Visual Abilities and its Relationship with Tactical Performance for Different Lines Players in Soccer

*Dr/ Ahmed Abd Elmawla Elsayed

Abstract

This research aims to recognize the " Visual abilities and its relationship with tactical performance for different lines players in soccer". The researcher used the descriptive approach to achieve the hypotheses and aims of the study. The research sample was chosen intentionally from soccer juniors in sport Dekernes club U18 years, registered at Egyptian Football Federation for 2015/2016 season. The most important result of study was the researcher concluded that there is a correlative relationship between individual offensive tactical performance and the visual abilities. so the researcher recommended that coaches should note the correlative relationship between the individual offensive tactical performance, and visual abilites in order to developm soccer players level and use individual offensive tactical performances and visual abilities within training units for soccer juniors.

Keywords: Visual abilities, tactical performance.

Introduction:

Visual abilities play an important and necessary role in the tactical performance of various sports in general and soccer in particular. Visual training is one of optometry branches, a branch concerned with the looking, perception, assessment and improvement of visual performance level, in addition to identification of optical instruments that are most suitable for the nature of sports activity (3:127). Suzanna Cathrina (2003) added that visual vision had no place in the daily preparation of athletes, and the coaches were trained in vision-related training, but research has shown the visual abilities importance for athletic performance. It also revealed that athletes have higher visual abilities compared to non athletes. many researchers have verified the possibility of training these visual abilities.

* Department of Sports Training, Faculty of Physical Education, Mansoura University, Egypt

some studies have shown positive results for training (11:79).

Homer Rice (2004) points out that visual skills or visual abilities, like all other physical skills, can be taught, trained, and improved. (12) Players are required to perform various technical and tactical tasks in line with goalkeeper, defender, midfielder and striker functions (8, 10). like other sports, there has been an increase in movement speed or modern soccer rhythm over the past years. so the current football players are able to run faster, perform technical skills more quickly, and implement the best tactical decisions (5).

Although successful performance in playing a soccer match requires superior levels of physical fitness to maintain a high work rate during matches, it may be a synthesis of physical, technical and tactical skill level that usually separates successful soccer players and team's performance at elite levels of competition (1).

The offensive tactics of team depends largely on the individual abilities through cooperation between team players, which requires the integration of individual moves into the team's collective performance and individual offensive tactics means are implemented: dribbling, feinting, passing and shooting.

Research Problem:

The researcher noticed through his work as a coach, as well as through the interview and the survey of many coaches and supervisors opinions in many clubs, and through the follow-up of many matches the lack of trainers interest when planning to build training programs with visual abilities and training methods on it, which may lead to low performance in general and may be reflected on tactical performance, it may also be due to lack of good training on tactics and not to allocate specific time for training, as happens on physical and technical side.

Although accepting visual vision is slow, athletes at all levels need to be more aware that visual fitness is as important as fitness, technical and tactical fitness for a successful sports. Therefore, sports experts and trainers to search for training innovations to develop sports performance and to improve the competitive

level, visual training is one of the modern training methods in the sports field This led the researcher to try to identify "visual abilities and their relationship with tactical performance for different lines players in soccer."

Search aim:

The aim of this research is to identify the " visual abilities and their relationship with tactical performance for different lines players in soccer", through the following questions:

1- What is the level of visual abilities for soccer juniors?

2- What is the level of tactical performance for soccer juniors?

3- What is the nature of the relationship between the visual abilities and tactical performance for soccer juniors?

4- What is the significance of differences in visual abilities and tactical performance of the line according to the different playing lines for soccer juniors?

Research terms:

- Visual Abilities:

The ability to see and visualize the spatial and temporal space in the field, whether with or without the ball, through various eye exercises to improve and enhancing basic visual functions. (Procedural definition)

- Individual offensive tactical performance:

Using the player for his movements and his basic skills alone to participate in the implementation of play plan for the team and whenever the player has been able to perform individual offensive plans as the collective team plans; are more efficient. (Procedural definition)

Research procedures

• Research Methodology

Researcher used descriptive approach to suit this study nature.

• The research sample

Research sample was chosen in a deliberate manner from Sport Dekernes club players under 18 years and registered in the Egyptian Federation of Football and the participants in the 2015/2016 sectors. The sample number was 10 players, Defense line (4) players - Midfield (3) players – offensive line (3) Players, and the number of survey sample (12) player from within the research community and from the same age stage and outside the basic sample.

• Equivalence of distribution and equivalence of research sample

The probability of distribution and equivalence of research sample was confirmed in basic variables of age, height, weight, training age and variables under study as shown in Table (1), (2).

Table (1)

Equivalence of research individuals distribution to sample control variables under study n= 10

Variables	Measurement unit	Mean	Std. deviation	Median	Skewness
Age	Year	١٧.٤٤	٠.٣٢٧	١٧.٥٥	١.٤٢٠ -
Length	Cm	١٧٥.١٠	٣.٨١	١٧٥,٠٠	٠.١٦١ -
Weight	Kg	٦٩.٤٠	٧.٢٤	٧٠.٠٠	٠.٦٥
Training age	Year	٥.٦٧	٥.٦٥	٠.٦٢٩	٠.٠٩٧ -

Table (1) shows that skewness transactions in sample control variables are between +3, indicating the moderation of data distribution.

Table (2)

Probability of research individuals distribution to the variables under study (n = 10)

Variables		Measurement unit	Mean	Std.deviation	Median	Skewness
Visual abilities	Static visual ability	Accuracy (degree)	٨.٨٠٠	١.٨٧٣	٩.٠٠٠	٠.٥٢٧-
	Dynamic visual ability	Time (s)	١.٠١٦	٠.١٤٢	١.٠١٠	٠.٠٦٦-
		Accuracy (degree)	٢.٨٠٠	٠.٧٨٨	٣.٠٠٠	٠.٤٠٧
	Peripheral awareness	Time (s)	١.٣٩٢	٠.٢٢٦	١.٤٠٠	٠.٢٩٦
		Accuracy (degree)	٢.٦٠٠	١.١٧٣	٢.٥٠٠	٠.٠٤١-
	Visual reaction	Time (s)	٠.٩١٢	٠.١٤٧	٠.٨٧٥	٠.٧٩٦
	Eye-foot co ordination	Number	٢٢.٤٠٠	٢.٥٠٣	٢٢.٠٠٠	٠.٢٨٠
	Field of vision	Number	١٢١.٠٠	١.٥٦٣	١٢١.٥٠	٠.٨٧٢-

Table (2) shows that the skewness transactions of biochemical variables and power are between ±3, indicating the moderation of data distribution.

• Search variables.

Research variables were determined according to theoretical readings and previous studies to:

- Visual abilities, measured by tests (static visual ability - dynamic visual ability - peripheral awareness - visual reaction – eye,foot co ordination- field of vision). (2) (6) (11)

- Individual offensive tactic performance (appendix 2)

• Data collection methods.

The researcher used the method of scientific observation as a tool for collecting data through the analysis of matches and also field tests by:

▪ Research devices and tools:

- Measuring tape - balls - cones / dishes - barriers - swedish seats - rastametar - stopwatch - video recorder – videos - computer - optical devices .

▪ Forms:

The researcher designed:

- The analysis and registration form of individual offensive tactic performance for soccer juniors under 18 years. appendix (2)

- Selection and identification form of the most appropriate special visual abilities.appendix (1)

• Survey studies.

- The survey study:

Was conducted in period from 4/10/201٥ until 7/10/201٥ after the tests were modified and finalized. The researcher conducted a study to determine the scientific parameters of these tests (validity - stability) on a sample of 6 players from outside the sample and within the original research community, the researcher used differentiation validity to calculate tests validity and the test application method then re-apply test to calculate the stability, and find the correlation coefficient between tests application results for two arbitrators both faculty members and their scientific specialization football to calculate the objectivity. Annex(4)

- Tests validity for power under study.

The researcher used the differentiation validity method to calculate the tests validity under study by applying the tests to two different groups of youth under 19 years. the first group is not distinguished and their number 6 players. the second group is distinguished

from players and their number 6 players from research community. and then compare the significance of the differences between two groups to identify the tests validity under study in the identification of differences between two groups as shown in Table (4).

Table (4)

The differentiation validity and significance of differences between distinguished and non-distinctive juniors in visual abilities under study (n1 = n2= 6)

Variables		Measurement unit	Not distinguished group		Distinguished group		Man witney test	
			Rank average	Rank Sum	Rank average	Rank sum	(Z) value	Significance Level
Visual abilities	Static visual ability	Degree	8.67	52.00	4.33	26.00	*2.119	0.034
	Dynamic visual ability	Time (s)	3.75	22.50	9.25	55.50	*2.647	0.008
		Degree	9.25	55.50	3.75	22.50	*2.735	0.006
	Peripheral awareness	Time (s)	3.50	21.00	9.50	57.00	*2.882	0.004
		Degree	9.17	55.00	3.83	23.00	*2.687	0.007
	Visual reaction	Time (s)	3.50	21.00	9.50	57.00	*2.887	0.004
	Eye-foot co ordination	Number	9.42	56.50	3.58	21.50	*2.827	0.005

Table (T) values are significant at 0.05 = 1.96

Table (4) shows statistically significant differences between distinguished group and undistinguished group in the tests used in research at a significant level (0.05),indicating test validity under study.

- Tests stability for visual abilities in the search.

The researcher used the test application method and then re-applied it to calculate the tests stability under study on a sample survey of 6 players from survey sample and the tests were re-applied on the same survey sample after 3 days of first application and was found correlation coefficient between the first

and second applications of survey sample to calculate stability coefficient of tests and the results showed test stability as shown in Table (5).

Table (5)
Tests stability for visual abilities under study (n1 = n2= 6)

Variables		Measurement unit	First measurement		Second measurement		Stability Value	Significance Level
			Mean	Std. Deviation	Mean	Std. Deviation		
Visual abilities	Static visual ability	Time (s)	9.500	1.378	8.833	1.169	*0.907	0.013
	Dynamic visual ability	Time (s)	0.926	0.933	0.935	0.836	*0.986	0.000
		Degree	3.166	0.752	2.333	1.032	*0.984	0.000
	Peripheral awareness	Time (s)	1.151	0.114	1.158	0.115	*0.997	0.000
		Degree	3.333	0.165	2.500	1.048	*0.953	0.003
	Visual reaction	Time (s)	0.736	0.061	0.753	0.086	*0.986	0.000
	Eye-foot co ordination	Number	26.000	3.224	25.166	3.430	*0.986	0.000

Table (T) values at 0.05 = 0.829

Table (5) shows that there is a direct correlation between the first application and second application of tests under study, the calculated "t" values have exceeded their tabular value at a significant level of 0.05. which means that test scores are stable when applied under the same conditions.

-Basic experience apply:

The researcher applied basic study on the research sample in two phase:

First phase:

aimed to: take the measurements of visual abilities under study in period from8-10/11/ 2015.

Second phase:

aimed to: photography five matches for the research sample in order to determine individual offensive tactic performance level for soccer juniors.

-Statistical treatments:

- Mean - Median - "T" value - Standard deviation- "Z" value - Skewness.

- Presentation and discussion of the results
- Results presentation:

1. What is the visual abilities and individual offensive tactical performance level according to different play lines for soccer juniors?

Table (6)
Visual abilities level according to different play lines for soccer juniors (n = 10)

Play lines	Mean and level	Visual abilities							
		Static ability	Dynamic visual ability		Peripheral awareness		Visual reaction	Eye-foot co ordination	Field of vision
		Degree	Time (s)	degree	Time (s)	Degree	Time (s)	Number	number
Defense line	Mean	٨.٠٠٠	١.٠٧٢	٢.٢٥٠	١.٤٧٢	٢.٠٠٠	٠.٩٥٥	٢١.٢٥٠	١٢٠.٢٥
	Level	medium	medium	Low	medium	Low	medium	medium	medium
	Percentage %	%٧٢.٧	٨٧.٨ %	٥٦.٢ %	٨١.٧ %	%٥٠	%٧٩.٥	%٨١.٧	%٧٩.٧
Midline	Mean	٩.٠٠٠	٠.٩٤٠	٣.٠٠٠	١.٤١٣	٣.٠٠٠	٠.٩١٦	٢٤.٣٣٣	١٢١.٣٣
	Level	medium	Low	medium	medium	medium	medium	High	medium
	Percentage %	%٨١.٨	٧٧.٠ %	%٧٥	٧٨.٥ %	%٧٥	%٧٦.٣	%٩٣.٥	%٩٨.٦
Offensive line	Mean	٩.٦٦٦	١.٠١٦	٣.٣٣٣	١.٢٦٣	٣.٠٠٠	٠.٩٥٠	٢٢.٠٠٠	١٢١.٦٧
	Level	high	medium	high	Low	medium	medium	medium	medium
	Percentage %	%٨٧.٨	٨٣.٢ %	٨٣.٣ %	٧٠.١ %	%٧٥	%٧٨.٨	%٨٤.٦	%٩٨.٩

Table (6) shows the visual abilities levels in different play lines and the results are as follows:

- In the defense line: static visual ability, dynamic visual ability time, central peripheral awareness time, visual reaction time, eye-foot co ordination, field of vision at an medium level and in percentages (72.7%, 87.8%, 81.7%, 79.5%,81.7%, 79.7%) respectively, while dynamic visual ability accuracy, central peripheral awareness accuracy, at a low level and in percentages (56.2%, 50%) respectively.
- In the midline: static visual ability, dynamic visual ability accuracy, time and accuracy of central peripheral awareness, visual reaction time, field of

vision reached an medium level (81.8%, 75%, 78.5%, 75%, 76.3%, 98.6%) respectively, while dynamic visual ability time was (77%) at a low level, and eye-foot co ordination was (93.5%) at a high level.

- In the offensive line: static visual ability, dynamic visual ability accuracy was high level at (87.8% , 83.3%). while dynamic visual ability time, central peripheral awareness accuracy, eye-foot co ordination, visual reaction time, field of vision at an medium level and in percentages (83.2%, 75%, 84.6%,78.8%, 98.9%) respectively, while central peripheral awareness time was low level (70.1%).

2.What is the individual offensive tactical performance level according to different play lines for soccer juniors?

Table (7)
individual offensive tactical performance level for soccer juniors
(n = 10)

Play lines	Mean and level	Tactical performance									
		Direct pass		Receive then pass		Receive-dribble then pass		Receive-feint then pass		Receive then shoot	Receive-dribble then shot
		Short	Long	Short	Long	Short	long	short	Long		
Defense line	Mean	٥.٢٥٠	٤.٥٠٠	٣.٢٥٠	٢.٧٥٠	٢.٠٠٠	١.٥٠٠	٠.٧٥٠	٠.٧٥٠	٠.٢٥٠	٠.٠٠٠
	Level	low	Medium	Low	medium	Low	low	low	low	Low	low
	Percentage%	%٤٣.٧	%٤٥	%٤٠.٦	%٦٨.٧	%٣٣.٣	%٣٧.٥	%١٠.٧	%٢٥	%١٢.٥	%٠.٠
Midline	Mean	٧.٠٠٠	٦.٣٣٣	٥.٣٣٣	٣.٠٠٠	٤.٣٣٣	٣.٠٠٠	٣.٦٦٦	١.٦٦٦	١.٦٦٦	١.٦٦٦
	Level	medium	Medium	Low	medium	Medium	medium	medium	low	medium	medium
	Percentage%	%٥٨.٣	%٦٣.٣	%٦٦.٦	%٧٥	%٧٢.٢	%٧٥	%٥٢.٣	%٥٥.٥	%٨٣.٣	%٨٣.٣
Offensive line	Mean	٨.٣٣٣	٣.٦٦٦	٥.٦٦٦	٢.٣٣٣	٣.٠٠٠	١.٣٣٣	٤.٣٣٣	٢.٠٠٠	١.٦٦٦	١.٣٣٣
	Level	medium	Low	Medium	low	Low	low	medium	medium	medium	medium
	Percentage%	%٦٩.٤	%٣٦.٦	%٧٠.٨	%٥٨.٣	%٥٠	%٣٣.٣	%٦١.٩	%٦٦.٦	%٨٣.٣	%٦٦.٦

Table (T) values at 0.05 = 2.179

Table (7) shows statistically significant differences between pre and post measurement in power level and biochemical variables under study for control group for post measurement at a significant level of 0.05.

- In the defense line: short direct pass, receive then short

pass, receive then dribble then short-long pass, receive then feint then short pass, receive then shot, receive then dribble then shot at an low level and in percentages (43.7%, 40.6%, 33.3%, 37.5%, 10.7%, 25%, 12.5%, 0.0%) respectively, while long direct pass, receive then long pass was medium level in percentages (45%, 68.7%).

- In the midline: short-long direct pass, receive then long pass, receive then dribble then short-long pass, receive then feint then short pass, receive then shot, receive then dribble then shot at an medium level in percentages (58.3%, 63.3%, 75%, 72.2%, 75%, 52.3%, 83.3% , 83.3%) respectively, while receive then short pass, receive then feint then short-long pass at a low level in percentages (66.6%, 55.5%)

- In the offensive line:short direct pass, receive then short pass, receive then feint then short-long pass, receive then shot, receive then dribble then shot at medium level and in percentages (69.4%, 70.8%, 61.9%, 66.6%, 83.3%, 66.6%), while long direct pass, receive then short pass, receive then dribble then short-long pass at low level percentages(36.6%,58.3%,50% ,33.3%)

3. What is the relationship nature between visual abilities and tactical performance for soccer juniors?

Table (8)

The correlation coefficient between visual abilities and the tactical performance for soccer juniors (n =10)

Visual abilities	Measurement unit	correlation value and significance	Tactical performance									
			Direct pass		Receive then pass		Receive-dribble then pass		Receive-feint then pass		Receive then shot	Receive-dribble then shot
			Short	Long	short	Long	short	long	short	Long		
Static visual ability	Degree	Correlation	٠.٥٨٠	٠.٧٨٦	٠.٨٢١	٠.٨٢٠	٠.٧١٤	٠.٦٦٥	٠.٧٣٨	٠.٧٧٧	٠.٦١٤	٠.٦٢٣
		significance	٠.٠٧٩	٠.٠٠٧	٠.٠٠٤	٠.٠٠٤	٠.٠٢٠	٠.٠٣٦	٠.٠١٥	٠.٠٠٨	٠.٠٥٩	٠.٠٥٤
Dynamic visual ability	time(s)	Correlation	-٠.٥٧١	-٠.٧٨٢	-٠.٧٢٨	-٠.٧٣٧	-٠.٧٧٥	-٠.٥٧٩	-٠.٦٨٨	٠.٨٢-	٠.٦١٠-	٠.٦٢٩-

FollowTable (8)

The correlation coefficient between visual abilities and the tactical performance for soccer juniors (n =10)

	Measurement	correlation	Tactical performance

abilities	unit	value and significance	Direct pass		Receive then pass		Receive-dribble then pass		Receive-feint then pass		Receive then shot	Receive-dribble then shot
			Short	Long	short	Long	short	long	short	Long		
		significance	٠.٠٧٩	٠.٠٠٨	٠.٠١٧	٠.٠١٥	٠.٠٠٩	٠.٠٧٩	٠.٠٢٨	٠.٠٠٤	٠.٠٦١	٠.٠٥١
	Degree	Correlation	٠.٥٧٨	٠.٥٨٠	٠.٧٩٩	٠.٥٧٠	٠.٦٦٨	٠.٥٩٢	٠.٨٨٤	٠.٨٠٠	٠.٦٨٧	٠.٧٥٦
		Significance	٠.٠٨٠	٠.٠٧٩	٠.٠٠٦	٠.٠٨٥	٠.٠٣٥	٠.٠٧١	٠.٠٠١	٠.٠٠٥	٠.٠٢٨	٠.٠١١
Peripheral awareness	time(s)	Correlation	-٠.٦٨٣	-٠.٥٨٦	-٠.٦٢٠	-٠.٦٨٣	-٠.٦٠٢	-٠.٤٨٦	-٠.٦٩٦	٠.٦١٠-	٠.٦٧٠-	٠.٥٥٤-
		significance	٠.٠٢٩	٠.٠٧٥	٠.٠٥٦	٠.٠٢٩	٠.٠٦٦	٠.١٥٤	٠.٠٢٥	٠.٠٦٢	٠.٠٣٤	٠.٠٩٧
	Degree	Correlation	٠.٧٢٨	٠.٥٤٠	٠.٦١٥	٠.٦١١	٠.٧٠٧	٠.٤٥٣	٠.٧٧٤	٠.٦٤٣	٠.٨١٢	٠.٦٩٦
		significance	٠.٠١٧	٠.١٠٧	٠.٠٥٩	٠.٠٦١	٠.٠٢٢	٠.٣٨٨	٠.٠٠٩	٠.٠٤٥	٠.٠٠٤	٠.٠٢٦
Visual reaction	time(s)	Correlation	-٠.٦٢٢	-٠.٦٨٨	-٠.٧٩٣	-٠.٦٦٠	-٠.٧٠٥	-٠.٤٧٣	-٠.٨٤٠	٠.٨٦٠-	٠.٦٣٤-	٠.٦٥٧-
		significance	٠.٠٥٥	٠.٠٢٨	٠.٠٠٦	٠.٠٣٨	٠.٠٢٣	٠.١٧٦	٠.٠٠٢	٠.٠٠١	٠.٠٤٩	٠.٠٣٩
Eye-foot co ordination	Number	Correlation	٠.٦٢٤	٠.٦٦٠	٠.٦٠٦	٠.٧٧٣	٠.٨٦٠	٠.٦٨٢	٠.٥٧٠	٠.٦٠٤	٠.٧٤٨	٠.٦٤٠
		significance	٠.٠٥٤	٠.٠٣٨	٠.٠٦٣	٠.٠٠٩	٠.٠٠١	٠.٠٣٠	٠.٠٨٦	٠.٠٦٤	٠.٠١٣	٠.٠٤٦
Field of vision	Number	Correlation	٠.٦٧٦	٠.٦٣١	٠.٥٨٨	٠.٦٥٧	٠.٦٩٩	٠.٦٥٠	٠.٦٥٠	٠.٦٤٥	٠.٦٢٨	٠.٦١٨
		significance	٠.٠٣٢	٠.٠٥١	٠.٠٧٤	٠.٠٣٩	٠.٠٢٥	٠.٠٤٢	٠.٠٤٢	٠.٠٤٤	٠.٠٥٢	٠.٠٥٧

Table (R) values at 0.05 = 0.564

Table (7) shows the relationship between the total individual offensive tactical performance and visual abilities, where it appears that there are correlations between individual offensive tactical performance and visual abilities.

There is a correlation between the static visual ability with tactical performances under study (Direct pass short, long- Receive then pass short, long- Receive then dribble then pass short, long- Receive then feint then pass short, long - Receive then shot - Receive then dribble then shot) with correlation coefficient values respectively (0.580, 0.786, 0.821, 0.820, 0.714, 0.665, 0.738, 0.777, 0.614, 0.623)

There is a correlation between the dynamic visual ability time with tactical performances under study (Direct pass short, long- Receive then pass short, long- Receive then dribble then pass

short, long- Receive then feint then pass short, long - Receive then shot - Receive then dribble then shot) with correlation coefficient values respectively (-0.571, -0.782, -0.728, -0.737, -0.775, -0.579, -0.688, -0.820, -0.610, -0.629)

There is a correlation between dynamic visual ability accuracy with tactical performances under study (Direct pass short, long- Receive then pass short, long- Receive then dribble then pass short, long- Receive then feint then pass short, long - Receive then shot - Receive then dribble then shot) with correlation coefficient values respectively (0.578, 0.580, 0.799, 0.570, 0.668, 0.592, 0.884, 0.800, 0.687, 0.756)

There is a correlation between the peripheral awareness time with tactical performances under study (Direct pass short, long- Receive then pass short, long- Receive then dribble then pass short, long- Receive then feint then pass short - Receive then shot) with correlation coefficient values respectively (-0.683, -0.586, -0.620, -0.683, -0.602, -0.696, -0.612, -0.670)

There is a correlation between the peripheral awareness accuracy with tactical performances under study (Direct pass short - Receive then pass short, long- Receive then dribble then pass short, long- Receive then feint then pass short - Receive then shot - Receive then dribble then shot) with correlation coefficient values respectively (0.728, 0.615, 0.611, 0.707, 0.774, 0.643, 0.812, 0.696)

There is a correlation between the visual reaction time with tactical performances under study (Direct pass short, long- Receive then pass short, long- Receive then dribble then pass short, long- Receive then feint then pass short - Receive then shot - Receive then dribble then shot) with correlation coefficient values respectively (-0.622, -0.688, -0.793, -0.660, -0.705, -0.840, -0.861, -0.634, -0.657)

There is a correlation between the eye-foot co ordination with tactical performances under study (Direct pass short, long- Receive then pass short, long- Receive then dribble then pass short, long- Receive then feint then pass short, long - Receive then shot - Receive then dribble then shot) with correlation coefficient values

respectively (0.624, 0.660, 0.606, 0.773, 0.860, 0.682, 0.570, 0.604, 0.748, 0.640)

There is a correlation between the field of vision with tactical performances under study (Direct pass short, long- Receive then pass short, long- Receive then dribble then pass short, long- Receive then feint then pass short, long - Receive then shot - Receive then dribble then shot) with correlation coefficient values respectively (0.676, 0.631, 0.588, 0.657, 0.699, 0.650, 0.650, 0.645, 0.628, 0.618)

Researcher returns this correlation to the proficiency of using these individual offensive tactical performances in the field parts and the need to direct and integrate these performances with visual abilities to emphasize visual training effectiveness during the daily tactical drills, and purposeful regulation of individual offensive tactical performances helps to exploit the specific spatial and temporal space through their visual abilities to achieve the offensive superiority and achievement required.

Researcher pointed out that visual training should be practiced by the players, especially eye training, in order to achieve the visual adaptation state with different variables, especially during training, which leads to overcoming visual stress in competitions, and improve elements of vision to control the obstacles and problems that face the eye during the vision at performance which affect the optical processes and the situation treatment and thus the ability to make decision and implementation of individual offensive tactical performance optimally.

And the passes exploitation in three lines of the field in the implementation of the direct pass aimed to a colleague precisely and suitable force in a free space with good vision, through it he can finish the attack.

And the need for short direct passing in the three lines of the field to build the attack in the defense line and control of the field central area to develop the attack as well as end the attack effectively in the areas affecting front of the goal, as well as relying on long direct passes that move the attack quickly from the defense and middle line to the offensive line.

The short, long high pass of the movement and shooting

are considered one of the most important means of execution collective offensive tactical work in the field parts, as that the attackers and midfielders have the ability to reaction speed as well as the speed of their performance to the shooting skill at the goal.

And using the players for the complex performances in order to create spaces and open the gaps in competitors lines by mastering players to receiving the ball skill in the direction of the next movement through integration it with dribbling ending by passing or shooting and implementation of perfect and adapted to serve the team's plans especially in the presence of high-level visual skills, thus achieving an offensive superiority in different parts of the field.

4. What is the significance of differences in visual abilities and tactical performance in different play lines for soccer juniors?

Table (9)
Significance of differences in visual abilities and tactical performance in different play lines n = 3

Variables		Measurement unit	Means	play lines			Chi-square	Significance
				defence	Middle	offensive		
Visual abilities	Static visual ability	Degree	ranks average	٤.٢٥	٦.١٧	٦.٥٠	١.٢٠٦	٠.٥٤٧
			Mean	٨.٠٠	٩.٠٠	٩.٦٦		
	Dynamic visual ability	time(s)	ranks average	٦.٧٥	٤.٠٠	٥.٣٣	١.٤٢٧	٠.٤٩٠
			Mean	١.٠٧	٠.٩٤	١.٠١		
		Degree	ranks average	٣.٥٠	٦.١٧	٧.٥٠	٣.٦٦٧	٠.١٦٠
			Mean	٢.٢٥	٣.٠٠	٣.٣٣		
	Peripheral awareness	time(s)	ranks average	٦.٧٥	٥.٥٠	٣.٨٣	١.٦٠١	٠.٤٤٩
			Mean	١.٤٧	١.٤١	١.٢٦		
		Degree	ranks average	٤.٠٠	٦.٥٠	٦.٥٠	١.٧٤٢	٠.٤١٩
			Mean	٢.٠٠	٣.٠٠	٣.٠٠		
	Visual reaction	time(s)	ranks average	٧.٠٠	٤.٨٣	٤.١٧	١.٧٢٠	٠.٤٢٣
			Mean	٠.٩٥	٠.٩١	٠.٨٥		

Follow Table (9)
Significance of differences in visual abilities and tactical performance in different play lines n = 3

Variables		Measurement unit	Means	play lines			Chi-square	Significance
				defence	Middle	offensive		
	Eye-foot co ordination	Number	ranks average	٤.١٢	٧.٦٧	٥.١٧	٢.٤٥٧	٠.٢٩٣
			Mean	٢١.٢٥	٢٤.٣٣	٢٢.٠٠		
	Field of vision	Number	ranks average	٤.٠٠	٦.٥٠	٦.٥٠	١.٧٥٣	٠.٤١٦
			Mean	١٢٠.٢٥	١٢١.٣٣	١٢١.٦٦		
Tactical performance	Direct pass	short	ranks average	٤.٠٠	٦.٠٠	٧.٠٠	١.٨٤٥	٠.٣٩٨
			Mean	٥.٢٥	٧.٠٠	٨.٣٣		
		Long	ranks average	٥.٣٨	٦.٨٣	٤.٣٣	١.٠٦٦	٠.٥٨٧
			Mean	٤.٥٠	٦.٣٣	٣.٦٦		
	Receive then pass	short	ranks average	٣.٧٥	٦.٥٠	٦.٨٣	٢.٤٠٦	٠.٣٠٠
			Mean	٣.٢٥	٥.٣٣	٥.٦٦		
		Long	ranks average	٥.٦٢	٦.٥٠	٤.٣٣	٠.٩١٩	٠.٦٣٢
			Mean	٢.٧٥	٣.٠٠	٢.٣٣		
	Receive-dribble then pass	short	ranks average	٣.٥٠	٨.١٧	٥.٥٠	٥.٢٠٩	٠.٠٧٤
			Mean	٢.٠٠	٤.٣٣	٣.٠٠		
		Long	ranks average	٤.٣٨	٨.٣٣	٤.١٧	٤.٣٤٠	٠.١١٤
			Mean	١.٥٠	٣.٠٠	١.٣٣		
	Receive-feint then pass	short	ranks average	٢.٨٨	٦.٨٣	٧.٦٧	٥.٤٥٦	٠.٠٦٥
			Mean	٠.٧٥	٣.٦٦	٤.٣٣		
		Long	ranks average	٣.٢٥	٦.٦٧	٧.٣٣	٤.٣٩٤	٠.١١١
			Mean	٠.٧٥	١.٦٦	٢.٠٠		
	Receive then shot		ranks average	٢.٧٥	٧.٣٣	٧.٣٣	٦.١٧٣ *	٠.٠٤٦
			Mean	٠.٢٥	١.٦٦	١.٦٦		
	Receive-dribble then shot		ranks average	٢.٥٠	٨.٠٠	٧.٠٠	٧.٥٣١ *	٠.٠٢٣
			Mean	٠.٠٠	١.٦٦	١.٣٣		

Table (Chi-square) values at 0.05 = 5.99

When comparing the statistical significance of the visual abilities and the tactical performances in study (Table 8), there are no statistically significant differences at significance level of 0.05 in the three playing lines. This is due to the need of different lines players to visual abilities and tactical performances albeit at varying rates but it is very close to some of it.

This agree with Rostami, R et.al (2015) that points out assessment of visual skills is also of high importance such as physical, physiological and

psychological skills that are usually evaluated in professional sport, the study results showed a similarity between the exercise programs of team members, coaches must note that each post has different characteristics and the fact that in addition to the specific physiological needs and skills, each post requires visual skills, and this indicates the need for specialized planning for each post during training courses (9).

Each sport requires a set of visual skills that are crucial elements for most sports performances. there was a great debate about the role of vision in sports performance, but the training of these special skills that affect the enhancement of special visual abilities has actually improved performance. it also gives more ideas in the need for future experiences on athletes of various sports and also recommends training in visual skills to be included in the routine training of athletes at all levels (4). Pj Du Toit, & et, al (2009) points out assessment of sports vision for soccer players: the results indicated that visual skills tend to improve with age, and different centers do not necessarily require different levels of visual skills. (6) R. Kannekens et, al (2010) points out the tactical models for elite youth soccer players indicated that defenders and midfielders did not improve their tactical skills, while increasing tactical attackers skills from 14 to 18 years (7).

Researcher points out that the players ability on offensive tactical performance increases through training in the presence of a comprehensive visual vision, which facilitates achieve playing well and individually effective in the context of offensive teamwork to players. There were also statistically significant differences at significance level of 0.05 between the three play lines in the tactical performance of the receiving then shooting, where the value of chi squuare (6.173) and receiving then dribbling then shooting, where chi squuare value (7,531).

The players gain the organized form in building the attack from the defense line as a result of increasing their ability to execute the shooting as the individual offensive tactical performance in the

midfield and attack and seize the opportunities that allow them to score the goal in the affecting areas and receiving and then shooting is the main means to achieve the goals and can end the attack in offensive line to develop offensive play by mastering the shooting skill. And to control the course of play in the defensive line where construction of the attack, the middle and offensive line, where the development and finishing of the attack by shooting in a gradual and consistent manner and using of visual exercises which aimes to improve the individual offensive tactical performance better and achievement of offensive superiority.

Conclusions:

Through study results, the researcher reached:

- Determination of the offensive tactical performance level and the visual abilities level in different player lines.
- There is a correlative relationship between individual offensive tactical performance and the visual abilities.
- There are differences between the visual abilities level and the skill of receiving then shooting, receiving then dribbling and then shooting.

Recommendations:

- Coaches should note the correlative relationship between the individual offensive tactical performance, and visual abilites in order to development soccer players level.
- Using individual offensive tactical performances and visual abilities within training units for soccer juniors.
- Guidance training on the attack using the individual offensive tactical performances in the three parts of the field (offensive-mid-defense) in the framework of the collective offensive plan of the team.

References

1- Adam Hewitt: Performance analysis in soccer: Applications of player tracking technology, (Human Movement) (Honours) , Faculty of Health, University of Canberra, Australia, 2016

2- Amro shady,ahmed abdelmawla: The effect of special visual ability drills on some motor compatibility components and skillful performance level for soccer juniors, Scientific production, Faculty of Sports Education for Boys, Alexandria University,2014.

3- Brian Ariel: Sports Vision Training: An expert guide to improving performance by training the eyes, Human Perception and Human Performance ،P127, 2004.

4- Khanal S: Impact of Visual Skills Training on Sports Performance: Current and Future Perspectives. Adv Ophthalmol Vis Syst 2 (1) :00032. DOI: 10.15406/ aovs, 2015.

5- Mediate P. : Speed Training Concepts for the High School Coach and Athlete, Strength & Conditioning Journal ;30 (1): 65- 6 ,2008.

6- PJ du Toit, PE Kruger, NZ Chamane, J Campher, D Crafford: Sport vision assessment in soccer players, African Journal for Physical, Health Education, Recreation and Dance, Vol 15, No 4, (2009).

7- R. Kannekens, M. T. ELferink-Gemser, W. J. Post, and C. Visscher: Self-assessed tactical skills in elite youth soccer players: A longitudinal study, Perceptual and Motor Skills: Volume 109, Issue , pp. 459-472,2010.

8- Rampinini E, Coutts AJ, Castagna C, Sassi R, Impellizzeri FM.: Variation in top level soccer match performance, International journal of sports medicine. 2007; 28 (12) :1018-24.

9- Robabeh Rostami, Hamid Mohammadi, Mahboobeh Alborzi: Assessment and Comparison of Visual Skills among Footballers, ISSN: 2476–4981, 2015

10- Stolen T, Chamari K, Castagna C, Wisloff U: Physiology of soccer: an update, Sports medicine (Auckland, NZ) ;35 (6): 501-36, 2005.

11- Suzanna Cathrina Venter : Acomparison of the Visual Skills of two Different Age Group high School Rugby Players, Master Philosphiae, Faculty of Science, Rand A Frikaans University,2003.