

# THE IMPACT OF SPECIAL EXERCISES IN THE DEVELOPMENT OF SPEED BEARING AND COMPLETION TIME (500 M) KAYAK ROWING YOUTH CATEGORY

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## ABSTRACT:

*The objective of the research was based on the impact of special exercises in the development of speed tolerance and its relationship to the completion of (500 m) rowing (kayak) through the preparation of special exercises and applied to the research sample within a training curriculum for two months (3) training modules per week, the researcher used the experimental method. The research community was represented by the players of the national team of rowing (kayak), the number of (8) blasphemers were chosen by the intentional way, and divided into two groups each group (4) blasphemers first officer and the other experimental, the researcher conducted a survey experiment on (3/6/2019) On Monday at the training center of the Iraqi Union Focus on the Canoe sample of Mjdwi outside of the sample and the number of two players for the purpose of identifying the validity equipment and tools used to identify and sufficient time for the application of the tests and the extent of understanding of the sample for this exercise.*

*The pre-test of the experimental and control sample was conducted on (4/6/2019) on Tuesday at 6 pm at the training center of the Iraqi Federation of Canoe. The post-test was conducted on Thursday 8/8/2019 at 6:30 pm under the same conditions. The pretest test, and then the researcher concluded that the practice of members of the experimental group For special exercises prepared by the researcher and continue to exercise regularly*

*It has had a positive effect in the development of bearing speed and progression in the achievement level, it is*

*In the meantime, the researcher recommended the use of these exercises because of their positive impact*

*In the development of physical qualities, including the character of bearing speed and thus improve the level of sports achievement.*

**Keywords:** Special exercises, speed bearing, kayaking.

## INTRODUCTION

Speed training is one of the most important exercises for the rowing player in the 500 m activity and through the correct scientific methods in planning and organizing the curriculum during the training period to know the level of impact of these exercises on the time of completion of 500 m rowing (kayak).  
research importance

The importance of the research through the use of special exercises to develop the ability to bear the speed and its impact in achieving the effectiveness (500 m) kayak rowing.

Research problem

The research problem crystallizes through the diagnosis, careful observation and analysis of many races of the rowing game (kayak) of the national youth team, in addition to the long experience of the field

researcher as a former player and coach of the kayak team. (Kayak) The researcher believes that this is due to weakness in some physical abilities, including carrying speed and in order to upgrade the player to a level commensurate with the requirements of development in this, so the researcher has adopted the use of Ash holds for the development of speed and time of achievement of the effectiveness of (500 m), rowing (kayak)

A study goal

.Prepare special exercises in the development of speed tolerance

Know the effect of special exercises in the development of speed tolerance and completion time (500 m) rowing (kayak).

search limits

A sample of the players of the Iraqi national team rowing (kayak) for youth in 2019.

## MATERIALS AND METHODS:

### Research Methodology:

The researcher used the experimental method to suit the nature of the research.

Research community and sample:

The research community represented the players of the national team of youth rowing (kayak), the number of (10) players, the researcher selected (8) blasphemers, representing 80% of the community of origin and were chosen by deliberate method, and divided into two groups randomly each group (4) blasphemers first officer The other is experimental.

Means of gathering information, tools and devices used for research:

- .Arab and foreign sources -
- .Form of registration of test results -
- .personal interviews with experience and competence in kayaking (kayak) -
- .Olympic boats + Olympic oars -
- .hour stop (3) + HD video camera number 3 -
- .Steamboat -

.balls of different sizes and colors -

.White flag 3 -

.- Banner 3+ Whistle 3

Field research procedures

Measures

The experimental method was used by designing the two samples (experimental officer) with the pre and post test. A control group with (4) blasphemers for each group.

Apply speed tolerance exercises

The researcher has prepared special exercises taking into account the training load and its intensity and the level of training and the training period and fitness of the research sample. (3) training modules per week (Saturday, Monday, Wednesday) where they were applied in the main part of the training unit, which lasts (35) minutes where the experimental group was applied Special exercises prepared by the researcher The control group was performing the training curriculum approved by the Federation and implemented by the trainer, and special exercises prepared by the researcher are:

.kayak rowing boat attached to the boat collar in front -

.rowing kayak with a ball tied rope rope boat from behind the boat -

.paddle paddle outside the water (rowing ground) rubber ropes -

Tests used in research

.Test the completion time for the effectiveness of 500 m rowing (kayak) -

Purpose of the test: To measure the maximum performance time -

Performance Requirements: Kayak - paddle - waterway for 500 m – stopwatch -

How to perform: The player stops the front of the boat on the starting line and sets off after hearing the whistle for the distance of 500 meters.

Registration: Calculating the player's performance time for a distance of 500 m



Figure (1)

Figure shows the completion time test 500 m rowing (kayak)

- as a test of speed tolerance on the training device at different weights (45 seconds): rate

Purpose of the test: To measure the speed tolerance of the arms, shoulders and torso (retractable)

The necessary tools: the machine manufactured - stopwatch - weight (8 kg) on the right and (8 kg) on the left.

Performance Description: The laboratory sits on the seat in the device as in the boat and holds the lips and when you hear the instructions begin to perform a drag from the front until the time is over.

Recording: The player is counted the number of times the performance and time during the (20 seconds.

The researcher conducted the scientific basis for the modified test



Figure (2)

The test shows the speed tolerance on the training device with different weights

Experiment procedures:

The researcher conducted a reconnaissance experiment on (3/6/2019) on Monday at the training center of the Iraqi Central Federation of Canoe on a sample of Majdafi outside the sample of the two players for the purpose of identifying the validity of the devices and the validity of the devices used. The sample for these exercises.

Parity between the two research groups:

Equivalence between the two groups was carried out by testing the speed tolerance on the weighted device and the achievement test 500 m rowing (kayak) in order to find parity between the two experimental groups for the pre-tests.

Equivalence results indicating no significant difference.

Table (1)

Shows the equivalence between the two research groups for the pretest tests in the test of speed tolerance of the weighted device and achievement (500 m) rowing (kayak)

Moral	Sig	Calculated value (v)	Control		Experimental		measruing unit	Variables	sequenc e
			standard deviation	Arithm etic mean	standard deviation	Arithm etic mean			
Non-Moral	0.75	0.33	2.38	23.50	1.83	24.00	Repetition	Withstand the speed (20) ts heavy machine	1
Non-Moral	0.20	1.46	3.56	113.00	1.26	115.75	time	Kayak Rowing 500 m	2

The degree of freedom - 6 .. Significant at the level (Sig)  $\square$  (0.05)

The pre-test of the experimental and control research sample was conducted on (4/6/2019) on Tuesday at 6 pm in the training center of the Iraqi Federation of Canoe, and the pre-test included the test of bearing speed (500 test). Time at that distance.

These special exercises were applied after presenting them to a group of experts in the field of rowing and sports training and made some amendments to it for a period of two months starting from (6/6/2019) to (6/8/2019) and by (3) units. In the week (Saturday, Monday, Wednesday) where it was applied in the main part of the training unit as Abu Al-Ala asserts that "most of the changes resulting from training usually occur within 6-8 weeks" () and the time of each training unit (30-35) Accurate and since the sections of the training unit is the preparatory section and the main and the final researcher intervention part From the main section during the training module of the sample carried out during the training period and using high intensity interval training method. The training curriculum for the sample of 500 kayak was developed according to the special exercises used to develop the physical capabilities of the player and commensurate with the capabilities and capabilities of the research sample, where the experimental group performed the special exercises prepared by the researcher. Prepared by the researcher are:

- .kayak rowing boat attached to the boat collar from the front -
- .rowing kayak with a ball tied rope rope boat from behind the boat -
- .paddle paddle outside the water (rowing ground) rubber ropes -

The post-test was conducted on Thursday, 8/8/2019 at six and a half pm and the same conditions of the pre-test and the use of researcher statistical bag spss to extract the results of tests and correlations.

**RESULT AND DISCUSSION:**

Presentation and analysis of the results of the experimental and control groups in the tests of bearing speed and completion time (500 m) rowing (kayak) before and after.

Table (2)

skewness	standard deviation	Arithmetic mean	Control	skewness	standard deviation	Arithmetic mean	Experimental	Skills	sequence
.753	1.70783	23.7500	Before	.190	2.16025	22.0000	Before	Bearing speed of the	1
.753	3.41565	24.5000	after	.129	1.73205	30.5000	after		

								device	
.190	2.16025	112.0000	Before	.855	1.50000	116.7500	Before	The completion time of 500 m rowing	2
.138	3.09570	114.7500	after	.672	2.58199	102.0000	after		

Table (3)

It shows the calculated value of (T and the error rate for the pre- and post-test of the speed tolerance test of the weighted device of (20 s) and the completion time of 500 m rowing for the experimental and control group

Error proportions	The value of T	FS	S- f	E-f	the group	Measurement	the exams	sequence
.000	29.445	.28868	.57735	8.50000-	Experimental	time	Bearing speed of the device	1
0.519	-0.728	1.03078	2.06155	0.75000-	Control			
0.001	14.310	1.03078	2.06155	14.75000	Experimental	time	The completion time of 500 m rowing	2
0.010	5.745	.47871	.95743	2.75000-	Control			

) \*Significantly below the significance level <(0.05

Table (4)

The mean, the deviation, the calculated value (t) and the statistical significance of the dimensional tests of the control and experimental groups

The result	Significance value	Calculated (T) value	Posttest tests		Group	Statistical parameters tests
			standard deviation	Arithmetic mean		
moral	0.020	3.133	1.73205	30.5000	Experimental	Bearing speed of (20) tha weighted device
			3.41565	24.5000	Control	
moral	0.001	-6.326	2.58199	102.0000	Experimental	Bearing speed of (20) tha weighted device
			3.09570	114.7500	Control	

At the degree of freedom (3) and below the level of significance (0.05)

It is clear from Table (2) that the mean of the experimental group in the pretest test to withstand the speed of the weighted device (22.0000) second and a standard deviation of (2.16025) and twist (190) and

after the test was the mean of (30.5000) and standard deviation of (1.73205) and torsion ( The arithmetic mean of the pre-test of 500 m blowing time (kayak) (116.7500) t with a standard deviation of (1.50000)

and twisting (.855) and after the test was the mean of (102.0000) and a standard deviation of (2.58199) and torsion (.672).

The control group in the pre-test of the speed tolerance of the heavy device (23.7500) t and a standard deviation of (1.70783) and the post-test was the mean (24.5000) and standard deviation of (3.41565) and the mean of the pre-test of the speed tolerance of (20) Tha Ping Press (20.5000) The average mean was (21.2500) and the standard deviation of (4.19325) The arithmetic mean of the pre-test of 500 m rowing time (kayak) (112.0000) Tha and the standard deviation of (2.16025) (114.7500) with a standard deviation of (3.09570).

From what is shown in Table (3) which shows us the values of the arithmetic difference of the experimental group in the test of the speed tolerance of the pre- and post-weighted device (8.50000-), the standard deviations (2.16025), the calculated value of T (29.445) and the probability of error (.000). The difference of the arithmetic groups of the control group in the test of the speed tolerance of the pre- and post-weighted apparatus (- 0.75000).

The values of the difference of the arithmetic groups of the experimental group at the time of completion of the 500 rowing (kayak) before and after (14.75000) The standard deviations (2.06155) and the value of (T) calculated (14.310) and the probability of error (0.001) The difference of the arithmetic groups of the control group in the test time of completion of 500 m Kayak rowing (2.75000) before and after the standard deviations (.95743) and the value of (T) calculated (5.745) and the probability of error (0.010).

In Table (4) which shows the arithmetic mean of the experimental group in the post-test to bear the speed of the weighted device (30.5000) t with a standard deviation of (1.73205) and the value of (T) calculated (3.133) and a value of (0.020) The control group for the post-test was the mean The mean arithmetic of the experimental group in the post-test of 500 m rowing time (kayak) (102.0000) second and the standard deviation of (2.58199) and the value of (2.58199). C) calculated (-6.326) with a value of (0.001) the mean of the control group in the post-test for the completion time of 500 m blasphemy) EAC) was the arithmetic mean value of (114.7500) and a standard deviation of

(3.09570) and the value of (t) calculated (-6.326) and the value of significance (0.001).

The results of Table (3) show that there are significant differences in the results of the experimental group between the pre- and post-tests in the test of bearing speed in the weighted device and measuring the rowing time of 500 m kayak and in favor of the post-test. The researcher attributes the reason for this development to the validity and effectiveness of the special exercises applied to the experimental group It contributed to building a good level of special endurance, which was reflected in positive results in the post-test. As for the control group, it is clear from table (3) that there are significant differences in the results of the control group between the pre- and post-tests in the test of the speed tolerance of the weighted device and measuring the rowing time of 500 m kayak for the benefit of the post-test. To increase the level of the individual relatively and for a long time as "(the training curriculum inevitably leads to the development of achievement)". When comparing the two groups, we see that the experimental group is superior. The researcher attributes this to the fact that the special exercises led to a high development in the various functionalities related to the game. This development came late after an evolution in the special physical characteristics that led to an increase in the ability to invest and develop the technique. As the technique is mainly associated with physical abilities, training leads to an increase in fatigue situation which leads to a similar increase in the development of devices and the development of energy drainage systems and the effectiveness of 500 m operating in the atmosphere of lactic acid so the development of this system leads to delay fatigue and the development of achievement. This is what the researcher did to him as these special exercises led to increased fatigue and the burden placed on the athlete, which led to the development of achievement.

Table (4) shows the results of the arithmetic mean and the standard deviation of the post-tests of the experimental and control groups for the test of the speed tolerance of the weighted device. The arithmetic mean (24.5000-30.5000) for both groups and the standard deviation for the two groups (1.73205-3.41565) and the value of (T) calculated (3.133). We note that there are significant differences between the

distance tests between the two groups, ie the experimental group that was trained using resistance training has achieved an improvement in the test of speed tolerance and was better than the control group that was trained on the training methodology followed by the trainer, the researcher attributes this to friction resistance As a result of the performance of the various exercises with resistors in the rowing boat, all this helped to develop the speed table gradually when applying the training curriculum in water. This is confirmed by Emad Abdel Fattah. There is a positive effect of using different levels of resistors according to the nature of performance within different environments (water or land). As well as the development that occurred in the achievement came from the evolution and improvement of tolerance Kayak, who adopted the principle of scientific accuracy in training speed tolerance maqamat as "the best that can be achieved by the athlete through training to endure speed and resistance to fatigue and overcome, is his ability to produce energy in circumstances Which increases the abilities and capabilities to be qualified to overcome (difficulties in training and competitions to achieve the best sports results)

### CONCLUSIONS:

The researcher reached the following conclusions:

- The practice of the members of the experimental group of special exercises prepared by the researcher and continue to practice regularly has had a positive impact in the development of speed tolerance and progress in the level of achievement.
- The use of these exercises in the final part of the training unit and their consistency with the training load had a physical impact on the rowers.

### ENDORSEMENT:

In the light of the research findings and conclusions, the researcher concluded that:

Focus on the application of special exercises in the final part of the module -

- Instruct instructors to use these exercises because of their positive impact in the development of physical

qualities, including the capacity to bear speed and thus improve the level of sports achievement.

- The researcher recommends the need for further research and studies using special exercises in the development of other physical characteristics and other activities in rowing (kayak).

### REFERENCES:

- Abdul Rahman Ahmed Saeed, designing a proposed training device with different weights in the special force and the achievement of 500 m Kayak for the youth category, Master Thesis in Physical Education and Sports Science, Mustansiriya University, 2018.
- Mohamed Hassan Allawi and Mohammed Nasr al-Din Radwan, tests of motor performance, 3rd floor, Cairo, Dar al-Fikr al-Arabi, 1994.
- Abu El-Ela Ahmed: Training and Athletic Health, Cairo, Dar Al-Fikr Al-Arabi, 1996.
- Saad Mohsen Ismail; Effect of teaching methods to develop the explosive power of the men and arms in the accuracy of the correction (remote jump high in handball, doctoral thesis, College of Sports Education, University of Baghdad.
- Emad Abdel Fattah: The Effect of a Training Program on the Development of Physical and Skill Characteristics of Karate Players, Master Thesis, Helwan University, Faculty of Physical Education, 2001.
- Abbas bin Saleh al-Haruri, science of sports training, I, BangaZi, publications of QarYounis University, 1994.