Effect of the Intensive Learning and the Distributor Style on the Evolution of the Performance Level and the Transfer of Learning Among Some Tennis and Badminton Skills

Mazin-Hadi Kazr, Hammoudi Mahmmoud, Ahmed Fadhil
Collage of physical education, Babylon University, Iraq
Collage of physical education, Babylon University, Iraq
Faculty of Health Sciences, UITM, Malaysia
babylonbf@yahoo.com
ahmedfad2005@yahoo.com

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ABSTRACT

The process of learning skills at the present time became the foundation of building the sport level, in the same respect the programmed learning which use the modern methods to correct skills of different educational level of students and learners must taking into consideration ,So the researchers selected one teaching methods to upgrading the performance of colleges Physical Education students by learning them the front and rear tennis skills strikes, using intensive learning and distributor style, to know the impact of badminton skills, and the best method that can be used to develop these skills, as well. a (24) female students from the Faculty of Physical Education - University of Babylon was the subject, whom representing 75% of the research community, the researchers used the experimental method using first and second Whyte test to measure the accuracy performance of front and back hit skills, in addition to the Badminton skills. The tests were conducted after (8) educational units, one unit per week, (90) minutes each.

Keywords: **Physical Education, badminton skills, female students, educational units**

1. Introduction

The importance of the study: The process of learning skills at the present time, is the foundation of building sport events level, by using the modern methods, which accompanied with the educational level, physical ability, mental and individual differences of students to get high performance level. The process of learning cannot be done only by studying the variables that accompanied this process, it must be included the type of event, activity type of skill, the age, experience, gender and level of learning, as well.

Typically there are many ways such as partial and whole method, closed and opened skills, which can be applied in practice, including sequential and random, fixed and concentrated and distributor method, All need to organize and to select an educational style that considered to be the appropriate method to master a certain skill and to be more economically in time and effort, in order to quick access and master the process of learning the skill. The aim of the present study was to define which methods are most important for tennis players and to estimate the learning intensive and distributor methods within the educational units to upgrade the students' performance of some tennis skills in the Physical Education University of Babylon.

Hardened steel and other hard materials are machined by grinding process in general, but grinding are time consuming and limited to the range of geometries to be produced (Poulachon et al., 2004; Singh & Rao 2010). The best alternative for grinding is by hard turning. Hard turning has emerged since modern cutting tools such as ceramics were available to reduce the time needed to finish hardened parts those with hardness ranging from 45 to 70 HRC. The secret to successful hard turning is by higher cutting speed because hard turning processes are usually associated with high temperatures. At these speeds, heat goes out with the chip and not into the tool or the work piece, so the wet cutting becomes useless (Sharma, 2001).

1.2 The study problem

Tennis game is characterized by a lack of participants at the university environment, especially female students, researchers noted low level of performance of this game of students in Faculty of Physical Education, which attributed to the limiting practice time, lack of facilities, deficient of leisure time to enjoy the desirable event, because that whole times set for the lecture only, so it is necessary to use the available class time for students to teaching tennis skills, through finding different learning methods to increase the ability of tennis skills.

1.3 The Objectives of the study

1. To identify the effect of intensive and distributor style to learn some of tennis and badminton skills.
2. To identify the best method of learning.
3. To identify the impact of transmission learning among some of tennis and badminton skills.

1.4 Hypotheses

1. There is a clear impact of learning and distributor style at the performance level of some skills of tennis and badminton games.
2. There is a significant difference in learning using intensive, distributor methods and the traditional style.
2. There is a transfer of learning between the tennis and badminton skills.

1.5 Fields of research

1.5.1. The subject: The subject were the third class students - Faculty of Physical Education - University of Babylon for the academic year 2011/2012

1.5.2. Temporal field: The period of the study was from 6/10/2011 until 9/11/2011

1.5.3. Field of Domain: Indoor Stadium Hall - Physical Education College/ University of Babylon.

1.6 Theoretical studies

There are several methods for organizing and scheduling exercise, each of them depend on the specific targets, including macro and micro, fixed and variable exercise, sequential or random exercise, physical and mental exercise, intense, distributor exercise, and, total partial way. Intensive and distributor style exercise - Intensive Exercise: A consecutive series of exercise. Which the ratio of rest time must be less of practice time. As (Schmidt 1991) the distribution of practice exercises learning time is one of the important factors that helps the accuracy of learning performance i.e., that the performance of the skill required precision and stability with a short period of rest. This means that the learner lead the educational exercise of skill by time, increasing the number of attempts to execute the exercise. The exercise distributor consists of the times of rest between attempts to exercise the skill to be learned. To do so, the coach or teacher determine the periods of rest during a workout scheduled by any user mode. If we used intensive exercise, we give the ratio between the convenience of a few attempts to exercise, for example, if the duration of exercise practice attempts (30 sec) ought to give time off (5 sec) or may be a time without rest. (1) The exercise may remain, giving the proportion of rest between attempts to exercise more and may be presented by a time to exercise more, or if the duration of practice (30 sec) gives an amount of rest time (30 s).

1.7 Tennis skills

There is difficult to learn the skills of tennis, because they need to practice constant and permanent addition to the focus of the performance and accuracy of learning, and attention to the guidance of coach or teacher with the use of aids and aids to learn the basic skills in the game of tennis, including: The strike skill in tennis and badminton (front and rear): the strikes of the front and rear are performed by the learner after the ball touch the ground first touch. While the skill of tennis badminton is done in the similar path, but the performance of double front and rear is the most important and most commonly used in tennis for the novice player because it is easy to be learned and performed very well which leads the offensive attacker to win a point.

2. Methodology

2.1 Research Methodology

The researchers used the experimental method of equal groups (i.e., make the two groups the control and experimental are equal completely in all variables except the variable to be studied).

2.2 Sample

28 students, of Physical Education collage - University of Babylon at the academic year 2011/2012 the third class, were representing this research, divided into two groups by 14 students for each group (Group tennis and badminton set, where each group was divided into two methods extensively and distributor by 7 students each), as follows: Tennis group: - (7

female, intensive style and 7 female distributor style). Badminton group: - (7 female intensive style and 7 female distributor style).

Table (1) show the samples of research

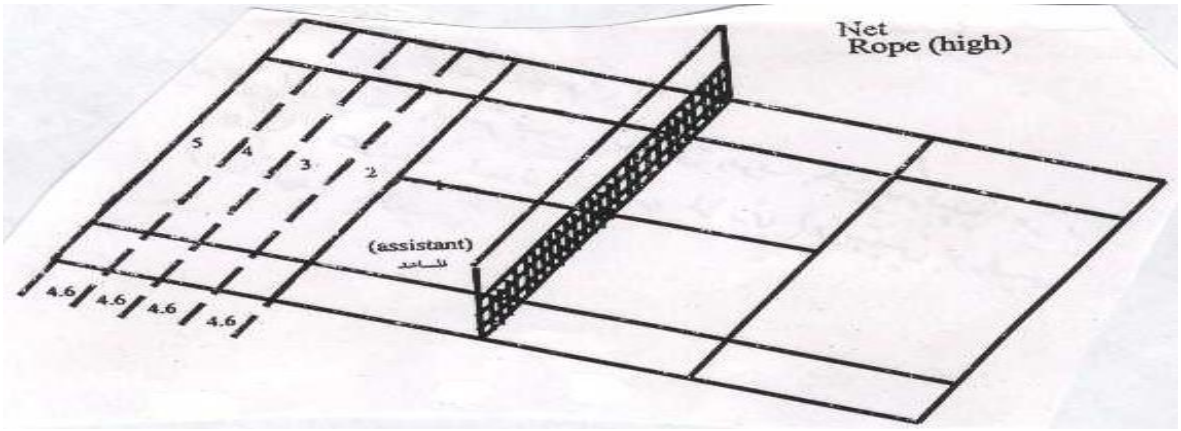
Sequence	Test name	Sources	Square. Sum	Freedom Degree	Square. average	Calcu.F value	Tab. F value	Sig
1	Tall	Between Group	1.11	2	0.05	1.45	3.47	No. sig
		In group	1.62	21	0.08			
		Groups	2.73	23				
2	Weight	Between Group	122.2	2	61.1	1.52	3.47	No. sig
		In group	80.6	21	40.3			
		Groups	202.8	23				
3	In front of Hit	Between Group	1.16	2	1.08	1.61	3.47	No. sig
		In group	14.2	21	0.67			
		Groups	16.36	23				
4	Back hit	Between Group	3.02	2	1.51	2.09	3.47	No. sig
		In group	15.12	21	0.72			
		Groups	18.14	23				
5	Service	Between Group	2.11	2	1.05	1.75	3.47	No. sig
		In group	12.6	21	0.6			
		Groups		23				

2. 3 The tests

2.3.1 White's first test (1)

The purpose of the test: measure the front and rear hit skills. Tools: tennis balls - tennis rackets Tennis courts - rope - chalk. Specification of performance: test involves standing player to be tested in the area behind the base line of the stadium.

1. Each player executed (10) attempts, then extracted the arithmetic mean.
2. The ball must cross the network from under the rope and crashing to the ground inside the stadium in a specific region, respectively, as in Figure (1) and give a degree of contiguous calendar and different ranging from (1-5) degrees.
3. If the ball crossed over the rope, they are given half degree. Please note that the high rope (6) feet above the network.



Figure(1)The calendar shows the grades and parking areas and tester show to conduct test of the average White Tennis double hit skills front and rear

2.3.2 Test two hits front and rear plane

The purpose: To measure the achievement of the front and rear strike skill. Tools needed: bats feather, feathers plane, an aide to Sending feathers, a legal court. How to implement the test: strike at the front player stands in the mid the right side of the stadium and Introduction to box drawn in the middle of the pitch and beat the feathers sent to him from the pitch corresponding to the cross over the net trying to bring it down in the region with a high degree, an area listed (1, 2, 3, 4.2), and in the backhand player puts his left foot on the box. Scoring: The player's performance (12) attempts and calculates the sum of the best (10) attempts for each skill.

2. 4 Curriculum

The researchers used the distributor and intensive style of learning for the first experimental and second groups, included the curriculum of double skills front and rear tennis, badmintons. Units at the educational, by unit per week for each educational unit 90 minutes, which contains the warm-up and part of the educational and practical approach for the two groups continued from 21/10/2011 to 25/11/2011.

2. 5 Pos- tests

Pos. tests were conducted on the samples in the same performance that has been testing in the pretest on Sunday 11/29/2011. Part IV 4 – Results , analysis and discussion After collecting and analyzing data statistically, the researchers presented the results as shown in table(2) , the mathematical circles, standard deviation , the value calculated and indexed of (T) tests before and after the first experimental group (group of intensive style).

Table (2) shows the calculations, the standard deviation, and the value of calculated and indexed (T) test of tennis condensation style

Seq	Tests	Pre		Post		T calculated	T tabulated	Sig.
		Avg.	St.dev	Avg.	St.dev			
1	front hit	1.54	0.64	3.60	0.42	6.22	2.57	Sig.
2	Back hit	1.35	0.45	3.25	0.35	9.16	2.57	Sig

Sample size (8), the degree of freedom (7) and the level of significance of 5%. It is clear from Table (2) that the value of calculated (T) between the pre and post tests and tests of the first experimental group was greater than the other group. This indicates the existence of significant differences between the pre and post tests. Table (3) shows mathematical circles, standard deviation and the value of (T) calculated and indexed to the second experimental group (distributor style group).

Table (3) shows the calculations, the standard deviation, the value of calculated and indexed (T) of tennis-style distributor

Sequ.	Tests	Pre		Post		T calculated	T tabulated	Sig.
		Avg.	St.dev	Avg.	St.dev			
1	front hit	1.56	0.36	2.64	1.22	5.22	2.57	Sig.
2	Back hit	1.34	0.52	2.82	1.17	6.13	2.57	Sig

Table (4) shows, standard deviation and the value of calculated (T) of a badminton spread intensive style

Sequ.	Tests	Pre		Post		T calculated	T tabulated	Sig.
		Avg.	Stdev	Avg.	Stdev			
1	front hit	1.52	0.38	2.01	0.84	3.47	2.57	Sig.
2	Back hit	1.31	0.34	2.63	0.46	4.18	2.57	Sig

Table (5) shows, standard deviation, the value of calculated and indexed (T) of distributor badminton-style

Sequ.	Tests	Pre		Post		T calculated	T tabulated	Sig.
		Avg.	St.dev	Avg.	St.dev			
1	front hit	1.54	0.38	2.011	0.86	3.45	2.57	Sig.
2	Back hit	1.35	0.35	2.76	0.45	3.18	2.57	Sig

2.6 Analysis of variance test of post-tests of the four groups

The researchers used the (F) test and (LSD) to analysis the variance between the research groups to find out whether there were significant differences between them.

Table (6) Shows the results of analysis of variance (F) to find out the differences in learning the skill of the strike the front of the four groups

Sources	**Squr. Sum**	**Freedom Degree**	**Squr. Average**	**Calcu.F value**	**Tab. F value**	**Sig**
Between Group	1.41	4	0.70	6.36	3.47	Sig
In group	2.33	24	0.11			
Groups	3.74	28				

Table (7) Shows the results of analysis of variance (LSD) differences between the groups in the front strike skill

Groups	**Teams results**	**LSD**	**Sig.**
G1-G2	0.96	0.75	Sig. for group (1)
G1-G3	1.59		
G1-G4	0.63		
G2-G3	- 0,24		
G4-G2	- 0,45		
G4-G3	0,16		

Table (7) shows the results of analysis of variance (F) to find the differences in learning of backhand in tennis and badminton skills, by using (LSD) to determine significant differences between them.

Table (8) Shows the results of analysis of variance (F) to find out the differences in learning the rear strike skill of the four groups

Sources	Squr. Sum	Freedom Degree	Squr. Average	Calcu.F value	Tab. F value	Sig
Between Group	1.41	4	0.70	6.36	3.47	Sig
In group	2.33	24	0.11			
Groups	3.74	28				

Table (9) Shows the results of analysis of (LSD) differences between four groups to learn the back strike skill

Groups	Teams results	LSD	Sig.
G1-G2	-0,54	0.75	Sig. for group (1)
G1-G3	0,23		
G1-G4	-0.63		
G2-G3	0,44		
G4-G2	- 0,12		
G4-G3	0,45		

It is clear from Table (9) the results of (LSD) which showed a significant differences between Group A and Group B, it presents a significant differences between Group I and III for the favor of the third group, and a significant differences among the first group and the fourth for the favor of the fourth group (style distributor) and the second and third and for the third between the second and fourth for the fourth between the third and fourth and in favor of the experimental group III (backhand pen aircraft-style condenser is the best group to acquire and learn a skill strike between among the four groups.

3. Results & Discussion

Through Tables (2, 3, 4, 5) there is a clear evolution in learning the front and rear hit skills in both games, both tennis and badminton, the researchers attributed that the games are interested the students as well as to the existence of a kind of similarities to a large degree in the course of performance for both two skills in tennis and badminton, (Mustafa 1984). In spite of the fact that these two skills are not closed, but both methods of extensive distributor had a clear effect in learning of these skills Which confirms (Sankar 1980) that the amount of learning is the most important of basic concepts about learning exercises, and the main thing to learn motor skills and development is to increase the number of attempts of exercise.

As show in the Tables (6, 7, 8.9) the researchers noted that in a front strike the first group (Group of intensive tennis style) was the best to be learned the strike skill. The strike skill of the background has achieved by the third group (Group badminton intensive style) was the best group of between four groups in learning the skill of the background, and the researchers believed that the backhand is one of the skills the students need to repeated intensively for being one of the skills needed to focus on and constant repetition of the third set. The results of transmission after learning skills between tennis and badminton.

Table (10) shows the results of the front and rear strike between tennis and badminton after learning

Groups	transfer Skill	Transfer percentage	Transfer type
In front of hit in the tennis	In front of hit in the badminton	10,22	Active
Back hit in the tennis	Back hit in the badminton	22,12-	Passive
In front of hit in the badminton	In front of hit in the tennis	17,11	Active
Back hit in the badminton	Back hit in the tennis	11,18-	Passive

As note there is the proportion of good transport of tennis forehand strike skill to the front pen strike, also both groups learned the concentrative style, while there is positive transfer learning between back and tennis back hand pen skill and there is no positive transfer of skills between back strike of the feather tennis.

4.Conclusion

To learn the front and rear hit skills manner of tennis game is better than distributor intensive learning method. There are good rates of transmission between the front blow skills to the same tennis pen plane skill. To learn the front and rear hit skills in badminton intensive learning style better than the style distributor. There is a good transition between the proportion of skilled pen hit of the front plane to the same tennis skill. Group tennis forehand strike intensive style was the best group of the four groups in learning the strike front skill. Range strike aircraft background pen-style intensive group was the best among the four groups in learning the strike back skill. Emphasis on the using of intensive learning style in learning the two front and rear skills in a game of tennis and badminton for students. Do attention to the principle of increasing the number of attempts to increase the frequency and speed of learning these skills. Further studies to determine the effect of intensive learning style and the distributor on the closed and open skills. Conducting various studies to determine the impact of other methods of learning on the evolution of the performance of these skills.

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