**The Effect of A Proposed Training Method in Developing Some of the Kinematic Variables of the Throwing and Achievement Stage of the Javelin Effectiveness of the Deaf and Dumb**

**Abbas Taha Hussein**

Faculty of Physical Education and Sports Science, University of Maysan, Iraq

[abbastaha16@gmail.com](mailto:abbastaha16@gmail.com)

**Asso. Prof. Dr. Haider Sobeih Najam**

Faculty of Physical Education and Sports Science, University of Maysan, Iraq

[haider@uomisan.edu.iq](mailto:haider@uomisan.edu.iq)

**Hussein Mohsen Saadoun**

**Abstract**

The research aims to prepare a proposed training approach for the effectiveness of javelin throwing for the deaf and dumb, as well as to identify the impact of the proposed training approach for some kinematic variables of the throwing and achievement phase of the javelin effectiveness of the deaf and dumb. The research fields consisted of the human field for future players of the Deaf and Dumb Forum for the effectiveness of javelin for the sports season 2020 AD and the temporal field for the period from 12/21/2019 to 27/22 2020 either. The spatial field is the Maysan Olympic Stadium Scientific method. The researchers used the one group experimental method to suit the research problem. The research community and sample, as the research community was chosen in the deliberate manner that represented the future forum for the deaf and dumb effectively by throwing a spear in Maysan Province, which number (8) players. The number of the research sample was (6) players. Two players were excluded because they were of high achievement and the percentage was (75 %) of original community. Either the most important conclusions. The proposed training curriculum was instrumental in developing the skill of javelin throwing for the deaf and dumb. The most important recommendations, the researchers recommend the Iraqi deaf and dumb trainers to rely on effective modern training methods and include them in training programs.

**Introduction**

To keep pace with the development taking place in all the different fields of life, the scientific and logical thinking through which the workers develop these fields should be the basis for which there is no alternative, and that this scientific thinking must subject these fields and fields to the most capable means of events of these developments, namely research Scientific and the use of the correct means to achieve what those workers hope to serve in those fields, and that the field of physical education is one of those fields that have adopted scientific research and the use of appropriate techniques in preparing a base of athletes who acquire learning on the basis of correct scientific foundations which they are in achieving the achievements and continuing to compete to achieve the best results, especially in the field and field activities that require correct numbers and are based on solid scientific foundations so what the physical numbers and exercises returned are the basis for achieving the best achievement, but the technical performance that corresponds to the physical training and the correct numbers has become the basis as the athletes usually prepare physically correctly in the upper levels except that the break is the use of optimal skill performance so we see coaches and teachers use the tools, tools and exercises that earn learners the skill in the optimal way and in proportion to the capabilities of that mattress No special events in other non-streaming Alarcad any events jump and throw advantage if these events are very important in a mastery of higher skill.

Throwing the spear is important stages of performance that require that it be acquired in a correct way, in order to closely link performance significantly with mechanical laws, and that its skillful performance usually requires building based on biomechanical foundations, as the issue does not depend on achieving an achievement on the force that we benefit from in obtaining the speed of the tool but rather is at the starting angle Significance is also great and there are many variables whose shape must be acquired through the early stages of learning, and that requires the use of many tools as alternatives and determinants of some of the Kinematic variables that are one of the most important things that the exercise is built on for the purpose of gaining learning at a certain stage.

The importance of research is evident in the impact of a proposed training program for the throwing stage for the deaf and dumb in order to provide learning in a proper scientific form and based on scientific foundations, which means contributing to building a base of spear-throwers for the deaf and dumb who could be counted on in the future to improve the local achievement and try to reach the best levels This will benefit the effectiveness of javelin for this category.

**Research problem**

During his field observation of the researchers, he pointed out that this event is one of the relatively difficult activities because the performance requirements are somewhat complicated, especially for the throwing stage in which preparation is made for photography and this is what causes difficulty in performance especially as it was also noted that there is a weak level of performance in throwing The players spear the deaf and the dumb, which reflected negatively on the level of achieving the effectiveness of the researcher's piece of hair in which a training curriculum was developed his electronic article compared to the level of metric tons of as well as the performance of some kinematic variables to the stage of shooting and the completion of this event only in an attempt to put what is new in the hands of the event coaches.

Research aims

Preparing a proposed training approach for the effectiveness of javing the deaf and dumb Identify the proposed affected training curricula for some kinematic variables for the shooting and achievement phase of the javelin effectiveness of the deaf and dumb.

**Fled z Search**

There are statistically significant differences between pre and post tests of research variables and in favor of post tests.

**Research fields**

**The Human Domain:**Future Forum Players for the Deaf and Dumb For the javelin effectiveness of the 2020 sports season

**Domain Temporal:**for the period from 21 /1 2 / 201 9 m and up to 27 /2 /20 20 m

**Spatial domain:**Maysan Olympic Stadium.

**Research methodology and field procedures**

**Research Methodology**

Researcher Wen used the one group experimental method to suit the research problem.

Research Society and Sample

As has been selected research community purposively represented by the players the Future Forum for the deaf and dumb B effective javelin throw in the Maysan province's ( 8 ) players and the number of research sample (6) players were excluded players because they are with high achievement and the percentage ( 75 %) of the original society, and has the researcher Wen conducted homogeneity on some variables Research (height, weight, age, arm length) for the individuals in the research sample, as shown in Table (1(

Table (1(Shows the mean, standard deviations, and relative difference coefficient of the research sample

|  |  |  |  |
| --- | --- | --- | --- |
| Variables | Arithmetic mean | standard deviation | Coefficient of variation |
| Age / year | 21. 5 | 0.9 | 4. 18 % |
| Weight / kg | 7 3 | 6.11 | 8.36 % |
| The overall height is cm | 1. 77 | 0. 09 | 5. 08 % |
| Arm length / cm | 7 6. 65 | 2. 67 | 3.48  % |

It is clear from Table (1) that the value of the relative difference coefficient of the research variables is less than 25% (Joseph J. Monk and Byron L. Newton: 1999, p. 351), which means that the research sample is homogeneous among them in these variables.

**Means of collecting information**

* Tests and measurements.
* Computer applications and software
* Arab and foreign scientific references.

**Devices and tools used in the research**

* Legal playground for javelin effectiveness.
* Special (6) shaft for this category.
* As a princess (video shooting type) Sony Japanese-made, with a frequency of 300 pictures / second, count (1(.
* Tripod Number (1(.
* Scale length )1 M(
* Tape measure length.
* Medical balls of different weights.
* Iron bar with different weights
* Rubber ropes
* Information registration form.
* Electronic hand stopwatch, number
* Arbitration banners number
* Medical scale to measure weight and height.
* Rope fixed with columns,   height (2.43) meters.
* Laptop type hp.

**Exploratory experience**

On Saturday, Researcher Wen conducted a pilot trial with a brief summary of 1/2/2019 9 pm. Three o'clock in the evening (2) for the Spear players. They achieve the purpose and purpose of the experiment to ensure the correctness of the tools and devices used. In the research, as well as to determine the nature of the conditions that decrease spoons that occur during the experiment

Tribal tests

On Tuesday, 24/24/2/9, the researcher Wen conducted the Maysan Olympic Stadium to perform the pre-test tests for the variable variables Elkinmetekih and achievement using the Sony-Japanese No. 1 video camera with a frequency of 300 images / second

**Kinematic variables**

) Spear starting angle, spear starting speed, highest spear starting point (

**The training program**

The researcher used the Wen training curriculum and the training curriculum period used for 8 weeks by (2) alone on Saturday and Tuesday of each week and the time of the department head in the training unit (40 - 45 minutes), and the pulse method is high and repeated intensity.

**Video photography**

Researcher Wen conducted video imaging in order to identify some of the motor variables that affect achievement, and video imaging is "one of the important means of discovering errors and controlling the level of convergence or distance levels for the technical performance of players" (Fouad Tawfiq Al Samarai: 1982, 328). Japanese (Sony) Japanese monochrome video camera - Made at a frequency of 300 pictures / second, place the camera at a distance of (7.5 0 meters) from the operator's movement path and height (1.3 8 meters) measured from the ground up to focus on photographing the lens machine and on The right side of the actuator was positioned vertically, and the scale (1) meters was used

**Main experience**

After the application of the aphids approached the training proposal, the researchers conducted the experiment on the homepage on Thursday, a brief summary, 2/20/20 20 pm. The third stage was to perform this procedure in the same way that tribal tests followed and the researcher tried them as brewing places that apply the same conditions in the tribal tests, in terms of time, location, tools and personnel to help avoid the occurrence of conditions variables in dimensional tests. Researcher Wen analyzed the variables using Kinovea.

Statistical means

**Use researcher Wen statistical pouch) SPSS (**

)Arithmetic mean, standard deviation, coefficient of variance, test (T) for associated samples(

View, analyze and discuss the results

View and analyze the results of tribal tribal tests to blame the variables

Table (2) shows the mean, standard deviations and value (t Calculated, error level and significance of differences between the pre and post tests in the research variables

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Search variables tests** | **measuring unit** | **Tribal** | | **after me** | | **Values t**  **Calculated** | **Significance level** | **Indication of differences** |
| **S** | **P** | **s** | **P** |
| **Spear starting angle** | **Degree** | 4 4 . 22 | 2 . 11 | 37 . 55 | 1.0 9 | **6,39** | **0.00** | **Moral** |
| **Spear starting speed** | **M / s** | 16 3 0 | 1.0 2 | 1 7 . 8 9 | 1.0 1 | **4,12** | **0.01** | **Moral** |
| **Highest spear starting point** | **Meter** | 1. 79 | 0.0 4 | 1. 90 | 0.0 2 | 5 . 72 | **0.04** | **moral** |
| **Achievement** | **Meter** | 36,88 | 1.0 4 | 39.57 | 2,13 | 4. 19 | **0.00** | **Moral** |

Moral under less or equal significance level (0.05) at freedom degree (5)

Looking at table ( 2 ), we find a positive development through the differences between the values ​​of the arithmetic mean for the pre and post tests for all research variables and for the benefit of the post tests, as well as the values ​​of law (T-Test) Calculated for samples symmetrical, which implications for all levels of less variables came from (0.05) which means that significant differences in favor of the post tests, and therefore have achieved what the researcher had assumed in the imposition of the second.

**Discuss the results**

Through the spectrum, it is clear that training on the approaches proposed by the researcher contributed to the development of the starting angle, and the researcher attributes the development of the spectrum to the approach to the training proposal, which contributed to the development of the starting angle of the spear. In fact, these exercises have contributed to achieving the full tide in the joints of the body, it is believed The researchers said that prolonging the throwing path of the tool is only an area of ​​the ability to close the player’s strength to generate the speed needed to launch the tool, “the starting angle is affected by the increase in the starting speed and according to the player’s experience in terms of experience and neuromuscular compatibility” (Talha Hossam El Din: 1997, p. 312). The starting angle is the two Sasaa variables n In achieving the goal of the spear, which is the completion of the largest horizontal disance, the disance is clear that the importance of changing the departure angle in light of the distance to be achieved "usually this angle 39 when throwing the required distance to be achieved is 75 meters" Talha Hossam El-Din: 1997, p. 26. )

Through (2) it shows that the training program prepared by the researcher contributed to the development of the level of the start speed in developing the spectrum feature for the researcher and the ambition that is going to approach the training proposal that contributed to the development of the speed of the spear start, the spectrum of the fact that the speed of one variable starts from the most important variables that I affected it directly on the achievement level, as the speed that the spear acquires from the approximate range in the last steps, especially throwing. The step contributes to improving the speed of the jar as quickly as possible and that the flow and correct alignment obtained by the ejector achieve the fastest speed of the spear to get the best achievement that has been done. Achievement (Talha Hossam El-Din: 1992, p. 23 7) Muhammad Yusuf Sheikh said that the circumference arm’s velocity towards a close relationship with the velocity angle is “the circumferential velocity, the maximum velocity of the angle of the arm, and the control of the diameter to some extent because it leads to an increase in the speed of the transmission arm to the spear to take off very quickly (Muhammad Youssef Al-Sheikh: 1996, p. 82)

The researcher attributed the development of the individuals sample to the proposed training approach, as this approach contributed to the development of the physical characteristics of the spear's effectiveness and the emphasis was on the worker's muscles in the engine that must be assisted to reach the most distant point during the throwing process, which contributed to securing the best point is the starting point, is The javelin activity is one of the athletes ’activities that involve joints mutually supportive and the muscles used in the tensile strength and relaxation process 12 throwing operations“ and the javelin activity requires shrinking muscles to move these joints in order to reach full tide ”(Qasim Hassan Hussein, Lyman Shaker: 2000, p. 310), And that the peak of the departing spear point It gives advantages to an additional horizontal distance because the height of the starting point of the Elkinmetekih variables that affect the fulfillment of Eman R., the researchers agree with the goats on the religion of God Muhammad Shafter “the full extension of the joints of the body increases the height of the thrust point and then a greater distance from the throw” is achieved Religion of God Muhammad Shaftar: 1998, p. 29)

The attribute of the researcher is due to the development of the spectrum in achievement, due to the training method proposed by the researcher, as well as to the regularity of the research sample in training, which contributed to the development of the investigation of the research sample, as a result of the regularity in formal training developed by Walt who obtained the kinematic variables associated with the achievement indicated by the results Kinetic movement test and analysis The spear that moves away to reach the spear develops and is in line with what the researchers said (Muhammad Ali Ahmad Qat). The training method that successfully measures the progress achieved by the individual athlete in the type of sports activity practiced through the level of Maha, physical, and functional depends on dependence. Dail achieved by an individual through curriculum training (Muhammad Ali Ahmad al-Qat: 1999, p. 12)

**Conclusions and recommendations:**

**Conclusions:**

In light of the results, the researchers concluded the following: -

* The proposed training curriculum has an effective role in developing the skill of throwing javelins for the deaf and dumb
* The proposed training has a positive effect on the development of some kinematic variables in the research.
* The proposed training curriculum has an impact on the development of achievement for the effectiveness of throwing deaf spears

**Recommendations:**

In light of the researcher's findings, he recommends the following: -

* Researchers recommend Iraqi trainers for the deaf and dumb to rely on effective modern training means and include them in training programs.
* Emphasizing the kinematic variables related to javelin effectiveness.
* Carry out similar research to other throwing events.

**References**

* Talha Hossam El-Din: Biomechanics, Cairo, Dar Al-Fikr Al-Arabi, 1993.
* Talha Hossam El-Din: Biomechanics, International Athletics Federation, Cairo, Cairo Regional Center for Development, 1997.
* Qasim Hassan Hussein, Iman Shaker: Research Methods in Biomechanics, Higher Education Press, Baghdad, 2000.
* Muhammad Ali Ahmad al-Qat: Member positions in sports training, first floor, Cairo, Dar al-Fikr al-Arabi, 1999.
* Mohamed Youssef El-Sheikh: Dynamic Learning, Third Edition, Dar Al-Maaref, Cairo, 1996.
* Al-Mu’iz Din Allah Muhammad Shaftar: The relationship of some anthropometric variables to some kinematic variables and the digital level by javelin throwing, Master Thesis, Al-Fateh University, College of Physical Education, 1998.
* Joseph C. Monk and Byron too. Newton: Statistics for Business, Science Research Associates, INC, 1999.