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# **The effect of an educational training curriculum on receiving and delivering the stick in the modern way and the achievement of (4 x 100) runners**

**Basma Abdul Hussein Shandal**

The Ministry of Education / General Directorate of Education in Diwaniyah/Iraq  
Email: [Frasf926@gmail.com](mailto:Frasf926@gmail.com)

**Abstract**--The evolution of the level of sport achievement in recent years in sports and general games special forces where I started sports teams of a very small achievement and this is due to the use of all scientific methods regarding sports training and contain athletics on a series of events that are less than the one from the other in terms of importance from points or get gold medals and there are individual games and other mass is effective (4X100) of the only collective events in athletics The importance of research has demonstrated the knowledge of the role of the conditions to achieve maximum speed of the runners as well as the impact on achievement. The research problem is the weakness of the completion of the difference in this event as a result of using the old method, the objective of this research is teaching runners Technique delivery and receipt of the stick of the modern situation Ramming search is modern role in the arrival of hostilities early maximum speed of the technique, the research methodology, the researcher used the experimental method, The research sample were runners Faculty of Physical Education, the statistical methods, the researcher used statistical pouch (spss). The conclusions of the research, the researcher concluded: 1. The training program prepared for the role in the development and accelerate the speed during the first three separation distances; 2. The accelerate developed and got better during the third separation distance runners and this evolution. The conclusions: 1. old beginning of the effectiveness of the relay conditions change in the modern situation that used in the researches; 2. Take advantage of this recent research experiment in the field of relay -interest effectively.

**Keywords**--educational training curriculum, achievement, mail runners.

## **Introduction**

The development of the level of sports achievement in recent years in sports in general and athletics in particular, where sports teams began to achieve very little, and this is due to the use of all scientific methods regarding sports training, including biomechanics and anatomy, and attention to all aspects that have an impact on sports achievement, and games contain The forces are based on a group of activities that are not less than one another in terms of importance and in terms of scoring or obtaining medals. There are individual and group games. The (4x100) event is considered one of the only group activities in athletics, and more than one player participates in it within the same team. This activity is considered one of the events The stable itself has its own score and is considered one of the most wonderful events because of its excitement and suspense for the teams and spectators and the process of receiving and handing over the stick a great role in achieving success and winning for teams, where the receiving and delivery technique and the extent to which the players master this technique is an important role in achieving the least possible time through delivery and receipt The stick is at maximum speed through the receiving box, thus achieving the least effective time as the starting positions are different Sitting, standing, or a position close to sitting (talking) has a very important role in achieving the best incremental acceleration to achieve the receipt and delivery of the stick at full speed to the players by investing biomechanics and choosing positions close to the starting position to reduce the radii of the body to reduce the moment of inertia of the runner to achieve better acceleration, Through the researcher's follow-up of athletics competitions, he noticed that there are new starting positions for Arab and international postal teams that were not used by runners and female runners. Hence, the researcher decided to identify the role of the conditions in achieving the maximum speed of runners, as well as the extent of their impact on achievement.

## **Research problem**

Through the researcher's follow-up to the athletics competitions, they noticed the Iraqi Post's teams' use of old conditions, despite the presence of new modes for the postal teams that were not used by runners and female runners. Therefore, the researchers instructed the teams to perform poorly with this effectiveness as a result of using the old modes. Here, the researchers wanted to identify the role of the modern situation in achieving The maximum speed of the runners, as well as the extent of its impact on the achievement.

## **Research aims**

- Teach runners the technique of handing and receiving the stick from the modern situation.
- Preparing a training curriculum to master the delivery and receipt of the stick from the modern situation of the university team runners

## Practical part

### Research Methodology:

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

Research community and sample:

The research community consisted of the runners of the University of Al-Qadisiyah team for the academic year 2020-2021. As for the research sample, the postal team runners (4x100) numbered (4) runners.

### Main search procedures:

#### Pretest

The researcher conducted a tribal test on the research sample by conducting a race timing (4x100) with filming the race with 3 cameras on the receiving and delivery areas, at a height of 110 cm and at a distance of 15 m from the race track, to find the speed and acceleration for every ten meters and a distance of 30 m from the receiving and delivery area.

#### Training tutorial

The researcher prepared a training educational program after reviewing the scientific sources and the opinions of experts to teach the modern method of receiving and handing the stick from a position close to the sitting position for a period of 6 weeks, at an average of two units per week, and at a time of 15 minutes for each unit, during which learning to receive the stick by the invisible method and the method of internal receipt and delivery From bottom to top.

#### Dimensional test:

The researcher conducted a remote test on the research sample by timing the race (4x100m) with the same pre-test.

#### Statistical means:

The researcher used the statistical bag (spss).

### Results

Presenting the results of the sample members for the acceleration and speed variable and the rate of development between the pre and post test for each (10) meters

Table (1)

It shows the arithmetic means, standard deviations, and the rate of evolution for the members in the first 10 meters

Data	Pretest		Post test		Evolution rate	
	The speed	Acceleration	The speed	Acceleration	The speed	Acceleration
Mean	4.50	2.04	4.65	2.16	3.22%	5.5%
Std. deviation	0.149	0.147	0.19	0.137		

It is clear from the above table that the arithmetic mean of the pre-test of speed was (4.50) and with a standard deviation of (0.149), as for the acceleration, the

arithmetic mean was (2.02) and with a deviation of (0.147), and the arithmetic mean of the distance test of speed was (4.65). With a standard deviation of (0.19), as for the acceleration, the arithmetic mean reached (2.16) and with a deviation of (0.137). Thus, the rate of velocity development during the first 10 m reached (3.22%) and the rate of acceleration development reached (5.5%), and this shows that the rate of development of acceleration during the first 10 m The development was good in relation to speed, and this was a result of the muscular strength enjoyed by the runners, especially the muscles of the legs, where muscular strength plays a major role in accelerating and speeding to cross the race distance in the shortest possible time, through following the training method based on sound scientific foundations, the training situation can develop well, ( ) As a result of performing repetitions at high intensity speeds during training, it will increase the energy store responsible for rapid muscle contractions, which will increase the efficiency of working muscles and thus develop their work.

Table (2)

It shows the arithmetic means, standard deviations, and the rate of evolution of the members in the second 10 meters

Data	Pretest		Post test		Evolution rate	
	The speed	Acceleration	The speed	Acceleration	The speed	Acceleration
Mean	6.20	1.17	6.35	1.25	2.3%	6.4%
Std. deviation	0.12	0.14	0.18	0.17		

It is clear from Table (2) that the arithmetic mean of the pre-test for speed was (6.20) m/sec and with a standard deviation of (0.12). As for the acceleration, it reached the arithmetic mean (1.17) and with a standard deviation of (0.14). As for the arithmetic mean For the dimensional test of the velocity, it reached (6.35) with a deviation of (0.18) and the acceleration reached the arithmetic mean (1.25) and with a standard deviation (0.17), and thus the rate of development of the acceleration during the distance reached 10 m/s (2.3%). (And the rate of development of acceleration has reached (6.4%), and this is a good development rate, especially for acceleration, as the rate of development is greater than the rate of development to accelerate during the first 10m distance. The researcher accepted and by influencing some of the runners' learning processes through the educational curriculum prepared to develop the acceleration and speed stage from a position close to sitting, where this position worked to shorten the radii through it and work to reduce the moment of inertia that is proportional to the direct proportion with the radii.

Table (3)

It shows the arithmetic means, standard deviations, and the rate of evolution of the research sample in the third 10m

Data	Pretest		Post test		Evolution rate	
	The speed	Acceleration	The speed	Acceleration	The speed	Acceleration
Mean	7.23	0.85	7.40	0.88	2.2%	3.4%

Std. deviation	0.49	0.08	0.10	0.09		
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It is clear from the above table that the arithmetic mean of the pre-test of velocity was (7.23) with a deviation of (0.49). As for the acceleration, it reached the arithmetic mean (0.85), with a deviation of (0.08), and the arithmetic mean of the distance test of speed was (7.40). (With a deviation it reached (0.10), as for the acceleration, the arithmetic mean was (0.88) and with a deviation (0.09), and thus the rate of development of the speed during the third 10 m reached (2.2%) the rate of development acceleration (3.4%). It is clear from the previous figures that the rate of development is good, although it is by a very small difference, but the speed deals with fractions of a second, and the development of a tenth is very small. To the computational circles, it can be predicted that the runners have entered the stage of maximum speed because the acceleration of the disease approaches zero, and this confirms that the initial speed has become the same as the final speed. )

Table (4)

It shows the arithmetic means, standard deviations, and the percentage of development for the individuals of the research sample in completing all the distances of 100 meters and the acceleration distance

Data	Pretest	post test	Evolution rate
	(4*100)m	(4*100)m	
Mean	66.44 second	64.87 second	2.42%

It is clear from the above table that the percentage of achievement development has reached the arithmetic mean of achievement (4x100m) in the pre-test (66.44 seconds), while the average for the remote test was (64.87) seconds, and the rate of development was (2.42%) and it is clear that the rate of development is good Since reducing a time of two seconds from the time of mail is a good development, as most sprints end with a very small difference, so the importance of the second parts and their role in changing the exciting of sprints has emerged.

### Conclusions

- 1) The prepared training program has a role in developing acceleration and speed during the first three intervals
- 2) The acceleration has improved better during the third interval, which is a good development for the runners
- 3) The prepared program has a role in increasing the acceleration distance for positive runners.

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