.58	1.44	26.14	Fitness
moral	0.015	2.92	0.68	2	1.09	39	1.26	41	Flexibility
moral	0.004	3.65	0.75	2.75	1.41	12;62	1.18	9.87	Fatigue
moral	0.006	3.49	0.79	2.78	0.80	9.26	1.77	12.04	Functional efficiency

The degree of freedom (6 + 6) - 2 = 10

At the error level (0.05) if the error level of (0.05)

From the review of the results of the tribal and remote tests of the two groups (the exercises of zomba traditional exercises) in the tests for all the variables of the research showed the obvious development of the two groups that were subjected to training modules using (training exercises - traditional exercises), which contributed to the improvement of all search variables, The variables of bioharking to the nature of the exercises prepared, in which the researchers took care of the principle of privacy in training and gradation, in addition to regularity in the training process, as the use of diversity in the exercises contribute to the exclusion of players from the Roti (Adnan Jawad and others: 1989) "emphasizes the need to introduce diversification into training" (10), and this is what he referred to (Kassem Mandelawi and others: 1990) "The use of varied and targeted exercises has a positive impact on the development of abilities and skills."

The regularity, overload and adaptation, in accordance with the abilities and capabilities of the individuals of the research sample, as well as the gradual difficulty in performance through the high levels of training units and gradation and spikes in the pregnancy training contributed to the phenomenon of the religion of oxygen in the players and thus increase the ability of muscles to adapt to physical effort and delay the emergence The sense of tiredness, which contributed to increase the ability to perform physical effort at the best level through the use of the method of low-intensity training and continuous training as they work on the development of both (endurance - endurance - aerobic endurance - muscular endurance - carrying power) It refers to him (Abul-Ela: 1997) that the method of training pulsation continuous training is appropriate for the development of power bearing (5)

The development of functional variables and both groups is attributed to the impact of training programs that have contributed to improving the bio and functional abilities. The programs used to develop the periodic and respiratory endurance by improving the efficiency of the functional body and activating the blood circulation in increasing the blood flow and the secretion to the muscle and the widening of the capillaries (O2) and improve the production of aerobic energy, ie, the exercises used in the effect of hypoxic conditions lead to the adaptation of the body to compensate for the shortage of oxygen After the effort, Oussama Riyad pointed out that "adapting to positive physiological effects contributes to minimizing the effect of the relative decrease in the oxygen ratio on the fitness of the player." "The activity of the blood circulation increases to increase the amount of blood, Up to all working muscles "which contributed greatly to the delay in the emergence of fatigue and increase the efficiency of the functionalities of women," said Owais Jubali, "Comprehensive development of multi-faceted an important basis for the training process and is a necessary requirements for training"

The results show that there is no significant correlation between the performance of precision skill in the correction before and after the effort. Kamal and Hassanein confirm that accuracy requires a complete neuronal compatibility and control of the musculoskeletal system of the individual. In most cases, the use of physical exertion is at the expense of accuracy, This

means that their availability together is a highly desirable exception (which is what we see in players who reach a physically and skillfully advanced level) ". The high voltage correlation with accuracy has proved to be vital and depends on significant gains and accuracy. Hand, we may not be exaggerating if we say this is a mcu N is strongly linked to the achievement of victory in the achievement of goals, the correction skill depends on this component to a high degree ". There is a high percentage of corrections fail to hit the goal, but some do not need to be blocked by a goalkeeper and the reason is not to perfect the correction because of high effort, which means dispersing the player and inability to perform the right skills required of him.

The researcher attributed the lack of a significant correlation in the skill of Al-Tabtabah before and after the effort because the players "can not master the basic skills that characterize each effectiveness in the absence of the necessary physical qualities of the activity of the sport and the close correlation between the skill level and the special requirements in each activity"

#### **CONCLUSIONS:**

- The Zumba training programs have positively influenced the development of the athletic and athletic abilities of basketball players.

- On the level of comparison in the results of the remote tests of the experimental research samples, whether for biochemical and functional tests, it was found that there are statistically significant differences for the group that used the zombie exercises.

- The use of the training methods for the zombies associated with the musical rhythms have contributed to increasing the desire, excitement and excitement of the basketball players to practice the training modules and also contributed to improve their ability to absorb the different movements.

## **ENDORSEMENT:**

The researchers recommend the following:

- The need for research and similar studies on other types of zombie exercises such as (Aqua Zumba) - (Zumba Gold Toning)

- The need to provide all teams of sports and different levels of modern training rooms for zombies to shorten

the time and effort to improve the level of players during the training process.

- Spreading cultural awareness of the need to practice zombie exercises in society because they are of great importance in improving the general fitness of the individual.

- The need to conduct research and studies using the exercises of zomba in the improvement of different biochemical and functional variables and different age groups.

# REFERENCES

- dgson,g.<u>the mechanism of athletes</u>, university of London press ltd,19961,p.37.

- Dr. Teresa Lamsam, Other's. A Quantitative Exploration of Instructor Body Weight Appearance's Effect on Perceptions of Zumba® Fitness Program Effectiveness. May 2013, p22-23.

- Jill Inouye MD: <u>A Survey of Musculoskeletal Injuries</u> <u>Associated with Zumba</u>, HAWAI'I JOURNAL OF MEDICINE & PUBLIC HEALTH, DECEMBER 2013, VOL 72, NO 12.

Siobhan Thompson, and Julie Pollock, <u>The exercise</u> <u>phenomena known as Zumba Fitness</u>.2010,p9.

- Abu El-Ela Ahmed Abdel-Fattah: (1997), Mathematical Training Physiological Basis, Cairo, Dar Al-Fikr Al-Arabi, p. 141.

- Osama Riyad: (2003), Sports Medicine and Athletics, I

1, Cairo, Dar al-Fikr al-Arabi, p379.

- Bahaa Eddin Ibrahim Salameh: (2000), Physiology of Sport and Physical Performance, Dar Al-Fikr Al-Arabi, II, Cairo, p8

- Jamil Khader Ali, Ronak Rachid (2015): The Effect of Rope Jump Exercises with Music in Anaerobic Capacity -Pulse Rate - Reaction Time at College of Physical Education - Salahuddin University, Research published in the Journal of Physical Education Sciences, Volume 8, No. 5, 2015, pp. 67-68.

- Toukan Obaidat (et al.): (2004), Scientific Research Concept, Performance and Methods, 1, Amman, Dar Al-Fikr, p 240.

- Adnan Jawad and others: (1989), basic principles in teaching methods of physical education, Basrah, Press of Higher Education, p. 197.

#### International Journal of Research in Social Sciences and Humanities

(IJRSSH) 2019, Vol. No. 9, Issue No. II, Apr-Jun

- Ali Salloum Jawad: (2004), tests and statistics in the field of sports, University of Qadisiyah, Press Ministry of Higher Education, p240.

Aweys Al-Jabali (2004), Mathematical Training Theory and Practice, 1, Cairo, G.M.S. for Printing and Publishing, p. 57.

- Qasim al-Mandalawi and others: (1990), tests, measurement and evaluation in physical education, Mosul, the presses of higher education, p. 284.

- Laila El-Sayed Farhat: (2007), Measurement and Testing in Physical Education, I4, Cairo, The Book Center for Publishing, p. 221.

-- Mohamed Subhi Hassanein (1995), Measurement and Evaluation in Physical Education and Sports, 3, Cairo, Dar Al-Fikr Al-Arabi, p. 415.

- Mohamed Sobhi Hassanein (2004), Measurement and Evaluation in Physical Education and Sport, C1, I 1, Cairo, Dar Al-Fikr Al-Arabi, p. 282.

- Mohamed Mahmoud Ahmed: (1999), scientific and practical results in the effect of blood pressure on the athlete, Jordan, Dar Al-Fikr for printing, publishing and distribution, p. 47.

- Mohamed Nasr El-Din Radwan: (1994), tests of motor performance, Cairo: Dar al-Fikr al-Arabi, p. 265.