## EFFECTS OF DOUBLE-TEAMING AND THREE-MAN WEAVE TRAINING ON GOAL-SCORING ACCURACY AMONG PLAYERS OF FEDERAL UNIVERSITY OF AGRICULTURE FOOTBALL TEAM, ABEOKUTA, OGUN STATE, NIGERIA

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**ABSTRACT:** This study investigated the effects of double-teaming and three-man weave training on goal-scoring accuracy among players of Federal University of Agriculture football team, Abeokuta, Ogun State, Nigeria. The sample size for this study was twenty one (21) and all the participants completed the intervention programme. Randomised, pretest-posttest experimental/control research design of 3 X 2 X 3 factorial matrix with age and playing experience as moderating variables were used for the study. Descriptive statistics of frequency counts and percentages was used to analyse the demographic data and research questions while inferential statistics of Analysis of Covariance (ANCOVA) was used to test hypotheses at 0.05 level of significance. Two research questions were answered while seven hypotheses were tested. Findings from this study revealed that there was a significant main effect of treatment on goal-scoring accuracy of the football players. (F = 65.120, p < .05,  $\eta 2 = .963$ ). The eta value of 0.963 showed that 96.3% of the variance in the participant's score was accounted for by the intervention. It was also observed that there was a variance of 87.5 percent accounted for by the independent variables combined together. There was no significant main effect of age on goal-scoring accuracy of the players. Likewise, there was no significant main effect of playing experience on goal-scoring accuracy of the players. It was observed that the interaction effect of the two moderating variables, age and playing experience was not significant. The study concluded that the interaction effect of treatment, age and playing experience has no significant effect on goal-scoring accuracy of the players of the Federal University of agriculture football team. Based on the findings of this study, it was concluded that the treatment was effective on goal-scoring accuracy of the school's football players. However, it was noted that double-teaming was better on the goal-scoring accuracy than three-man weave training of the players in the school team.

**KEYWORDS:** Double-teaming, Goal-scoring accuracy, precision board, three-man weave, Abeokuta.

### INTRODUCTION

Football is a sport played between two standard teams maximum of eleven players and minimum of seven players with a spherical ball. It is played within the duration of ninety

minutes on a rectangular pitch of 120 X 90 meters. Like many other ball games, it could end in a win, a draw or a loss. Every team however, clamour for winning because that is the essence of the game; the key purpose of football game is to score goals regularly and more than the opponent. This assertion prompted Ali (2011) to state that the ability to execute skillful movement patterns efficiently and effectively to score goals is about the most important aspect of football performance. Ducksters (2020) revealed that the object of football game is to get the soccer ball into the opposing team's goal. Strutt (2018) posits that a goal is scored when the ball passes completely over a goal line at each end of the field of play between two centrally positioned upright goal posts 7.32m apart and underneath a horizontal crossbar at a height of 2.44m.

Football players must apply certain skills, techniques, tactics and precision to execute goalscoring accuracy. The idea of goal-scoring accuracy is a key element that must be considered very strongly if any team wants to succeed in football competitions. This is important because consistent goal-scoring is the major factor among all the objectives associated with football game. Football is the most popular game in the world and whatever the beauty of a team's pattern of play, pace, and tactical endowment, goal-scoring is the most essential feature that the followers, handlers and team management desire. This is because it is goal-scoring that puts any team in high pedestal/table and enables such team to win laurels.

Due to its increasing popularity, as well as the amount of financial interest in the game, football is the world's most popular sport. This is corroborated by Fifa.com (2007) who states that the Federation of International Football Association, (FIFA), the world governing body of football, estimates that there are over 265 million active players of the game globally. International Football Association Board IFAB (2019) also submits that a cumulative television audience of over (36) thirty six billion watched the 2018 World Cup Finals tournament held in Russia. The game is played on a rectangular field with a goal post at each end. A goal is scored by moving the ball completely beyond the goal line between the goal posts and under the crossbar. Number of games won due to number of goals scored and the number of goals conceded is what differentiates one team from the other on the competition table. Football involves majorly three types of skills viz: tactical, technical and goal-scoring accuracy.

Goal-scoring accuracy is the capacity to focus, aim, shoot and score goals, within the spate of time allowed, constantly and dependably in football game. Dukic (2000) posits that the potential for goal-scoring ability has become not only a strategy for teams but also for team success in competitions. Success in goal-scoring in football depends on goal-scoring skill acquisition through repeated and consistent training, center for perception and its connection with the reticular system and sensitive motor coordination (Maric, 2003). Goal-scoring accuracy is also referred to as the state or degree of being precise in the quality of having high precision and consistency in scoring goals in football. Goal-scoring accuracy is also means the innate and trained quality of being reproducible in amount of products delivered in repeated performance in football game (Nićin, 2000).

Double-teaming is an attacking strategy where two attackers tend to bypass defenders where one of the attackers forms a dummy to confuse the players of the defending team to score goals. Double teaming was commonly used in the defense but development in football prompts the use of double-teaming as an attacking tactical tool in recent times. Making an offensive line to work together is the most vital part to the success of an offensive play in double-teaming. From penetrating pass in possession to picking up a double-team mate, the player initiating the double-team attack must be ready to help his fellow team mate (The Soccer Guide, 2010). Brad (2014) states that one key fundamental skill which should be taught and acquired in football is the double teaming. This can be done between the center, left side and right side of the attacking third of the field. He states further that the duo and the assistant who are performing the double-teaming role must not be far apart for more efficiency.

The Soccer Guide (2010), on double-teaming established that if a team has two (2) attackers within 5 meters of a defender or two (2) defenders at the attacking third of the field of play during a game that was the trigger for a double-teaming. The real trigger is when the defenders get their heads down, and are defense-ready trying to ward off the attackers from poaching with the ball to get goal; otherwise, the two attackers can find their passing options. One of the aims of pressure in double-teaming is to get the defender's head down and confuse him with the double man movement on the ball. Double-teaming here could mean that two attackers try to dummy up the defenders to create space for one or both of them to penetrate into the attacking third with the ball. It could also mean pressing on the attacker two-on-one to win the ball in the attacking third and so penetrate the penalty area to score goal. This is also referred to as pressing high on double-team to make the opponent loose possession while possibly two attackers execute this action in order to score goal. It is of very great importance that any double-teaming of this nature should have cover in case both double teaming attackers get beaten. This is to debar the possibility that the opponent renders a counter attack on the doubleteaming team. Soccer Coach Weekly (2020) submits that the practice of double-teaming allows a team to start to introduce the idea of how multiple units on the field start work together and interact with each other. It also introduces the idea of recovering once the ball beats any player on the field. Double-teaming is a strong tactical tool used to score several goals and win games in the developed world.

The concept of the three-man weave is a tactical arrangement in football where three players work together with the same aim to outrun the opponent in a zigzag formation, passing the ball among one another with one touch, in a wall-pass format, to score goals. Three-man weave is most usually executed with pace. So, each and every one assigned to execute this tactical movement must have trained and acquire speed as a performance variable. This concept is also better executed when the players also have agility because of the zig-zag nature of the concept. Sportplan (2009) established three-man weave as a means of scoring goals where players will pass the ball in a three-man weave style formation heading down from the middle of the pitch towards the goal. As soon as the first pass is initiated by one of the three players, the remaining two players start to run wide to receive pass and send to the third man who finally buries the ball into the net.

Three-man weave can be described as a three-player combination passing and receiving ball from one another with pace and agility to bypass defenders while passing with combination and interchanging to finish with a shot at goal. The player at the rear, or the initiator of the drill is referred to as the three man weave starter, the second player is the connector and the last man in front is the finisher. Sideline soccer (2020) states that the three-man weave is a great drill to adopt by players with great ball movement and switching the field of play to score goals. Three-

man weave has been used to score countless goals in the developed countries. It is a very effective tactical pattern leading to goals.

Age refers to the length of time that a player has lived or existed. Age is different from a players playing experience which however, refers to the length of time a player has been playing including all the knowledge he has acquired during this time. Studies have indicated that age affects football performance. Minson (2015) posits that total muscle mass tends to decline as human ages, and can contribute to declines in performance. There is a great difference between playing experience and players' age. That a player is old in age does not mean that he has a long playing experience. A player may be old in age but may have a short playing age, therefore short playing experience. This means that such player did not start playing football in his very early days in life. Conversely, a player's age may be young but such player may have long playing experience; it means although young in age, but long playing experience. Therefore, playing experience is directionally proportional to consistent number of playing years.

### **Statement of the Problem**

The primary objective of football game is for a team to score more goals than the opponent. Therefore, each and every player in a team should have the knowledge and also acquire goalscoring accuracy. However, many university football teams do not devote the necessary time and practice in training to improve on their double-teaming and three-man weave tactical play in the developing world. The Federal University of Agriculture, Abeokuta, Ogun State, Nigeria football team is one of the teams that do not score well from double-teaming and three-man weave tactical play. Preliminary study on this university football team by the researcher revealed that the team has not been scoring goals from double-teaming and three-man weave tactical play. The football team's technical crew had been relying on scoring goals from chances that emanate from against run of play and perhaps set-pieces and few other technical patterns. The goals scored by this team was not enough to win laurels and also qualify them for the Nigeria University Games.

Perhaps when some other tactical tools which lead to scoring more goals like double-teaming and three-man weave were put to use, these will act as adjuncts to assist the team to score more goals and win laurels. Making very good use of goal-scoring chances from double-teaming and three-man weave tactical play cannot be over emphasized. This is especially important as these situations arise regularly throughout matches and it is very important to improve on the prospects of making the most of them in order to do well in competitions. Several studies have been done on the Federal University of Agriculture, Abeokuta football players: FUNAAB (2019) reports that studies which include development of physical fitness for all players, promoting awareness of physical fitness, health, recreation and leisure activities among players have been done on this institution football players. But no obvious research effort has been directed towards utilizing double-teaming and three-man weave tactical tools to improve on the goal-scoring enablement of the school team. It is in light of this that this study investigated the effects of eight-week double-teaming and three-man weave training on goal-scoring accuracy among players of federal University of Agriculture Football team, Abeokuta, Ogun State, Nigeria.

#### **Research questions**

The study provided answers to the following questions:

1. Will double-teaming lead to scoring more goals during Federal University of Agriculture, Abeokuta football team matches?

2. Will Federal University of Agriculture, Abeokuta football players prefer the use of double-teaming to three-man weave tactical play in game situations?

## Hypotheses

The following hypotheses were tested in the study

1. There will be no significant main effect of treatments on the goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players.

2. There will be no significant main effect of playing experience on the goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players.

3. There will be no significant interaction effect of treatments and playing experience on the goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players.

4. There will be no significant main effect of Age on the goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players.

5. There will be no significant interaction effect of treatment and Age on the goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players.

6. There will be no significant interaction effect of playing experience and Age on the goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players.

7. There will be no significant 3-way interaction effect of treatment, playing experience and Age on the goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players.

# METHODOLOGY

Randomised pretest-posttest/control experimental research design of 3X2X3 factorial matrix was used for this study. Descriptive statistics of frequency counts and percentages was used to analyse the demographic data and research questions while inferential statistics of Analysis of Covariance (ANCOVA) was used to test hypotheses at 0.05 level of significance. Two research questions were answered while seven hypotheses were tested. The population for this study was all Federal University of Agriculture, Abeokuta football players. Twenty one (21) football players of the University were recruited for this study as participants. Total sampling technique was used to assign the participants into three (3) groups of seven (7) participants in each. Experimental group (1) one was for double-teaming training, experimental group (2) two undergone three-man weave training while group (3) was the control group which undertook convectional training. Pretest assessment was done at the initial stage of the intervention while post-test assessment was also done after intervention was concluded.

The following research instruments were used for data collection;

1. Standard football pitch: Football field was used to carry out training

2. **Cones of various sizes:** they were used for organisation of surface area for each training and test.

3. Landmarks: these pieces of equipment were used for metric demarcations during training and tests.

4. **Whistle:** this was used to draw attention of players to moderations when to start and when to stop during intervention and tests.

5. **Stop Watch:** this was used to time participants during intervention and tests.

6. **Measuring Tape:** a calibrated in meter measuring tape used for taking necessary distance measurements.

7. **Scoring sheets and pen:** scoring sheets were used to record scores of tests of participants while pen was used to write values scored into the scoring sheets.

8. **Protractor:** this is necessary for measuring angles of players' contact on the ball.

9. **Football Cases:** they were used by the players to train and to take pretest and posttest values.

10. **Jerseys:** four different sets of these were worn on by the players. One colour for set pieces team, another for double-teaming team, the third for the control group while the last one was for the researcher and the research assistants majorly worn for identification purpose.

11. **Playing boots:** these were worn by the players for training and tests

12. **Canvas:** these were worn for warm up exercises by the players and also worn by the researcher and the research assistants.

13. Goal Post: a standard football goal post 7.32meters X 2.44 meters was used.

14. **Ball Board:** this is an abridged prototype of the football field with players in it. It was used to rehearse in the class what the players did on the field when tests and training began.

15. **Short Hurdles:** they were used for players' warm up sessions.

16. **2.0 meters X 2.2 meters Canvas board (Precision Board):** this was hung on the football goal crossbar as target to measure free kick for scoring precision.

#### **Procedure for Training Programme, Skill Test and Data Collection Fig. 1. Double-teaming Training, Test and Scoring Method**



Source: Author's design

**Objective:** to test skill and goal-scoring accuracy of players from double-teaming tactical play.

**Equipment:** cones, balls, landmarks, jerseys, playing boots, whistle and the goal post were used for this test.

**Procedure:** players were made to warm up for about 15minutes. After the blast of the whistle by the research assistant, an attacking player  $\mathbf{Q}$  picks the ball at a designated point  $\mathbf{A}$ , 30 meters away from the goal line and approaches the goal with the ball as quickly as possible with the second player  $\mathbf{R}$  running perpendicularly with him to meet at a point  $\mathbf{B}$  20 meters away from goal line to form a dummy. Momentarily as they meet, the second attacking player  $\mathbf{R}$  dashes away from player  $\mathbf{Q}$  unto the open field about 5 meters away. At that point, player  $\mathbf{Q}$  passes the ball very fast to player  $\mathbf{R}$  who without trapping shoots the ball to either the left or right side of the goal post.

**Scoring:** goals scored at the top left or right far corner of the post about 2 meters from the upright is assigned 5 points, middle left or right 2 meters from the upright is assigned 4 points, the ground left or right far corner is assigned 3 points while any goal scored in the middle upper center above (roof) is assigned 2 points. If it touches the bar or upright and scores in any part of the goal post, it is assigned 1 point. Any goal scored at the center of the goal post, or did not enter into the goal post, or hits the cross bar or upright and goes out is assigned 0 point. These scoring positions shall be demarcated and explained to all the participants before the commencement of the test. Each of the seven participants takes turn to play with any of the other players assisting. Participant **R** is measured. Ten trials are allowed for each participant. The total numbers of points made on the ten kicks were recorded. This test was administered at the right, left and center zones of the field.

## Fouls:

- starting the test without waiting for the whistle
- running wider, farther or shorter off the marked perimeters
- trapping the ball before final kick towards the goal

The procedure of McDonald Soccer Precision Tests, cited by Miller (2002) was adopted for this study.



Fig. 2. Three-man weave Training, Test and Scoring Method

Source: https://www.sportplan.net > Soccer.

### Setup

Players create 3 lines at one side of the field, facing the opposite end of the field. A goalkeeper is needed in the net at the opposite end during training. But during pretest/posttest, goalkeepers were not used. Each player in the middle line should have a ball.

**Objectives:** to test skill, train and score goal-scoring accuracy of football players from threeman weave tactical play.

### Instructions

The first player in each line starts to run down the field, with the middle player dribbling the ball. The middle player then passes the ball to the right wing player. The passer will then run behind the receiver and become the right wing player, while the receiver will dribble to the middle and then pass the ball to the left wing player. The passer will then run behind the receiver and become the left wing player, while the receiver will dribble to the middle and then pass to the original player. This continues to form a weave pattern. The weave will continue down the field until players reach the penalty area at the opposing end of the field. The last player with the ball takes a shot at the net.

### **Coaching Tips**

Players should make lead passes, meaning the ball should be passed ahead of the receiving player in order for them to reach it with a single or the most of double touches. This will help the players get down the field more quickly. Players who are overlapping should do so with speed. Make sure the two players who did not take the shot still attack the goal looking for a rebound. If a rebound exists, encourage the players to take a shot. Limit the number of touches to 2 or 3. For example, one touch to receive the ball and the other to pass it. Defenders can be used for added pressure.

#### Scoring:

Goals scored at the top left or right far corner of the post about 2 meters from the upright is assigned 5 points, middle left or right 2 meters from the upright is assigned 4 points, the ground left or right far corner is assigned 3 points while any goal scored in the middle upper center above (roof) is assigned 2 points. If it touches the bar or upright and scores in any part of the goal post, it is assigned 1 point. Any goal scored at the center of the goal post, or did not enter into the goal post, or hits the cross bar or upright and goes out is assigned 0 point. These scoring positions shall be demarcated and explained to all the participants before the commencement of the test. Each of the seven participants takes turn to play with any of the other players assisting. Participant **R** is measured. Ten trials are allowed for each participant. The total numbers of points made on the ten kicks were recorded. This test was administered at the right, left and center zones of the field.

#### Fouls:

- starting the test without waiting for the whistle
- running wider, farther or shorter off the marked perimeters
- trapping the ball before final kick towards the goal
- touching the ball more than two times

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## **Procedure for Data Analysis**

Descriptive statistics of frequency counts and percentages was used to analyse the demographic data and research questions while inferential statistics of Analysis of Covariance (ANCOVA) was used to test hypotheses at 0.05 level of significance.

## **RESULTS AND DISCUSSIONS**

This following are the results of the research questions and hypotheses: Table 1 Summary of Participants' Demographic Profile

Tuble 1. Summary of 1 articipants' Demographic Frome						
<b>Demographic Charac</b>	teristics	Frequency	Percentages %			
Age	17-20yrs (short)	6	28.6			
_	21-24yrs (medium)	9	42.9			
	25-28yrs (long)	6	28.6			
Playing experience	Short $(0-2 \text{ years})$	13	61.9			
	Long (2 – 4 years)	8	38.1			
Treatment	Double teaming	7	33.3			
	Three-man weave	7	33.3			
	Control	7	33.3			

Table 1 shows that 6(28.6%) of the players were between the ages of 17-20yrs, 9(42.9%) were between the ages of 21-24yrs and 6(28.6%) were in the ages 25-28yrs category. 13(61.9\%) had short playing experience while 8(38.1%) had long playing experience. 7(33.3%) were in the Double-teaming group, 7(33.3%) were in the three-man weave group and 7(33.3%) were in the Control group.

## **Answer to Research Questions**

Table 3. Below shows the estimated marginal means of treatment on scoring accuracy of players. Participants in double-teaming group had the highest mean ( $\bar{\mathbf{x}} = 8.042$ ), followed by participants in three-man weave group with a mean of ( $\bar{\mathbf{x}} = 7.768$ ). Therefore, this answers the two research questions. It therefore means that: 1. double-teaming will lead to scoring more goals during Federal University of Agriculture, Abeokuta football team matches. 2. The Federal University of Agriculture, Abeokuta football players will prefer the use of double-teaming to three-man weave tactical play in game situations?

## **Results and Discussion of Findings**

**Hypothesis one:** There will be no significant main effect of treatments on the goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players.

Table 2 showing pretest/post-test	of double-teaming group,	three man-weave group	and
control group n = 21			

Pretest raw data (%)		Post-test raw data (%)		
Double-teaming	17.9%	Double-Teaming 56		
Three-man weave	16.9%	Three-man weave	55.7%	
Control	0.18%	Control	0.20%	

Table 3. Estimated marginal means of treatments on goal-scoring accuracy of the Federal
University of Agriculture, Abeokuta football players.

Treatment Groups	$\overline{\mathbf{x}}$	Std.Error	95% Confidence Interval		
			Lower Bound	<b>Upper Bound</b>	
Double Teaming	8.042	.384	7.055	9.030	
Three-man weave	7.768	.395	6.754	8.782	
Control	2.646	.385	1.656	3.637	

Table 3 showed the estimated marginal means of treatment on goal-scoring accuracy of players. Participants in double-teaming group had the highest mean ( $\bar{\mathbf{x}} = 8.042$ ), followed by participants in three-man weave group with a mean of ( $\bar{\mathbf{x}} = 7.768$ ). Participants in control group had the least mean score of ( $\bar{\mathbf{x}} = 2.646$ ). This showed that participants in double- teaming performed better in goal-scoring accuracy than the participants in three-man weave and control group. Overall comparison showed that participants in double-teaming group were the best in goal-scoring accuracy followed by those in three-man weave and control group. Findings therefore, revealed that there was a significant main effect of treatment on goal-scoring accuracy of the Federal University of Agriculture, Abeokuta football players. (F = 65.120, p<.05,  $\eta 2=.963$ ). Thus, the null hypothesis was rejected. The eta value of .963 showed that 96.3% of the variance in the participant's score was accounted for by the intervention. This is line with Bobavonic (2010) who opined that double-teaming can certainly be one attacker putting pressure on a defender while the other attacker forms a dummy on the defender in the form of distraction in order to bypass him with the ball to score goals readily. It also means that the effect size of the independent variables on the dependent variable is as high as 96.3%. This further means that the effect of double-teaming and three-man weave on goal-scoring accuracy of the participants is 96.3%.

(I) Treatment	(J) Treatment	Mean Difference (I-J) (J-I)	Std. Error	Sig. p-value
Double-teaming	Three-man weave	.1429	.4056	.940
	Control	5.4857*	.4056	.000
Three-man weave	Double teaming	1429	.4056	.940
	Control	5.3429*	.4056	.000
Control	Double teaming	-5.4857*	.4056	.000
	Three-man weave	-5.3429*	.4056	.000

Table 4. Post Hoc Test showing multiple pair-wise analyses of Treatment on goal- scoring accuracy of football players.

\* sig. at .05 level

Table 4 shows that there were pair-wise significant differences between double-teaming and the control group, three-man weave and control group. This table explains the mean difference (I-J) between the first treatment (I) double-teaming and second treatment (J) (three-man weave) on goal-scoring accuracy of the football players. It was revealed that [(I) minus (J)] value of .1429 shows 14.29% mean difference. This means that the difference between the mean of double-teaming and three-man weave on goal-scoring accuracy is 14.29% while the mean difference between three-man weave (J) and double-teaming (I) [(J-I)] on goal-scoring accuracy is -.1429 which shows -14.29%. While the mean difference value between control group and double-teaming is -5.4857 which showed -54.85%. The mean difference value between control group and three-man weave is -5.3429 which shows -54.42%.

**Hypothesis two:** There will be no significant main effect of playing experience on the goalscoring accuracy of Federal University of Agriculture, Abeokuta football players.

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Age	$\overline{\mathbf{x}}$	Std.Error	95% Confidence Interval				
			Lower Bound	<b>Upper Bound</b>			
17-20yrs (short)	5.803	.423	4.717	6.890			
21-24yrs (medium)	6.307	.343	5.425	7.188			
25-28yrs (long)	6.356	.433	5.244	7.469			

Table 5. Estimated marginal means of Age on goal-scoring accuracy of Federal Universityof Agriculture, Abeokuta football players.

Table 5 shows the estimated marginal means of Age on goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players. Although, age was not significant in enhancing goal-scoring accuracy, however, players with long age bracket had the highest mean  $(\bar{\mathbf{x}} = 6.356)$ , followed by participants with medium ages with a mean value of  $(\bar{\mathbf{x}} = 6.307)$ . Participants with short age bracket had the least mean score of  $(\bar{\mathbf{x}} = 5.803)$ . This shows that participants with long number of age performed better in goal-scoring accuracy than players within the middle age bracket. Overall comparison shows that participants in the long age bracket were better in goal-scoring accuracy followed by those within the medium age bracket and short age bracket. Therefore, there is no significant main effect of age on goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players. (F = .310, p>.05,  $\eta^2$ =.110). Thus, the null hypothesis is not rejected. The eta value of .110 showed that 11% of the variance in the participant's score was accounted for by the intervention.

**Hypothesis three:** There will be no significant interaction effect of treatments and playing experience on the goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players.

Table 6.	Showing	Estimated	Marginal	Mean	of	Playing	Experience	on	goal-scoring
accuracy	of Federa	l University	y of agricu	lture, A	be	o <mark>kuta</mark> foo	otball players	5	

Playing Experience	x	Std.Error	95% Confidence Interval		
			Lower Bound	<b>Upper Bound</b>	
Short Playing Experience	6.281	.291	5.533	7.028	
Long Playing Experience	5.960	.359	5.036	6.883	

Table 6 shows the estimated marginal means of Playing Experience on goal-scoring Precision of Federal University of Agriculture, Abeokuta football players. Although, playing experience

was not significant in enhancing goal-scoring accuracy, however, participants with short playing experience had the higher mean ( $\bar{\mathbf{x}} = 6.281$ ) followed by participants with long playing experience having a mean of ( $\bar{\mathbf{x}} = 5.960$ ). This showed that participants with short playing experience performed better in goal-scoring accuracy than the participants with long playing experience. This must have borne out of vigour and urge to perform in youthfulness. Therefore, there was no significant main effect of Playing Experience on goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players. (F = .138, p>.05,  $\eta^2$ =.027). Thus, the null hypothesis was not rejected. The eta value of .027 showed that 27% of the variance in the participant's score was accounted for by the intervention.

**Hypothesis four:** There will be no significant main effect of Age on the goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players.

Treatment	Age	$\overline{\mathbf{X}}$	Std.Error	95% Confidence	e Interval
				Lower Bound	Upper Bound
Double-teaming	Short	7.903	.681	6.152	9.654
	Medium	7.846	.588	6.334	9.358
	Long	8.713	.684	6.954	10.472
Three-man weave	Short	8.553	.681	6.802	10.304
	Medium	8.181	.657	6.493	9.869
	Long	6.963	.684	5.504	8.722
Control	Short	2.329	.702	.525	4.133
	Medium	2.893	.613	1.316	4.470
	Long	2.786	.708	.965	4.608

 Table 7. Estimated marginal means of Treatment and Age on goal-scoring accuracy of

 Federal University of Agriculture, Abeokuta football players

Table 7 shows the estimated marginal means of Treatment and Age on goal-scoring accuracy of the players. Although, the interaction of the treatment and Age was not significant in enhancing goal-scoring accuracy, however, participants with long ages who are in doubleteaming group had the highest mean value of ( $\bar{\mathbf{x}} = 8.713$ ), followed by players in with short age in double-teaming group with a mean of ( $\bar{\mathbf{x}} = 7.903$ ). Participants in double-teaming group with medium age had the least mean score of ( $\bar{\mathbf{x}} = 7.846$ ). This shows that players with long age are better than players with short age and medium-aged players.in goal-scoring accuracy. In three-man weave group, participants in short age category had the highest mean of ( $\bar{\mathbf{x}}$  = 8.553), followed by the medium-aged players with a mean value of ( $\bar{\mathbf{x}} = 8.181$ ). While the long-aged players had the least mean score of ( $\bar{\mathbf{x}} = 6.963$ ). This showed that participants in three-man weave group short age category are better in goal-scoring accuracy than the mediumaged players while the players with long ages had lowest mean values in goal-scoring accuracy. In the control group however, participants with short age had the highest mean of ( $\bar{\mathbf{x}} = 2.893$ ), followed by long aged players with a mean value of ( $\bar{\mathbf{x}} = 2.786$ ). Short-aged players had the least mean score of ( $\bar{\mathbf{x}} = 2.329$ ). This shows that in the control group short-aged players are better in goal-scoring accuracy. Overall comparison shows that participants with long age in double-teaming group were the best in goal-scoring accuracy followed by those players with short age in three-man weave.

Therefore, there was no significant interaction effect of Treatment and Age on goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players. (F = .488, p>.05,  $\eta^2$ =.281). Thus, the null hypothesis was not rejected. The eta value of .281 showed that 28.1% of the variance in the participant's score was accounted for by the intervention.

**Hypothesis five:** There will be no significant interaction effect of treatment and Age on the goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players.

Treatment	Playing	x	Std.Error	95% Confidence Interval		
	Experience			Lower Bound	Upper Bound	
Double-teaming	Short	8.101	.576	6.621	9.581	
	Long	7.953	.682	6.201	9.706	
Three-man weave	Short	7.878	.465	6.684	9.072	
	Long	7.603	.681	5.852	9.354	
Control	Short	2.862	.533	1.492	4.232	
	Long	2.323	.607	.763	3.883	

Table 8Estimated marginal means of Treatment and Playing Experience on<br/>Scoring Precision of Federal University of Agriculture, Abeokuta football players.

Table 8 shows the estimated marginal means of Treatment and Playing Experience on goalscoring accuracy of Federal University of Agriculture, Abeokuta football players. Although, the interaction of treatment and playing experience was not significant in enhancing goalscoring accuracy, however, participants who are in double-teaming group with short playing experience had the highest mean of ( $\bar{\mathbf{x}} = 8.101$ ), followed by participants in double-teaming group with long playing experience with a mean value of ( $\bar{\mathbf{x}} = 7.953$ ). Participants in threeman weave group with short playing experience had mean score of ( $\bar{\mathbf{x}} = 7.878$ ) while participants with long playing experience had mean score of ( $\bar{\mathbf{x}} = 7.603$ ). In the control group, participants with short playing experience are better with mean score of ( $\bar{\mathbf{x}} = 7.603$ ) than players with short playing experience group with mean score of ( $\bar{\mathbf{x}} = 2.862$ ) are better than long playing experience who has score of ( $\bar{\mathbf{x}} = 2.323$ ) Overall comparison shows that participants in the double-teaming group with short playing experience were the best in goalscoring accuracy followed by those in the three-man weave group with short playing experience while participants in the control group with long playing experience are the least in goal-scoring accuracy. As indicated in Table 6 above, there was no significant interaction effect of Treatment and Playing Experience on goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players (F = .353, p>.05,  $\eta^2$ =.124). Thus, the null hypothesis is was not rejected. The eta value of .124 shows that 12.4% of the variance in the participant's score was accounted for by the intervention.

**Hypothesis six:** There will be no significant interaction effect of playing experience and Age on the goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players.

Age	Playing	$\overline{\mathbf{x}}$	Std.Error	95% Confidence Interval		
	Experience			Lower Bound	<b>Upper Bound</b>	
Long	Short	6.263	.462	5.076	7.450	
	Long	6.636	.980	4.117	9.156	
Medium	Short	6.233	.521	4.894	7.571	
	Long	6.381	.452	5.219	7.543	
Short	Short	6.346	.537	4.965	7.727	
	Long	4.990	.678	3.248	6.731	

Table 9	Estimated	marginal	means	of .	Age	and	Playing	Experience	on	goal-scoring
accuracy	of Federal	University	y of Agr	icul	ture	, Abe	okuta fo	otball player	s.	

Table 9 shows the estimated marginal means of Age and playing experience on goal-scoring accuracy of the players. Although, the interaction of Age and playing experience was not significant in enhancing goal-scoring accuracy, however, participants who have long age with long playing experience had high mean of ( $\bar{\mathbf{x}} = 6.636$ ), followed by participants with medium age but with long playing experience having a mean of ( $\bar{\mathbf{x}} = 6.381$ ). Participants with long playing experience with medium age had the high mean score of ( $\bar{\mathbf{x}} = 6.381$ ) while participants with short playing experience and medium age had low mean score of ( $\bar{\mathbf{x}} = 6.233$ ). Participants with long playing experience and long age had higher mean score of ( $\bar{\mathbf{x}} = 6.636$ ) while participants with short playing experience and long age had mean score of ( $\bar{\mathbf{x}} = 6.263$ ). This showed that participants with long playing experience and long age are better in goal-scoring accuracy than the participants with short playing experience and short age. Participants with long playing experience and medium age are better than the participants with short playing experience and medium age in goal-scoring accuracy. Similarly, the participants with long playing experience with long age are better than the participants with short playing experience and long age. Overall comparison shows that participants with long playing experience with long age were the best in goal-scoring accuracy followed by those with long playing experience and medium age while participants with long playing experience and with short age are the least in goal-scoring accuracy. Result also indicated that there was no significant interaction effect of Age and Playing Experience on goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players (F = .310, p>.05,  $\eta 2$ =.110). Thus, the null hypothesis is not rejected. The eta value of .110 showed that 11.0% of the variance in the participant's score was accounted for by the intervention.

**Hypothesis Seven:** There will be no significant 3-way interaction effect of treatment, playing experience and Age on the goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players.

Result in Table 11. below showed that there was no significant interaction effect of Treatment, Age and Playing Experience on goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players (F = .025, p>.05,  $\eta$ 2=.005). Thus, the null hypothesis is not rejected. The eta value of .005 showed that 5% of the variance in the participant's score was accounted for by the intervention.

Table 10.	Estimated	marginal	means of	Treatment,	Age and Pl	aying	Experience	on goal-	-scoring
accuracy	of Federal	University	of Agric	ulture, Abec	okuta footba	ll play	yers.		

Treatment	Age	Playing	$\overline{\mathbf{x}}$	Std. Error	95% Confidence Interval	
		Experience			LowerBound	UpperBound
Double-	Short	Short	7.896	1.064	5.161	10.631
Teaming		Long	7.910	1.010	5.314	10.506
	Medium	Short	7.696	1.064	4.961	10.431
		Long	7.997	.774	6.006	9.987
	Long	Short	8.713	.684	6.945	10.472
		Long	-	-	-	-
Three-man	Short	Short	8.553	.681	6.802	10.304
weave		Long	-	-	-	-
	Medium	Short	7.793	.718	5.946	9.639
		Long	8.569	1.020	5.946	11.192
	Long	Short	7.290	.958	4.827	9.752
		Long	6.636	.980	4.117	9.156
Control	Short	Short	2.590	.958	.127	5.052
		Long	2.069	1.020	554	4.692
	Medium	Short	3.210	1.010	.614	5.806
		Long	2.576	.679	.832	4.320
	Long	Short	2.786	.708	.965	4.608
		Long	-	-	-	-

Table 10. Shows the estimated marginal means of treatment, Age and playing experience on goal-scoring accuracy of the players. Although, the interaction effect of the treatment (Age and playing experience) was not significant enough to enhance goal-scoring accuracy. However, participants who are in double-teaming group with long age had the highest mean effect of ( $\bar{\mathbf{x}}$ = 7.910. Participants in the three-man weave group with medium age and with long playing experience had a high marginal mean of ( $\bar{\mathbf{x}} = 8.569$ ) while participants in three-man weave group playing with short age with long playing experience had nil marginal mean.

Source	Sum o	f DF	Mean	F	Sig.	Eta.
	Squares		Square		_	Sq
Corrected Model	142.650	15	9.510	10.363	.009	.969
Intercept	7.288	1	7.288	7.942	.037	.614
Pretest	0.397	1	0.397	0.432	.540	.080
Main effect:						
Treatment	119.515	2	59.757	65.120	.000	.963
Age	0.569	2	0.285	0.310	.746	.110
Playing Experience	0.126	1	0.126	0.138	.726	.027
2-way Interactions:						
Treatment x Age	1.793	4	0.448	0.488	.746	.281
Treatment x P.E	0.649	2	0.324	0.353	.718	.124
Age X P.E	0.569	2	0.285	0.310	.746	.110
3-way interactions:						
Treatment x Age x P.E	2.286E-02	1	2.286E-02	0.025	.881	.005
Error	4.588	5	0.918			
Total	960.690	21				
Corrected Total	147.238	20				

Table 11. ANCOVA showing the main and interaction effect of Treatment, Age and Playing Experience on goal-scoring accuracy of Federal University of Agriculture, Abeokuta football

 $\overline{R}$  Squared = .969 (Adjusted R Squared = .875)

Table 11. Shows the main and interaction effects of treatment, Age and playing experience on goal-scoring accuracy of Federal University of Agriculture, Abeokuta football players. It was also observed that there was a variance of 87.5 percent accounted for by the independent variables combined together. This study is in line with Thorndike's theory of learning referred to as 'connectionism'. It is a learning theory based on the concept of bonds formed between stimulus and response.

### Research implications, Justification and Novelty of the Study

Over the years, double-teaming and three-man weave have been existing as a means of defense and possession respectively in football game. The study sought to investigate the effects of double-teaming and three-man weave training on goal-scoring accuracy among players of Federal University of Agriculture Football Team, Abeokuta, Nigeria using players' age and Playing position as moderating variables. The study elicited more facts that these two football tactical tools (double-teaming and three-man weave) are better used as means of attacking accuracy and goal scoring, not leaving out their original purposes of defensive and possession. It is novel-worthy to discover in this study that comparison shows that participants with long playing experience and age were the best in goal-scoring accuracy. Mastery of these two tactical tools will sharpen the players' accuracy to score more goals readily. The study poked further to discover that another novelty of this study is that it is obvious after analysis that between the two treatments, the usage of double-teaming would lead to players' accuracy at scoring more goals. The study therefore came up with a pointer that coaches and football stake holders should take cognizance of training and learning more on how to use double-teaming and three-man weave not only for defending and possessing but to scoring more goals as against the common goals scored from against the run of play in football matches. The training and tests were included in the study for usage. It is important to score more goals because that is what the fans come to see and cheer in the stadia. Goal scoring also relieved the fans of their stress and creates joy and social cohesion. It is goal scoring that also put any team on top of the football league table. Goals also aid teams in winning laurels and also optimize financial gain. Therefore, it is noteworthy to say that scoring more goals leads to success and sustenance of any football team in the world.

## CONCLUSION

Based on the findings of this study, it was concluded that the treatment was effective on goalscoring accuracy among football players of Federal University of Agriculture, Abeokuta. It was also concluded that double-teaming was better on goal-scoring accuracy than three-man weave. There was no significant main effect of Age on goal-scoring accuracy. However, players with long playing experience with long age are better in goal-scoring accuracy than the players with short playing experience with short age. Participants with long playing experience with medium age are better than the participants with short playing experience with medium age on goal-scoring accuracy. Similarly, the participants with long playing experience with long age are better than the participants with short playing experience with long age are better than the participants with short playing experience with long age are better than the participants with short playing experience with long age are better than the participants with short playing experience with long age. Overall comparison shows that participants with long playing experience and age were the best in goalscoring accuracy followed by those with long playing experience with medium age while participants with long playing experience and short age are the least in goal-scoring accuracy.

### Recommendations

Based on the findings of this study, the following cogent conclusions were made:

The findings of this study revealed the need for football coaches to be educated on the benefits of usage of double-teaming and three-man weave during training to improve goal-scoring accuracy during games. Coaches should concentrate on simplified and better methods of training double-teaming and three-man weave..

It was therefore recommended that:

1. Coaches of the University of Agriculture, Abeokuta should make use of double-teaming more than three-man weave during games.

2. Coaches should endeavour to use double-teaming more among medium aged players.

3. Coaches should endeavour to make use of the three-man weave tactical play more among forward players.

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