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RESEARCH ARTICLE

The Effect of the Self-Regulated Method on Learning the High Dribbling (Fast) Skill Basketball for First-Year Intermediate Students

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Abstract

The purpose of this paper is to prepare educational units according to the self-regulated method to learn the high (fast) dribbling skill in basketball and to identify its effect for first-year middle school students. The researchers assumed that there is an effect of the educational units according to the self-regulated method in learning the high (fast) dribbling skill in basketball for students. There are statistically significant differences in favor of the experimental group. The researchers used the experimental method in the manner of two equal groups. The researchers identified the population as students from Al-Naqa Secondary School for Boys, one of the schools of the Diyala Education Directorate for the academic year 2023-2024. They numbered (372) students for all grades in it, and the researchers chose the sample from students. The first grade, which has a number of (86) students and a percentage of (24.19%), was selected from Division (A) so that the sample number was (40) students and a percentage of (46.511%). They were divided into an experimental group and a control group represented by (20) students for each group. And (5) students for the exploratory experiment from the research community. The study concluded that the use of the self-regulated method had a direct impact on the students' learning of the high (fast) skill of dribbling basketball for students.

Keywords

Self-Regulating Method, High Dribbling (Fast), Basketball

INTRODUCTION

Those in charge of the educational and pedagogical process tend to employ and use the science of teaching methods in the field of sports, as it is a science concerned with improving the academic level of students, as different teaching methods and approaches are used and experimented to achieve educational goals in educational institutions it is mentioned (Sameer, Rashid & Radhi, 2022). The learners' abilities are multiple and their academic levels vary between each educational stage and another, as well as the teacher's multiple approaches to teaching, requiring the teacher to search for the method that suits each learner and the nature of the teaching environment and the subject. Teaching that provides diverse educational situations taking into

account the individual differences of the learners is the appropriate method." To achieve the goals sought by educators (Al-Jburi, Rashid, & Radhi, 2022). Therefore, the need of education for new programs and methods to develop creative abilities and various scientific skills has increased, and there are many methods and methods that contribute to developing creative abilities, the most important of which is the brainstorming method, which is one of the methods of developing creativity in generating the largest possible number of ideas away from evaluation or criticism. Because criticizing ideas or over-evaluating them especially when they first appear may lead to female students being afraid and paying more attention to quality than quantity, thus slowing down their thinking and decreasing the percentage of creative ideas they have (Saleh, Radi, &

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Hashem, 2020). Despite his recent entry into the field of physical education, he has proven his effectiveness and has been able to contribute to providing solutions. For motor problems, as it makes the student search for all motor solutions to the problem that is being posed, using his ability to brainstorm his mind and body with ideas in which he can find a solution. As we talk about modern methods, we must, while trying out the new, compare it with the traditional methods that we are accustomed to studying with, including the imperative method. Which is considered the most widely used method in the fields of education, as this method is characterized by the fact that the students must follow all the orders issued by the teacher at all stages of the lesson, so the students are restricted in the process of performance and commitment to the teacher's instructions and obedience to her (Sameer et al., 2022).

The self-organized method gives a greater scope of individual freedom to the student or learner and depends on cooperation and interaction between the students themselves and gives them the opportunity to rely on themselves in making their own decisions. This results in them accepting self-responsibility for their learning, but not in isolation from the teacher, as the student thinks." In ways that depend on induction, exploration, and creativity through their use of cognitive and metacognitive processes, as this process depends primarily on the student, and this process differs from the traditional method, as the student's freedom of thought is limited and in accordance with the teacher's point of view and what is imposed by the nature of the subject (Garcia & Pintrich, 2012), mastery of its performance is considered the cornerstone of the team because of its importance to the team's progress and scoring points. The team performs the skills when possessing the ball in a coherent, sequential manner, interspersed with the high (fast) dribbling skill that is part of these skills, as all the skills the player performs within On the field, it is nothing but an attempt to create an opportunity to shoot at the opposing team's basket to score winning points. This happens when the student reaches the opposing team's basket legally with the ball, avoiding the mistake of walking with the ball and thus high (fast) dribbling. "Noting that the technical aspects of dribbling are considered easy, and it is easy for every student to master them, by pushing the ball towards the ground using the fingers of the hand as well as the wrist, provided that the movement of the hand is downwards, while ensuring that the fingers are spread over the ball without stiffness, as this leads to To control the ball. It should be taken into account that the player does not constantly look at the ball when changing the dribble to the other hand, but rather must be trained to look at his teammates so that he can exploit the opportunity available to his teammates (Dayem and Hani, 1999).

When mastered, the player avoids the mistake of walking. It is considered an effective offensive means of transferring and moving from one place to another inside the court during play. It is usually used to advance the ball and when there is no teammate within reach or there is no room to use handling to move inside the court toward the opposing team's basket. Since dribbling leads to a push The ball hits the ground with one hand and in a specific direction and bounces it from the ground to one of the hands as well. It requires muscular coordination repetition and to master performance correctly and with great fluidity. Mastering the basic skills in any sports game and learning skillful and tactical performance is one of the most important goals that the educational process seeks after taking into account the level of the learners and the time specified for the learner to complete the learning process. These are all changing circumstances, as it has become necessary to find new means and methods to confront them." These variables then make the educational process successful and provide learners with skills and mastery of them (Al-Naimi, 2015).

Hence the importance of research on using the modern (self-regulated) method that motivates the student to self-learn the skill, which makes the student master the skill in most playing conditions. "Working in a self-organized manner in a physical education lesson is limited to groups of students in the lesson, which helps students' thinking unleash their creative abilities. In this context, working within a group of students possesses more information and knowledge than its individual members possess, even if one of them possesses information and knowledge." Broadly speaking, another person's information can represent a significant contribution within the group, even if it is modest and individual (Al-Daghini, 1996). The specialists in teaching physical education and the game of basketball,

despite the results and achievements achieved through the use of teaching methods and methods, teachers in secondary schools still rely on the use of traditional methods in teaching basketball skills, including high-level drilling, in order to develop and improve students' performance, and The method of directing the physical education lesson in an accurate scientific form, in secondary schools. A fundamental problem arises related to the failure to use modern methods that rely on the student and make his learning self-paced. The problem of the research lies in the presence of a clear weakness in the level of performance of the high dribbling (fast) skill basketball by first-year intermediate students. Therefore, the researchers decided to conduct a study to identify the effect of the self-regulated learning method on learning to perform the high dribbling (fast) skill basketball for first-year intermediate students. The research objective was identifying the effect of the self-regulated learning method on learning the high dribbling (fast) skill basketball among members of the research sample.

MATERIALS AND METHODS

Research methodology and field procedures Research Methodology

Research Methodology: The researchers used the experimental method in the style of equal groups, which is considered one of the most efficient means of achieving reliable knowledge, as shown in Table (1).

Table 1. Shows the experimental design

Groups	The first step	The second step	The third step	- Fourth step	Five step
	Pretest	Independent variable	Posttest	- Tourin step	
Experimental	High dribbling (fast) test	Self-regulated method	High dribbling (fast)	Mean differences between the pre-	Mean differences between the two
Control		Established method	test	and post-test results for the two groups	groups in the posttest

Community and sample research

The community is "all the items that the variable can take (Al-Sumaidaie et al., 2010), while the research sample is the model "on which the researcher conducts the entirety and focus of his work, and in psychology, education, sociology, and sports science, for example, the sample is the human being" (Mahjoub, 2002).

The researchers identified the research population as students from Al-Naqa Secondary School for Boys, one of the schools affiliated with the Diyala Education Directorate for the academic year 2023-2024, who numbered (638) students for all grades there. The researchers deliberately chose the sample from first-year students, and their number reached (30) students from Division (A). as an experimental group, numbering (15) students, and section (B) representing the

experimental group, numbering (15) students (10) students for the exploratory experiment from the same two sections.

This article's necessary ethics committee permissions were obtained with University of Baghdad College of Physical Education and Sports Sciences for Woman **Ethics** Committee Commission Date: 23.01.2024 Issue/Decision No: 2024/22. Regarding vulnerable groups, the authors took into account the needs and priorities of the groups/individuals in which the study was conducted, in accordance by Articles 19 and 20 of the WMA Declaration of Helsinki, and the situation that the study could not be carried out outside these groups and individuals was taken into account. "In this study, additional precautions were taken by the researcher(s) to protect the volunteers."

Homogeneity of the research sample:

Through Table (2), it was found that the values of the skewness coefficient were all limited to (+1), and the significance of the differences

proved to be insignificant, which made it clear to the researchers that the members of the two groups were equivalent in the variables of height - weight - age.

Table 2. shows the statistical parameters of the variables of height - weight – age

Variables	X	SD	Median	Skewness (±3)
Length – cm	146,83	5,47	146	0,455
Weight - kg	58,71	6,58	58	0,323
Age - year	12,49	1,26	12	1,166

Mean (M), Std. Deviations (SD)

Test is under investigation High dribbling (fast) basketball Test

Objective of the test: to measure high dribbling skill. Performance specifications: At the start signal, the tester begins to perform dribbling from the corner of the field towards the center line, then turns to cross the field from the center line,

and then turns to continue dribbling to the end of the field from the side line, as shown in the figure. Registration: The time for covering the distance is calculated in time and to the nearest (1/100 second) from the beginning, that is, from the start signal until reaching the finish line.

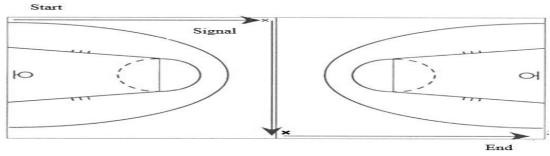


Figure 1. shows the high dribbling (fast) test.

Field research procedures Exploratory experience

The exploratory experiment is considered a mini-experiment of the basic experiment, and it must have the same conditions and circumstances as the main experiment, as much as possible, so that its results can be taken into account" (Abdul-Jabbar and Bastawisi, 1984).

The exploratory experiment was conducted by the two researchers on the exploratory sample on (Thursday) corresponding to (10/12/2023) at exactly nine o'clock in the morning on the basketball court of Al-Naqa High School, by applying the high dribbling (fast) skill test to identify the suitability of the test for a sample, the validity of the tools, and the knowledge of the supporting work team on how to apply the tests, their sequence, the method of recording, and the length of time to apply each test.

Scientific foundations of the skill under research

After processing the data statistically by using the simple correlation coefficient (Pearson), it was found that all skills have a high degree of stability, as shown in Table (3).

Table 3. Shows the reliability coefficient for skill tests

Test	Reliability coefficient	Type sig		
High dribbling (fast)	0,87	Sig		

Table (4) shows the reliability coefficient for the high dribbling (fast) test in basketball, where it was shown that the calculated values of the test are greater than the tabulated value, which indicates that the test results have high stability. As for the equivalence of the sample, which shows that the members of the two groups are on the same starting line in terms of the level of performance for the skill, the researchers conducted the equivalence of the sample with the pre-test for the two research groups in the high dribbling (fast)

Table 4. Shows the equivalence of the skill test used

skill. The results were analyzed statistically, and Table (4) shows this.

Groups		Measuring Unit	Arithmetic means	Standard deviations	T value Calculated	Error percentage
High	Experimental	_	15.77	1.75		_
dribbling (fast)	Control	(time/second)	16.58	1.57	1.531-	0.134

The tabular (t) value at a significance level of 0.05 and the degree of freedom (38) is (2.05). From Table (3), it was found that the significance of the differences is not significant. This indicates that the two groups are equivalent in the level of performance of the high dribbling (fast) skill basketball.

Pre-test of the research sample

Pre-tests for the research sample were conducted for the experimental and control groups on Sunday, 10/15/2023, at Al-Naqa Secondary School for Boys.

Main experience

The first educational unit was conducted in Appendix (1), a model of the educational unit for the experimental group, on Monday, 10/16/2023, and the last educational unit was conducted on Monday, 12/25/2023. As for the control group, the physical education teacher at the school used his usual method. *Post-tests*

The researchers conducted the post-tests after completing the application of the educational

units to the experimental group, amounting to (8) educational units, on Wednesday (12/27/2023) in the Al-Naqa Secondary School Stadium for Boys, taking into account all the conditions, conditions and procedures under which the pre-tests were conducted.

Statistical analysis

A statistical program was used in the statistical analysis of the data obtained. Arithmetic mean, standard deviation, frequency, minimum and maximum values were used in statistical representations of the data. Independent Samples T-test were used in the analysis of normally distributed data.

RESULTS

Presenting, the results of the differences between the pre-test and post-test for the high (fast) basketball dribbling skill of the experimental group

Table 5. Skill test analysis results for the experimental and control groups

	Groups	Measuring ⁻ Unit		-test	Post	-test	Difference	Differences	a	m 1		
Skill			X	SD	X	SD	of the arithmetic means	Differences of standard deviations	Standard error	T value Calculated	sig	Type sig
High	Experimental		15.777	1.755	14.344	1,889	1.433	1.215	0.272	5.273	0.000	Sig
dribbling (fast)	Control	1/100sec	16.583	1.570	15.431	1.116	1.153	1.136	0.254	4.537	0.000	Sig

Mean (M), Std. Deviations (SD),

The tabular (t) value is (2.09) with an error rate of (0.05) and a degree of freedom (19)

Table 6. Presenting, the results of the post-tests analysis for the experimental and control groups

Variables	Groups	Arithmetic means	Standard deviations	T value	level sig	Type sig	
High dribbling (fast)	experimental	14.344	1.803	2.292	0.028	Sig	
	Control	15.431	1.116	_		C	

Degree of freedom (38) and tabulation (2.05) with an error rate of (0.05)

DISCUSSION

It is evident from Table (5), as we note the values of the arithmetic means, the standard deviations, and the value of (t) calculated between the pre- and post-tests for the experimental group, as well as the values of the differences for the arithmetic means and the standard deviations for the pre- and post-tests for the high dribbling (fast) skill basketball, as the arithmetic mean value for the dribbling skill reached the high (fast) skill for the pre-test was (15.777) and the standard deviation was (1.755). The arithmetic mean value for the high dribbling (fast) skill for the post-test was (14.344) and the standard deviation was (1.889), while the calculated (t) value was (5.273), and since the (t) values are The calculated score is greater than the tabulated one at the significance level of (0.05), which indicates that there are significant differences between the pre- and posttests and in favor of the post-test for the experimental group for the high dribbling (fast) skill.

The researchers attribute the reasons for the differences and results of the pre- and post-tests of the experimental group to the effect of the educational units designed according to the selfregulated method for learning high dribbling (fast) skill basketball, and the self-regulated method has a large and effective role in learning and developing the skill, "because the steps of the selfregulated method allow the learner to create Meaningful understanding by linking previous knowledge and integrating it with what has been learned, as these steps begin by presenting a real problem faced by students and then working to analyze it and find appropriate solutions to it through the knowledge and skills that are acquired (Fouad, 2008).

The researchers see the significant differences achieved by the control group between the pre- and post-tests in the research variable, and this is realistic because the method, whatever type, that the subject teacher follows, certainly has a positive role in the students' learning and developing their level of high dribbling (fast) skill basketball, even if this method is It depends on the teacher more than the student. "The bottom line is that the student's role is repetition and practice. that is, the teacher gives the ideas and topics complete and ready for the students, and they do not have to interpret and analyze, but rather apply

and practice to master the skill to be learned. This is what confirms when the learner faces a problem or situation, learning occurs (Zaitoun, 2007).

From Table (6) we note the values of the arithmetic means, the standard deviations, the calculated (t) value, and the error rate for the posttest for the experimental and control groups for the high dribbling (fast) skill basketball, where the arithmetic mean value for the high dribbling (fast) skill basketball in the post-test for the experimental group reached (14.344). With a standard deviation of (1.803), as for the control group, the arithmetic mean reached (15.431) and with a standard deviation of (1.116), and the calculated (t) value reached (2.292), while the standard error percentage reached (0.01), since the value of the standard error percentage is smaller than the significance level at (0.05) This indicates that there are significant differences in the post-test between the experimental and control groups, in favor of the experimental group confirms that leadership and decision-making by the teacher and student has a significant impact on positive learning by creating sound positive attitudes that contribute to increasing readiness for learning (Abdul-Jabbar and Bastawisi, 1984).

The possibility of providing sufficient time in this method to practice the skill, and this is consistent with what teaching method experts such as Muston and Peterson have stated that the physical education lesson depends on two important factors, the first is increasing the application time, and the second is providing information and correcting errors (Al-Dairy, 1986). The researchers attribute these results to the effectiveness and impact of the educational units designed according to the self-regulated method used by the experimental group, which helped them outperform the control group. The use of the self-regulated method in its basic stages has an effective and significant positive impact on the development of the level of learning of the experimental research sample because it provides New capabilities that the learner can benefit from, "The self-regulated style is considered an essential factor and the axis upon which learning skills and academic achievement are based. It refers to the self-generated thoughts and feelings and the planned and necessary events that affect the student's learning and motivation. The selfregulated student knows how to learn and be selfmotivated, and knows his capabilities and their

limits, and based on This knowledge controls and organizes the learning processes, adjusts them to suit the objectives of the educational task and thus improves the performance of skills during practice. The self-regulated learning method is represented in the process of generating ideas and transforming feelings and actions through self-planning to achieve the learning objectives (Majed Farhan, 2020), states, "One of the positives of this method is that the student can, for the first time, make some lesson decisions, especially those related to application, in addition to giving the student a good opportunity to exchange information with the teacher personally about the skill he is applying" (Al-Deiri and Batayneh 1987).

Conclusions

Through the above-mentioned presentation, analysis and discussion of the results, the researchers reached the following conclusions. The results of the arithmetic means of the experimental group in the pre- and post-tests proved that there are differences in favor of the post-tests, the method used by the teacher helped in learning the high dribbling (fast) skill basketball among members of the control group, the self-regulated method has a positive impact on learning the high dribbling (fast) skill basketball for the benefit of the experimental group members, the educational units, which included skill exercises in the main section and designed according to the selfregulated method, had a positive impact on learning the skill aspect of the high dribbling (fast) skill basketball, better than the method used in school, and the results and differences obtained by the experimental group and their superiority over the results of the control group are clear evidence of the success of using the self-regulation method by the experimental group.

Recommendations

Based on the above-mentioned conclusions reached by the researchers, the following is recommended: Using the self-regulated method in learning other skills and the technical stages of other sporting events is because this method is one of the modern teaching methods, conducting other similar studies in which the self-regulated method is used on samples of different genders, such as female students, need to pay attention to using the self-regulatory method and encourage those in charge of the educational process to develop their educational and training capabilities ,conducting studies to compare the self-regulatory method with

other methods of teaching basketball skills ,and emphasizing the use of modern models, methods, strategies and methods in physical education lessons and moving away from the traditional methods and methods used.

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Conflict of Interest

The author declare no conflict of interest.

Ethics Committee

This study was performed by adhering to the Helsinki Declaration. ethics committee permissions were obtained with University of Baghdad College of Physical Education and Sports Sciences for Woman Ethics Committee Commission Date: 23.01.2024 Issue/Decision No: 2024/22

Author Contributions

Study Design, HKA and ZGM; Data Collection, HKA and ZGM; Statistical Analysis, HKA and ZGM; Data Interpretation HKA and ZGM Manuscript Preparation, HKA and ZGM; Literature Search, HKA and ZGM. All authors have read and agreed to the published version of the manuscript.

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Appendix (1)

A sample of educational units for learning the high (fast) dribbling skill.

Experimental group

Self-regulating style

first month

High (fast) basketball skill Dribbling

Unit/first Week: first

Day and date // 20 Time: (45) minutes Educational objectives:

- Accustoming students to discipline and commitment.
- Spreading the spirit of cooperation among students.
- Spreading the spirit of competition among students.

Educational goals:

- Learn the high Dribbling (fast) skill

						ľ	lotes	
Type of	Time in minutes	Educational goal	performance			Rest in	between	Total
activity				Organization	repetition	repetitio n	Exercise s	performan ce time
Preparatory part	5minute	Warm up Physical exercises	Running and arm movements	******	33	3	2	10minute
			-High (fast) Dribbling performance from stationary					
			mode.					
			 -High performance (fast) Dribbling from outside the forbidden area. 		3	30sec		4.5minute
ĸ			-Running from the halfway line to the free throw center		2	30sec	30sec	3minute
• •	1		and taking the ball from the ground and high (fast)		2	1minut	30sec	7minute
	5minute	Educational activity	dribbling.		2	e	2minute	
[\$]	25minute	Applied activity	Ball and numbers exercise					
R	7		(each student carries a specific number in his group. A ball is		2	30sec		5.5minute
[\{			placed in front of each group. The teacher calls out a specific			30800	1 minute	5minute
• § •			number. The student runs		1	30sec		
			quickly and catches the ball, then does a high (fast)					
			Dribbling from outside the forbidden zone line.					
Concluding			Small game					
part 5minute	10minute		Dismissing					