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CONTINUOUS OBSERVATION OF THE CORRECTION OF BIOCHEMICAL INFORMATION AND ITS EFFECT ON MOTOR TRANSPORT AND THE STARTING PARAMETERS OF SPEARMOWERS UNDER THE AGE OF 18 YEARS

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ABSTRACT:

The effectiveness of throwing javelin is one of the activities of athletics with complex technical performance. Therefore, the trainer and the player may have difficulty in observing the precise technical errors in the parts of the movement, especially the starting variables, without relying on the means of analysis and thus diagnosing errors in the starting stage of this activity and correcting them. Through the mechanical information to be followed by the shooter when the application of the technique (technical performance), thus trying to change performance towards the right movement, and also so that the athlete can conclude that the skill that is performed is integrated and correct.

:But the problem of research was determined by the following question
- Is this method makes the athlete apply performance with a focus on correcting the error and feeling it.
- Can the results of the comparison between what has been done and corrected be consistent with what should be done.
The goal of the research is to develop a curriculum that includes a plan for retrieving biochemical information, with the contribution of the trainer and the rami to observe the impact on the locomotives and the starting variables of the spearmen.
The third group included the society and the sample of the research. The sample of the research sample reached (5) archers, and the researcher chose him by the deliberate method. They are the throwers of the National Center for Athletic Talent in Baghdad for the season (2019)
The fourth chapter included the presentation, analysis and discussion of the results, while chapter 5 included conclusions and recommendations
- the need to guide the trainers need to pay attention to the mechanical variables to put the throwing is the most influential in the achievement of jogging because of its importance in achieving the high speed of the launch.
- Asserting more time to train the technical performance to increase achievement, especially in the effectiveness of javelin.

***Keywords**: correction of biochemical - motor transport – spearmowers.*

INTRODUCTION

The effectiveness of throwing javelin is one of the activities of athletics with complex technical performance. Therefore, the trainer and the player may have difficulty in observing the precise technical errors in the parts of the movement, especially the starting variables, without relying on the means of analysis and thus diagnosing errors in the starting stage of this activity and correcting them. Through the mechanical

information to be followed by the shooter when he applies the technique (technical performance), thus trying to change the performance towards the right movement, and also so that the athlete can conclude that the skill that is performed is integrated and correct, and allow nutrition This is because after each repetition the interaction between the instructor and the trainer is achieved through the success of applying the mechanical factors correctly during the performance. What has been done wrongly (which is not felt by the player and believed to perform correctly) with what must be done.

The traditional method of retrieving information is based on the fact that the coach tells the player what corrective information he needs after each attempt, and no one uses the feedback with the athlete to do his own analysis of decision making and to give suggestions about correcting performance.

Most athletes during the competition try to focus on the motor duty they want to perform, in other words the coach asks the player to achieve the best achievement, and this suggests the player not to focus on the performance skill, but on the competition to achieve achievement, although the athlete does not try to sense the exact performance, but focuses To modify the minor errors associated with performance, including amendments to correct the length of the step or correction of the shaft-bearing shaft, etc., without careful analysis of the requirements for performance and modify the parts of the body responsible during the implementation of performance and all intentional self-information of Riyadh On the other hand, the athlete receives information from the trainer about the performance of what to do in practice (feedback). The information is compared between what the athlete expects to achieve (self-reinforcement) and the application of the trainer's information. Feedback is the key to effective learning when Supported by the trainer, if the external information (the trainer) coincides with the internal information, the skill is shown well.

MATERIALS AND METHODS:

Research Methodology:

The researcher used the experimental method (one group design) in order to suit the objectives of the study. The researcher prepares the steps taken by the researcher to arrive at the facts related to the phenomenon to be examined.

Search community and sample:

Due to the research requirements and the attainment of its goals and objectives, the research community reached (5) archers, and the researcher chose him by the intentional way. They are the throwers of the National Center for Athletic Talent in Baghdad for the season (2019). The number of (3) archers out of (5) The percentage of the research sample is 60% of the community of origin, as shown in Table (1)

Table (1) Details of sample distribution

Sample application	Sample of the exploratory experiment	the number	the sample
3	2	5	Shooters
60%	40%	Percentage of the community	

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

:Means of data collection

- Arab and foreign sources
- Personal interview
- Note
- Testing and measurement.
- Wireless communication methods
- Information Network (Internet)

Used equipment and tools

- Video camera type (CASIO-EX-FH20) multi-speed (30-1000) image / second number (3).
- Digital video camera type (SONY HX 300) for filming field procedures.

Kinovea kinetic analysis program.

- Computer (laptop) number (1).
- Legal shaft (700 g) Number (3).
- Drawing scale length (1 m).
- 75 m measuring tape
- Colored adhesive tape (for identifying control marks).

Field research procedures:

Determination of kinetic variables for javelin launch and kinetic transport index

:The speed of starting spear

The speed of the spear is the moment of leaving the hand of the rami. This variable is calculated by determining the distance between the moment of departure and the real distance and the time of the two images, and by dividing the distance over time we get the speed of the moment.

Spear launch angle.

It is the angle of launch of the projectile located between the horizontal line that passes from the center of gravity of the projectile and parallel to the earth during the start of the flight and the path that the center of the weight of the body draws during the flight. The value of this angle is related to the movement of the shot, which is by achieving the maximum horizontal distance possible.

- the height of the starting point spear: the highest point where the spear leaves .

Angle of attack: -

The angle between the longitudinal axis of the shaft and the mar at the center of the spear weight before starting from the player's hand with the horizontal line passing from the center of gravity to the mass of the shaft parallel to the ground.

:Direction angle

ز The difference between the angle of attack and the starting angle

:Movement index of motor

Which is the relationship between the starting angle and mechanical energy performed in the moment of dependence and payment

For firing stage.

Exploration Experience

The researcher will summarize what will be done in the exploratory experiment with several points:

. Adjust the locations of the camera fast according to the three axes -

. Ensure that the cameras can work as a single unit-

.The readiness and adequacy of the team to conduct the test-

. The time it takes to perform the experiment-

.Extent of application of the sample for testing-

Main experience

Imaging procedures:

The main experiment was conducted on the members of the research sample at the same place and at the same time as the experiment was carried out. The researcher and the assistant working team set up the speed cameras in the same measurements and distances that were in the exploratory experiment. The quick cameras were placed to see the three axes And the depth) for the movement of the Rami during the performance of the firing stage, and be from the side and the top and the highest distance of the camera from the side (8.5) meters and the height of (1,80) meters and the camera on the front of the player (8.5) meters and high (1,80) The third camera from the top (3.5)

work plan:

The study consisted of the completion test, as well as the successive corrections in the special curriculum to determine the level of development in the technical performance of the sample. The test was done and data obtained from the fast video cameras. The researcher analyzed these data by diagnosing the important biochemical variables under study and identifying the negative points And the positive of the variables specified in the performance and worked to address them by providing information on performance, which the researcher submitted to the trainer and sample to be part of the main part of the training program prepared by the trainer and dedicated to the shooters, (30) training units. This experiment was applied in the special preparation for a period of (12) weeks. The researcher relied on the codification of the information given in the training modules Prepared on personal interviews with the experienced and competent and the results of the pilot experiment and the pre-test of the members of the research sample of the variables under study.

: Performance test for javelin effectiveness Method of testing

In this test, the shooter must perform (6) attempts. The shooter must complete the firing stage and the best attempt will be made for each Rami in terms of achievement out of six attempts. Thus, the variables specified in the research are analyzed for the firing

stage, according to the three axes (longitudinal, lateral and deep).

Registration method:

The achievement of the player is measured by measuring the distance from the firing line to the nearest point left by the spear when it falls.

Statistical means

The researcher used the statistical bag (SPSS) for the purpose of processing the results.

RESULT AND DISCUSSION:

The researcher identified the level of the sample by extracting the values of the variables and the mean and the standard deviation as shown in Table (1)

Table (2) Shows the kinetic parameters of the research sample

P	s	The Third Rami	The Second Rami	The First	measruing unit	Variables	sequence
0.40	**21.03**	**21.00**	**20.65**	**21.46**	M / sec	The starting speed of the spear	**1**
1.52	**31.66**	**33**	**30**	**32**	Degree	Spear starting angle	**2**
9.90	**200.12**	**188.74**	**204.81**	**206.82**	cm	High spear starting point	**3**
3.60	**36**	**37**	**32**	**39**	Degree	Angle of attack	**4**
2.51	**4.33**	**4**	**2**	**7**	Degree	Direction angle	**5**
0.86	**18.48**	**17.55**	**18.66**	**19.25**	Degrees / goules / grams	Motor transport indicator	**6**

Table 1 shows the kinetic variables for the three archers. The value of the variable was the spear speed of the first shot (21.46 m / s) and the second grenade was 20.65 m / s. The third shot was 21.00 m / (30), the third (33), the mean (31,66), and the third (30) With a deviation of (1.52). The shooters achieved the highest point starting from the spear (206.82 cm) for the first shot. The second racer achieved a starting point of 204.81 cm. The third shot achieved a starting point of 188.74 cm. (39) for the first and the second thrower was (32) and (37) for the third player to reach the mathematical mean (36) and by deviation (3.60). As for the angle of direction, the archers were able to achieve almost complete exploitation of the movement of the spear movement. The direction angle of the first shot was (7), the second shot was (2) and the third was (4)), And the standard deviation (2.82). The shooters also achieved a movement index of the shaft by 19.25 for the first and 18.66 for the second and 17.55 for the third. Thus, the mean was 18.48 and the deviation was 0.86.

The researcher followed the researcher to the kinetic variables that belong to the research sample. He found a convergence in the ranges of movement through the movement parts and the angle values that relate to the performance of the shooters while there was a difference in the ranges of motion for the third player. The reason for obtaining this result for the shooters is to focus on the muscles of the two men, torso and arms by increasing the explosive muscle strength at the moment of the performance of the final firing stage, in which there is no interruption in the movement of parts of the body during performance, The most important variables that determine the distance of the throw are the speed of starting the spear and that this speed must correspond to the optimal increase of the angle of departure.

After presenting the results of the starting angle variable for the three archers and analyzing them through the arithmetic mean, the researcher found that the reason for obtaining this result is that they do not specify the ideal throwing angle of (36-39), due to the ineffectiveness of the application of the physical conditions of the body parts And the appropriate angles that should be taken by the thrower at the spear, which effectively contribute to the application of the correct corner of the launch of the spear, which is one of the effective kinetic indicators to get a perfect path and right to launch, which in turn increases the range of spear flight as well as the arc of aviation without prejudice to the rest of the Metgh Rat

Elkinmetekih (the starting speed and high starting point and angle of attack and angle direction).

In this light, the researcher believes that the movement must be smooth when moving from one part to another part of the body. The locomotion is carried out continuously in the performance of the movement, ie it is in a fast and continuous motor sequence. From the bottom of the body to the above, in the form of rapid serial motor, as it imposes on the rami different positions and movements of some parts of the body paved to move to the position of throwing, so it requires the shooter to have consistency, compatibility and sequence in the movements of the body to achieve the required motor duty.

Kamal Abdul Hamid discusses the relationship between motor transport and the smooth movement of performance between a good advanced performance ram for the effectiveness of javelin and Ram arising in the same activity. He also points out that the great difference in performance of the advanced ram in terms of kinetic transport, (Kamal Abdul Hamid). "Motor transport is an important feature of the calendar on which the movement of athletic skill is based on different sports activities.

CONCLUSIONS:

- The presentation of the raw biomagnetic variables and their discussion of the three shooters revealed to us accurate and important details of all the characteristics of the throwing, giving a clear picture of the determination of the strengths and weaknesses of the shooters as their strengths were all the specified kinetic variables except the angle of starting spear and direction angle.
- The kinetic variables under study during the same significant impact on the movement of motor and starting variables for throwing spear**.**

ENDORSEMENT:

- Emphasize the importance of the use of modern devices in analysis and imaging, especially the three-dimensional analysis system to know the mechanical errors in the movement accurately, which includes technical performance, especially to put the throwing in the effectiveness of spear throwing.
- the need to guide the trainers need to pay attention to the mechanical variables to put the most effective impact of the achievement achieved by jogging because of its importance in achieving the high speed of the launch.
- Asserting more time devoted to training the technical performance to increase achievement, especially in the effectiveness of javelin.

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