

*Master Thesis Title

Vorcation and Sport Science-Unit The Impact of Exercises Using Multi-Punching Device in Developing Neuromuscular Fitness and some **Mechanical Variables of the Straight Punch of the** Junior

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☆ ☆ Supervised by:

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2018.

The thesis contains five sections as follows:

The first section: The development in the college of Physical Education and Sports Science has recently focused on the science of training, physiology and biomechanics as well as other sciences, which enabled the researcher to study the muscle-neuronal fitness and mechanical changes in the players because they are the mainstay of the society. The researcher designed a proposed multi-punching device in the development of neuromuscular fitness and some mechanical variables as well as the preparation of straight punch exercises on the proposed device.

The problem of the study is spotlighted through the preparation of junior well because they are considered the cornerstone in the construction of sports, as observed by the researcher through the field follow-up that there is a weakness for players in rounds emerging in the lowers and limited to the defensive style more than offensive style because of poor neuromuscular fitness and incorrect punching angles during the rounds, the disuse of modern devices in the course of training The research problem is manifested in the design of a multi-punching device to increase their training capabilities, as well as increase the speed of punching and their neuromuscular compatibility , correcting the punching angles and knowledge of the intensity of the exercise by a pulse meter during the punching process. Through the work of the researcher as a former

The study aimed at:

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- 1. Setting up the proposed multi-punching device.
- 2. Preparing exercises using the proposed multi-punching device.
- 3. Identifying of the impact of the multi-punching device proposed in developing neuromuscular fitness and some mechanical variables.

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The second section includes the theoretical and previous studies. The theoretical studies deals with the identification of boxing and its history in Iraq, the requirements of boxing, the basic skills in boxing including punches and their types. It also includes straight punching and its importance as well as neuromuscular fitness and skills, training sports and neuromuscular fitness and the impacts of exercise on neuromuscular fitness, physical exercises and their importance, properties, mathematical mechanics, angles of motor performance , video analysis using the (Dart Fish program) and the study of junior. While the previous studies included Amjad Mohammed Wahab.

The third section of the study is methodology and its procedures which includes:

Research Methodology: The researcher used the experimental approach to suit the research procedures.

Sample of the study: The sample of the study is chosen in a deliberate manner, represented by the players of the boxing team in the club of junior lines (ages 16-16). The total number of sample is (16) boxers is divided into two groups (experimental and controls) after homogenizing in their age, height, weight, and in amount of (8) experimental players and (8) controlling players.

The researcher used modern scientific means, sources, devices and tools.

The procedures of the field study: The design of the proposed multi-punching device, the first four devices are; the first one is correcting the corners of punching and the second is a alternatively punching device, the third is a pulse measurement device during punching and the fourth device is a punching device with springs, the function of the devices in general used (9) weeks in

amount of (63) days, and in each week (4) four training modules in amount of (60) minutes per unit and then conducting post tests and the extraction of results by means of statistical means using the SPSS program.

The fourth section presents analyzes and discusses the results. The results of the study are presented, analyzed and discussed in a modern scientific manner.

Section five contains the conclusions and recommendations.

The conclusions includes:

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- ☆ ☆ 1. The use of the proposed multi-punching device has contributed to the development of neuromuscular fitness and mechanical variables that include the attached wrist angle and shoulder.
- 2. The use of the proposed multi-punching device has led to the development of the straight punching performance of the players who have a positive impact through the accuracy of angles during the performance, which is positively reflected with the performance of the players to be the perfect punch accompanied by the mass of the body.
- The use of the proposed multi-punching device has led to the development of $\overset{}{\star} \overset{}{\star} \overset{}{\star} \overset{}{\star} \overset{}{\star} \overset{}{\star}$ the straight punch performance of the players in terms of avoidance of errors to be on the right angle and in the correct motor path.

The recommendations includes:

- 1. The need to use modern devices when performing the exercise according to the ☆ ☆ ☆ correct motor path to be effective punches and targeted to avoid mistakes.
- ☆ 2. Dependence on training overlap in the construction of training modules.
- ☆ 3. The use of the training course by a mobile device and separated by the ☆ $\stackrel{\diamond}{\wedge} \stackrel{\diamond}{\wedge} \stackrel{\diamond}{\wedge} \stackrel{\diamond}{\wedge} \stackrel{\diamond}{\wedge}$ performance of the player during the performance of the straight punch, is similar to the cases of real competition by playing on the device and avoid injury and risk, allowing the player to perform the exercise correctly and ☆ without boredom and high accuracy. ☆
- 4. Conducting a study using the device on other mechanical variables of the ☆ ☆ boxers. \checkmark
- ☆ 5. Performing similar studies on the device in the development of other punches. ☆

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Director of the Department of Diyala University 2019 and continuing

Universities or institutes where he studied **

Т	the University	Period from - to	Notes
1	Diyala University/College of Physical Education and Sports Sciences	2018-2019	boxing training
2	Diyala University/College of Physical Education and Sports S <mark>ciences</mark>	2019-2020	boxing training
3	Diyala University/College o <mark>f Physica</mark> l Education and Sports Sciences	2020-2021	boxing training
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* International magazines and magazines (impact fators) in which he published

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Т	Educational Magazine	Research Title	the number	the year
1	Internatioal Journal of psychosocial Rehabilitation	<u>-</u> The Impact of exercise endurance the forms of unlimited and relative force on some of the functional abilities and on 800 m running	Vol. 24, Issue 08	2020 ISSN
2	Internatioal Journal of psychosocial Rehabilitation	Effect of special training with rubber ropes in length and step frequency for stages and Performance	Vol. 24, Issue 08,	2020 ISSN
3	Internatioal Journal of psychosocial Rehabilitation	The effect of a proposed training curriculum in developing the skill competence of young boxers	24, Issue 06, 2020	2020 ISSN
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* Membership of local and international scientific bodies

* <u>Authoring and translation</u>

*	International magazines	and magazin	es (impact fa	tors) in	which	n he publis	<u>shed</u>
1	Educational Magazine	Research	Title	the number	t	he year	
	Internatioal Journal of psychosocial Rehabilitation	<u>-</u> The Impact of exercise endurance the forms of unlimited and relative force on some of the functional abilities and on 800 m running		Vol. 24, Issue 08	20	D20 ISSN	
	Internatioal Journal of psychosocial Rehabilitation	Effect of spec with rubber length and ste for stage Perform	cial training ropes in p frequency es and nance	Vol. 24, Issue 08,	20	020 ISSN	
	Internatioal Journal of psychosocial Rehabilitation	The effect of proposed tra curriculum i developing t competence boxe	f a ining n he skill of young ers	24, Issue 06, 2020	20	ж 220 ISSN ख	
	* Membership of lo	cal and inte	rnational s	cientifi	<u>c boo</u>	ties	_
*	Authoring and tra	nslation	Sport Sc	ience-l	hive		
Г	The title of the book	Dar Al nasher	Year of Publication	Numbe	er of ns	Methodolo syste	gical / non- matic
1	Applications in measurement and evaluation	University of Diyala Press	2017	THE F	THE First unsystematic		ematic

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