



**Ministry Of Higher Education AND Scientific Research
University of Babylon
College of Physical Education**

**Some Biomechanical And Physical Avariables
To The Grab Start For Tow Stage Of Takes
Of The Oldest And The Modern And Its
RelationshipWith Achieving 50 M Free Style**

**BY
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**A Dissertation
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**Advisor
Prof . Dr . MazinAbd –Al -Hade Ahmed**

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Abstract

Some Biomechanical And Physical A variables To The Grab Start For Tow Stage Of Takes Of The Oldest And The Modern And Its Relationship With Achieving 50 M Free Style

Researcher

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Advisor

Prof . Dr . MazinAbd –Al -Hade Ahmed

The research aims for the following reasons:

- 1) Get some physical variables values and Albayumkanikih to start using the starting platforms hijacker ancient and modern.
- 2) to know the relationship between some of the physical variables and Albayumkanikih start hijacker and the time of completion of the first 15 m and the overall achievement of the variables under consideration.
- 3) compared to some of the physical variables and Albayumkanikih to start a snap using the starting platforms ancient and modern.

The researcher used the descriptive style of mutual relations, and sample consisted of (5) swimmers from the national team of Iraq (applicants) on the effectiveness of (50) m freestyle, the devices research was designed researcher launch pad similar to the international standards of datum rear movable adopted in Search, and the purpose of calculating the research variables physical and Albayumkanikih lost researcher used a foot scan aqueous which Taatsoar first fast 300 pictures / sec and the second at 25 Photo / s and was obtained values of variables through the use of program Ironing Novia and program real player sp for cutting Suri and processors statistical has Astkhadd researcher SPSS statistical bag.

The researcher concluded that- :

- 1) a significant correlation between each of the variable angle behind the knee and variable angle payment and the time of the completion of the first 15 to start the kidnapper (track) on the launch pad modern.
- 2) The presence significant correlation between each of the variable angle payment and variable angle aviation and completion time total of 50 m to start hijacker (track) on the launch pad modern.
- 3) The presence of a significant correlation between each of the variable time of movement and variable speed of movement and the time of

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the completion of the first 15 to start the kidnapper (track) on the launch pad old.

The researcher recommends the following- :

- 1) need to focus on physical variables mechanical Albao of start hijacker (area) in the training modules for swimmer of the Iraqi national team for short distances .
- 2) emphasis on all of the variables that showed significant correlation function relationships with the stages of completion and work on developing.
- 3) The need great attention to the development all Elkinmetekih variables and Elkinatkih stages start the kidnapper (the track) and modern on the launch pad.