

## CHAPTER - IV

### RESULTS AND DISCUSSIONS

#### 4.1 OVERVIEW

In this chapter, the test of significance, level of significance, discussions on findings and discussion on hypothesis were analyzed.

The purpose of the study was to find out the efficacy of specific packages of football drills with and without psych up strategies on selected physical fitness, game skill variables and playing ability among inter collegiate football players.

Forty five college men football players from Chennai city were randomly selected and their age ranged between 21 and 24 years. They were assigned into three equal groups. Group one acted as Experimental Group I – (Football drills with psych up strategies, Group two acted as Experimental Group II-(Football drills without psych up strategies) and Group three acted as Control Group.

Pre test was conducted for all the forty five subjects on selected physical fitness variables namely speed, agility, explosive power, flexibility and cardio vascular endurance and game skill variables namely passing, shooting, dribbling, kicking for distance in left leg and kicking for distance in right leg. Playing ability was measured by experts rating. This initial test scores formed as pre test scores of the subjects. Experimental Group I was exposed to specific packages of football drills with psych-up strategies, experimental group II was exposed to specific packages of football drills without psych-up strategies, and the control group was not exposed to any experimental training other than their regular daily activities. The experimental period was for 12 weeks. After the experimental treatment, all the forty five subjects were measured on the

selected physical fitness, game skill variables and playing ability. This final test scores formed as post test scores of the subjects. The pre test and post test scores were subjected to statistical analysis using Analysis of Covariance (ANCOVA) to find out the significance among the mean differences, whenever the 'F' ratio for adjusted test was found to be significant Scheffe's Post hoc test was used. In all cases 0.05 level of significance was fixed to test hypothesis.

#### **4.2 TEST OF SIGNIFICANCE**

This is crucial portion to achieving the conclusion by examining the statistical hypotheses and either by accepting the null hypotheses or rejecting the same in accordance with the results obtained in relation to the level of significance fixed by the investigator.

The test was usually called the test of significance since the investigator tested whether the differences among three groups or within many groups scores were significant or not. In this study, if the obtained F-value were greater than the table value, the null hypotheses were rejected to the effect that there existed significant difference among the means of the groups compared, and if the obtained values were lesser than the required values, then the null hypotheses were accepted to the effect that there existed no significant differences among the means of the groups under study.

#### **4.3 LEVEL OF SIGNIFICANCE**

The pre and post test scores of the experimental and control groups were analyzed to find out the efficacy of specific packages of football drills with and without psych up strategies on selected physical fitness and game skill variables and playing ability among intercollegiate football players. The analysis of covariance (ANCOVA) was used to find

out significant difference if any, between the groups on selected criterion variables separately. In all the cases, 0.05 level of confidence was fixed to test the significance which was considered as appropriate.

#### 4.4 COMPUTATION OF ANALYSIS OF COVARIANCE AND POST HOC TEST 4.4.1 RESULTS ON SPEED

The fitness variable, speed was measured through 50 meters run test. The results on the effect of specific packages of football drills with and without psych up strategies is presented in Table IV

**TABLE IV**  
**COMPUTATION OF ANALYSIS OF COVARIANCE ON SPEED**  
(Scores in Seconds)

Test	Means			Source of Variance	Sum of Square	Degrees of freedom	Mean Square	Obtained F
	Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group					
Pre test	6.04	5.97	6.06	Between	0.07	2	0.03	0.22
				Within	6.54	42	0.16	
Post test	5.44	5.65	5.77	Between	0.84	2	0.42	3.60*
				Within	4.92	42	0.12	
Adjusted	5.43	5.68	5.75	Between	0.83	2	0.42	8.27*
				Within	2.07	41	0.05	
Mean gain	0.60	0.32	0.29					

Table F-ratio at 0.05 level of confidence for 2 and 42 (df) =3.22, 2 and 41(df) =3.23

\*Significant

Table IV shows that the pre test mean scores of speed of specific packages of football drills with psych up strategies group was 6.04 seconds, specific packages of football drills without psych up strategies group was 5.97 seconds and control group was 6.06 seconds. The post test means showed differences due to specific packages of football drills and mean values recorded were 5.44 seconds, 5.65 seconds and 5.77 seconds respectively.

The obtained F value on pre test scores 0.22 was less than the required F value of 3.22 to be significant at 0.05 level. This proved that there were no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post test scores analysis proved that there were significant differences between the groups, as the obtained F value 3.60 was greater than the required F value of 3.22. This proved that the differences between the post test means of the subjects were significant.

Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value of 8.27 was greater than the required F value of 3.23. This proved that there was a significant difference among the means due to the experimental trainings on speed.

Since significant differences were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in Table V

**TABLE V**  
**SCHEFFE'S CONFIDENCE INTERVAL TEST SCORES ON**  
**SPEED**  
**(Scores in Seconds)**

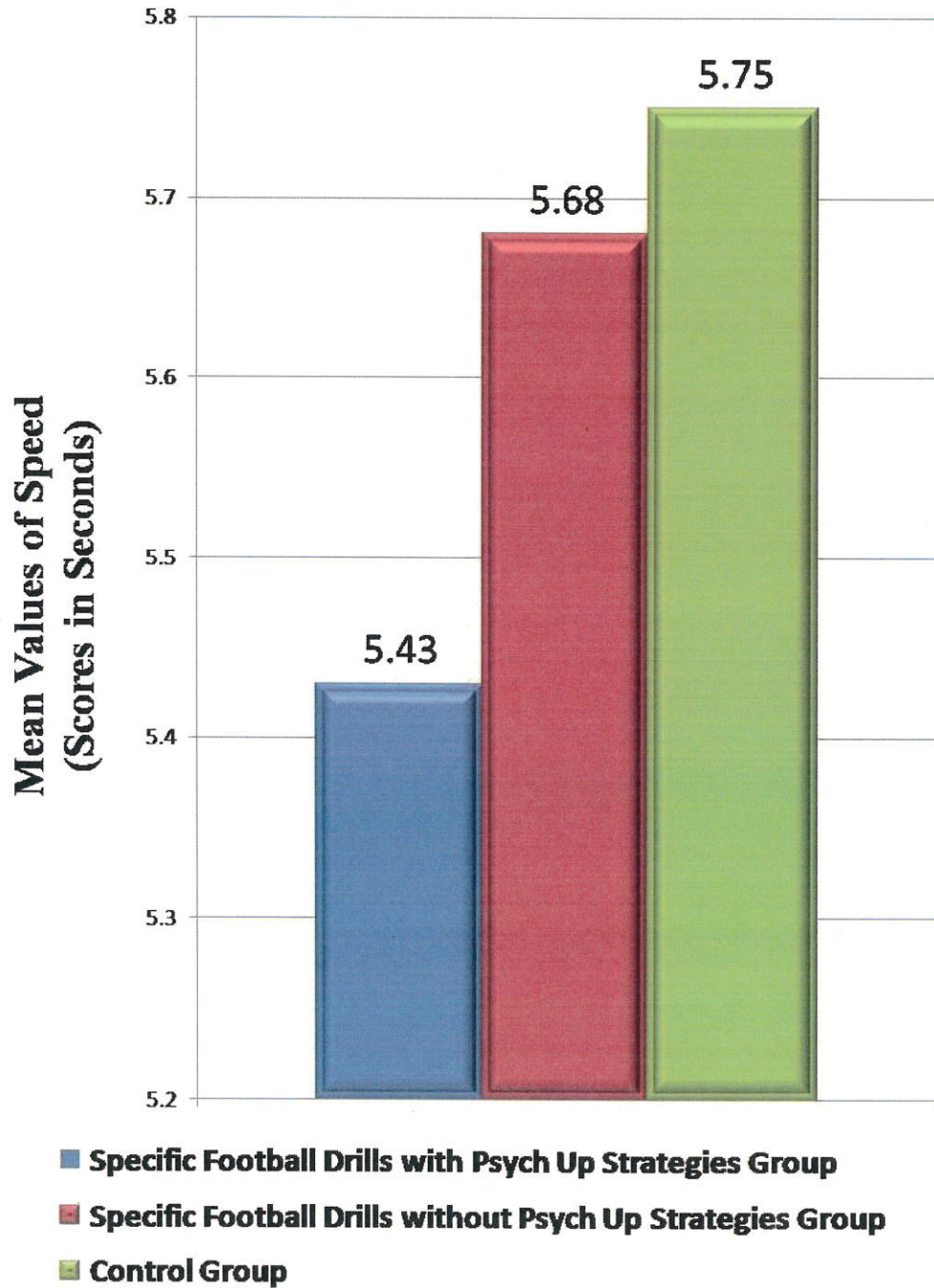
MEANS			MEAN DIFFERENCE	REQUIRED C I
Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group		
5.43	5.68	-	0.25*	0.21
5.43	-	5.75	0.31*	0.21
-	5.68	5.75	0.06	0.21

\* Significant

The multiple mean comparisons shown in Table V proved that there existed significant differences between the adjusted means of specific packages of football drills with psych up strategies group and without psych up strategies group and specific packages of football drills with psych up strategies and control group. There was no significant difference between specific packages of football drills without psych up strategies group and control group.

The ordered adjusted means on speed were presented through bar diagram for better understanding of the results of this study in Figure-54.

**FIGURE-54**  
**BAR DIAGRAM ON ORDERED ADJUSTED MEANS OF SPEED**



#### 4.4.1.1 DISCUSSIONS ON THE FINDINGS OF SPEED

The results presented in Table IV showed that obtained adjusted means on speed among specific packages of football drills with psych up strategies group was 5.43, followed by specific packages of football drills without psych up strategies group with mean value of 5.68 and control group mean values of 5.75. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 0.22, 3.60 and 8.27 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23.

The post hoc analysis through Scheffe's Confidence test proved that due to specific packages of football drills with psych up strategies and specific packages of football drills without psych up strategies improved speed than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis shows that there was significant difference between the experimental groups, clearly indicating that specific packages of football drills with psych up strategies was significantly better than the specific packages of football drills without psych up strategies in improving the speed of the inter collegiate level football players. The finding of this study is in line with the study undertaken by Maniazhagu, (2012), Bullock (2012) and Jaime Sampaio (2007).

#### 4.4.2 RESULTS ON AGILITY

The fitness variable, agility was measured through Shuttle run test. The results on the effect of specific packages of football drills with and without psych up strategies is presented in Table VI

**TABLE VI**  
**COMPUTATION OF ANALYSIS OF COVARIANCE ON AGILITY**  
**(Scores in Seconds)**

Test	Means			Source of Variance	Sum of Square	Degrees of freedom	Mean Square	Obtained F
	Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group					
Pre test	12.74	12.68	12.75	Between	0.04	2.00	0.02	0.05
				Within	16.60	42.00	0.40	
Post test	11.56	11.93	12.21	Between	3.20	2.00	1.60	5.21*
				Within	12.90	42.00	0.31	
Adjusted	11.55	11.95	12.20	Between	3.22	2.00	1.61	10.39*
				Within	6.35	41.00	0.15	
Mean gain	1.18	0.75	0.54					

Table F-ratio at 0.05 level of confidence for 2 and 42 (df) =3.22, 2 and 41(df) =3.23  
\*Significant

Table VI shows that the pre test mean scores of agility of specific packages of football drills with psych up strategies group was 12.74, specific packages of football drills without psych up strategies group was 12.68 and control group was 12.75. The post

test means showed differences due to specific packages of football drills and mean values recorded were 11.56, 11.93 and 12.21 respectively.

The obtained F value on pre test scores 0.05 was less than the required F value of 3.22 to be significant at 0.05 level. This proved that there was no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post test scores analysis proved that there was significant difference between the groups, as the obtained F value 5.21 was greater than the required F value of 3.22. This proved that the differences between the post test means of the subjects were significant.

Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value of 10.39 was greater than the required F value of 3.23. This proved that there was a significant difference among the means due to experimental trainings on agility.

Since significant improvements were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in Table VII

**TABLE VII**  
**SCHEFFE'S CONFIDENCE INTERVAL TEST SCORES ON**  
**AGILITY**  
**(Scores in Seconds)**

MEANS			MEAN DIFFERENCE	REQUIRED C I
Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group		
11.55	11.95	-	0.41*	0.37
11.55	-	12.20	0.65*	0.37
	11.95	12.20	0.24	0.37

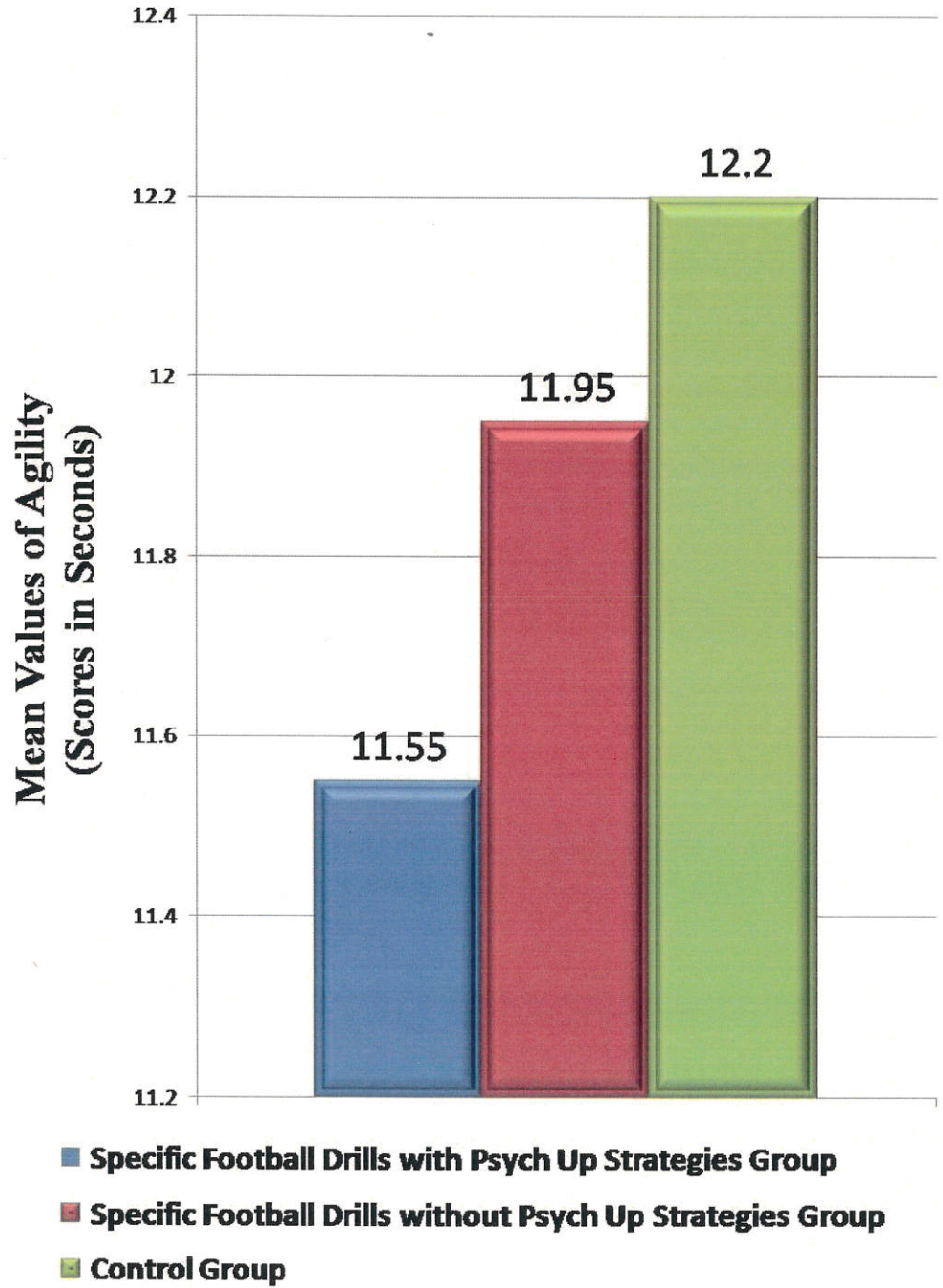
\* Significant

The multiple mean comparisons shown in Table VII proved that there existed significant differences between the adjusted means of specific packages of football drills with psych up strategies and without psych up strategies group, specific packages of football drills with psych up strategies and control group. There was no significant difference between specific packages of football drills without psych up strategies and control group.

The ordered adjusted means on agility were presented through bar diagram for better understanding of the results of this study in Figure-55.

FIGURE-55

BAR DIAGRAM ON ORDERED ADJUSTED MEANS OF AGILITY



#### 4.4.2.1 DISCUSSIONS ON THE FINDINGS OF AGILITY

The results presented in Table VI showed that obtained adjusted means on agility among specific packages of football drills with psych up strategies group was 11.55 seconds, followed by specific packages of football drills without psych up strategies group with mean value of 11.95 seconds, control group mean values of 12.20 seconds. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 0.05, 5.21 and 10.39 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23.

The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training the specific packages of football drills with psych up strategies group and specific packages of football drills without psych up strategies group improved agility than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis shows that there was significant difference between the experimental groups, clearly indicating that specific packages of football drills with psych up strategies was significantly better than the specific packages of football drills without psych up strategies in improving the agility of the inter collegiate level football players. The finding of this study is in line with the study undertaken by Athanasios Katis and Eleftherios Kellis, (2009), Miguel Arruda (2007), Maniazhagu (2012) and Mirkov, (2010).

#### 4.4.3 RESULTS ON FLEXIBILITY

The fitness variable, flexibility was measured through sit and reach test. The results on the effect of specific packages of football drills with and without psych up strategies is presented in Table VIII

**TABLE VIII**  
**COMPUTATION OF ANALYSIS OF COVARIANCE ON FLEXIBILITY**  
(Scores in Centimeters)

Test	Means			Source of Variance	Sum of Square	Degrees of freedom	Mean Square	Obtained F
	Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group					
Pre test	31.07	30.27	30.07	Between	8.40	2	4.20	0.65
				Within	272.80	42	6.50	
Post test	34.13	32.33	30.93	Between	77.20	2	38.60	10.53*
				Within	154	42	3.67	
Adjusted	33.78	32.45	31.17	Between	50.05	2	25.03	16.61*
				Within	61.79	41	1.51	
Mean gain	3.07	2.07	0.87					

Table F-ratio at 0.05 level of confidence for 2 and 42 (df) =3.22, 2 and 41(df) =3.23  
\*Significant

Table VIII shows that the pre test mean scores of flexibility of specific packages of football drills with psych up strategies group was 31.07, specific packages of football drills without psych up strategies group was 30.27 and control group was 30.07. The post

test means showed differences due to specific football drills and mean values recorded were 34.13, 32.33 and 30.93 respectively.

The obtained F value on pre test scores 0.65 was less than the required F value of 3.22 to be significant at 0.05 level. This proved that there was no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post test scores analysis proved that there was significant difference between the groups, as the obtained F value 10.53 was greater than the required F value of 3.22. This proved that the differences between the post test means of the subjects were significant.

Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value of 16.61 was greater than the required F value of 3.23. This proved that there was a significant difference among the means due to the experimental trainings on flexibility.

Since significant improvements were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in Table IX

**TABLE IX**  
**SCHEFFE'S CONFIDENCE INTERVAL TEST SCORES ON**  
**FLEXIBILITY**  
**(Scores in Centimeters)**

MEANS			MEAN DIFFERENCE	REQUIRED C I
Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group		
33.78	32.45	-	1.33*	1.14
33.78	-	31.17	2.62*	1.14
-	32.45	31.17	1.28*	1.14

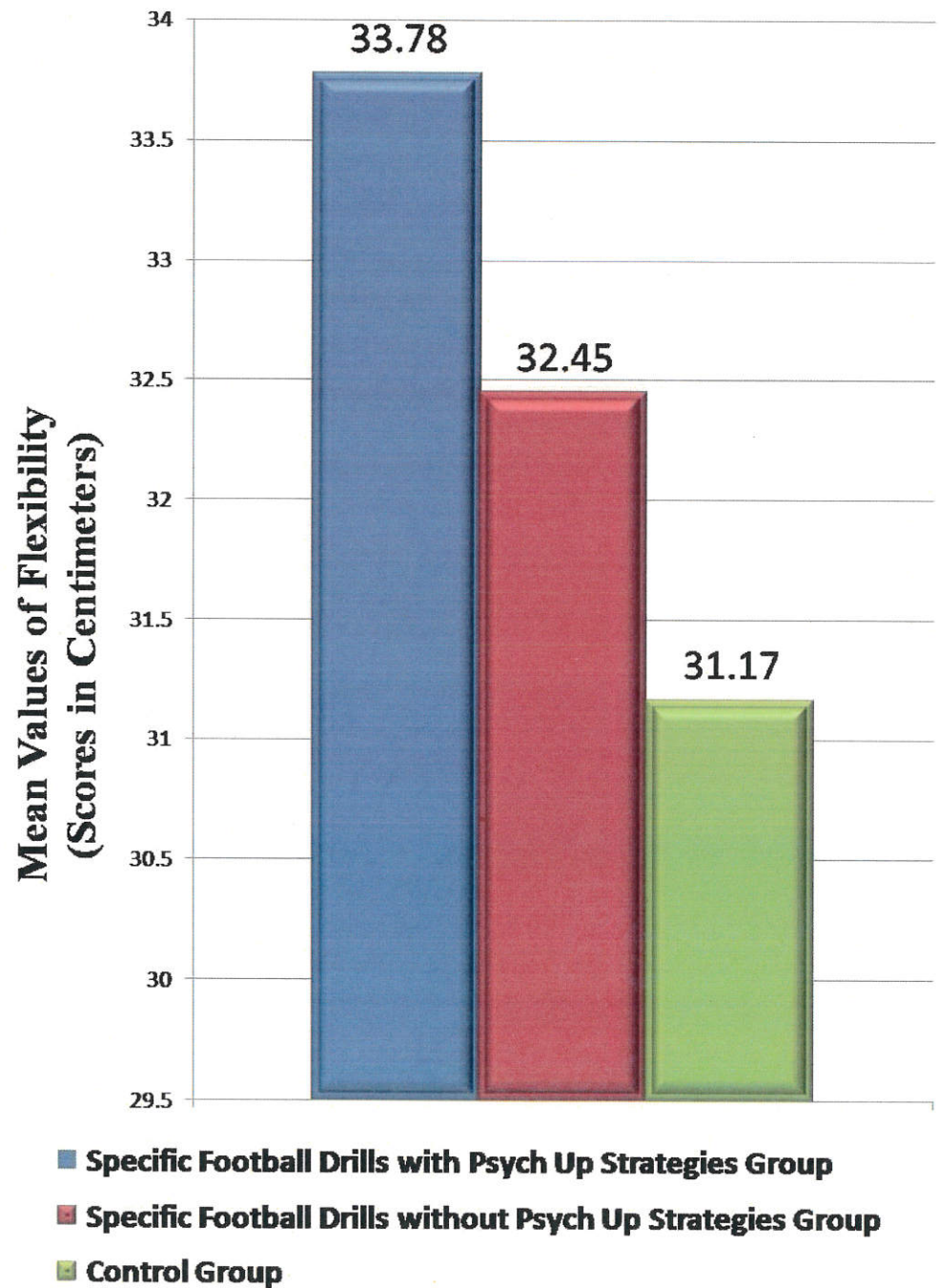
\* Significant

The multiple mean comparisons shown in Table IX proved that there were significant differences between the adjusted means of specific packages of football drills with psych up strategies and without psych up strategies groups, specific packages of football drills with psych up strategies and control group and specific packages of football drills without psych up strategies and control group.

The ordered adjusted means on flexibility were presented through bar diagram for better understanding of the results of this study in Figure-56.

FIGURE-56

## BAR DIAGRAM ON ORDERED ADJUSTED MEANS OF FLEXIBILITY



#### 4.4.3.1 DISCUSSIONS ON THE FINDINGS OF FLEXIBILITY

The results presented in Table VIII showed that obtained adjusted means on flexibility among specific packages of football drills with psych up strategies group was 33.78, followed by specific packages of football drills without psych up strategies group with mean value of 32.45, control group mean values of 31.17. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 0.65, 10.53 and 16.61 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23.

The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training the specific packages of football drills with psych up strategies group and specific packages of football drills without psych up strategies group improved flexibility than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis shows that there was significant difference between the experimental groups, clearly indicating that specific packages of football drills with psych up strategies was significantly better than the specific packages of football drills without psych up strategies in improving the flexibility of the inter collegiate level football players. The finding of this study is in line with the study undertaken by Reilly (2007) and Williford (1994).

#### 4.4.4 RESULTS ON EXPLOSIVE POWER

The fitness variable, explosive power was measured through Sargent Jump test. The results on the effect of specific packages of football drills with and without psych up strategies is presented in Table X

**TABLE X**  
**COMPUTATION OF ANALYSIS OF COVARIANCE ON EXPLOSIVE POWER**  
(Scores in Centimeters)

Test	Means			Source of Variance	Sum of Square	Degrees of freedom	Mean Square	Obtained F
	Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group					
Pre test	55.27	52.67	51.6	Between	106.71	2	53.36	2.06
				Within	1085.87	42	25.85	
Post test	59.47	56.00	54.47	Between	196.84	2	98.42	3.65*
				Within	1133.47	42	26.99	
Adjusted	57.36	56.52	56.06	Between	11.87	2	5.94	8.89*
				Within	27.37	41	0.67	
Mean gain	4.2	3.33	2.87					

Table F-ratio at 0.05 level of confidence for 2 and 42 (df) =3.22, 2 and 41(df) =3.23

\*Significant

Table X shows that the pre test mean scores of explosive power of specific packages of football drills with psych up strategies group was 55.27, specific packages of football drills without psych up strategies group was 52.67 and control group was 51.6.

The post test means showed differences due to specific packages of football drills and mean values recorded were 59.47, 56.00 and 54.47 respectively.

The obtained F value on pre test scores 2.06 was less than the required F value of 3.22 to be significant at 0.05 level. This proved that there was no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups

The post test scores analysis proved that there was significant difference between the groups, as the obtained F value 3.65 was greater than the required F value of 3.22. This proved that the differences between the post test means of the subjects were significant.

Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value of 8.89 was greater than the required F value of 3.23. This proved that there was a significant difference among the means due to the experimental trainings on explosive power.

Since significant improvements were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in Table- XI

**TABLE XI**  
**SCHEFFE'S CONFIDENCE INTERVAL TEST SCORES ON**  
**EXPLOSIVE POWER**

(Scores in Centimeters)

MEANS			MEAN DIFFERENCE	REQUIRED C I
Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group		
57.36	56.52	-	0.84*	0.76
57.36	-	56.06	1.30*	0.76
	56.52	56.06	0.46	0.76

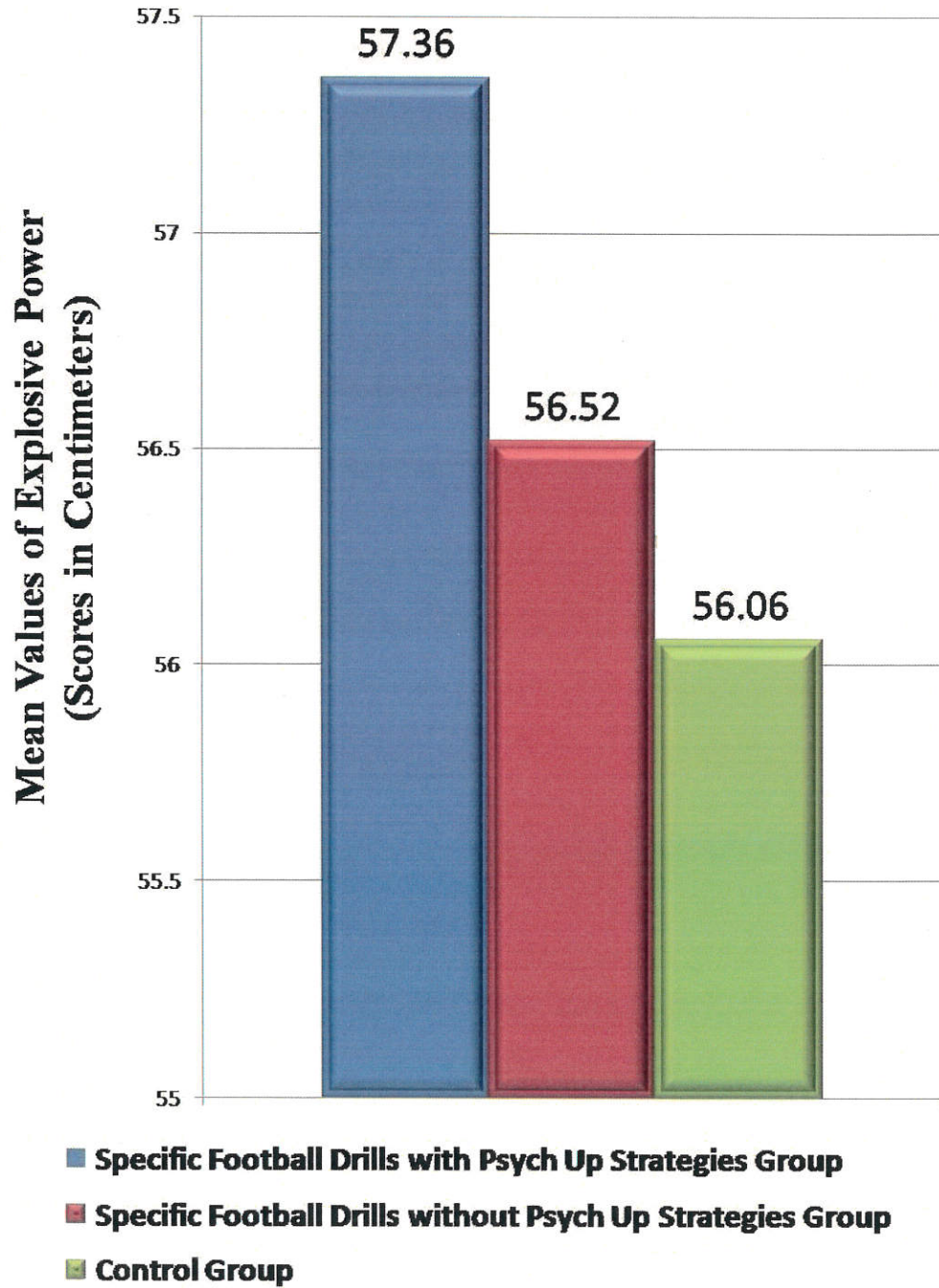
\* Significant

The multiple mean comparisons shown in Table XI proved that there existed significant differences between the adjusted means of specific packages of football drills with psych up strategies and without psych up strategies groups, specific packages of football drills with psych up strategies and control group and there was no significant difference between specific packages of football drills without psych up strategies and control group.

The ordered adjusted means on explosive power were presented through bar diagram for better understanding of the results of this study in Figure-57.

FIGURE-57

BAR DIAGRAM ON ORDERED ADJUSTED MEANS OF EXPLOSIVE POWER



#### 4.4.4.1 DISCUSSIONS ON THE FINDINGS OF EXPLOSIVE POWER

The results presented in Table X showed that obtained adjusted means on explosive power among specific packages of football drills with psych up strategies group was 57.36, followed by specific packages of football drills without psych up strategies group with mean value of 56.52, control group mean values of 56.66. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 2.06, 3.65 and 8.89 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23.

The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training the specific packages of football drills with psych up strategies group and specific packages of football drills without psych up strategies group improved explosive power than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis shows that there was significant difference between the experimental groups, clearly indicating that specific packages of football drills with psych up strategies was significantly better than the specific packages of football drills without psych up strategies in improving the explosive power of the inter collegiate level football players. The finding of this study is in line with the study undertaken by Nunez (2008), , Chamari and Wisløff, (2010), Nunez (2008) and Holt Lambourne (2008).

#### 4.4.5 RESULTS ON CARDIO VASCULAR ENDURANCE

The fitness variable, cardio vascular endurance was measured through 12 minutes run and walk test. The results on the effect of specific packages of football drills with and without psych up strategies is presented in Table XII

**TABLE XII**  
**COMPUTATION OF ANALYSIS OF COVARIANCE ON**  
**CARDIO VASCULAR ENDURANCE**

(Scores in Meters)

Test	Means			Source of Variance	Sum of Square	Degrees of freedom	Mean Square	Obtained F
	Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group					
Pre test	2268	2308	2415.33	between	174137.78	2	87068.89	2.98
				within	1225453.33	42	29177.46	
Post test	2651.33	2524.00	2458.67	between	288013.33	2	144006.7	4.88*
				within	1238706.67	42	29493.02	
Adjusted	2694.70	2539.59	2399.71	between	578490.64	2	289245.3	18.31*
				within	647648.28	41	15796.3	
Mean gain	383.33	216	43.33					

Table F-ratio at 0.05 level of confidence for 2 and 42 (df) =3.22, 2 and 41(df) =3.23

\*Significant

Table XII shows that the pre test mean scores of cardio vascular endurance of specific packages of football drills with psych up strategies group was 2268, specific packages of football drills without psych up strategies group was 2308 and control group

was 2415.33. The post test means showed differences due to specific football drills and mean values recorded were 2651.33, 2524.00 and 2458.67 respectively.

The obtained F value on pre test scores 2.98 was less than the required F value of 3.22 to be significant at 0.05 level. This proved that there was no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post test scores analysis proved that there was significant difference between the groups, as the obtained F value 4.88 was greater than the required F value of 3.22. This proved that the differences between the post test means of the subjects were significant.

Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value of 18.31 was greater than the required F value of 3.23. This proved that there was a significant difference among the means due to experimental trainings on cardio vascular endurance.

Since significant improvements were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in TableXII

**TABLE XIII**  
**SCHEFFE'S CONFIDENCE INTERVAL TEST SCORES ON**  
**CARDIO VASCULAR ENDURANCE**

(Scores in Meters)

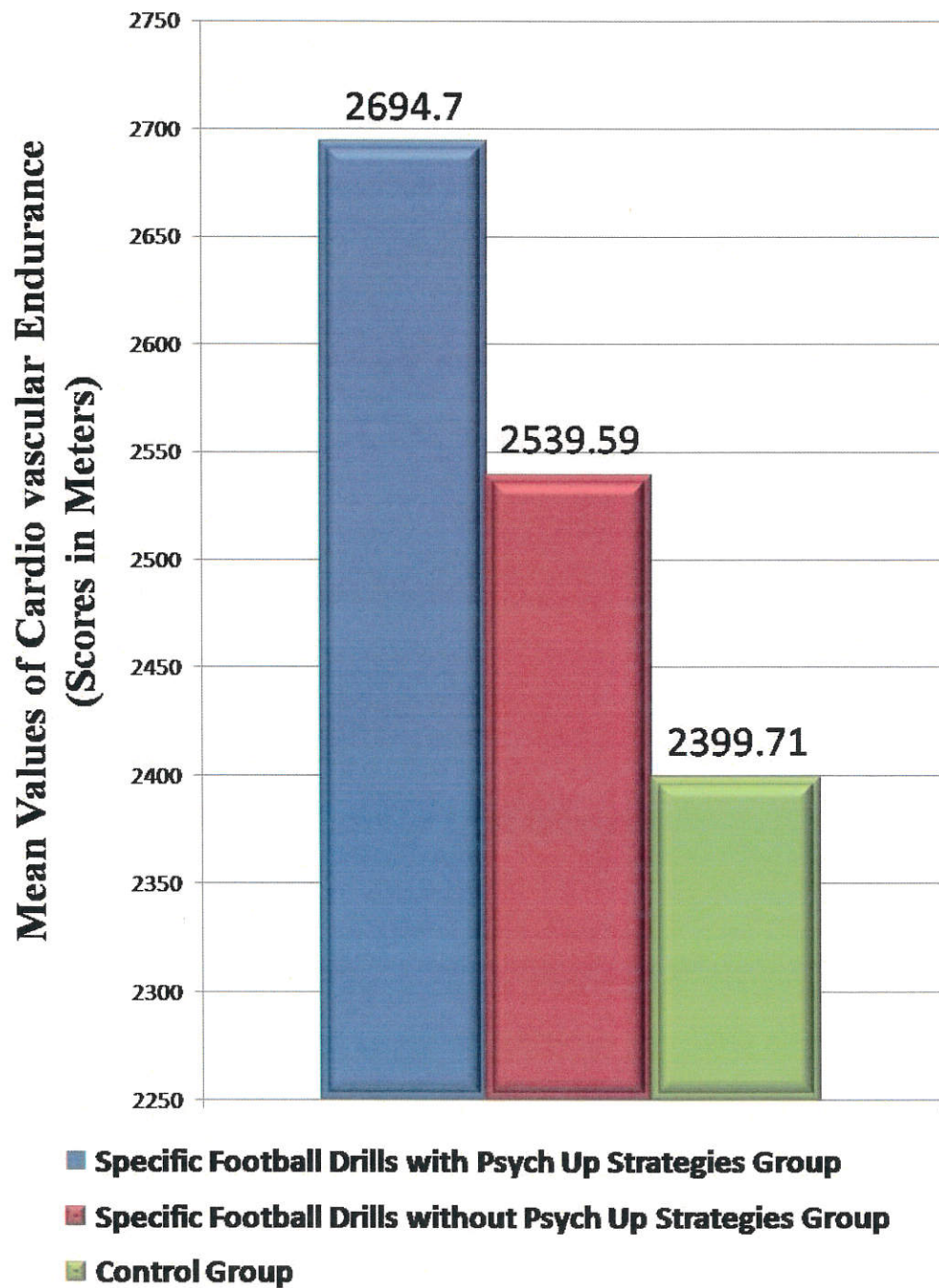
MEANS			MEAN DIFFERENCE	REQUIRED C I
Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group		
2694.70	2539.59	-	155.11*	116.64
2694.70	-	2399.71	294.99*	116.64
-	2539.59	2399.71	139.88*	116.64

\* Significant

The multiple mean comparisons shown in Table XIII proved that there existed significant differences between the adjusted means of specific packages of football drills with psych up strategies and without psych up strategies group, specific packages of football drills with psych up strategies and control group and specific packages of football drills without psych up strategies and control group.

The ordered adjusted means on cardio vascular endurance were presented through bar diagram for better understanding of the results of this study in Figure-58.

FIGURE-58

BAR DIAGRAM ON ORDERED ADJUSTED MEANS OF  
CARDIO VASCULAR ENDURANCE

#### 4.4.5.1 DISCUSSIONS ON THE FINDINGS OF CARDIO VASCULAR ENDURANCE

The results presented in Table XII showed that obtained adjusted means on cardio vascular endurance among specific packages of football drills with psych up strategies group was 2694.70, followed by specific packages of football drills without psych up strategies group with mean value of 2359.59, control group mean values of 2399.71. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 2.98, 4.88 and 18.31 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23.

The post hoc analysis through Scheffe's Confidence test proved that due specific packages of football drills with psych up strategies group and specific packages of football drills without psych up strategies group improved cardio vascular endurance than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis shows that there was significant difference between the experimental groups, clearly indicating that specific packages of football drills with psych up strategies was significantly better than the specific packages of football drills without psych up strategies in improving the cardio vascular endurance of the inter collegiate level football players. The finding of this study is in line with the study undertaken by Chandrasekaran (2012).

#### 4.4.6 RESULTS ON PASSING

The Game skill variable, passing was measured through Morgan Christian soccer ability test. The results on the effect of specific packages of football drills with and without psych up strategies is presented in Table XIV

**TABLE XIV**  
**COMPUTATION OF ANALYSIS OF COVARIANCE ON**  
**PASSING**

(Scores in Counts)

Test	Means			Source of Variance	Sum of Square	Degrees of freedom	Mean Square	Obtained F
	Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group					
Pre test	6.53	6.73	6.60	Between	0.31	2	0.16	0.12
				Within	56.27	42	1.34	
Post test	9.53	8.53	7.40	Between	34.18	2	17.09	10.10*
				Within	71.07	42	1.69	
Adjusted	9.58	8.47	7.41	Between	35.27	2	17.64	13.20*
				Within	54.79	41	1.34	
Mean gain	3.00	1.80	0.80					

Table F-ratio at 0.05 level of confidence for 2 and 42 (df) =3.22, 2 and 41(df) =3.23

\*Significant

Table XIV shows that the pre test mean scores of passing on specific packages of football drills with psych up strategies group was 6.53, specific packages of football drills without psych up strategies group was 6.73 and control group was 6.60. The post test

means showed differences due to specific football drills and mean values recorded were 9.53, 8.53 and 7.40 respectively.

The obtained F value on pre test scores 0.12 was less than the required F value of 3.22 to be significant at 0.05 level. This proved that there was no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post test scores analysis proved that there was significant difference between the groups, as the obtained F value 10.10 was greater than the required F value of 3.22. This proved that the differences between the post test means of the subjects were significant.

Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value of 13.20 was greater than the required F value of 3.23. This proved that there was a significant difference among the means due to experimental trainings on passing.

Since significant improvements were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in Table-XV.

**TABLE XV**  
**SCHEFFE'S CONFIDENCE INTERVAL TEST SCORES ON**  
**PASSING**

(Scores in Counts)

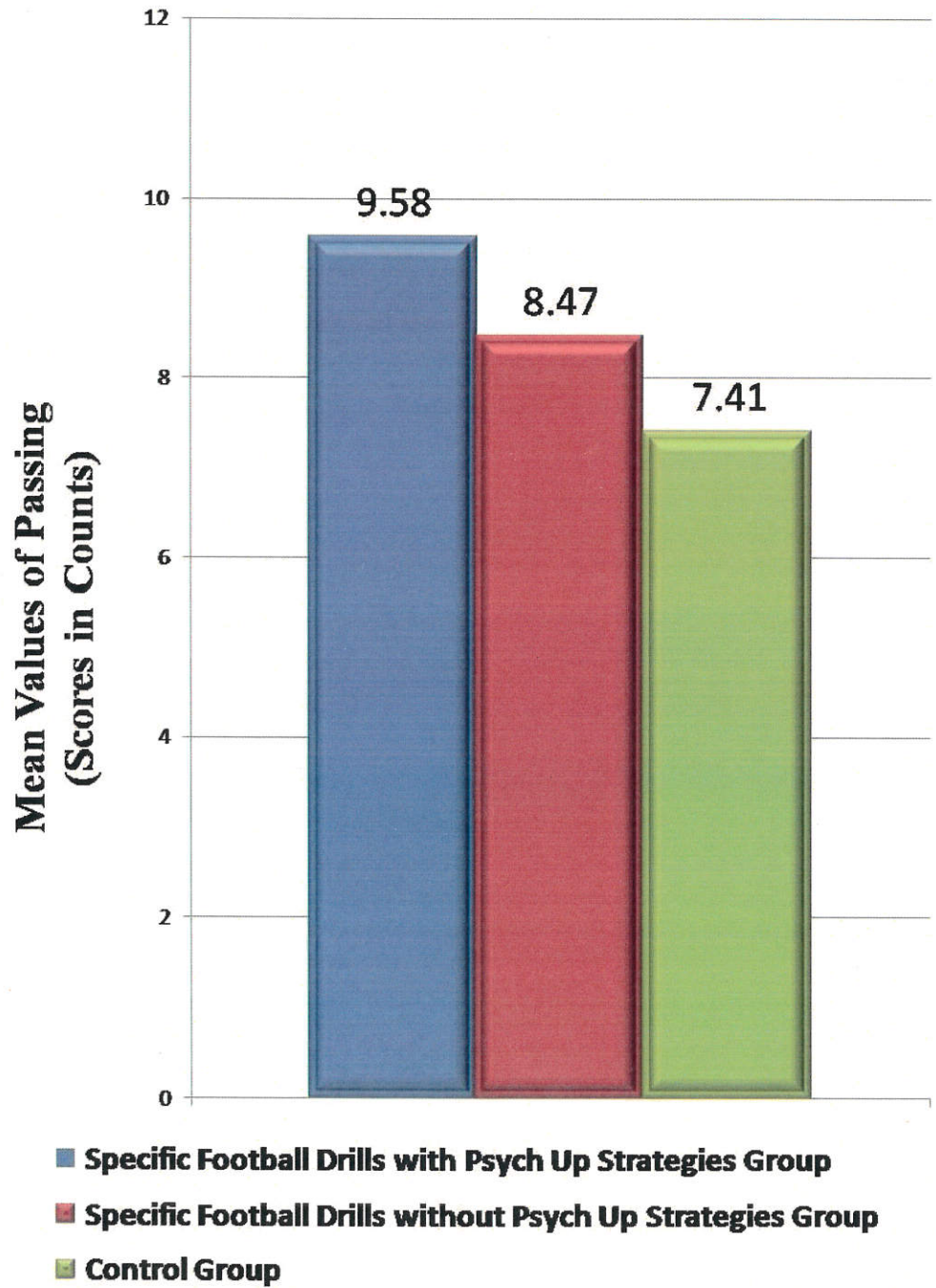
MEANS			MEAN DIFFERENCE	REQUIRED C I
Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group		
9.58	8.47	-	1.11*	1.07
9.58	-	7.41	2.17*	1.07
	8.47	7.41	1.06*	1.07

\* Significant

The multiple mean comparisons shown in Table XV proved that there existed significant differences between the adjusted means of specific packages of football drills with psych up strategies and without psych up strategies group, specific packages of football drills with psych up strategies and control group and specific packages of football drills without psych up strategies and control group.

The ordered adjusted means on passing were presented through bar diagram for better understanding of the results of this study in Figure-59.

**FIGURE-59**  
**BAR DIAGRAM ON ORDERED ADJUSTED MEANS OF**  
**PASSING**



#### 4.4.6.1 DISCUSSIONS ON THE FINDINGS OF PASSING

The results presented in Table XIV showed that obtained adjusted means on passing among specific packages of football drills with psych up strategies group was 9.58, followed by specific packages of football drills without psych up strategies group with mean value of 8.47, control group mean values of 7.41. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 0.12, 10.10 and 13.20 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23.

The post hoc analysis through Scheffe's Confidence test proved that due to twelve specific packages of football drills with psych up strategies group and specific packages of football drills without psych up strategies group improved passing than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis shows that there was a significant difference between the experimental groups, clearly indicating that specific packages of football drills with psych up strategies was significantly better than the specific packages of football drills without psych up strategies in improving the passing of the inter collegiate level football players. The finding of this study is in line with the study undertaken by Robert M Malina, et al., (2005).

#### 4.4.7 RESULTS ON SHOOTING

The Game skill variable, shooting was measured through Morgan Christian soccer ability test. The results on the effect of specific packages of football drills with and without psych up strategies is presented in Table XVI

**TABLE XVI**  
**COMPUTATION OF ANALYSIS OF COVARIANCE ON**  
**SHOOTING**

(Scores in Counts)

Test	Means			Source of Variance	Sum of Square	Degrees of freedom	Mean Square	Obtained F
	Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group					
Pre test	96.80	99.60	101.47	Between	165.51	2	82.76	0.81
				Within	4275.73	42	101.80	
Post test	116.40	109.87	106.67	Between	738.31	2	369.16	5.42*
				Within	2858.67	42	68.06	
Adjusted	117.17	109.77	105.99	Between	933.96	2	466.98	7.82*
				Within	2448.85	41	59.73	
Mean gain	19.6	10.27	5.2					

Table F-ratio at 0.05 level of confidence for 2 and 42 (df) =3.22, 2 and 41(df) =3.23

\*Significant

Table XVI shows that the pre test mean scores of shooting of specific packages of football drills with psych up strategies group was 96.80, specific packages of football drills without psych up strategies group was 99.60 and control group was 101.47. The

post test means showed differences due to specific packages of football drills and mean values recorded were 116.40, 109.87 and 106.67 respectively.

The obtained F value on pre test scores 0.81 was less than the required F value of 3.22 to be significant at 0.05 level. This proved that there was no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post test scores analysis proved that there was significant difference between the groups, as the obtained F value 5.42 was greater than the required F value of 3.22. This proved that the differences between the post test means of the subjects were significant.

Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value of 7.82 was greater than the required F value of 3.23. This proved that there were significant differences among the means due experimental trainings on shooting.

Since significant improvements were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in Table- XVII

**TABLE XVII**  
**SCHEFFE'S CONFIDENCE INTERVAL TEST SCORES ON**  
**SHOOTING**

(Scores in Counts)

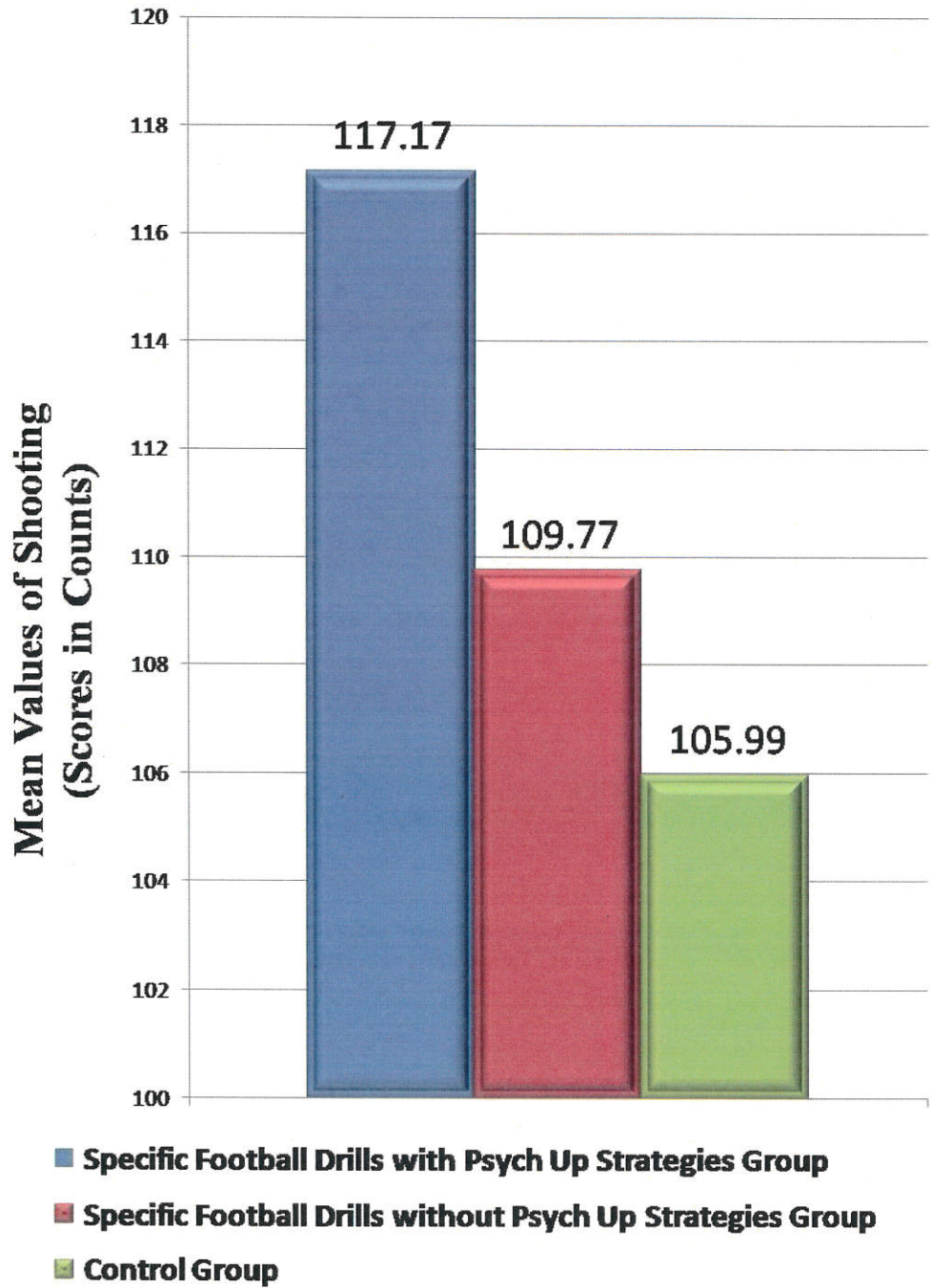
MEANS			MEAN DIFFERENCE	REQUIRED C I
Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group		
117.17	109.77	-	7.40*	7.17
117.17	-	105.99	11.18*	7.17
-	109.77	105.99	3.78	7.17

\* Significant

The multiple mean comparisons shown in Table XVII proved that there existed significant differences between the adjusted means of specific packages of football drills with psych up strategies and without psych up strategies group, specific packages of football drills with psych up strategies and control group and there was no significant difference between specific packages of football drills without psych up strategies and control group.

The ordered adjusted means on shooting were presented through bar diagram for better understanding of the results of this study in Figure-60.

**FIGURE-60**  
**BAR DIAGRAM ON ORDERED ADJUSTED MEANS OF SHOOTING**



#### 4.4.7.1 DISCUSSIONS ON THE FINDINGS OF SHOOTING

The results presented in Table XVI showed that obtained adjusted means on shooting among specific packages of football drills with psych up strategies group was 117.17, followed by specific packages of football drills without psych up strategies group with mean value of 109.77, control group mean values of 105.99. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 0.81, 5.42 and 7.82 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23.

The post hoc analysis through Scheffe's Confidence test proved that due to specific packages of football drills with psych up strategies group and specific packages of football drills without psych up strategies group improved shooting than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis shows that there was significant difference between the experimental groups, clearly indicating that specific packages of football drills with psych up strategies was significantly better than the specific packages of football drills without psych up strategies in improving the shooting of the inter collegiate level football players. The finding of this study is in line with the study undertaken by Papaionnou, (2004) and Stone Oliver, (2009).

#### 4.4.8 RESULTS ON DRIBBLING

The Game skill fitness variable, dribbling was measured through Morgan Christian soccer ability test. The results on the effect of specific packages of football drills with and without psych up strategies is presented in Table XVIII

**TABLE XVIII**  
**COMPUTATION OF ANALYSIS OF COVARIANCE ON**  
**DRIBBLING**

(Scores in Seconds)

Test	Means			Source of Variance	Sum of Square	Degrees of freedom	Mean Square	Obtained F
	Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group					
Pre test	15.54	15.81	15.91	Between	1.13	2	0.57	0.89
				Within	26.55	42	0.63	
Post test	13.70	14.45	15.32	Between	19.72	2	9.86	16.14*
				Within	25.66	42	0.61	
Adjusted	13.85	14.41	15.22	Between	13.78	2	6.89	19.94*
				Within	14.17	41	0.35	
Mean gain	1.84	1.36	0.59					

Table F-ratio at 0.05 level of confidence for 2 and 42 (df) =3.22, 2 and 41(df) =3.23

\*Significant

Table XVIII shows that the pre test mean scores of dribbling of specific packages of football drills with psych up strategies group was 15.54, specific packages of football drills without psych up strategies group was 15.81 and control group was 15.91. The post

test means showed differences due to specific packages of football drills and mean values recorded were 13.70, 14.45 and 15.32 respectively.

The obtained F value on pre test scores 0.89 was less than the required F value of 3.22 to be significant at 0.05 level. This proved that there was no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post test scores analysis proved that there was significant difference between the groups, as the obtained F value 16.14 was greater than the required F value of 3.22. This proved that the differences between the post test means of the subjects were significant.

Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value of 19.94 was greater than the required F value of 3.23. This proved that there was a significant difference among the means due to experimental trainings on dribbling.

Since significant improvements were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in Table-XIX

**TABLE XIX**  
**SCHEFFE'S CONFIDENCE INTERVAL TEST SCORES ON**  
**DRIBBLING**

(Scores in Seconds)

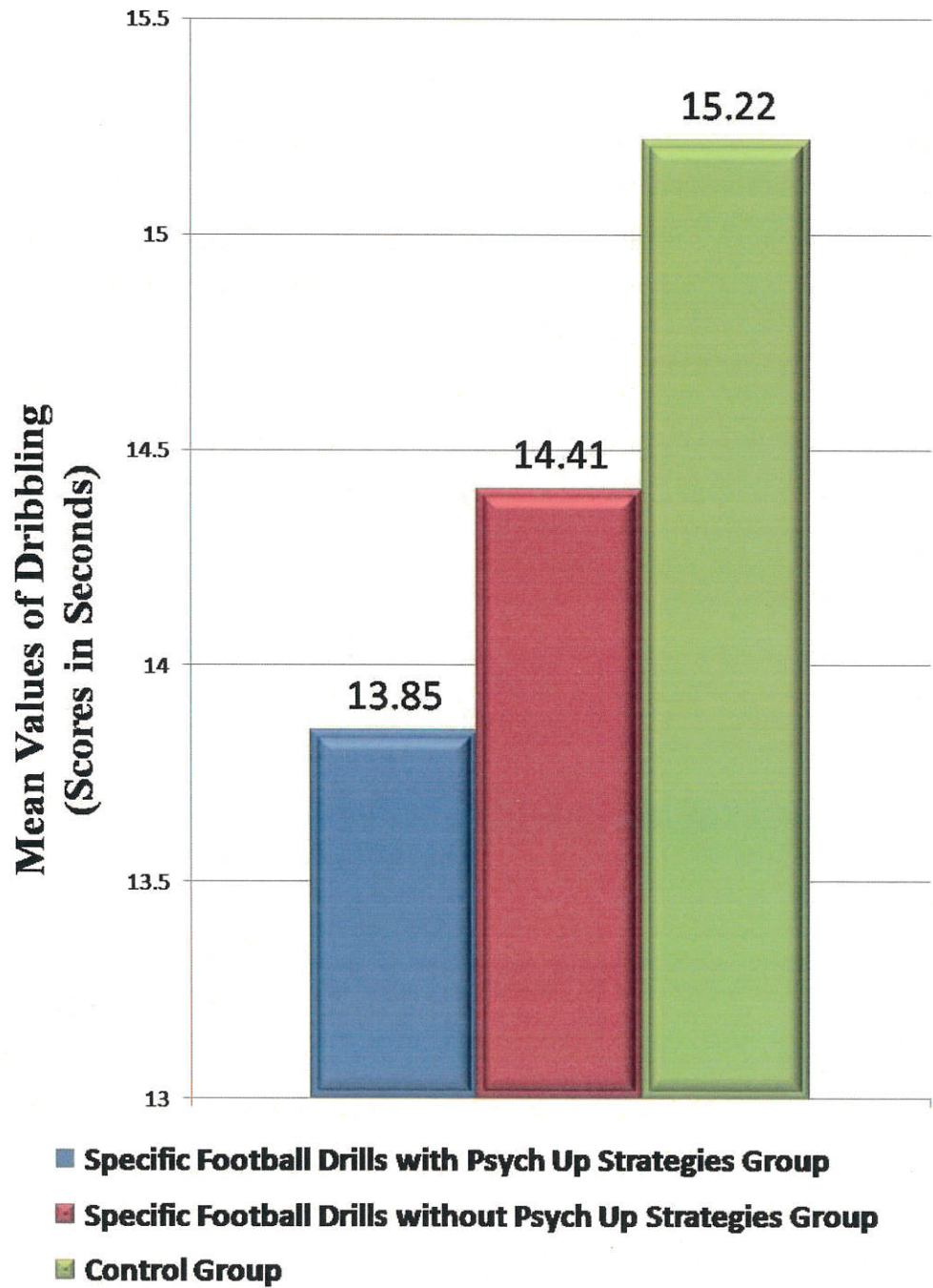
MEANS			MEAN DIFFERENCE	REQUIRED C I
Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group		
13.85	14.41	-	0.57*	0.55
13.85	-	15.22	1.37*	0.55
	14.41	15.22	0.81*	0.55

\* Significant

The multiple mean comparisons shown in Table XIX proved that there existed significant differences between the adjusted means of specific packages of football drills with psych up strategies and without psych up strategies group, specific packages of football drills with psych up strategies and control group and specific packages of football drills without psych up strategies and control group.

The ordered adjusted means on dribbling were presented through bar diagram for better understanding of the results of this study in Figure-61.

**FIGURE-61**  
**BAR DIAGRAM ON ORDERED ADJUSTED MEANS OF**  
**DRIBBLING**



#### 4.4.8.1 DISCUSSIONS ON THE FINDINGS OF DRIBBLING

The results presented in Table XVIII showed that obtained adjusted means on dribbling among specific packages of football drills with psych up strategies group was 13.85, followed by specific packages of football drills without psych up strategies group with mean value of 14.41 and control group mean values of 15.22. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 0.89, 16.14 and 19.94 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23.

The post hoc analysis through Scheffe's Confidence test proved that due to specific packages of football drills with psych up strategies group and specific packages of football drills without psych up strategies group improved dribbling than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis shows that there was significant difference between the experimental groups, clearly indicating that specific packages of football drills with psych up strategies was significantly better than the specific packages of football drills without psych up strategies in improving the dribbling of the inter collegiate level football players. The finding of this study is in line with the study undertaken by Stone Oliver, (2009), Pui-Lam Wong, (2011), Barbara Huijgen, (2010) and Robert Malina, (2005).

#### 4.4.9 RESULTS ON KICKING FOR DISTANCE, RIGHT FOOT

The Game skill variable, kicking for distance, right foot was measured through warner test for soccer skill. The results on the effect of specific packages of football drills with and without psych up strategies is presented in Table XX

**TABLE XX**

**COMPUTATION OF ANALYSIS OF COVARIANCE ON  
KICKING FOR DISTANCE, RIGHT FOOT**

(Scores in Meters)

Test	Means			Source of Variance	Sum of Square	Degrees of freedom	Mean Square	Obtained F
	Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group					
Pre test	36.20	37.97	38.71	Between	49.98	2	24.99	2.01
				Within	521.10	42	12.41	
Post test	42.80	41.00	38.63	Between	131.51	2	65.76	5.20*
				Within	530.91	42	12.64	
Adjusted	43.60	40.81	38.02	Between	213.91	2	106.95	11.89*
				Within	368.72	41	8.99	
Mean gain	6.6	3.02	0.09					

Table F-ratio at 0.05 level of confidence for 2 and 42 (df) =3.22, 2 and 41(df) =3.23

\*Significant

Table XX shows that the pre test mean scores of kicking for distance, right foot of specific packages of football drills with psych up strategies group was 36.20, specific packages of football drills without psych up strategies group was 37.97 and control group

was 38.71. The post test means showed differences due to specific football drills and mean values recorded were 42.80, 41.00 and 38.63 respectively.

The obtained F value on pre test scores 2.01 was less than the required F value of 3.22 to be significant at 0.05 level. This proved that there was no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post test scores analysis proved that there was significant difference between the groups, as the obtained F value 5.20 was greater than the required F value of 3.22. This proved that the differences between the post test means of the subjects were significant.

Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value of 11.89 was greater than the required F value of 3.23. This proved that there was significant difference among the means due to experimental trainings on kicking for distance, right foot.

Since significant improvements were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in Table-XXI

**TABLE - XXI**  
**SCHEFFE'S CONFIDENCE INTERVAL TEST SCORES ON**  
**KICKING FOR DISTANCE, RIGHT FOOT**

(Scores in Meters)

MEANS			MEAN DIFFERENCE	REQUIRED C I
Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group		
43.60	40.81	-	2.79*	2.78
43.60	-	38.02	5.58*	2.78
	40.81	38.02	2.79*	2.78

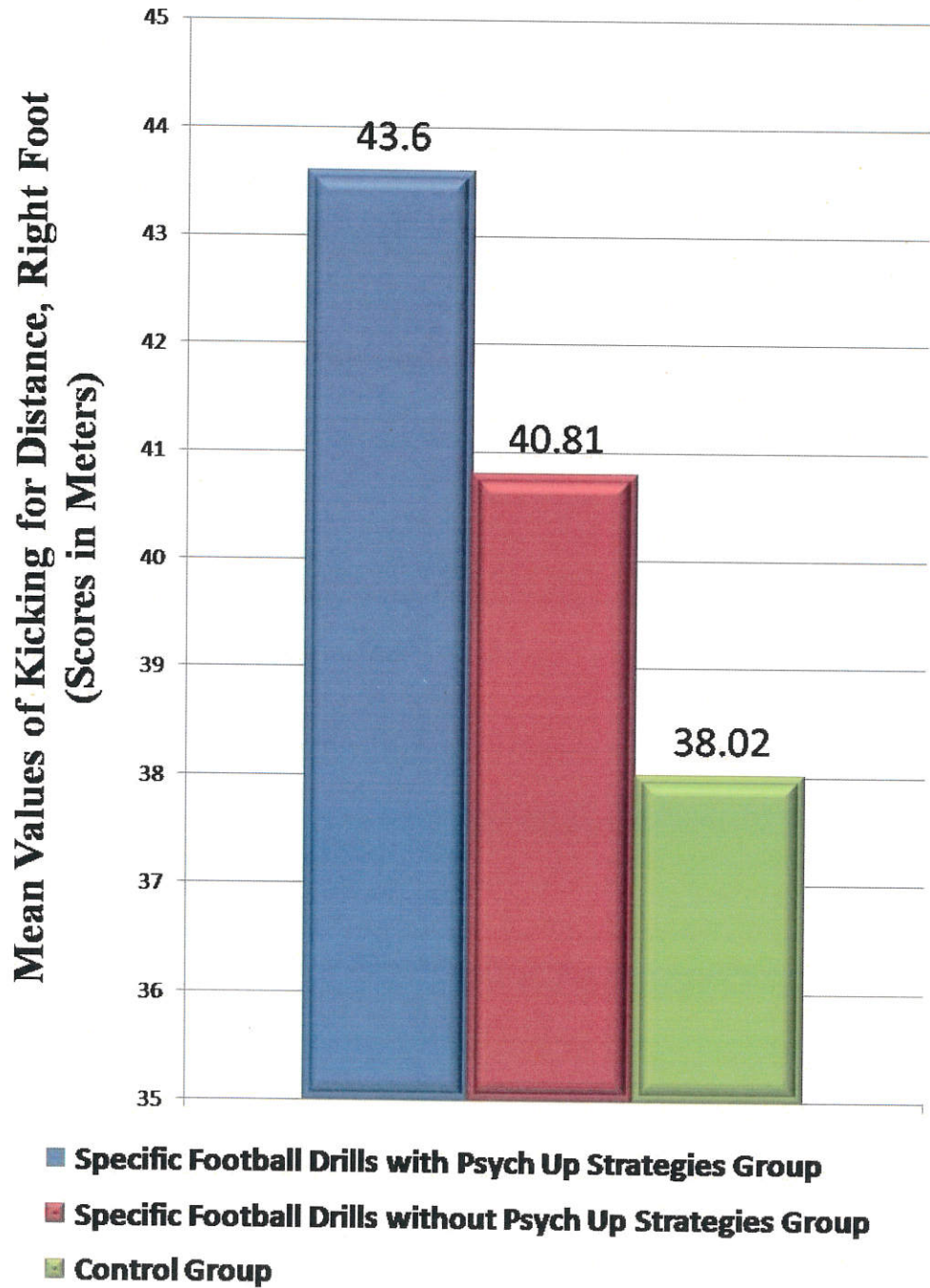
\* Significant

The multiple mean comparisons shown in Table XXI proved that there existed significant differences between the adjusted means of specific packages of football drills with psych up strategies and without psych up strategies group, specific packages of football drills with psych up strategies and control group and specific packages of football drills without psych up strategies and control group.

The ordered adjusted means on kicking for distance, right foot were presented through bar diagram for better understanding of the results of this study in Figure-62

FIGURE-62

BAR DIAGRAM ON ORDERED ADJUSTED MEANS OF KICKING FOR DISTANCE, RIGHT FOOT



#### **4.4.9.1 DISCUSSIONS ON THE FINDINGS OF KICKING FOR DISTANCE, RIGHT FOOT**

The results presented in Table XVIII showed that obtained adjusted means on kicking for distance, right foot among specific packages of football drills with psych up strategies group was 43.60, followed by specific packages of football drills without psych up strategies group with mean value of 40.81, control group mean values of 38.02. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 2.01, 5.20 and 11.89 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23.

The post hoc analysis through Scheffe's Confidence test proved that due to specific packages of football drills with psych up strategies group and specific packages of football drills without psych up strategies group improved kicking for distance, right foot than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis shows that there was significant difference between the experimental groups, clearly indicating that specific packages of football drills with psych up strategies was significantly better than the specific packages of football drills without psych up strategies in improving the kicking for distance, right foot of the inter collegiate level football players. The finding of this study is in line with the study undertaken by Johnson, Premkumar and Mariayyah, (2007), McLean and Tumilty (1993) and Muthukumar and Sundaramoorthy, (2011).

#### 4.4.10 RESULTS ON KICKING FOR DISTANCE, LEFT FOOT

The Game skill variable, kicking for distance, left foot was measured through warner test for soccer skill. The results on the effect of specific football drills with and without psych up strategies is presented in Table XXII

**TABLE XXII**  
**COMPUTATION OF ANALYSIS OF COVARIANCE ON**  
**KICKING FOR DISTANCE, LEFT FOOT**

(Scores in Meters)

Test	Means			Source of Variance	Sum of Square	Degrees of freedom	Mean Square	Obtained F
	Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group					
Pre test	21.93	20.19	21.31	Between	23.24	2	11.62	1.71
				Within	284.86	42	6.78	
Post test	25.72	22.87	22.08	Between	109.69	2	54.84	8.32*
				Within	276.81	42	6.59	
Adjusted	25.07	23.65	21.95	Between	72.93	2	36.47	17.46*
				Within	85.65	41	2.09	
Mean gain	3.79	2.67	0.77					

Table F-ratio at 0.05 level of confidence for 2 and 42 (df) =3.22, 2 and 41(df) =3.23

\*Significant

Table XXII shows that the pre test mean scores of kicking for distance, left foot of specific packages of football drills with psych up strategies group was 21.93, specific packages of football drills without psych up strategies group was 20.19 and control group

The pre test mean was 21.31. The post test means showed differences due to specific packages of football drills and mean values recorded were 25.72, 22.87 and 22.08 respectively.

The obtained F value on pre test scores 1.71 was less than the required F value of 3.22 to be significant at 0.05 level. This proved that there was no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post test scores analysis proved that there was significant difference between the groups, as the obtained F value 8.32 was greater than the required F value of 3.22. This proved that the differences between the post test means of the subjects were significant.

Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value of 17.46 was greater than the required F value of 3.23. This proved that there was a significant difference among the means due to experimental trainings on kicking for distance, left foot.

Since significant improvements were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in Table-XXIII

TABLE XXIII

TABLE XXIII

SCHEFFE'S CONFIDENCE INTERVAL TEST SCORES ON  
KICKING FOR DISTANCE, LEFT FOOT

(Scores in Meters)

MEANS			MEAN DIFFERENCE	REQUIRED C I
Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group		
25.07	23.65	-	1.43*	1.34
25.07	-	21.95	3.13*	1.34
	23.65	21.95	1.70*	1.34

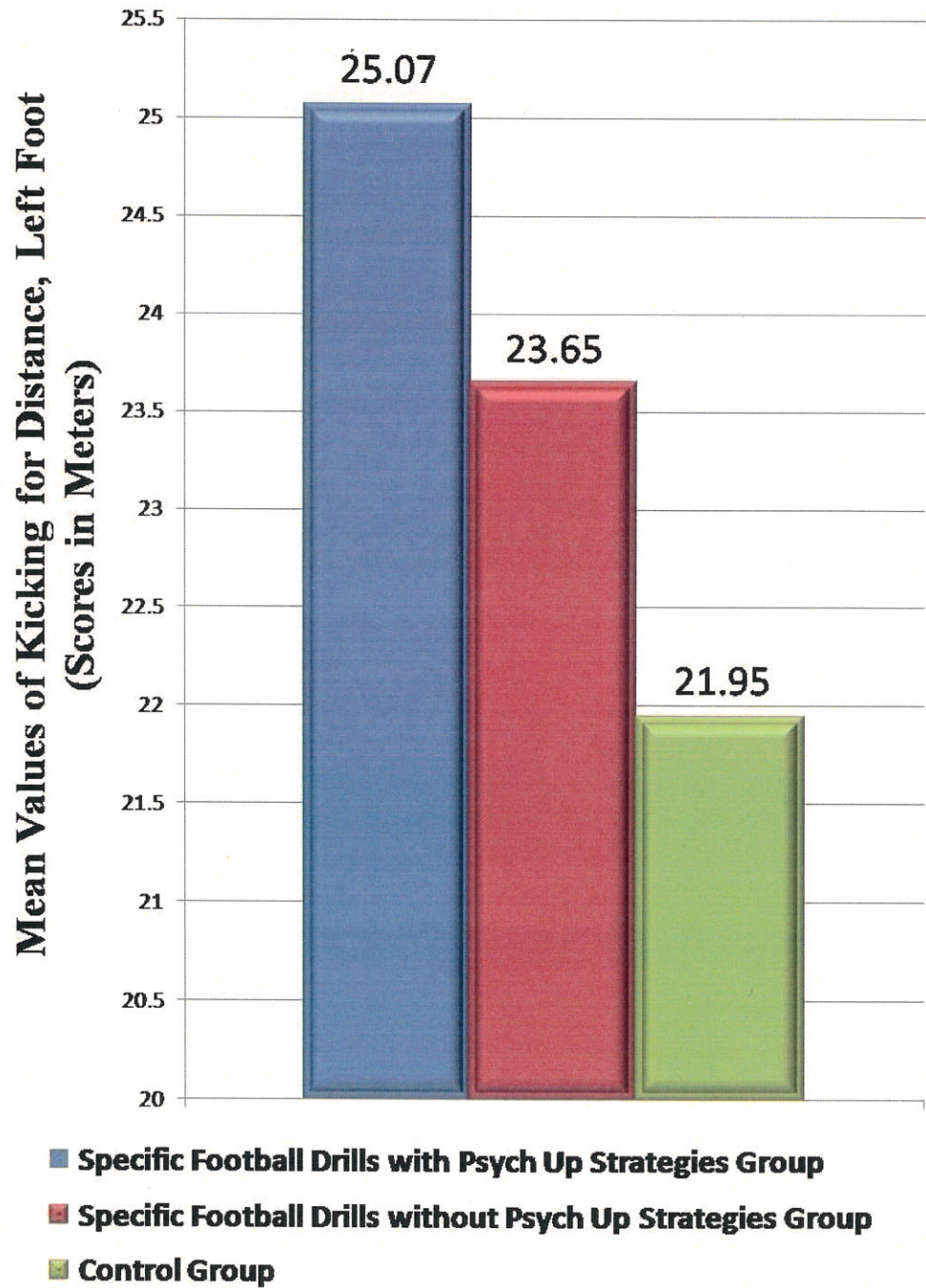
\* Significant

The multiple mean comparisons shown in Table XXIII proved that there existed significant differences between the adjusted means of specific packages of football drills with psych up strategies and without psych up strategies group, specific packages of football drills with psych up strategies and control group and specific packages of football drills without psych up strategies and control group.

The ordered adjusted means on kicking for distance, left foot were presented through bar diagram for better understanding of the results of this study in Figure-63

FIGURE-63

BAR DIAGRAM ON ORDERED ADJUSTED MEANS OF  
KICKING FOR DISTANCE, LEFT FOOT



#### 4.4.10.1 DISCUSSIONS ON THE FINDINGS OF KICKING FOR DISTANCE,

##### LEFT FOOT

The results presented in Table XXII showed that obtained adjusted means on kicking for distance, left foot among specific packages of football drills with psych up strategies group was 25.07, followed by specific packages of football drills without psych up strategies group with mean value of 23.65, control group mean values of 21.95. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 1.71, 8.32 and 17.46 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23.

The post hoc analysis through Scheffe's Confidence test proved that due to specific packages of football drills with psych up strategies group and specific packages of football drills without psych up strategies group improved kicking for distance, left foot than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis shows that there was significant difference between the experimental groups, clearly indicating that specific packages of football drills with psych up strategies was significantly better than the specific packages of football drills without psych up strategies in improving the kicking for distance, left foot of the inter collegiate level football players. The finding of this study is in line with the study undertaken by Rubley, (2011), Johnson Premkumar and Mariayyah, (2007), Muthukumar and Sundaramoorthy, (2011) and McLean and Tumilty, (1993).

**TABLE XXIV 4.4.11 RESULTS ON PLAYING ABILITY**

The Playing ability was measured through Subjective rating. The results on the effect of specific packages of football drills with and without psych up strategies is presented in Table XXIV

**TABLE XXIV  
COMPUTATION OF ANALYSIS OF COVARIANCE ON  
PLAYING ABILITY**

Test	Means			Source of Variance	Sum of Square	Degrees of freedom	Mean Square	Obtained F
	Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group					
Pre test	69.07	70.02	67.63	Between	43.53	2	21.76	0.88
				Within	1042.24	42	24.82	
Post test	75.34	72.27	66.36	Between	624.95	2	312.48	14.93*
				Within	879.06	42	20.93	
Adjusted	75.25	71.67	67.04	Between	500.02	2	250.01	17.57*
				Within	583.27	41	14.23	
Mean gain	6.27	2.25	1.27					

Table F-ratio at 0.05 level of confidence for 2 and 42 (df) =3.22, 2 and 41(df) =3.23

\*Significant

Table XXIV shows that the pre test mean scores of playing ability on specific packages of football drills with psych up strategies group was 69.07, specific packages of football drills without psych up strategies group was 70.02 and control group was 67.63.

The post test means showed differences due to specific packages of football drills and the mean values recorded were 75.34, 72.27 and 66.36 respectively.

The obtained F value on pre test scores 0.88 was less than the required F value of 3.22 to be significant at 0.05 level. This proved that there was no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post test scores analysis proved that there was significant difference between the groups, as the obtained F value 14.93 was greater than the required F value of 3.22. This proved that the differences between the post test means of the subjects were significant.

Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value of 17.57 was greater than the required F value of 3.23. This proved that there was a significant difference among the means due to specific football drills on playing ability.

Since significant improvements were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in Table-XXV

**TABLE -XXV**  
**SCHEFFE'S CONFIDENCE INTERVAL TEST SCORES ON**  
**PLAYING ABILITY**

MEANS			MEAN DIFFERENCE	REQUIRED C I
Specific Football Drills with Psych up Strategies	Specific Football Drills without Psych up Strategies	Control group		
75.25	71.67	-	3.58*	3.50
75.25	-	67.04	8.21*	3.50
	71.67	67.04	4.63*	3.50

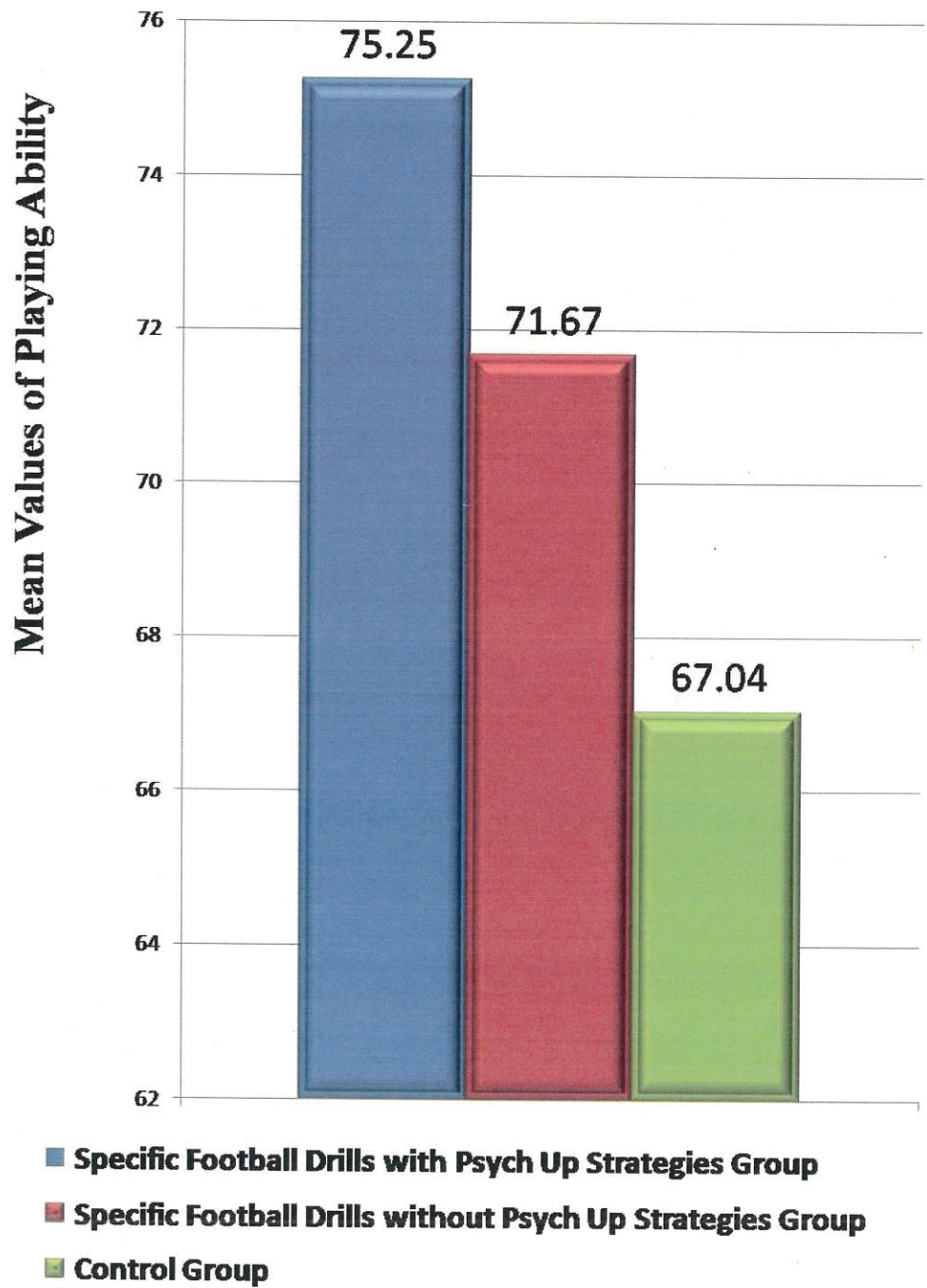
\* Significant

The multiple mean comparisons shown in Table XXV proved that there existed significant differences between the adjusted means of specific packages of football drills with psych up strategies and without psych up strategies group, specific packages of football drills with psych up strategies and control group and specific packages of football drills without psych up strategies and control group.

The ordered adjusted means on playing ability were presented through bar diagram for better understanding of the results of this study in Figure-64

FIGURE-64

BAR DIAGRAM ON ORDERED ADJUSTED MEANS OF  
PLAYING ABILITY



#### 4.4.11 DISCUSSIONS ON THE FINDINGS OF PLAYING ABILITY

The results presented in Table XXIV showed that obtained adjusted means on playing ability among specific packages of football drills with psych up strategies group was 75.25, followed by specific packages of football drills without psych up strategies group with mean value of 71.67 and control group mean values of 67.04. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 0.88, 14.93 and 17.57 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23.

The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training the specific packages of football drills with psych up strategies group and specific packages of football drills without psych up strategies group improved playing ability than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis shows that there was significant difference between the experimental groups, clearly indicating that specific packages of football drills with psych up strategies was significantly better than the specific packages of football drills without psych up strategies in improving the playing ability of the inter collegiate level football players. The finding of this study is in line with the study undertaken by Sawyer, (2002), Jaya Chitra, (2010), Kalidasan, (1999) and Natarajan and Vijayaragavan, (2011).

#### 4.5 DISCUSSION ON HYPOTHESES

The Investigator has formulated three important hypotheses to further progress his study.

1. The first hypothesis stated that the specific packages of football drills with psych up strategies would have a greater significant improvement on the selected physical fitness variables namely speed, agility, flexibility, explosive power and cardio vascular endurance than the specific packages of football drills without psych up strategies among inter collegiate football players.

The results presented in table IV, V, VI, VII, VIII, IX, X, XI, XII and XIII proved that the specific packages of football drills with psych up strategies had a greater significant improvement on the selected physical fitness variables namely speed, agility, flexibility, explosive power and cardio vascular endurance than the specific packages of football drills without psych up strategies among inter collegiate football players. Hence the formulated research hypothesis was accepted and the null hypothesis was rejected at 0.05 level.

2. The second hypothesis stated that the specific packages of football drills with psych up strategies would have a greater significant improvement on the selected game skill variables namely passing, shooting, dribbling, kicking for distance, right foot and kicking for distance, left foot than the specific packages of football drills without psych up strategies among inter collegiate football players.

The results presented in table XIV, XV, XVI, XVII, XVIII, XIX, XX, XXI, XXII and XXIII proved that the specific packages of football drills with psych up strategies had a greater significant improvement on the game skill variables namely passing, shooting, dribbling and kicking for distance, right foot and kicking for distance, left foot than the

specific packages of football drills without psych up strategies among inter collegiate football players. Hence the formulated research hypothesis was accepted and the null hypothesis was rejected at 0.05 level.

3. The third hypothesis stated that the specific packages of football drills with psych up strategies would have a greater significant improvement on playing ability than the specific packages of football drills without psych up strategies among inter collegiate football players.

The results presented in table XXIV and XXV proved that the specific packages of football drills with psych up strategies had a greater significant improvement on playing ability than the specific packages of football drills without psych up strategies among inter collegiate football players. Hence the formulated research hypothesis was accepted and the null hypothesis was rejected at 0.05 level.