

The effect of the imperative method on the learning process of the passing skill in handball among students in the first year of secondary school

أثر الأسلوب الامري على عملية تعلم مهارة التمرير في كرة اليد لدى تلاميذ السنة الاولى ثانوي

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Abstract :

The research aims to determine the impact of the imperative style on the process of learning the passing skill in handball among students in the first year of secondary school, the study was conducted on 08 female students who were randomly selected using the experimental method. The results of the research led to the fulfilment of the proposed hypothesis. We recommend the necessity of adopting the process of learning the skill of passing in handball for students in the first year of secondary school

Keywords: The command method , Passing skill , Handball , Secondary school .

المخلص :

يهدف البحث إلى تحديد أثر الأسلوب الامري على عملية تعلم مهارة التمرير في كرة اليد لدى تلاميذ السنة الاولى ثانوي، أجريت الدراسة على 08 تلميذات تم اختيارهن عشوائياً باستخدام المنهج التجريبي. وأفضت نتائج البحث إلى تحقيق الفرضية المقترحة. و نوصي بضرورة تبني عملية تعلم مهارة التمرير في كرة اليد لدى تلاميذ السنة الاولى ثانوي. الكلمات المفتاحية : الأسلوب الامري ، مهارة التمرير ، كرة اليد ، المرحلة الثانوية .

1- Introduction and problematic of the study:

Physical and sports education is considered a form of sports practice because it has a great impact on the formation of the individual in terms of physical,

health, social and psychological is due to the use of all skill and physical abilities as well as knowing what he can do with these abilities. (ayach, 2008 , p.14).

The practice of physical activity in the physical education and sports class is considered a necessity of life and has a significant impact on all the age stages that the individual goes through, development, maturity and its realisation of the concept of physical self. (djasmani, 2022, p,71)

The physical education and sports lesson is an important pillar in the formation of young people, as it works to develop aspects of personality and learn motor skills (Tejero, 2020, p. 12), as well as health and social habits. It is the basic unit in the school physical education curriculum, so it must take a large share in the educational process within schools because of the various methods and techniques in teaching (Al-Zahrawan, 2019, p. 14)

Many studies have been conducted to prove the role of the imperative method in the development of some psychological, physical and skill qualities, including (Bassem, 2018) This study aimed to identify the impact of using some teaching methods in physical education and sports (command, training, exchange) on developing the dimensions of mental visualisation skill (visual perception, auditory perception, motor sense, accompanying emotional state) in Tallam The mental visualisation scale was used on a sample of (140) randomly selected male and female students from the fourth grade of intermediate education in the municipality of Messila, including three experimental groups on which the teaching methods under study were applied to a sample on which the imperative method was applied and a control group, and the results showed a difference between the pre and post tests on the mental visualisation skill c (basem, 2018, p162)

As proven by a study (amar, 2011) This study aimed to identify the impact of using two teaching methods (command and training) on the development of the dimensions of mental visualisation skill (visual perception, auditory perception, kinesthetic perception, accompanying emotional state) among middle school students. The study sample included (110) male and female students selected randomly from the fourth grade of middle school, using the teaching methods under study, and using the mental perception scale in the mathematical field. Arithmetic means, standard deviations, t-test, univariate analysis of variance, and Tukey's test were used on the Mathematical Mental. (amar, 2011 , p50)

As proven by a study (masoudi, 2018) The study dealt with the methods of teaching motor skills during physical education and sports classes, and the researchers addressed the extent of determining the appropriate method to reach better results . (masoudi, 2018, p2)

A number of previous studies have addressed the topic and recommended studying the impact of the imperative method on motor learning, including (Amira, 2024), which addressed the impact of the imperative method on motor learning among female secondary school students on a sample of 16 female students from Basra city and used the experimental method and found a positive effect of the imperative method on motor learning among female students and recommended its application to different age groups and educational stages (amira, 2024 ,p77)

Teaching methods play an important role in the process of motor learning of motor skills, and one of these methods is the command method, which ranks first in the teaching chain, as the method transfers the implementation and evaluation decisions during the physical education and sports class to the

learner, and aims to give him the opportunity to discover his abilities and self-reliance during the motor learning stage. This raises the following question:

Does the imperative method have an impact on the process of learning the passing skill in handball for first year secondary students ?

2- Hypothese of the study : The imperative style positively influences the learning process of the handball passing skill in secondary school students.

3- Objective of the study : Studying the effect of the imperative method on the process of learning the skill of passing in handball among secondary school students.

4- Study terminology :

4-1- Method:

4-1-1-Terminological definition: A method is a set of tasks, rules and procedures that encompass a logically connected learning experience, and therefore a method is a structured process aimed at achieving a set of pre-determined goals. (jansson, 2020, p58)

4-1-2- Procedural definition : It is how the teacher implements the teaching methods during the physical education and sports class.

4-2- Imperative style::

4-2-1-Terminological definition: It is the second of the group of teaching methods, in which all decisions in the process of planning, implementation and evaluation are made by the teacher, or what is called the nine decisions to the learner. (haoucine, 2018 ,p52)

4-2-2-Procedural definition: This method is used directly by the teacher to teach the skill of passing in handball.

4-3-Kinesthetic learning:

4-3-1- Terminological definition : It is the constant relative change, modification and control of an individual's physiological, psychological, dynamic and behavioural outcomes. (ali, 2023 ,p152)

4-3-2- Procedural definition: It is a change in performance associated with positive practice, i.e. an individual performing an activity and gaining knowledge or ability by performing motor skills.

4-4- Physical Education and Sports Class :

4-4-1-Terminological definition: It is the smallest unit in the study programme of physical education that represents the smallest part of the subject and carries all its characteristics, the teacher wants to practice on his students . (joseph, 2022, p25)

4-4-2- Procedural definition: The basic form of the educational process, which is part of the study unit and has special objectives .

5- Methodology of the study : The researchers used an experimental approach

6- Search areas :

6-1-Temporal domain : The pre-test was conducted on 12 January 2025, the post-test was conducted on 16 January 2025, the pretest was conducted on 19 January 2025 and the post-test was conducted on 19 March 2025.

6-2-Spatial Domain: The study was conducted at "Machref El Tayeb High School" , Bouhanifia -mascara-,

6-3- Human Domain: Our study was conducted on 8 female students from the first year of secondary school.

7- Search tools :

7-1- handball Quick Passing Test:

7-1-1-Objective : Measuring passing speed

7-1-2-Test Instruments : -Legal handball / A smooth wall perpendicular to the floor / A stopwatch

7-1-3-Test Procedures :

- A straight line is drawn on the floor parallel to the wall at a distance of 4 metres
- The student stands with the ball behind the drawn line and begins to pass the ball towards the wall with a chest pass 15 times
- The time is calculated from the moment he gives the start signal until the end.

7-1-4- Calculate the result : the number of seconds in 15 passes .

The student is not allowed to move more than one step in any direction.

8- The exploratory study : The exploratory study was conducted from 12-16 January 2025 at "Machref El Tayeb High School" in Bouhanifia on a sample of 5 female students, where the pre-test was applied and then the post-test was applied and the results were as follows.

9-Scientific foundations of research:

9-1- Stability:

To calculate the stability coefficient, we used the Test-Retest method on a sample of 05 students, and the stability coefficient was calculated using Pearson's correlation coefficient.

9-2-Validity:

To know the subjective validity of the used swipe test, we calculated the square root of the stability coefficient, and Table (01) shows the results of the stability coefficients and subjective validity of the test applied to the sample of the exploratory experiment:

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Table (01): Reliability and stability coefficients of the swipe test

The test		Quick Passing Test
Pre-test	Arithmetic mean	28.95
	Standard Deviation	2.10
Post-test	Arithmetic mean	27.83
	Standard Deviation	1.96
Stability coefficient		0.99
Self-honesty		0.99
Significant		0.05

From table (01), we can see that the stability and self-certification coefficients of the swipe test are high, as the first value reached 0.99, while the second value reached 0.99.

9-3- Objectivity : The tests are easy and clear to understand, not open to interpretation and far from self-assessment, so the test used are considered to have good objectivity.

10- The main study :

The main study was conducted on a sample of 08 female students from the first year level at “Machref El Tayeb High School” in Bouhanifia, by conducting a quick passing test to measure the speed of success in handball. The pre-test was conducted on 19 January 2025, then a special programme using the Lamarckian method was applied to the experimental sample, and on 19 March 2025, the

post-test was conducted on both samples (control and experimental) and the results were collected.

11- Statistical methods :

A. The arithmetic mean.

b. The standard deviation .

c. Pearson's simple correlation coefficient.

d. T-test for independent groups.

E. T-test for correlated groups.

12- Presenting and analysing results :

12-1- 12-1- Presenting the results of the pre-test to examine the differences between the control and experimental samples:

Table 02: The results of the pre-test between the control and experimental samples

The test		Quick Passing Test
Experimental Sample	Arithmetic mean	23.41
	Standard Deviation	4.39
Control Sample	Arithmetic mean	22.87
	Standard Deviation	4.68
F Probability		0.99
T Probability		0.87
Error Rate		0.05

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From Table 02 , The result of the t test between the control and experimental samples is 0.84, indicating that there are no statistically significant differences.

12-2- Presentation of the results of the pre-test and post-test of the batting skill for the experimental sample :

Table 03: Pre- and post-test results for the experimental sample

The test		Quick Passing Test
Pre-test	Arithmetic mean	23.41
	Standard Deviation	4.39
Post-test	Arithmetic mean	15.33
	Standard Deviation	1.92
Calculated t-value		0.08
Percentage error		0.05
Statistical significance		Statistically significant

It is clear from Table 03 that the arithmetic mean of the pre-test is 23.41 (since the test is measured in time and therefore less time is better), and this difference is attributed to the applied training programme which was effective in improving the passing skill in the experimental sample.

12-3- Presentation of the results of the posttest between the control and experimental samples:

Table 04: The results of the posttest between the control and experimental samples.

The test		Quick Passing Test
Experimental Sample	Arithmetic mean	15.33
	Standard Deviation	1.92
Control Sample	Arithmetic mean	19.23
	Standard Deviation	3.36
Calculated t-value		0.03
F Probability		0.42
Percentage error		0.05
Statistical significance		Statistically significant

From Table 04, we note that the arithmetic mean of the experimental sample in the post-test was 15.33 with a standard deviation of 1.92, while the arithmetic mean of the control sample was 19.23 with a standard deviation of 3.36. This indicates that there are differences between the results of the control and experimental samples in the pre-test in favour of the experimental sample, and this difference is attributed to the applied training programme that was effective in improving the passing skill of the experimental sample.

13- Discussion of the study hypothesis:

The study investigates the effect of the imperative method on learning the skill of handball passing among secondary school students. Through the statistical treatment of the results obtained from the handball passing speed test shown in the tables above, we will discuss the results obtained, in light of the hypothesis and the statistical analysis of the latter, in an attempt to highlight some key factors that have a role in determining the results obtained, and may contribute to understanding the ambiguity surrounding them .

From the results of the hypothesis that states that: **The command style positively affects the process of learning the skill of passing in handball for students of the first year of secondary school.**

It seems that there is a remarkable improvement in the experimental sample in the applied test, and we attribute this to the educational programme that we proposed, which relies primarily on the command method, as confirmed by the study of (amar, 2011), As this method has a positive role on the experiment sample in the motor learning process due to its advantages in line with the characteristics of the adolescent at this stage, especially the motivational aspect that plays a big role in attracting the interest of students, as confirmed by the study of (Bassem, 2018), and it also allows to activate the class and create an atmosphere full of vitality, and the results of (masoudi, 2018) which found that the imperative method is the most effective in teaching the skills of (shooting from jumping forward - passing), which was also confirmed by the results of the study (Bassem, 2018) Fun and Recreation, which confirms the fulfilment of the hypothesis : The imperative style positively affects the learning process of passing skill in handball for first year high school students.

14- Conclusion :

After careful scientific discussion of the handball success test and theoretical study, we came to the general conclusion that the command method has a positive impact on the learning process of handball success for first-year secondary students.

In addition to the methods used by the teacher of physical education and sports during motor learning, the command method allows the transfer of a set of decisions at specific stages of the lesson to the student, in addition to moving between students to follow up performance and give feedback, and leads to fun and entertainment. The researchers recommend the following:

- Using the deterministic method in the motor learning process for secondary school students.
- We recommend taking skills and applying an experimental approach by taking a sample of males in order to diversify the variables.
- Giving the student a chance to develop and master various motor skills.

Finally, treatment of the aspects related to this research and there is no doubt that other matters were worthy of explanation and depth that we did not do justice to and we hope that with this research we have taken new horizons for dimensions and studies in this subject in its various aspects.

15- References :

Books :

1. Ali mohamed said . (2023). *Terms in Curriculum and Instruction*. Elmansoura: Dar Al-Kitab for Printing.
2. Djasmani abd rahim . (2022). *Child and adolescent psychology and its basic facts*. beirout: Dar Al-Bayda Science.

3. Haoucine kamel . (2018). *Playful teaching strategy*. cairo: Al Hussein Academic Library.
4. Jannson lavegne . (2020). *psychologie et méthodologie*. Paris : Les éditions E.S.F.
5. Joseph la gazette . (2022). *méthodologie teaching strategy* . Paris: Leséditions
6. Tejero, Pérez .(2020) . Functional characteristics of the mnemonic system , los angles , Paracycling edition
7. Zahrawane abd el hamid . (2019). *Developmental psychology of childhood and adolescence*. cairo: Dar Al Maarif, 1st edition.

Magazines :

8. Ben amar morad . (2011). The use of two teaching methods (command and training) and their impact on the development of mental imagery in middle school students. *Journal of Physical Activity Science and Technology Volume 3, Issue 1*, 50-58.
9. Amira monir . (2024). The effect of training method on motor learning in secondary school students. *Kinetic Education Journal Issue 10*, 77-89.
10. Ayach ahmed djamil . (2008). *Teaching methods of artistic, vocational and sports education*. amman : Dar Al-Masirah for Publishing, Distribution and Printing, 1st edition.
11. Basem adel , benamar morad khoudja . (2018). The use of some teaching methods in physical education and sports and their impact on

the mental perception of middle school students. *Sports Organisation Magazine Vol. 5, No. 1*, 162-197.

12. Masoudi khaled , kamel ben dine . (2018). The role of reciprocal teaching and training methods in team games to emphasise sports leadership indicators in middle school students. *Journal of Science and Technology for Physical Activity and Sport Volume 15, Issue 2*, 1-12.