

THE EFFECT OF SAKYO TRAINING (S.A.Q) IN DEVELOPING SOME PHYSICAL AND KINETIC ABILITIES AND COMPLETING 110M HURDLES FOR 16-YEAR-OLD SPECIALIZED SCHOOL PLAYERS

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Abstract

The event of crossing the barriers is one of the Power Games activities that have received great attention in the field of researches. Which led to many developments in training methods and its ways, and then led to an improvement in the level of achievement. So, the use of these modern training methods is one of the necessary requirements for upgrading hurdlers, so the researcher found that Sakyo training is one of the latest techniques used in the sports field and it depends largely on the right running model that depends on explosive kinetic patterns in sports that require maximum speed and agility, that why the sample consisted of 110 m athletes barriers from the School Specialized in power games, numbering (5) players, The study was validated to find out the effect of Sakyo exercises on physical, kinetic abilities and achievement. The researcher concluded that there is a positive effect of these exercises on the research variables.

Keywords: Sports psychology. Sports exercise. Sakyo training. Physical. Kinetic abilities. complete, hurdles, school players.

Introduction

Modern means have contributed in assisting trainers, students and those in charge of the training process in the field of physical education to change and overcome the old methods and ways that was used and relied on. the reliance on modern scientific methods leads to knowing the impact of sports training on developing technical and physical performance.

The activity of crossing the barriers is one of the power games activities that have received great attention in the field of researches (Mohammed & Kzar, 2021). Which led to many developments in training methods and ways, which then led to an improvement in the level of achievement. As the use of these modern training methods is one of the necessary requirements to improve the barrier activity players.

(Khaleq, 2003) mentions that modern training programs have taken a form and structure consistent with the new development in methods and means in the training process, which has become one of the goals of physical, skill, functional and psychological preparation for players, as it has been proven by experience that the use of modern scientific means in training leads to the athlete's reaching the formalization of Optimum Sports (1:98) (Jovanovic et al., 2011) that the term Sakyo S.A.Q is derived from the initial letters of both transitional (speed), agility and kinetic speed (Quinkness). As (Polman et al., 2009) explain that the Sakyo S.A.Q training is an integrated training system that aims to improve both (acceleration, compatibility, response speed, and agility. (3: 494). S.A.Q exercises are considered one of the best training methods used in developing reaction

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speed, acceleration speed, agility, explosive power and general endurance level (4:183).

The power games competitions are among the most famous sports in the world, as their practice requires the integration of physical and physiological capabilities, technical aspects and psychological aspects. Therefore, the 3100 hurdles race is considered one of the strongest and most popular track races, which prompted coaches and runners to constantly and continuously search for modern methods of training. Through the researcher's review of many sources, researches and the latest modern methods of training, she found that the Sakyo S.A.Q training is one of the latest techniques used in the sports field, as it largely depends on the right running model that depends on explosive kinetic patterns in sports that require maximum speed, agility and interactive kinetic speed As a main condition for achieving athletic achievement, the researcher adopted a study of this problem in developing some physical and motor abilities and completing 100 meter hurdles through Sakyo exercises (Hassan et al., 2019). Preparing Sakyo (S.A.Q) exercises in developing some physical and kinetic abilities and completing 110 meter hurdles for young people. Knowing the effect of Sayko (S.A.Q) exercises in developing physical and kinetic abilities and completing 110m hurdles for specialized school players.

Research assignments: There are hypotheses with statistical significance between the two tests, the pre and post tests in the research variables for the research sample.

Research Fields: The human field: a sample of 16-year-old specialized school players in the 110m hurdles event. Time field: for the period from 5/11/2021 to 5/1/ 2022. Location field: the stadium of the Specialized School for Power games in Baghdad

Definition of Terms: S.A.Q training: a term derived from the initial letters of both speed, agility, and quickness, which contribute to an improvement in acceleration time, muscular ability, agility and kinetic speed

Methodology:

The researcher used the experimental filter with two measurements (before and after) for one experimental group for its suitability and the research problem, as "choosing the scientific method to solve research problems is essential, as the problem is the one that imposes the method that can

be used" (5: 47). The research sample: was chosen by the intentional method from the players of the Specialized School of power games at the age of 16 years, and their number is (5) players. The homogeneity of the research sample was carried out as shown in table (Table 1).

It is clear from Table. (1) that all the sample members were under the equilibrium curve in the variables related to homogeneity, which indicates the homogeneity of the research sample members in the homogeneity variables. Tools used in the research are (Arab and foreign sources, Questionnaire forms, Internet information network, personal interviews, Expert survey form, Length measuring tape, Medical scale to measure weight, hurdles of legal height and Boxes of different heights).

Results and Discussions

For the purpose of determining some of the physical and motor abilities of the effectiveness of 100m Hurdles, the researcher reviewed the specialized sources and similar research, and tests were presented to a group of experts with experience and specialization, and what suited the research was chosen as shown in table (Table 2).

Exploratory experience: The researcher conducted the exploratory experience on Wednesday, 10/11/2021 at 4:00 p.m. on the playground of the Specialized School for Athletics. and its purpose Knowing the work of the assistant team, Familiarize yourself with the workflow of the tests, Learn how to perform Sakyo exercises and Adjusting rest and work times within the training program.

Table 1: It shows the arithmetic means, standard deviations and skewness coefficient of the homogeneity of the sample in the variables (height, weight, chronological age, training age).

Variables	Skew modulus	Mediator	Standard deviation	Arithmetic mean	Measuring unit
Height	0,84	170	14,95	1,70,324	Cm
Weight	1,66	65	4,88	65,914	Kg
Chronological age	1,32	16	2,91	16,713	Year
training age	1,089	2	0,313	2,582	Year

Table 2: Demonstrates the physical , kinetics tests and achievement of the university's 100m Hurdles activity.

No.	Tests	Measuring unit	Aim of test
1	Sargent vertical jump	Cm	explosive power
2	choose three hops for each foot	distance	The power of speed
3	Choosing the 30m sprint from flying	time	Transition speed
4	Running like a zigzag	second	Agility
5	Running 100m Hurdles	second	Achievement

Table 3: Shows the arithmetic means, standard deviations, and the calculated and tabulated T-values of the research variables for the experimental research sample.

No.	Variables	Indication	The value of T		Posttest exam		Pretest exam		Measuring unit
			tabulated	calculated	p	S	P	S	
1	vertical jump	Valuable	2,78	2,83	0,43	34,42	0,58	30,41	Cm
2	three hops test	Valuable	2,78	3,41	0,68	5,62	0,21	4,56	distance
3	running 30cm from flying	Valuable	2,78	3,22	0,81	4,22	0,37	5,26	Second
4	running zigzag shape	Valuable	2,78	4,08	1,004	7,18	1,28	9,32	Second
5	achievement	Valuable	2,78	2,96	1,93	16,9	2,044	17,8	Time

Pretest exams: The researcher conducted the pretest exams on Monday, November 15, 2021 at four o'clock in the afternoon on the power games stadium of the Specialized School in Baghdad

Curriculum

The prepared a training curriculum using Sakyo S.A.Q to develop the research variables and it was applied to the research sample as follows (Mohammed, 2018) :

The training course took 6 weeks

1. The training units were 18 training units
2. We used coercive and sub-forced intensity and used high intensity interval training
3. Use the curriculum during the special preparation period
4. In her curriculum, the researcher used sayko exercises with gradual repetitions
5. Taking into account the gradation in the curriculum in terms of intensity, comfort and repetition

Posttests exams: The researcher conducted the post tests on Monday 3/1/2022 at four o'clock in the afternoon at the specialized power games stadium in Baghdad.

Statistical means: The researcher used the spss statistical bag for its suitability to the research. Presentation and discussion of the results of the physical, kinetic and achievement variables of the experimental research sample (Table 3).

Through Table 3 it shows the arithmetic mean, standard deviations, and the two values of (tabulated and calculated t), where the calculated t-value appeared for choosing the vertical jump 2.83, choosing three tracks 3.41, choosing running 30m and 3.22, and running a zigzag shape 4.08 And the achievement is 2.96, which is greater than the tabular amount of (2.78), and this means that the difference is significant.

The researcher attributes the moral differences to the exercises used in the training curriculum, which are the Sakyo exercises, which have a great impact on physical abilities such as transitional speed, agility, achievement, and strength characterized by speed and explosiveness (Al-Selmi et al., 2019). The study (Mohamed, 2017) agrees with what came of the most important results that led to the development of physical and kinetic abilities and achievement through the use of Sakyo exercises, which are considered one of the best quality functional exercises for track races because they simulate the neurokinetic stimuli of performance in terms of acceleration, fixation and deceleration, as well as improving The harmonic agility that the obstacle rider relies on when performing the starting stage (18304) and that the Sakyo S.A.Q exercises are a distinctive training method for developing the maximum speed as it reduces the runner's arrival time from zero to the maximum speed and the transitional motor speed that requires maximum muscle contraction or repeated muscle contractions in the shortest Possible time and this appears in the stage of starting short-distance races in athletics that depends on reaction time (Mohammed et al., 2021). The researcher believes that the training program using Sakyo exercises contributed to the development of speed-distinguishing forces and led to an improvement in speed and worked on consulting the motor units that led to the participation of a large number Which results in a strong and rapid contraction that increases performance

and speed (5:123).

(Khaleq, 2005) confirms that performance is closely related to physical and motor abilities. The mastery of technical performance depends on the extent to which the requirements of this performance are developed in terms of special physical and motor abilities. Rather, the level of this performance is often measured on the extent to which the individual acquires these special physical and motor qualities. (6:88)

Conclusion

Under the influence of the results reached by the researcher through field experience and appropriate statistical treatments, the conclusions were reached, which is that the training curriculum and the Sakyo training contributed to the development of explosive power, which is distinguished by speed, transitional speed, and agility. In light of the results, similar research and studies are conducted using modern training methods, and Sakyo exercises are conducted on other age groups and on other sports activities. Also, Sakyo exercises are conducted according to physiological variables to know the changes in the physiological system through these exercises.

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Appendix 1:

Sakyo exercises

1. Sidejumping with the feet over the barriers
2. Running between the cones, forward and back
3. Standing in front of the agility ladder with the feet, the player moves the foot inside the ladder boxes once to the right and once to the left alternately
4. Standing in front of the agility ladder with both feet. The player jumps forward inside the ladder boxes with both feet
5. Standing sideways to the ladder, the player jumps sideways inside the squares with both feet
6. Standing with both feet inside the squares, the player jumps inside and outside the square with both feet.
7. Standing, foot in front of foot behind, the player jumps with the right foot inside the square, then the left foot follows, and so on to the rest of the squares
8. The player stands in the middle of an eight star. The player runs to the end of the star line and returns to the middle, then runs again to another line and returns to the end of the eight lines.
9. Draw circles on the ground that are connected one above the other, then the player runs around the circle and moves to the other circle and so on
10. Jumping with the feet over the 5 low Hurdles and then completing a distance of 30 m after the last barrier at full speed.