**Effect of exercises for some combinatorial abilities in learning phase of flying over the barrier for effectiveness of 400 hurdles sprint**

**Researchers**

**Hashim Shakir Abdulkareem /** [**hashim.shakir@uobasrah.edu.iq**](mailto:hashim.shakir@uobasrah.edu.iq)

**Riyadh Alsaeed /** [**riyadh.alsaeed@uobasrah.edu.iq**](mailto:riyadh.alsaeed@uobasrah.edu.iq)

**College of Physical Education and Sports Sciences**

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**Abstract**

Most of the complex sports activities need a clear strategy for the learner, since the stability of tactics does not constitute a unit of learning good skills, so you need exercises that facilitate the process of developing tactic skills to increase compatibility and harmony in terms of kinetic representation of performance, which is called additional exercises that will improve performance and in organizing sports skill training (depending on the nature of the effectiveness) is not sufficient to achieve stability in performance, and therefore there is a specific need for training that facilitates process of increasing capabilities and facilitating performance. the exercises used. researchers used the experimental method by designing the control and experimental groups with pre and post tests and calculating the difference between them. research sample included the students of the second stage in the intentional manner in the College of Physical Education and Sports Sciences - University of Basrah for the academic year 2021/2021, and their number was (10) students who were randomly divided into two control and experimental groups each. A group of (5) students and homogeneity was calculated between them. A test of running 400 hurdles was conducted for the two groups to find out the level of impact of exercises on learning the stage of flying over the barrier and thus improving their achievement. fourth chapter included a discussion and analysis of the results of the running test through the use of statistical treatments. final results were obtained and the researcher had sufficient information about the results of the field practical experiment that he carried out on the research sample. results indicated significant differences at end of the experiment, as results proved that there is progress tangible in the level of achievement of the research sample.

As for the fifth chapter, it included conclusions and recommendations, including:

1- use of exercises for some combinatorial abilities contributes to improving the learning process of the effectiveness of 400 hurdles by developing flight phase in crossing hurdle.

2- It can be used in schools, education, the effectiveness of running obstacles, for ease of application.

3- Conducting analytical studies for these means in terms of kinetic analysis to find out their usefulness from a mechanical point of view.