



EFFECT OF AN EDUCATIONAL CURRICULUM IN IMPROVING SOME BIO KINEMATIC VARIABLES FOR JUMP WAVY SERVE (FLUTER) WITH THE JUNIOR IN VOLLEYBALL

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Article history:		Abstract:
Received	7 th August 2022	The importance of research is reflected in an attempt to submit Jump wavy Serve (flutter) skill in the volleyball, which is one of the main offensive skills to experiment with special skilled exercises, different educational and educational instruments depending on the study of the motion variables and attempted to learn by developing some mechanical variables for the movement .The player is either the problem of researchers see this problem and address this problem by placing an educational curriculum that improves some of the Bio Kinematic variables for the jumping wavy serve (flutter) with a view to teaching this skill and working to retain as long as possible, the search objectives included The proposed educational curriculum in accordance with some methods and educational tools in teaching and developing the values of some of the Bio Kinematic variables to jumping the plane. And then the development of technical performance is skill Jum Flutter Serve.
Accepted:	8 th September 2022	
Published:	11 th October 2022	

Keywords: An educational curriculum; Bio Kinematic variables ; Jump Flutter Serve .

1 -1 INTRODUCTION AND IMPORTANCE OF RESEARCH:

The significant development and progress that teaching and learning areas requires our procession to push the educational process for better in order to prepare an individual with a high degree of efficiency. Encounter, consultations, information and enthusiasm, and increases his love to learn. The mobility scope has seen a great development, especially with regard to the creation of educational attitudes, the learner's motives and access to the purpose of the educational process. The learning process is based on an important means of transferring knowledge and information from the teacher to the student. The learning process was better and faster and a less effort and therefore the preparation of an educational curriculum using a modern educational foundation would keep pace with the development of modern learning, the coach places a lot of different and varied information that works to achieve objective targets that benefit from them during the education process and so contribute to the education Develop learner capabilities and skills. The volleyball of the mission of sports has contributed to its conclusion and its achievements by subjugating its skills to various instruments, tools and instruments, where moving learning to those skills is based on modern technologies, which are enters the skill through super-speed video imaging. From the most accurate observation of movement during skill performance and knowledge of vulnerabilities and strength in performance dependent on the study of biomechanical variables for all stages of movement and therefore harness those sciences to serve the skill level.

And that the rapid development is one of the most important and supervisors and educational processes, all teams are using techniques, devices and educational instruments, but the difference in how to take advantage of those technologies for distinctive skeptical performance and this is to go into a learning process since the first age stages Which is a basis for learning and detection of the most important biomechanical variables for learners and how to correct mistakes and follow them during all stages of

skilled learners in order to save time and effort, and therefore, as the age phase is important and fundamental and is possible to acquire the individual skills Different and technical performance, to reach the mastery we are looking for in sports activity including volleyball, as the volleyball of sports consists of technical skills so it should be learned interconnected and sequentially during different learning stages to become correct and consistent Taking into account the learning of these gradient skills is easy to hard.

The importance of research is reflected in an attempt to submit a serve skill in volleyball, which is one of the basic offensive skills to experimentation with special skilled exercises and educational instruments in different and interdependent methods based on the study of motion variables on the biomechanical and learning through the development of some Mechanical variables of the player's movement within the stages of the outbreak and follow up the learning process for all its stages and continuously in order to stand on their advantages and professions and address mistakes in the learning process through the evaluation of the curriculum and thus apply the principle of flexibility in the educational curriculum in order to speed and efficiently and effort by the learner and the teacher , And the impact of those exercises to teach that skill and thus find new ways in developing the techniques of the rest of the skills, which means creating a new opportunity to build a good base of volleyball practitioners, which is beneficial to our teams, we are produced and upgrading the game in Iraq.

1-2 Research Problem:

A little not to observe the performance of a skillful serve by jumping (flutter) by the difficulties for the difficulty of its performance. Exercise is secluded and traditional style means an increase in long-standing learning time with skillful learner as appropriate for access to the exact compatibility phase that is usually more training than exercise to conduce in stressing and attack.

Hence, the research problem, which lies in keeping trainers for skillful serve skill, the difficulty of skill and the full know-how of the performance, which shows the strengths and weaknesses in the skill and thus finding necessary solutions to correct the mistakes through follow-up and flexibility in the educational curriculum before Trainers and this leads us to the speed of learning and evolution of skill performance and this requires us to focus on building educational and training approaches according to the latest methods benefiting from physical science and sports science for a true scientific building for learning process. It is a note and followed by some of the modern ways to learn this skill. In the analysis of motor performance Accordingly, the researchers see this problem and addressed them by placing an educational curriculum that improves some of the Bio Kinematic serve variables by jumping the plane, with a view to teaching this skill and to keep them as long as possible, and employ the results of this research in the service of the educational process and thus upgrading the level of education Performance is better.

1 -3 Research Objective:

1. Identify the impact of the proposed educational curriculum in accordance with some techniques and educational tools in teaching and developing the values of some of Bio Kinematic variables for a skill of serve wavy (flutter) by jumping.
2. Identify the differences in the values of some of the Bio Kinematic variables affecting the performance of flutter serve wavy skill in the jumping of the plane between tribal and post imaging.

1-4 hypotheses Research:

1. The proposed educational curriculum using some methods and educational tools used has an impact on the education and development of Bio Kinematic skilled performance of serve wavy (flutter) by the ball.
2. There are differences in the values of some of the Bio Kinematic variables in the performance of skill for serve wavy (flutter) with a volleyball and the benefit of post-imaging.

1-5 Research areas:

1-5-1 -Human field: The players of the AL-Bahree sports club with the volleyball category.

1-5-2 - Time field : 21/4/2021 – 7/8/2021

1-5-3 - Spatial area: AL- Mdeena Club Hall in Basra Governorate.

2- RESEARCH METHODOLOGY:

The curriculum is the "scientific road that researchers in solving the problem of his research. Subject to the measurement of tribute and then the experimental variable is subsequently introduced to test its effect " (Nuri Al Shawk & Rafie Fathi: 2004), then be measured after and compare the tribal and post measuring grades to test differences.

2 -1 Society and sample of research:

The sample was selected in the deliberate way. Included (12) players from the players of the AL-Bahree Club with the bug at ag-14-16 year for the sports season 2021-2022 and who have the minimum (flutter) serve skill from jumping, so this sample is acceptable Statistically, as well as honest and valid in their

representation of the origin, and to identify the sample homogeneity and in order to isolate the effects that may affect the experiment. The researchers used difference to know how to homosexuality and age, where the value of the difference was less than 30% To the homogeneity of the sample, where the less coefficient approaching 1% is highly homogeneous and if more than 30% means that the sample is heterogeneous (WadieYasin Mohammed & Hassan Mohammed Abdul: 1999). As shown in table (1)

Table (1)

It shows the calculations, standard deviations and differences for some sample search variables

Body measurements	Unit Measurement	Mean	Standard deviation	Differences factor
Length	Cm	178.30	6.39	3.58
Mass	Kg	65.41	6.14	9.38
Age	Year	15.33	0.65	4.24
leg Length	Cm	91.83	5.49	5.97
Arm Length	Cm	74.16	4.21	5.67

2 -2 devices and tools used in search:

the researchers Use of many devices and research tools for the performance of educational units, video shooting and analysis Guy research, they are the means expressed by methods and methods to solve the search problem including:

- Arab and foreign references.
- Note and experimentation.
- Personal interviews.
- Informatics Network (Internet).
- Tests and measurement.
- Videoconference Type (SONY) Making Japanese Number (1) Quickly (240) Image / sec.
- LAP TOP PC type (inspiron 1520 dell).
- Electronic balance.
- Tape measure.
- Adhesive tape display (5 cm).
- Type Time (CASIO) (2).
- Volleyball court.
- Ruler + drawing scale.
- Airplane balls (10) type (mikasa).
- DVD Tablets.
- Medical balls (5 kg) number (2).
- Different high-end boxes (10).
- Special software for motor analysis.

2-3 Test used in research:

Serve Test : (Mohammad Subhi Hassanein & Hamdi Abdel Moneim: 1997)

Purpose of Test: Measurement of serve skill.

Hardware and tools: volleyball playground, ten aircraft balls, adhesive tape, measuring tape.

Performance Specifications:

The lab performs ten correct legal communications so that the ball is sent from the end of the stadium-facing the planned stadium as in Figure (1) and cross each degree within this division from the degree that gives the laboratory if the ball falls inside this area.

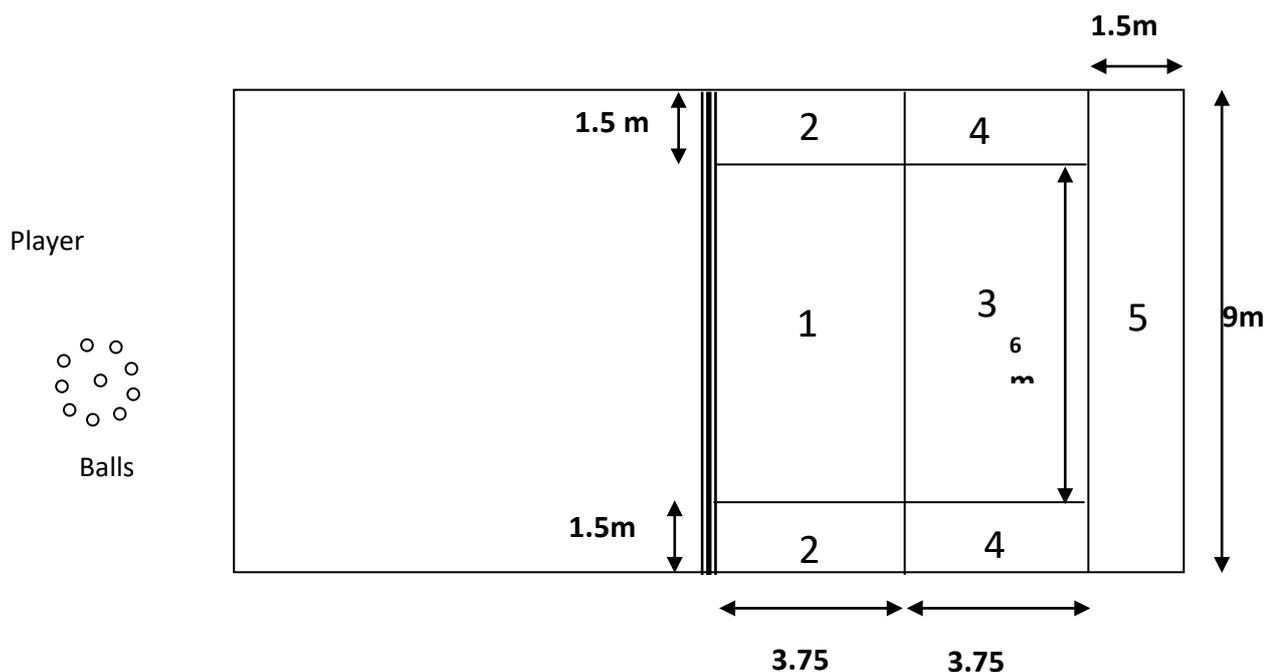
The conditions:

It is required to perform each time submitted on the legal conditions of the transmission from the top If the ball falls on the line, gives the degree in the top area.

Registration method:

Register the degree of the player according to the fall of the ball as the stabilizer is greater (50) degree and gives the lab zero if the ball is touched or in the case of falling the ball outside the planned stadium. Register the degree of the player according to the fall of the ball as the stabilizer is greater (50) degree and gives the lab zero if the ball is touched or in the case of falling the ball outside the planned stadium.

(1) Shape demonstrates the serve wavy test



2-4 Exploratory Experience:

For the purpose of access to the most accurate and recognizable labor constraints, which may facilitate the proceedings of the main experiment. Five players, where players tested to perform the skill of wavy serve (flutter) from jump and the aim of the surveillance experience included the following:

1. Ensure that the devices are valid.
2. Ensure the efficiency of the photography and imaging angles.
3. Determine the height and after the imaging machine during performance.

2-5 Video imaging:

In order for the Kinematic analysis of the skill changes under research researchers researched the video analysis as an important means of analysis to identify variables and discover mistakes and adjust the rapprochement or deprive levels of technical performance (Fouad Tawfiq: 1982) The sample was filmed Sony (240 images / second) is located on a triple holder and a distance (3) m of the player's skill and on the right side of the learner and an vertical angle with the direction of movement and a higher lens. What gives accuracy in extracting variables under study during video analysis and the researchers are used a gauge a length (1) m.

2-6 Bio Kinematic computer analysis:

The new orientation of motor analysis is moving away from the observation method depending on the naked eye, which is insufficient to obtain the exact scientific information and scientific facts of some sports movements, so that the trend began to rely on the method of motor analysis, accurate and advanced means such as computer and some applied software and some applied software Recording minutes movement in the smallest time unit (Reissan Khreiba, & Nijaah Mahdi: 2002). Where researchers adopted the analysis of skill under study using computer techniques.

2-7 Tribal Photography for Sample research:

The researchers conducted tribal imaging for the sample of the research, 12, twelve players of the Junior Volleyball al - Bahree Club players on the sports club sports in the al- mdeena hall of Basra on 24/5/2021 at 3 pm. The 10 attempts were filmed for each player Skilled serve from jumping, where some Kinematic variables were identified through computer analysis to learn about the weaknesses associated with the mechanical terms and try to develop them through the application of the curriculum.

2-8 proposed educational curriculum:

By informing researchers on some of the scientific resources and scientific research, the researchers prepared a proposed educational approach to some Bio Kinematic variables, which are believed to have a role in learning the right performance of the skill under study. The researchers prepared an educational curriculum consisting of 21 and twenty an educational unit and two educational units in the week, from 27/5/2021 and was appropriate on 5/8/2021 and the curriculum was presented to a group of experts and specialists in the game. The educational curriculum was followed by filming some views for the research

sample, where the first and sample visualization was conducted on 22/6/2021, eighty after educational units, where variables were analyzed under the study of the development of sample research and try to change the educational curriculum During the focus on some exercises, which are mainly involved in the variables that have not developed as required by increasing the number of repetitions of these exercises, and the second observation was conducted on 19/7/2021 after eight educational units of the first observation (appendix 1), note that the time of educational unit (50) Fifty minutes distributed on their main sections, taking into account the degree of difficulty and easy to exercise and graduation in their application within the mandated sequence of the technical performance of skills, as well as the use of modern help during the application of educational units, and the educational unit included three sections

2-9 post imaging for search sample.

The post-research sample was held on 7/8/2021 at 4:00 pm on the sports club in Basra Governorate.
3-11 Statistical means:

Data was statistically addressed by using the Statistical Pouch (23SPSS VER.) By using the following applications:

1. The arithmetic medium.
2. Standard deviation.
3. Test (t) for interrelated sample
4. Test (T. test)

The researchers also use the following processors:

1. Percentage (Mohammed Abdul Hafeez,& Mustafa Hussein Bahi: 2002).
2. Difference coefficient (Ali Salloum &Jawad Hakim: 2004).

3 - VIEW, ANALYZE AND DISCUSS RESULTS:

Table (2) Shows the calculations and standard deviations, T and Sig values

Variables	Tribal Tests		Post Tests		T	Sig
	M	S	M	S		
High ball moment beating	239.0000	5.68890	254.0000	6.31016	9.458	0.046
The speed of the ball	33.4167	1.31137	40.4167	1.72986	28.434	0.000
Ball starting angle	23.1667	1.94625	16.9167	1.56428	34.832	0.000
Resolution of serve	33.9167	2.42930	36.2500	2.59808	3.334	0.072

Through the above table of the results of the Bio Kinematic variables, researchers reached a clear evolution on the interim test results for the tribal test of mentioned variables, because of the sample submission to the educational curriculum training, which had a great impact on increasing the values of capacity, as well as the commitment of the sample in the presence of training regularly The training has contributed to a significant improvement in the efficiency of the nervous system for the players throughout (21) an educational unit to a variety of exercises using an increase in its maximum limits of acceleration, which led to an increase in the maximum voluntary contraction. .mentions Influence in adapting the nervous system by increasing the maximum hexagon limit (MVC) by creating the nervous system better due to the repetition of training for more than 4-5 weeks (Talha Hossam Eddin: 2014).

As a natural manifestation of the learning process, there should be an evolution on learning as long as the trainer follows the proper steps and glaucoma for learning and practice on the right performance and focus on the establishment of performance and stability, (Magill: 2004) that the training used in the curriculum has contributed to this development The jump exercises are developing the impairment of the nervous system and increasing the effectiveness of neurological nutrition from the workforce. The results of some research also emphasize that the various jump exercise is an impact on developing the efficiency of the nervous system - muscle for the purpose of performing rapid, powerful and rewarding traces with reducing performance time for these rewarding variables, giving them a priority in the jump because the performance of the force in accordance with the motor track to be trained It helps do so by working to activate the muscle (decentralization) and be directly accompanied by a very fast muscle contraction (central contraction) and this tension Relaxation and then strengthen and expand the strength (Hazem Mousa Abdel Hassoun: 2001)

The researchers also see the effect of the educational curriculum in the development of the muscle capacity of the bottom and capacity to contain the curriculum on large resistive exercises (large loads) used gradually, resulting in an adaptation of the muscles in line with this gradient and the nature of exercises, making the muscle capable of acting contraction Strong and high speed so they increased its

systolic capacity, helping to develop muscle efficiency working for men to achieve the force and speed required to move the body mass to the highest vertical distance. The body and the power of the earth reaction that gave its final enabled the biggest capacity to obtain the required vertical distance, as well as the exercises used in the curriculum have helped to have an evolution of the muscle capacity of two men as there is a virtual relationship between increasing the strength of the two man muscles with architectural results Which is expressed in the broad (Nahed Khairi: 1998), and exercises used in the curriculum have facilitated muscle action in accordance with the appropriate mechanical requirements In terms of the right application of the body to achieve the best value for the musculoskeletal of these angles and the required time, which reflects a good consensus within the muscle itself as well as among the muscles operating in performance.

The rapid speed of the ball researchers is because the development is due to the curriculum used. The use of high resistors (uncaring) has led to an increase in arms of arms and has therefore assisted in the evolution of muscle capacity, which has affected the development of mechanical capacity for highest instruments Speed at performance, as the muscle is trained to overcome the maximum resistance in a short and fast and rapidly increased and then increases its ability (Helmi Hussein: 1985) "as well as the exercises are more useful and beneficial in many games such as volleyball game All of them require a powerful employment during high-speed movements "(Zaki Mohammed Hassan: 2004)

The exercises and exercises used in the training curriculum are an influential role in developing the amount of force that moved through remote joints to the nearby joints such as the force that moved from the ankle joint to the knee joint then to the hip detailed and then the passive muscles to the power of these parts at the end Movement (is the performance of crispy transmission skill). A positive reflection on the speed of the appropriate ball while performing a natural result of the verb reaction that has demonstrated significantly to the application of Newton III. There is that these exercises are mutating them in their own, construction and degree of compatibility with format and motor construction of crispy transmission to serve the basic objective of them, giving the search sample appropriate to achieve the highest possible angle of the army and trunk when applying skill and is very short, and parties participating in performance (Arm and trunk) and work with body parts have been made with one chain and the player's arm is the farthest part of the original axis of the body. The speed of this part is proportionate to a vulnerable parameters with a radius.

The researchers believe that this principle can be an educational principle. The control of the country's parts can cause an increase in peripheral speed and angle of the injured arm. What is known from the results of some scientists and their experiences, the amount of motion caused by angle of trunk is a large amount that can be added to the amount of angle of the arm during the moment of beating, which affects the end of the ball and thus increasing the speed of the ball and this is confirmed by saying that the fast movement is confirmed Body parts during performance enables the player to get the maximum movement between these parts (1992: UEYE).

As for a variable, the corner of the ball, researchers, caused the cause of the curriculum (some corrective exercises) in all kinds and its species in the phase of the ball significantly to correct the mistake to a certain extent in the motor compatibility of the harvest and their joints consistently and on appropriate corners with the track The motor to perform the multiplication of the ball and the followers of special exercises based on repetition and skill training is easy to hard and in partial and macro exercise as well as the use of utilities that helped the proper application for this stage according to the appropriate Kinematic conditions for the body conditions. In the height of jumping as well as shoulder angle with trunk and thus has influenced the angle values of the wrist angle and an angle of the ball with horizontal jump led to the height of the molding point of the ball due to the expectation and good motor compatibility to hit the ball at the highest height of the player in reducing the starting angle The horizontal level as well as the role of guidance and angle required to send the ball with the correct path and is required The opponent is changing by the curriculum and understanding what is required to be achieved from players, his assignment and understanding has given the opportunity to focus on the use of the stalemate to arm the ball instead of the front strike. Reducing the radius of the arm of the arm on the shoulder detailed for what it was with the outdated arm and thus reduce self-deficiency and increase the corner speed of the injured arm.

And that the success of the educational process requires the availability of means and tools and instruments for the implementation of the platform for the decree. To contribute to the progress of players and their interaction and their rush to training and therefore the educational unit has achieved its goal in achieving evolution. Thus, the player will receive the mechanism of performance because its thinking will be in performance only without thinking time to hit the ball or the incorrectly and hit the ball. The accuracy

of the skill of wavy transmitter has not changed in tribal and actual testing. The curriculum helped players increase their focus at the opposing team stadium so that more control and control of the ball during the performance of this skill as the ability to control the transmission performance is an important process (AILIN Wadih Faraj: 1989)

4. CONCLUSIONS AND RECOMMENDATIONS:

4-1 CONCLUSIONS:

- 1- The educational curriculum proposed by researchers was an effective impact on the development of Kinematic variables under study (high ball moment beating, ball speed, ball starting angle).
- 2-The corrective exercises under the proposed educational curriculum achieved a positive impact on the starting corner of the ball.
- 3- Understanding the motion mechanical players are quickly sophisticated and correct for the wrong performance.

4.2 RECOMMENDATIONS:

- 1- The researchers recommend using the proposed educational curriculum to develop muscle capacity for players and then develop technical performance for flutter serve skill.
- 2- The need to prepare other educational and training approaches to the development of muscle capacity for other skills or type of serve and the adoption of the principle of motor analysis of different skills.
- 3- The need to adopt educational and training approaches to mechanical principles (motor tracks for skill).
- 4- To apply the curriculum and corrective exercise within the proposed curriculum because it represents the requirements for modern technics to perform fluter serve skill.
- 5-Trainers are conducting periodic tests and work to analyze these tests to identify the most important errors, and put corrective exercises

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Educational Unit	Educational Target: Development of cognitive collection of performance	variables means and tools used	: Unit time: 50 minutes
Fifth and sixth educational goal	Learn the skill of wavy serve from jumping balls	, balls ,wall, adhesive tape, shaving diameter of meter	Date / / 2022

Educational Unit	time	exercises and performance	Shape & Notec
I. Preparatory Section - Record attendance - Preparatory exercises are general and especially II. Main Section A - Educational activity - The theoretical part - practical part B - Application activity Final Section	15 m	(Stand) Weak jogging	Emphasize traffic with a step-by-step trainer during performance. - Without balls and then performance balls. . - The beating is above a decree line on the wall and at a particular height
	2m	jogging with hit the	
	13m	punctual pulmonary	
		jogging while touching	
		the ground by hands	
		with the punishment of	
		jogging with lifting the	
		knees highly joined with	
		the striking jogging	
		jogging between	
	colleagues jogging		
	normal.		
	(Parking) lift the hill and		
30m	then bend the knees		
	and then reduce the		
	Aqlin		
7m	(Parking, Fata) The		
	trunk pressure is under		
2m	three advanced and in		
	the fourth past		
	(Long sitting, open)		
	pressure trunk front		
5m	touch foot comb.		
	(Long sitting, exhibit)		
	corded by and pollen.		
	Barriers for balls		
	- Explain to you the skill		
	of wavy transmitter		
	from jumping.		
	- The coach applies the		
	skill movement in front		
	of the players with a		
	slow part.		
	- Matching the player's		
	movement with the		
	trainer's move to adjust		
	the movement and		
	however the arms of		
	the player during		
	performance and		
	performs the exercise		
	with a slow slow and		
	then leads to the speed		
	of the transmitter skill.		
	- Players lead the skill		

		<p>of wavy transmitter every individual according to mechanical performance.</p> <ul style="list-style-type: none">- Stand in front of the wall and hit the ball to a specific point on the wall by the same player according to the mechanical performance.- Stand in front of the wall 9 meters with a taste of 4.6 m and 2.5 m and hit the ball to a specific point <p>Calm and relaxing exercises</p>	
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