

THE EFFECTIVENESS OF METACOGNITIVE STRATEGIES IN THE INFERENTIAL THINKING OF OFFENSIVE TACTICAL BEHAVIOR IN FOOTBALL FOR STUDENTS

Akeel Kadhim Hadi Al-Fahham¹, Mudher Abdulbaqi Salim², Rafid Abdulameer Naji³

¹University of Babylon, the College of Physical Education and Sport Sciences, Iraq.

²University of Babylon, the College of Physical Education and Sport Sciences, Iraq.

³University of Babylon, the College of Physical Education and Sport Sciences, Iraq.

Received: 12.03.2020

Revised: 09.04.2020

Accepted: 04.05.2020

ABSTRACT: The study aimed to know the impact of the effectiveness of metacognitive strategies in the inferential thinking of the positions of offensive tactical behavior in football for students. The researchers used the experimental approach to design the two experimental groups equivalent to the pre and posttest, while the sample of the research are students of the third stage in the College of Physical Education and Sports Science - University of Kufa For the academic year 2018/2019, the number of which is (75) students. The sample of the experimental application sample was identified and a number of (22) students were divided into a lottery method into two experimental groups and by (11) students for each group, and the most important conclusions are that the strategies behind metacognition develop a level Inferential thinking among students and that there is a positive impact of the use of metacognitive strategies in the level of inferential thinking, the positive of the learner in acquiring knowledge while learning to employ metacognitive strategies, and the most important recommendations were the addition of metacognitive strategies as one of the vocabulary of teaching methods in colleges associated with the process Educational, training courses for football teachers to teach them the latest teaching strategies Modern to apply in their schools.

KEYWORDS: Metacognition strategies, Inferential thinking, Attitudes of offensive tactical behavior in football.

© 2020 by Advance Scientific Research. This is an open-access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>) DOI: <http://dx.doi.org/10.31838/jcr.07.08.351>

I. INTRODUCTION

Strategies for metacognition are among the strategies to teach yourself how to learn, and they are based on exploiting the student's previous knowledge, and asking questions about what the student knows about a specific subject, that is, they are introductory strategies that provide the student with remembering what he knows about a particular subject, and it is one of the best strategies to stand on the knowledge Learners and their educational needs and what they have learned through educational situations and take a base for them after that through knowing how the learner learned in addition to the strategies behind the knowledge are only the learner's awareness of what he uses of thinking patterns and methods of study and techniques accompanying learning and his awareness of the methods of self-control that It carries out to achieve its goals from the learning process,1 and to direct its learning path on its own towards the desired goal of learning in order to obtain effective and influential results.

The traditional in transferring information, which would not focus on the levels and types of thinking of learners from here, the importance of the study was demonstrated in Learn about the effectiveness of metacognitive strategies in the inferential thinking of offensive tactical behavior in football for students of the third stage in the College of Physical Education and Sports Science,2 and that the time period for conducting the research (11/19/2018 to 27/8/2019).

II. FIELD RESEARCH PROCEDURES

The researchers used the experimental approach to design the two equivalent experimental groups with pre and post testing, as for the research sample, they are the third stage students in the Faculty of Physical Education and Sports Science - University of Kufa for the academic year 2018/2019 and they are (75) students, and the members of the experimental sample were identified with a number of (22) A student was divided by the lottery method into two experimental groups, by (11) students for each group, and the homogeneity of the research sample was performed, as shown in Table (1):

Table 1: Shows the Homogeneity of the Variables Length, Mass, and Age

Tests	Units	Mean	Median	SD	Skewness	Type of significance
Length	Cm	169.68	168.97	6.43	0.33	homogeneous
Mass	Kg	61.30	60.5	5.73	0.41	homogeneous
Age	Year	20,5	20	1.25	0.94-	homogeneous

Inferential thinking scale

For the purpose of measuring inferential thinking, the researchers built a special measure for inferred thinking in football for students, consisting of (30) of the multiple choice type, giving the student one degree for each correct choice, so the highest theoretical degree is (30) and the lowest theoretical degree is (zero).

Pilot study

On 11/19/2018, the researchers conducted the exploratory experiment of the respondents' variables, as the purpose of the exploratory experiment was to identify the obstacles facing researchers when applying the two measures and to train the work team to carry out its tasks accurately,3 clarity of instructions, conducting tests and calculating scientific foundations.

Distinguished ability and internal consistency

It was found that the test used in the research has a high discriminatory ability because the value of (sig) is smaller than (0.05) in addition to the internal consistency by calculating the correlation coefficient between the paragraph and the total score on the scale and the results showed that all correlation coefficients are significant and Table (2) shows that:

Table 2: Show Discriminatory Ability and Internal Consistency of Inferential Reasoning Paragraphs

Paragraph number	Discriminatory ability	Paragraph number	Discriminatory ability	Paragraph number	Internal consistency	Paragraph number	Internal consistency
1	*5.17	16	*3.41	1	** 0.67	16	** 0.76
2	*8.86	17	*4.8	2	**0.65	17	** 0.70
3	*3.25	18	*9.09	3	**0.64	18	** 0.68
4	*3.79	19	*5.17	4	**0.71	19	**0.67
5	*3.82	20	*8.86	5	**0.54	20	**0.74
6	*6.82	21	*4.21	6	**0.56	21	**0.57
7	*5.21	22	*4.15	7	**0.58	22	**0.67
8	*3.36	23	*5.31	8	**0.53	23	**0.65
9	*4.21	24	*5.21	9	**0.63	24	**0.64
10	*4.98	25	*4.87	10	**0.54	25	**0.71
11	*3	26	*4.21	11	**0.51	26	**0.54
12	*3.57	27	*4.98	12	**0.72	27	**0.56
13	*5.21	28	*5.21	13	**0.66	28	**0.58
14	*7.04	29	*6.02	14	** 0.62	29	**0.53
15	*4.4	30	*5.21	15	** 0.67	30	**0.63

Stability of scale

The coefficient of the measure of the scale was halfway divided (0,82), and since this parameter was used to measure half of the stability, it was necessary to use the (Spearman and Brown) equation to measure the complete stability.

III. THE MAIN FIELD EXPERIENCE

Pre-test

The pre-test of the experimental and control group was conducted on Monday 11/3/2019 at nine in the morning to test the inferential thinking of the positions of the offensive linear act of football for students.

Teaching unit’s application

The vocabulary of the curriculum was applied according to (meta-knowledge) strategies on the experimental individuals.

While the control group applied the method followed by the course professor, the number of educational units reached (9) one educational unit (theoretical) and (8) practical, it took implementation of the educational units (9) weeks, the number of educational units per week (1), the time of educational units reached (90) minutes.

Post-test

The post-test was conducted after the completion of applying the teaching methods to the two experimental groups, at nine in the morning on Monday 20/5/2019, as the post-test was applied to the inferential thinking scale.

IV. RESULTS

Table 3: Shows the Differences between the Pre and Posttest of the Control Group

Variables	Units	Pretest		Posttest		(t) value	Moral value	Type of significance
		Mean	SD	Mean	SD			
Inferential thinking	Degree	18.1	1.20	20.5	1.08	3.698	0.000	Sig.

Table (3) shows that the calculated value of (t) (3.698) is greater than the value of the tabular value of (1.812), and under the degree of freedom (10) with the probability of error (0.05).

This indicates that there are significant differences between the pre and posttests of inferential reasoning tests and in favor of the post test.

Table 4: Shows the Differences between the Pre and Posttest of the Experimental Group

Variables	Units	Pretest		Posttest		(t) value	Moral value	Type of significance
		Mean	SD	Mean	SD			
Inferential thinking	Degree	18.6	0.97	23.6	1.65	5.855	0.000	Sig.

It is clear from Table (4) that the results of the reasoning reason test are that the calculated value of (t) (5.855) is greater than the value of the tabular value of (1.812) and under the degree of freedom (10).

With the probability of error (0.05) and this indicates that there are significant differences for the test between the pre and post.

To test the inferential thinking of offensive tactical behavior situations in football and in favor of the post test.

Table 5: Show Differences in the Dimensional Tests of the Control and Experimental Groups

Variables	Units	Control group		Experimental group		(t) value	Moral value	Type of significance
		Mean	SD	Mean	SD			
Inferential thinking	Degree	20.5	1.08	23.6	1.65	4.05	0.000	Sig.

Table (5) shows that the calculated T value is (4,05) and it is greater than the tabular (t) value of (1.725) under the degree of freedom (20) with a probability of error (0.05). This indicates that there are significant differences between the two groups and in favor of the experimental group in the Posttest.

V. DISCUSSIONS

Teaching according to metacognitive strategies focuses on activity in the learning process. Students discover themselves and apply their scientific knowledge in new situations, which helps discover knowledge in a sound scientific manner. The self-derivation of questions makes it easier for students to understand the facts and concepts understood, and to understand the purpose of what they have learned,4 and their desire to learn more, and researchers believe that the use of inferential thinking scale for the positions of offensive planning in football during the educational units of the cases of offensive play has a clear effect and effectiveness on student performance As well as the strategies for metacognition through the use of (cooperative learning strategies, model strategy and KWLH strategy) the clear effect of modifying the behavior of students within the group and this indicates the development taking place in the patterns and mental capabilities that the student has,5 which qualifies him first to assume an appropriate place within the goal area according to his capabilities Technical and give him more flexible solutions, accuracy and speed in performance when receiving the ball, it plays a positive role and can be used to pressure the defenders to lead this to force them to make mistakes and this is what the results indicate in the tables (4), (5), (6) that whenever The mental abilities increased,6

The student’s inferential thinking increased, and he had speed in thinking and making the appropriate decision for his abilities and capabilities and his location within the m The offensive third area In this context, “the mental capabilities of the football student include multiple capabilities such as memory, learning, speed of awareness and the ability to retrieve audio and visual information.”7 and that the experimental group students ’superiority in cognitive achievement showed that they used their higher thinking skills, including strategies Beyond knowledge, one of which is the KWLH strategy and this was confirmed by a study8 which confirms that the student who possesses higher thinking skills and metacognition has the ability to act in changing situations within the game and works to evoke previous skills and experiences and employ them in play situations to reach excellence in these situations By sound judgment and good implementation of these skills .9

VI. CONCLUSIONS

1. Metacognition strategies develop the level of inferential reasoning for offensive tactical behavior in football among students and that there is a positive impact of the use of metacognitive strategies in the level of inferential thinking.
2. The learner is positive in acquiring knowledge while learning to employ metacognitive strategies.

VII. REFERENCES

[1] Aida Ali and others: The effect of a metacognitive strategy on learning the skill of preparation in volleyball, *Contemporary Sports Journal*, p. 15, vol. 10, 2011.

[2] Pride, A Training Cycle Football Condition: Development of Theory & Translation to Football Practice. *Work paper , Ottawa, Canada, 2004.*

[3] Alsayigh, H. A., & Athab, N. A. (2016). The Study of Rectus Femoris Activity after Knee Joint Rehabilitation. *International Journal of Pharm Tech Research*, 9(9), 360-365.

[4] Athab, N. A., Hussein, W. R., & Ali, A. A. M. (2019). A Comparative Study for Movement of Sword Fencing Stabbed According to the Technical Programming in the Game of Fencing Wheelchairs Class B. *Indian Journal of Public Health Research & Development*, 10(5), 1344-1347.

[5] Athab, N. A. (2019). An Analytical Study of Cervical Spine Pain According to the Mechanical Indicators of the Administrative Work Staff. *Indian Journal of Public Health Research & Development*, 10(5), 1348-1354.

- [6] Alsayigh, H. A., Athab, N. A., & Firas, M. (2017). The Study of Electrical Activity of the Triceps Brachia Muscle according to the Chemical Changes of Water Loss during Spike in Volleyball. *Journal of Global Pharma Technology*, 57-62.
- [7] Athab, N. A. K., & Hassan, A. A. Analysis Study To The Joint Pain Of Knee With Indication Of Loading Mechanics For Players The researchers.
- [8] Rahimirad, M., & Shams, M. R. (2014). The effect of activating metacognitive strategies on the listening performance and metacognitive awareness of EFL students. *International Journal of Listening*, 28(3), 162-176.
- [9] Weinstein, E., Turner, M., Kuzma, B. B., & Feuer, H. (2013). Second impact syndrome in football: new imaging and insights into a rare and devastating condition: case report. *Journal of Neurosurgery: Pediatrics*, 11(3), 331-334.