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EFFECT OF USING SPECIAL EXERCISES TO DEVELOP OF A NUMBER OF COGNITIVE ABILITIES KINESTHETIC AND LEARNING FOOTBALL DRIBBLING SKILL

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ABSTRACT

Research aims to reveal impact of using special exercises in development of a number of cognitive abilities and learning skill of dribbling football. And to compare in post-test between two study groups in development of a number of cognitive abilities kinetic and learning skill of dribbling football for students of fifth grade of primary school, and researcher used experimental approach to suit nature of research, represented Community of research was students of Khank Elementary School (fifth grade), for (2023-2024) academic year, which numbered (146) students was distributed over four sections. The research sample was selected by lottery, as draw led to selection of divisions (B, D), and thus number of sample reached (62) students, as well as draw led to selection of students of Division (A) a sample for stability and pilot experiments and were excluded a number of student of sample for lack of equality with sample, and thus final number of sample (32) pupils divisive for two (experimental , control) groups at (16) pupils for each, a percentage was (21.917%) of a community of study. The suggested exercises were division by lottery. educational programs fulfillment it took eight weeks, divided at two units weekly, units time it was (40 m). In through research re returns ached by researcher that educational programs applied to two research groups have a positive impact on development of some cognitive abilities kinetic influential football. Experimental group, which used special skill exercises focused on motor sensation, outperformed control group, which used traditional method (skill exercises program only). Advantage of development of cognitive abilities in experimental group was effectively reflected in improvement of learning process of skill of dribbling football. Researcher recommended emphasizing synchronization of cognitive development when embarking on learning basic football skills. And emphasis on development of cognitive abilities among young age groups in football. As well as emphasizing development of cognitive abilities when learning basic skills in other group events, and conducting studies and research to develop cognitive abilities for different age stages.

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INTRODUCTION

Kinesiology is one of important sciences and is directly related to learning various motor and technical skills and developing many different abilities among athletes, which help m learn those skills better and with less effort, which led to interest of many specialists and researchers to provide scientific research that seeks to raise level of learner's performance in various sports activities, especially in field of football, which is one of most important and most important mass sports in all countries of world as it is practiced in most countries times and places, outstanding motor performance does not only need to form a visual or auditory perception only, but must be accompanied by a kinetic that helps learner in controlling dribbling performance and good absorption of parts of movement and needs, and this crystallizes through practice of motor performance, as muscles do not accomplish motor performance only, but sense of that performance that is, it senses extent of strength and work on balance of contraction and relaxation in various muscles of body, as well as extent of tension and relaxation in joints that participate in that performance Kinetic, and this is clearly observed in learners who have not yet developed a kinesthetic (in initial stages of learning), and that development of learners' cognitive abilities Kinesthetic and skill depends mainly on extent of or interaction with method, method or educational exercises followed and extent of or response to (Ericsson & Karlsson, 2014).

" learner interacts with environment through visual, auditory and motor sensations when he pays attention to stimuli he receives during performance, which makes him need to interpret m through his previous skills and experiences and try to overcome m."(Chang et al., 2020)

"Understanding and perceiving movement and forming a clear picture of concept of movement or skill has a great impact on learning different skills."(Kudinova et al., 2021).

As phenomenon of motor perception in terms of direction and time, as well as distance, has a direct impact on athlete's motor ability and development, in addition to facilitating process of perception and understanding of various motor skills, as it indicates (Erickson & Erickson, 2017) To" that perception in movement facilitates process of linking movements, especially vehicle, and that learner's perception of surroundings comes through sensation, perception derives its effectiveness and resistance from senses that transfer influences from nerves to senses and re is process of perception. (Chaudhuri & Bhardwaj, 2018)

Since skill of dribbling football is special because of its importance in many aspects, including "breaking offside trap, as well as opponent's work, giving an opportunity for colleagues to move and create spaces, as well as giving colleagues an opportunity to organize offensive position, organize movements, distract opponent's attention, delay play, gain time, as well as change speed of play and is a prelude to performance of dribbling, deception or correction."(Nusri et al., 2024)

As football players must learn skill of dribbling and master it well, as arrival of skill performance to automatic level of performance will lead to achieving best desired results with economy of effort and best time as motor skill has been defined as " possibility of doing motor work characterized by accuracy, ease, control and economy in exerting effort."(Rello Pambudi & Widiyanto, 2019)

re is a continuous need for football player to wide motor perception and to high skill and physical abilities to overcome different conditions during play and face m with confidence. (Sarajärvi et al., 2024)

Situations that player faces during game need to be aware and thinking correctly to enable him to make appropriate decision in right form and time to obtain best results, "as right thinking and appropriate solution are result of a good and correct awareness of different conditions and elements that player faces on field."(Bonney et al., 2019)

As interest of specialists in sports field is focused on how to form a player with high specifications who has a high level of cognitive and mental abilities and possibility of making

right decision at best times to solve all problems and create new opportunities for play that enable team to achieve difference over competitors, "as knowledge and awareness of player is of great importance not only to learn and implement performance of skills, but to solve all problems he faces while using various playing skills."(Duda & Khramov, 2018)

" player who can score a goal with required specifications in terms of strength, speed and accuracy in performance, as well as playing ball and handling it in right place and time, is one of important and main tools that coach relies on during play and in most difficult matches."(Artanayasa & Giri, 2019)

Therefore, development of cognitive abilities kinetic and learning skill of dribbling will lead to a clear development in performance of player as well as in general results of team, hence importance of study crystallized in possibility of developing some cognitive abilities kinetic and learning skill of dribbling football for students of fifth grade of primary school, which contributes to preparation of new learners and high specifications through their access to a good amount of learning.

Football includes a variety of skills and many and se skills need a variety of adaptations such as movement of legs (feet in particular), head, arms, and even movement of trunk, and se agreements need high cognitive abilities to help learner learn skills required ideally and that development of se cognitive abilities does not come only through exercise and practice, hence problem of searching for answer to following two questions:

1. Does use of special exercises have an impact on development of a number of cognitive abilities Kinesthetic for students of fifth grade of primary school?
2. Does use of special exercises have an impact on learning skill of dribbling football for fifth grade students?

Research aims to reveal following:

1. Effect of using special exercises in development of a number of cognitive abilities Kinesthetic.
2. Effect of using special exercises on learning skill of dribbling in football.
3. Comparison between research groups in post-test of development of a number of cognitive abilities Kinesthetic and learning skill of dribbling football for students of fifth grade of primary school.

Researcher assumes following:

1. re are significant differences between results of pre- and post-tests in development of a number of cognitive abilities Kinesthetic and for two research groups.
2. re are significant differences between results of pre- and post-tests in learning skill of dribbling in football and for two research groups.
3. re are no significant differences between two research groups in post-tests in development of a number of cognitive abilities Kinesthetic and learning skill of dribbling football.

RESEARCH METHOD

Researcher used experimental method by designing two randomly chosen equivalent groups with a pre- and post-observation tightly controlled. Community of research was students of Khank Elementary School (fifth grade), for (2023-2024) academic year, which numbered (146) students divided for four sections. the research sample was selected by lottery, as draw led to selection of divisions (B, D), and thus number of sample reached (62) students, as well as draw led to selection of students of Division (A) a sample for stability and pilot experiments and were excluded a number of student of sample for lack of equality with sample, and thus final number of sample

(32) pupils divisive for two (experimental , control) groups at (16) pupils of each, a percentage was (21.917%) of a community of study. The suggested exercises were division by lottery.

Main experiment of research

The pilot study was conducted on samples from research community, and working to address difficulties and obstacles that faced researcher's work, and then the main experiment was conducted on experimental group, which started from 4/3/2024 to 29/4/2024. Scientific foundations of tests: (honesty, reliability, objectivity), as shown in Table (1).

Table 1. shows coefficients of honesty, stability and objectivity of tests of some cognitive abilities (Kinesthetic) and test of dribbling skill

No.	Statistical Process / Tests	Measurement Unit	Stability Coefficient	Self-honesty	Objectivity
1	dominant foot Sensation	cm.	0.93	0.964	0.915
2	Time Perception (10 seconds)	Sec.	0.915	0.956	0.945
3	Balance Perception (60 seconds)	Sec.	0.875	0.935	0.927
4	Dribbling	Sec.	0.955	0.977	0.935

Table (1) shows that values of correlation coefficients ranged between (0.875 and 0.977), which indicates that tests have high truthfulness, stability and objectivity coefficients.

Homogeneity and equivalence of research groups:

Process of homogeneity and equivalence included following variables: First: In growth variables (height, mass, age): researcher processed of homogeneity of growth variables (height, mass, age) of research sample, show in Table (2).

Table 2. shows results of (T) test between two research groups in variables (age, height and mass)

No.	Variables	Measurement Unit	Group	M.	St.d	(T) Test	Sig.
1	Age	Month	Control	130.125	1.360	1.379	0.593
			Experimental	129.437	1.459		
2	Height	cm.	Control	128.562	1.787	0.898	0.432
			Experimental	129.187	2.136		
3	Mass	Kg.	Control	30.812	1.046	0.457	0.923
			Experimental	31	1.264		

* difference is not significant when p-value is greater than (0.05)*

Table (2) shows that re are significant differences between experimental and control research groups in variables of (age, height, mass) because values of error rate probability is greater than (0.05), which indicates equivalence of two groups of research in variables.

Second: Equivalence in some elements of physical fitness affecting selected skills between two research groups:

Table 3. shows results of test (T) between two research groups in some elements of physical fitness

No.	Fitness and Motor Abilities	Measurement Unit	Group	M.	St.d	(T) Test	Sig.
1	Agility	Sec.	Control	11.035	0.464	1.876	0.316
			Experimental	11.432	0.708		
2	Transition speed	Sec.	Control	8.006	0.653	0.546	0.924
			Experimental	7.881	0.641		

* difference is not significant when p-value is greater than (0.05)*

Table (3) shows that re are significant differences between two research groups (experimental and control) in elements of physical fitness (agility and transitional speed) because values of probability of error rate is greater than (0.05), which indicates equivalence of two research groups in those variables.

Third - parity in tests of some cognitive abilities kinetic between two research groups:

Table 4. shows results of test (T) between two research groups in tests of some cognitive abilities kinetic

No.	Cognitive abilities	Measurement Unit	Group	M.	St.d	(T) Test	Sig.
1	dominant foot Sensation Time Perception (10 seconds)	cm.	Control	7.906	0.490	1.130	0.599
			Experimental	7.706	0.510		
2	Balance Perception (60 seconds) dominant foot Sensation	Sec.	Control	7.531	0.332	0.148	0.431
			Experimental	7.512	0.384		
3		Sec.	Control	23.987	0.617	1.144	0.581

	Time Perception (10 seconds)		Experimental	23.737	0.618		

* difference is not significant when p-value is greater than (0.05)*

Table (4) shows that re are significant differences between experimental and control research groups in tests of some cognitive abilities (Kinesthetic) because values of probability of error rate are greater than (0.05), which indicates equivalence of two research groups in those variables.

Forth - Equivalence in test of football dribbling skill between two research groups:

Table 5. shows results of test (T) between two research groups in skill of dribbling in football)

No.	Skill	Measurement Unit	Group	M.	St.d	(T) Test	Sig.
1	Dribbling	Sec.	Control	19.525	0.349	1.086	0.91
			Experimental	19.387	0.366		

* difference is not significant when p-value is greater than (0.05)*

Table (5) shows that re are significant differences between experimental and control research groups in skill of (dribbling) because error rate probability values are greater than (0.05), which indicates equivalence of two research groups in those variables.

Time of programs:

The two programs was included (36, units) distributed over two research groups as follows:

1. (16) educational units for experimental group according to special exercises accompanying skill exercises.
2. (16) educational units for control group according to traditional method (skill exercises program only). Implementation of educational programs took eight weeks, distributed by two educational units per week for each group, and time of educational unit was (40) minutes.

RESULTS

Presentation of results of differences between pre- and post-tests of experimental group in development of a number of cognitive abilities Kinesthetic affecting football:

Table 6. shows means and standard deviations of pre- and post-tests and values of (T) calculated in development of a number of cognitive abilities kinetic influential football

No.	Cognitive abilities	Measurement Unit	Test	M.	St.d	(T) Test	Sig.
1	dominant foot Sensation	cm.	Pre	7.706	0.510	9.544	0.0009

	Time Perception (10 seconds)		Post	5.556	0.594		
2	Balance Perception (60 seconds) dominant foot Sensation	Sec.	Pre	7.512	0.384	23.366	0.0003
			Post	4.543	0.307		
3	Time Perception (10 seconds)	Sec.	Pre	23.737	0.618	36.213	0.0005
			Post	14.825	0.967		

* Significant difference at error rate of ≤ (0.05) and in front of degree of freedom (15), knowing that tabular value of (T) = 2.13.

Table (6) shows that re are significant differences between arithmetic means of pre- and post-tests of experimental group and in favor of post-test in development of all cognitive abilities of selected kinetic (sense of dominant foot, perception of time, perception of balance), as values of (T) calculated respectively (9.544, 23.366, 36.213) and by observing error ratios of (0.0009,0003, 0.0005), which is smaller than ratio of (0.05), which indicates significance of differences.

Presentation of results of differences between pre- and post-tests of experimental group in learning skill of dribbling in football:

Table 7. shows means and standard deviations of pre- and post-tests and values of (T) calculated in learning skill of dribbling in football

No.	Skill	Measurement Unit	Test	M.	St.d	(T) Test	Sig.
1	Dribbling	Sec.	Pre	19.387	0.366	35.323	0.0007
			Post	14.618	0.413		

Significant difference at error rate of ≤ (0.05) and in front of degree of freedom (15), knowing that tabular value of (T) = 2.13.

Table (7) shows that re are significant differences between arithmetic means of pre- and post-tests of experimental group and in favor of post-test in learning skill of dribbling in football, as calculated values of (T) reached (35.323) and by observing error rates of (0.0007), which is smaller than percentage of (0.05), which indicates significance of differences.

Presentation of results of differences between pre- and post-tests of control group in development of a number of cognitive abilities kinetic football:

Table 8. shows means and standard deviations of pre- and post-tests and values of (T) calculated in development of a number of cognitive abilities kinetic influential football

No.	Cognitive abilities	Measurement Unit	Test	M.	St.d	(T) Test	Sig.

1	dominant foot Sensation Time Perception (10 seconds)	cm.	Pre	7.906	0.490	3.079	0.008
			Post	7.425	0.358		
2	Balance Perception (60 seconds) dominant foot Sensation	Sec.	Pre	7.531	0.332	5.073	0.0001
			Post	6.718	0.526		
3	Time Perception (10 seconds)	Sec.	Pre	23.987	0.617	21.983	0.0007
			Post	19.831	0.564		

Significant difference at error rate of ≤ (0.05) and in front of degree of freedom (15), knowing that tabular value of (T) = 2.13.

Table (8) shows that re are significant differences between arithmetic means of pre- and post-tests of control group and in favor of post-test in development of all cognitive abilities and selected kinetic (sense of dominant foot, perception of time, perception of balance), as values of (T) calculated respectively (3.079, 5.073, 21.983) and by observing error ratios of (0.008,0001, 0.0007) respectively, which is smaller than ratio of (0.05), which indicates significance of differences.

Presentation of results of differences between pre- and post-tests of control group in learning dribbling skill in football

Table 9. shows means and standard deviations of pre- and post-tests and values of (T) calculated in learning skill of dribbling in football

No.	Skill	Measurement Unit	Test	M.	St.d	(T) Test	Sig.
1	Dribbling	Sec.	Pre	19.525	0.349	19.003	0.0006
			Post	17.681	0.197		

Significant difference at error rate of ≤ (0.05) and in front of degree of freedom (15), knowing that tabular value of (T) = 2.13.

Table (9) shows that re are significant differences between arithmetic means of pre- and post-tests of control group and in favor of post-test in learning skill of dribbling in football, as calculated values of (T) reached (19.003) and by observing error rates of (0.0006), which is less than percentage of (0.05), which indicates significance of differences.

Presentation of results of comparison in post-test between two research groups in development of a number of cognitive abilities kinetic influential football:

Table 10. shows results of comparison in post-test between two research groups in development of a number of cognitive abilities kinetic influential football

No.	Cognitive abilities	Measurement Unit	Group	M.	St.d	(T) Test	Sig.
1	dominant foot Sensation Time Perception (10 seconds)	cm.	Control	7.425	0.358	10.767	0.0002
			Experimental	5.556	0.594		
2	Balance Perception (60 seconds) dominant foot Sensation	Sec.	Control	6.718	0.526	14.259	0.03
			Experimental	4.543	0.307		
3	Time Perception (10 seconds)	Sec.	Control	19.831	0.564	17.885	0.01
			Experimental	14.825	0.967		

Significant difference at error rate of ≤ (0.05) and in front of degree of freedom (15), knowing that tabular value of (T) = 2.13.

Table (10) shows that re are significant differences between arithmetic circles in post-test between experimental group and control group and in favor of experimental group in development of a number of cognitive abilities kinetic chosen, as values of (T) calculated respectively (10.767, 14.259, 17.885) and by observing error rates of (0.0002,0.03, 0.01), which is smaller than ratio (0.05), which indicates significance of differences.

Presentation of results of comparison in post-test between two research groups in learning skill of dribbling football:

Table 11. shows results of comparison in post-test between two research groups in learning skill of dribbling in football

No.	Skill	Measurement Unit	Group	M.	St.d	(T) Test	Sig.
1	Dribbling	Sec.	Control	17.681	0.197	26.737	0.006
			Experimental	14.618	0.413		

Significant difference at error rate of ≤ (0.05) and in front of degree of freedom (15), knowing that tabular value of (T) = 2.13.

Table (11) shows that re are significant differences between arithmetic circles in post-test between experimental group and control group and in favor of experimental group in learning skill of dribbling football, as calculated values of (T) reached (26.737) and by observing error rates of (0.006), which is less than percentage of (0.05), which indicates significance of differences.

DISCUSION

Through results obtained in tables (6,7) shows that re are significant differences between results of pre- and post-tests of control group in development of a number of cognitive abilities kinetic and learning skill of dribbling football and in favor of post-test, and researcher attributes reason for se differences to effectiveness of curriculum used, which included an explanation and presentation of motor skills through performance of skill exercises and re-repeated, as it contributed to development of efficiency of functional work of devices of cognitive system Kinesthetic, and this indicates that educational curriculum followed has helped in increasing motor experience of learners through development of Kinesthetic cognitive abilities. Where mentions.(Koltai et al., 2016)

Performance of skill exercises and repetition on a regular basis helps to understand motor duty, which helps to increase focus of performance and surroundings, as performance of exercises led to development of those abilities and learn skill of dribbling and this is what he emphasized. (Bozkurt, 2018). As focus on performance through repetition and practice helps in raising level of perception of learners, which contributes positively to learning skills, and that practice and continuous repetitions are of great importance in process of motor learning. This, in turn, leads to compatibility between constituent parts of same skill as well as between different skills.(Čoh et al., 2004)

Through results obtained in tables (8, 9) show that re are significant differences between results of pre- and post-tests of experimental group in development of a number of cognitive abilities kinetic and learning skill of dribbling football and in favor of post-test, and researcher attributes reason for se differences to effectiveness of educational curriculum used skill exercises focused on kinetic, "as cognitive functions Kinesthetic change fundamentally when exposed to educational conditions directed."(Yudy Hendrayana, 2015). In addition, development of cognitive abilities through exercises followed during educational units will be transmitted to learner, which helps to develop his skill performance, and this is what he emphasized.(Harahap et al., 2018)

That perception derives its effectiveness and resistance from senses that transfer influences from nerves to senses and re is process of perception," in addition to that "skill exercises help to develop physical and motor level when performing exercises, learner interacts with a number of stimuli when performing constantly, as this leads to upgrading his level, especially in competitive games."(Cope et al., 2017). Where performance of skill exercises in a different style with emphasis and focus on cognitive aspect by stimulating sensory perceptions had a positive impact that helped enable learners to perform skill duties of required skill and with a remarkable development, "as overlap in educational environment increases learner's experiences, increases skill mastery, and increases learner's ability to perform skill better."(Robin et al., 2020) Through what has been presented from results obtained in tables (10, 11) shows that re are significant differences in results of post-tests between experimental and control groups in development of a number of cognitive abilities kinetic and learning skill of dribbling football and for benefit of experimental

group, and researcher attributes reason for se differences to effectiveness of educational curriculum used skill exercises focused on kinetic, which had a positive impact on this superiority, as many indicate Studies indicate that re is a correlation between cognitive abilities and physical and skill aspect of learner, as it indicates (DOĞGÜN, 2023)

Physical or skill exercises are automatically accompanied by development of Kinesthetic cognitive abilities, and in this regard it is mentioned (Koçak, 2019) To "that most of scientific references agreed on possibility of developing cognition Kinesthetic and reaching a high degree of accuracy and clarity, but y stipulated that this be done through use of appropriate exercises and selected means with a direct focus on those Kinesthetic abilities", as re are many means that can be used when developing Kinesthetic perception, "and that method of diversification is one of most important of se methods, through diversity in exercises or diversity in requirements of motor performance and that To ensure development of Kinesthetic perception in learners" (Ryngier, 2021).

As visual kinetic path helps learner before motor performance to form an experience for learner about kinetic path of skill, which helps to develop cognitive abilities in addition to development of skill, which in turn leads to economy of effort, which leads to reducing performance time. (Mandoob Makki Ati et al., 2024). Researcher believes that reason for development in cognitive abilities kinetic and skill dribbling football came as a result of organization of skill exercises (which focus on sensory perception) and number of repetitions and breaks in educational unit of experimental group, which led to better learning, "In order to achieve good learning, organization of exercise and distribution of rest periods and practice must be carried out during educational curriculum to prepare beginner learners for motor skills, whether one skill or many in order to facilitate education process and a consistent organization of various exercises as well as on process of developing mechanism of skill performance and avoiding mistakes."(Huang & Liu, 2020).

As development in Kinesthetic cognitive variables is due to skill exercises that focused on sensory perceptions of learners increase formation of new neural connections through repeated stimulation, which leads to improved neuromuscular responses, and that progress in Kinesthetic cognitive abilities was result of balancing in targeting different senses and with equal repetitions when performing required duties. " Kinesthetic perception is one of most important psychological, motor and mental functions that contribute to learner's acquisition of motor capabilities and abilities in sports activities that need to accurately estimate spatial, temporal and motor relationships."(Rawat Assistant Professor et al., 2019). Since members of this group had best development in development of cognitive abilities and Kinesthetic, and this was reflected positively and effectively on improving learning process of skill of dribbling football, it was mentioned (Dhouibi et al., 2021).

Stimulation of cognitive abilities of learners directly and in regular doses can lead to improving process of learning motor skills more effectively and better performance with economy of time and effort, as process of developing cognitive abilities helps learners to adapt to all variables and surrounding circumstances, no matter how difficult, which contributes to preparation of new learners with high quality cognitive and skill qualities and a high and distinguished level of performance.

CONCLUSION

Educational methods implemented in two research groups positively influence the development of certain cognitive capacities and kinetic skills related to football. The implementation of educational programs in two research groups has positively influenced the acquisition of dribbling skills in football. The experimental group, which employed specific skill exercises that focused on

motor sensation, did better than the control group, which just used a regular method (skill exercise program). The experimental group's preference for enhancing cognitive capacities was effectively manifested in the enhancement of the learning process for the skill of dribbling a football. Suggestions When starting to learn the basics of football, make sure to stress the importance of synchronizing cognitive growth. Focus on improving cognitive skills in kids that play football. Focus on enhancing cognitive skills throughout the acquisition of fundamental abilities in individual or group activities. Doing studies and research to help people of all ages improve their cognitive skills.

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