### **CHAPTER - IV**

#### **RESULTS AND DISCUSSIONS**

### 4.1 OVER VIEW

This chapter deals with the test of significance, level of significance, computation of 't' test, computation of ANCOVA, discussion on finding and discussion on hypotheses were presented. The four groups namely game-specific field training group, game-specific field training with yogic practices group, game-specific field training with yogic practices and mental training and control group were analysed for the differences in their measures of physical, physiological, psychological and performance variables in relation to pre test, post test and adjusted post test scores.

The purpose of the study was to find out the influence of game-specific field training, yogic practice and mental training on selected physical, physiological, psychological and performance variables among cricket players.

To achieve the purpose of the study, sixty male inter-collegiate cricket players studying in various colleges affiliated to Bharathidasan University, Tiruchirappalli, Tamilnadu State, India were randomly selected as subjects and their ages ranged from 18 to 25 years. The subjects (N=60) were randomly assigned to four equal groups of fifteen subjects each. The requirement of the experiment procedures, testing as well as exercise schedule was explained to the subjects so as to get full co-operation of the effort required on their part and prior to the administration of the study.

Pre test was conducted for all the subjects on selected physical, physiological, psychological and performance variables. This initial test scores formed as pre test scores of the subjects. The groups were assigned as Experimental Group I, Experimental Group II, Experimental Group III and Control Group in an equivalent manner. Experimental Group I was exposed to game-specific field training, Experimental Group II was exposed to gamespecific field training with yogic practices, Experimental Group III was exposed to game-specific field training with yogic practices and mental training and Control Group was not exposed to any experimental training other than their regular daily activities. The duration of experimental period was 12 weeks. After the experimental treatment, all the sixty subjects were tested on their physical, physiological, psychological and performance variables. 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 dependant 't' test and 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 hypotheses.

### 4.2 TEST OF SIGNIFICANCE

This is the crucial portion of the thesis, that of arriving at the conclusion by examining the hypothesis. The procedure of testing the hypothesis in accordance with the results obtained in relation to the level of confidence which was fixed at 0.05 level, was considered necessary for this study. The tests are usually called as the test of significance, since we test whether the difference between the pre-test and post-test scores of the samples are significant or not. In the present study, if the obtained F-ratio was greater than the table F-ratio at 0.05 level, the hypothesis was accepted to the effect that there existed significant difference between the means of groups compared. And if the obtained, F-ratio was lesser than the table F-ratio at 0.05 level, then the hypothesis was rejected to the effect that there existed no significant difference between the means of groups under study.

### 4.3 LEVEL OF SIGNIFICANCE

To test the obtained results on all the variables, level of significance 0.05 was chosen and considered as sufficient for the study.

### 4.4 COMPUTATION OF 't' TEST

The primary objective of the paired 't' ratio was to describe the differences between the pre-test and post-test means of cricket players.

Thus the obtained results were interpreted with earlier studies and presented in this chapter well along with graphical presentations.

## TABLE - VII

# SIGNIFICANCE OF MEAN GAINS & LOSSES BETWEEN PRE AND POST TEST SCORES ON SELECTED VARIABLES OF GAME-SPECIFIC FIELD TRAINING GROUP

S.No	Variables	Pre- Test Mean	Post- Test Mean	Mean difference	Std. Dev (±)	σ DM	't' Ratio
1	Speed	7.77	7.73	0.47	0.19	0.50	9.35*
2	Explosive Strength	1.44	1.58	0.14	0.06	0.01	8.39*
3	Flexibility	25.74	28.54	2.79	3.71	0.95	2.91*
4	Systolic Blood Pressure	124.06	121.06	3.00	3.00	1.41	8.21*
5	Diastolic Blood Pressure	81.73	81.06	0.66	1.04	0.27	2.46*
6	Vital Capacity	3.32	3.79	0.46	0.14	0.03	12.77*
7	Anxiety	58.60	42.26	16.33	8.02	2.07	7.88*
8	Aggression	14.60	11.13	3.46	2.72	0.70	4.93*
9	Self Confidence	38.60	13.13	25.46	2.66	0.68	36.95*
10	Playing Ability	3.53	6.40	2.86	1.55	0.40	7.15*

\* Significant at 0.05 level. (Table value required for significance at 0.05 level of confidence df 14 was 2.14)

An examination of table-VII indicates that the obtained 't' ratios were 9.35, 8.39, 2.91, 8.21, 2.46, 12.77, 7.88, 4.93, 36.95 and 7.15 for speed, explosive strength, flexibility, systolic blood pressure, diastolic blood pressure, vital capacity, anxiety, aggression, self confidence and playing ability respectively. The obtained 't' ratios on the selected variables were found to be greater than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be significant. The results of this study showed that statistically significant and explained its effects positively.

## TABLE - VIII

# SIGNIFICANCE OF MEAN GAINS & LOSSES BETWEEN PRE AND POST TEST SCORES ON SELECTED VARIABLES OF GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES GROUP

S.No	Variables	Pre- Test Mean	Post- Test Mean	Mean difference	Std. Dev (±)	σ DM	't' Ratio
1	Speed	7.78	7.27	0.51	0.12	0.03	15.98*
2	Explosive Strength	1.41	1.62	.020	0.08	0.02	9.14*
3	Flexibility	24.10	29.38	5.28	3.69	0.95	5.54*
4	Systolic Blood Pressure	123.86	121.00	2.86	1.18	0.30	9.35*
5	Diastolic Blood Pressure	82.26	81.06	1.20	1.01	0.26	4.58*
6	Vital Capacity	3.26	3.85	0.58	0.14	0.03	15.99*
7	Anxiety	58.93	41.80	17.13	5.40	1.39	12.26*
8	Aggression	15.33	10.06	5.26	2.52	0.65	8.09*
9	Self Confidence	37.46	12.33	25.13	3.52	0.90	27.63*
10	Playing Ability	3.26	6.53	3.26	1.38	0.35	9.12*

\* Significant at 0.05 level. (Table value required for significance at 0.05 level of confidence df 14 was 2.14)

An examination of table-VIII indicates that the obtained't' ratios were 15.98, 9.14, 5.54, 9.35, 4.58, 15.99, 12.26, 8.09, 27.63 and 9.12 for speed, explosive strength, flexibility, systolic blood pressure, diastolic blood pressure, vital capacity, anxiety, aggression, self confidence and playing ability respectively. The obtained't' ratios on the selected variables were found to be greater than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be significant. The results of this study showed that statistically significant and explained its effects positively.

## TABLE - IX

# SIGNIFICANCE OF MEAN GAINS & LOSSES BETWEEN PRE AND POST TEST SCORES ON SELECTED VARIABLES OF GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES GROUP AND MENTAL TRAINING GROUP

S.No	Variables	Pre- Test Mean	Post- Test Mean	Mean difference	Std. Dev (±)	σ DM	ʻt' Ratio
1	Speed	7.75	7.16	0.59	0.16	0.04	14.09*
2	Explosive Strength	1.45	1.73	0.27	0.04	0.01	21.96*
3	Flexibility	24.70	32.88	8.17	4.27	1.10	7.40*
4	Systolic Blood Pressure	123.73	119.20	4.53	0.99	0.25	17.72*
5	Diastolic Blood Pressure	82.33	79.20	3.13	1.24	0.32	9.74*
6	Vital Capacity	3.28	4.02	0.74	0.11	0.02	24.99*
7	Anxiety	57.00	36.20	20.80	4.64	1.20	17.33*
8	Aggression	14.46	7.93	6.53	2.13	0.55	11.85*
9	Self Confidence	38.80	8.20	30.60	3.04	0.78	38.95*
10	Playing Ability	3.46	7.93	4.46	0.91	0.23	18.89*

\* Significant at 0.05 level. (Table value required for significance at 0.05 level of confidence df 14 was 2.14)

An examination of table-IX indicates that the obtained't' ratios were 14.09, 21.96, 7.40, 17.72, 9.74, 24.99, 17.33, 11.85, 38.95 and 18.89 for speed, explosive strength, flexibility, systolic blood pressure, diastolic blood pressure, vital capacity, anxiety, aggression, self confidence and playing ability respectively. The obtained't' ratios on the selected variables were found to be greater than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be significant. The results of this study showed that statistically significant and explained its effects positively.

## TABLE - X

# SIGNIFICANCE OF MEAN GAINS & LOSSES BETWEEN PRE AND POST TEST SCORES ON SELECTED VARIABLES OF CONTROL GROUP

S.No	Variables	Pre- Test Mean	Post- Test Mean	Mean difference	Std. Dev (±)	σ DM	ʻt' Ratio
1	Speed	7.84	7.78	0.05	0.15	0.03	1.33
2	Explosive Strength	1.43	1.46	0.02	0.08	0.02	1.12
3	Flexibility	25.41	25.53	0.13	2.66	0.68	0.19
4	Systolic Blood Pressure	124.26	124.00	0.26	1.03	0.26	1.00
5	Diastolic Blood Pressure	82.20	82.06	0.13	1.68	0.43	0.30
6	Vital Capacity	3.32	3.30	0.01	0.11	0.30	0.63
7	Anxiety	59.53	58.60	0.93	4.77	1.23	0.75
8	Aggression	15.66	15.06	0.60	1.84	0.42	1.26
9	Self Confidence	39.40	39.26	0.13	3.96	2.06	0.13
10	Playing Ability	3.06	3.33	0.26	0.79	0.20	1.29

Table value required for significance at 0.05 level of confidence df 14 was 2.14

An examination of table-X indicates that the obtained 't' ratios were 1.33, 1.12, 0.19, 1.00, 0.30, 0.63, 0.75, 1.26, 0.13 and 1.29 for speed, explosive strength, flexibility, systolic blood pressure, diastolic blood pressure, vital capacity, anxiety, aggression, self confidence and playing ability respectively. The obtained 't' ratios on the selected variables were found to be lesser than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be insignificant.

## 4.5 COMPUTATION OF ANALYSIS OF COVARIANCE

The following tables illustrate the statistical results of the game-specific field training, yogic practice and mental training on selected physical, physiological, psychological and performance variables among cricket players.

## TABLE - XI

# COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF GAME-SPECIFIC FIELD TRAINING, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES AND MENTAL TRAINING AND CONTROL GROUPS ON SPEED

	GSFT	GSFTYP	GSFTYPMT	CG	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test	7.77	7.78	7.75	7.84	BG	0.06	3	0.02	1.18
Means				7101	WG	1.06	56	0.01	
Post-Test	7.30	7.27	7.16	7.78	BG	3.49	3	1.16	108.14*
Means	7.50	1.21	7.10	7.70	WG	0.60	56	0.01	
Adjusted					BS	3.21	3	1.07	00 57*
Post-Test Means	7.30	7.27	7.16	7.78	WS	0.59	55	0.01	99.57*

BG- Between Group MeansBS – Between SetsWG- Within Group MeansWS- Within Setsdf- Degrees of FreedomWS- Within Sets

\* Significant at 0.05 level of confidence (Table Value for 0.05 Level for df 3 & 56 = 2.76) (Table Value for 0.05 Level for df 3 & 55 = 2.77)

### 4.6 **RESULTS OF SPEED**

An examination of table - XI indicated that the pretest means of gamespecific field training, game-specific field training with yogic practices, gamespecific field training with yogic practices and mental training and control groups were 7.77, 7.78, 7.75 and 7.84 respectively. The obtained F-ratio for the pre-test was 1.18 and the table F-ratio was 2.76. Hence the pre-test mean F-ratio was not significant at 0.05 level of confidence for the degree of freedom 3 and 56.

The post-test means of the game-specific field training, game-specific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 7.30, 7.27, 7.16 and 7.78 respectively. The obtained F-ratio for the post-test was 108.14 and the table F-ratio was 2.76. Hence the pre-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 56.

The adjusted post-test means of the game-specific field training, gamespecific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 7.30, 7.27, 7.16 and 7.78 respectively. The obtained F-ratio for the adjusted post-test means was 99.57 and the table F-ratio was 2.77. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 55.

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

### TABLE - XII

## THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED

	Adjusted P	ost-Test Means	Mean	Confidence	
GSFT	GSFTYP	GSFTYPMT	CG	Difference	Interval
7.30	7.27			0.03	
7.30		7.16		0.14*	
7.30			7.78	0.48*	0.10
	7.27	7.16		0.11*	0.10
	7.27		7.78	0.51*	
		7.16	7.78	0.62*	

### **MEANS ON SPEED**

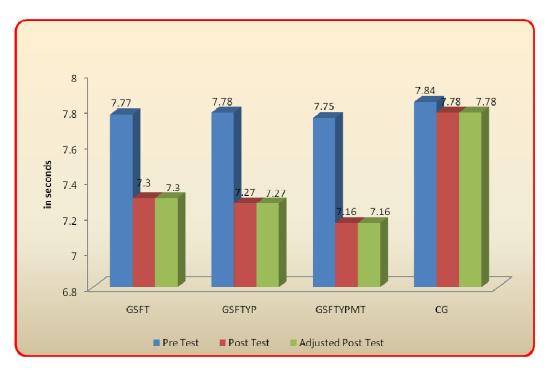
### \* Significant at 0.05 level of confidence

Table shows that the mean difference between game-specific field training and game-specific field training, yogic practices and mental training, game-specific field training and control group, game-specific field training with yogic practices and game-specific field training, yogic practices and mental training, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and control group, game-specific field training and control group, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and mental training and control group were 0.14, 0.48, 0.11, 0.51 and 0.62 respectively on speed are greater than the confidence interval value 0.10, which shows significant difference at 0.05 level of confidence.

The mean difference between game-specific field training and gamespecific field training with yogic practices groups was 0.03 on speed which was lesser than the confidence interval value 0.10, which shows no significant difference at 0.05 level of confidence.

The pre, post and adjusted means on speed were presented through bar diagram for better understanding of the results of this study in Figure-I.

# FIGURE - I PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, EXPERIMENTAL AND CONTROL GROUPS ON SPEED



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#### 4.6.1 DISCUSSION ON SPEED

The results presented in table XI showed that obtained adjusted means on speed among game-specific field training, yogic practices and mental training group was 7.16 followed by game-specific field training with yogic practices group with mean value of 7.27, followed by game-specific field training group was 7.30 and control group with mean value of 7.78. The differences among pre test scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 1.18, 108.14 and 99.57 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 2.76 and 2.77. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of game-specific field training with yogic practices and mental training has improved speed than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that game-specific field training, yogic practices and mental training group was significantly better than the other experimental groups in improving speed of the cricket players.

The study conducted by Samsudeen (2011) proved that there was an improvement in speed.

## TABLE - XIII

# COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF GAME-SPECIFIC FIELD TRAINING, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES AND MENTAL TRAINING AND CONTROL GROUPS ON EXPLOSIVE STRENGTH

	GSFT	GSFTYP	GSFTYPMT	CG	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test	1.44	1.41	1.45	1.43	BG	0.01	3	0.004	1.43
Means				1110	WG	0.14	56	0.003	
Post-Test	1.58	1.62	1.73	1.46	BG	0.54	3	0.18	52.84*
Means	1.00	1.02	1.75	1.10	WG	0.19	56	0.003	
Adjusted					BS	0.53	3	0.17	51.89*
Post-Test Means	1.58	1.62	1.72	1.46	WS	0.19	55	0.003	51.09

BG- Between Group MeansBS – Between SetsWG- Within Group MeansWS- Within Setsdf- Degrees of FreedomWS- Within Sets

\* Significant at 0.05 level of confidence (Table Value for 0.05 Level for df 3 & 56 = 2.76) (Table Value for 0.05 Level for df 3 & 55 = 2.77)

### 4.7 RESULTS OF EXPLOSIVE STRENGTH

An examination of table - XIII indicated that the pretest means of gamespecific field training, game-specific field training with yogic practices, gamespecific field training with yogic practices and mental training and control groups were 1.44, 1.41, 1.45 and 1.43 respectively. The obtained F-ratio for the pre-test was 1.43 and the table F-ratio was 2.76. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 3 and 56.

The post-test means of the game-specific field training, game-specific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 1.58, 1.62, 1.73 and 1.46 respectively. The obtained F-ratio for the post-test was 52.84 and the table F-ratio was 2.76. Hence the pre-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 56.

The adjusted post-test means of the game-specific field training, gamespecific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 1.58, 1.62, 1.72 and 1.46 respectively. The obtained F-ratio for the adjusted post-test means was 51.89 and the table F-ratio was 2.77. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 55.

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

#### **TABLE - XIV**

# THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON EXPLOSIVE STRENGTH

	Adjusted P	ost-Test Means	Mean	Confidence	
GSFT	GSFTYP	GSFTYPMT	CG	Difference	Interval
1.58	1.62			0.04	
1.58		1.72		0.14*	
1.58			1.46	0.12*	0.05
	1.62	1.72		0.10*	0.02
	1.62		1.46	0.16*	
		1.72	1.46	0.26*	

### \* Significant at 0.05 level of confidence

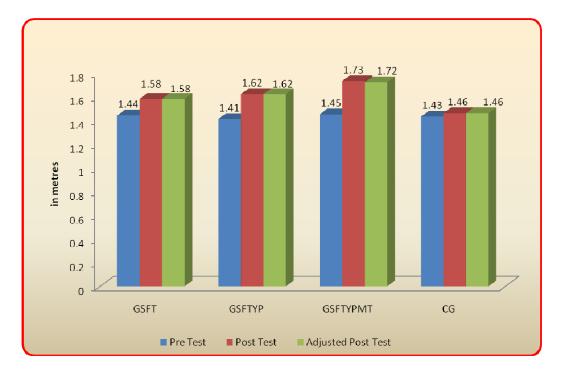
Table shows that the mean difference between game-specific field training and game-specific field training, yogic practices and mental training, game-specific field training and control group, game-specific field training with yogic practices and game-specific field training, yogic practices and mental training, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and control group, game-specific field training and control group, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and mental training and control group were 0.14, 0.12, 0.10, 0.16 and 0.26 respectively on explosive strength are greater than the confidence interval value 0.05, which shows significant difference at 0.05 level of confidence.

The mean difference between game-specific field training and gamespecific field training with yogic practices groups was 0.04 on explosive strength which was lesser than the confidence interval value 0.05, which shows no significant difference at 0.05 level of confidence.

The pre, post and adjusted means on explosive strength were presented through bar diagram for better understanding of the results of this study in Figure-II.

## FIGURE - II

# PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, EXPERIMENTAL AND CONTROL GROUPS ON



#### **EXPLOSIVE STRENGTH**

#### 4.7.1 DISCUSSION ON EXPLOSIVE STRENGTH

The results presented in table XIII showed that obtained adjusted means on explosive strength among game-specific field training, yogic practices and mental training group was 1.72 followed by game-specific field training with yogic practices group with mean value of 1.62, followed by game-specific field training group was 1.58 and control group with mean value of 1.46. 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 1.43, 52.84 and 51.89 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 2.76 and 2.77 respectively. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of game-specific field training with vogic practices and mental training has improved explosive strength than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that game-specific field training, yogic practices and mental training group was significantly better than the other experimental groups in improving explosive strength of the cricket players.

The study conducted by Samsudeen (2011) proved that there was an improvement in explosive strength.

## TABLE - XV

# COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF GAME-SPECIFIC FIELD TRAINING, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES AND MENTAL TRAINING AND CONTROL GROUPS ON FLEXIBILITY

	GSFT	GSFTYP	GSFTYPMT	CG	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test	25.74	24.10	24.70	25.41	BG	24.44	3	8.14	1.11
Means					WG	409.63	56	7.31	
Post-Test	28.54	29.38	32.88	25.55	BG	408.83	3	136.27	20.01*
Means	20.01	27.00	52.00	20.00	WG	381.29	56	6.80	
Adjusted					BS	409.14	3	136.38	19.75*
Post-Test Means	28.50	29.44	32.89	25.52	WS	379.71	55	6.90	19.75

BG- Between Group MeansBS – Between SetsWG- Within Group MeansWS- Within Setsdf- Degrees of FreedomWS- Within Sets

\*Significant at 0.05 level of confidence (Table Value for 0.05 Level for df 3 & 56 = 2.76) (Table Value for 0.05 Level for df 3 & 55 = 2.77)

#### 4.8 **RESULTS OF FLEXIBILITY**

An examination of table - XV indicated that the pretest means of gamespecific field training, game-specific field training with yogic practices, gamespecific field training with yogic practices and mental training and control groups were 25.74, 24.10, 24.70 and 25.41 respectively. The obtained F-ratio for the pre-test was 1.11 and the table F-ratio was 2.76. Hence the pre-test mean Fratio was not significant at 0.05 level of confidence for the degree of freedom 3 and 56.

The post-test means of the game-specific field training, game-specific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 28.54, 29.38, 32.88 and 25.55 respectively. The obtained F-ratio for the post-test was 20.01 and the table F-ratio was 2.76. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 56.

The adjusted post-test means of the game-specific field training, gamespecific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 28.50, 29.44, 32.89 and 25.52 respectively. The obtained F-ratio for the adjusted post-test means was 19.75 and the table F-ratio was 2.77. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 55.

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

### **TABLE - XVI**

# THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON FLEXIBILITY

	Adjusted P	ost-Test Means	Mean	Confidence	
GSFT	GSFTYP	GSFTYPMT	CG	Difference	Interval
28.50	29.44			0.94	
28.50		32.89		4.39*	
28.50			25.52	2.98*	2.76
	29.44	32.89		3.45*	2.70
	29.44		25.52	3.92*	
		32.89	25.52	7.37*	

### \* Significant at 0.05 level of confidence

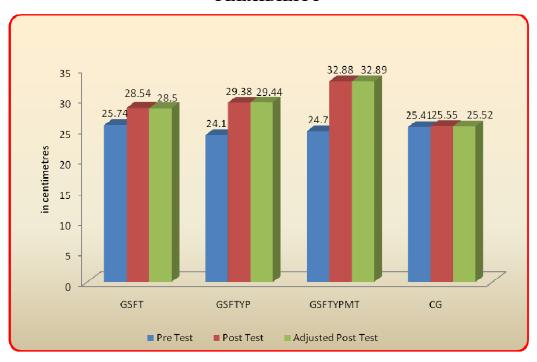
Table shows that the mean difference between game-specific field training and game-specific field training, yogic practices and mental training, game-specific field training and control group, game-specific field training with yogic practices and game-specific field training, yogic practices and mental training, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and control group, game-specific field training and control group, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and mental training and control group were 4.39, 2.98, 3.45, 3.92 and 7.37 respectively on flexibility are greater than the confidence interval value 2.76, which shows significant difference at 0.05 level of confidence.

The mean difference between game-specific field training and gamespecific field training with yogic practices groups was 0.94 on flexibility which was lesser than the confidence interval value 2.76, which shows no significant difference at 0.05 level of confidence.

The pre, post and adjusted means on flexibility were presented through bar diagram for better understanding of the results of this study in Figure-III.

### FIGURE - III

## PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, EXPERIMENTAL AND CONTROL GROUPS ON FLEXIBILITY



#### 4.8.1 DISCUSSION ON FLEXIBILITY

The results presented in table XV showed that obtained adjusted means on flexibility among game-specific field training, yogic practices and mental training group was 32.89, followed by game-specific field training with yogic practices group with mean value of 29.44, followed by game-specific field training group was 28.50 and control group with mean value of 25.52. 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 1.11, 20.01 and 19.75 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 2.76 and 2.77. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of gamespecific field training with yogic practices and mental training has improved flexibility than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that game-specific field training, yogic practices and mental training group was significantly better than the other experimental groups in improving flexibility of the cricket players.

The study conducted by Samsudeen (2011) proved that there was an improvement in flexibility.

## TABLE - XVII

## COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF GAME-SPECIFIC FIELD TRAINING, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES AND MENTAL TRAINING AND CONTROL GROUPS ON SYSTOLIC BLOOD PRESSURE

	GSFT	GSFTYP	GSFTYPMT	CG	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test	124.06	123.86	123.73	124.26	BG	2.45	3	0.81	1.18
Means	12.000	120100	120110		WG	38.53	56	0.68	
Post-Test	121.06	121.00	119.20	124.00	BG	177.65	3	59.21	113.05*
Means	121.00	121.00	117.20	124.00	WG	29.33	56	0.52	
Adjusted					BS	172.39	3	57.46	109.51*
Post-Test Means	121.07	120.98	119.17	124.03	WS	28.86	55	0.52	109.51*

BG- Between Group MeansBS – Between SetsWG- Within Group MeansWS- Within Setsdf- Degrees of FreedomWS- Within Sets

\*Significant at 0.05 level of confidence (Table Value for 0.05 Level for df 3 & 56 = 2.76) (Table Value for 0.05 Level for df 3 & 55 = 2.77)

### 4.9 RESULTS OF SYSTOLIC BLOOD PRESSURE

An examination of table - XVII indicated that the pretest means of gamespecific field training, game-specific field training with yogic practices, gamespecific field training with yogic practices and mental training and control groups were 124.06, 123.86, 123.73 and 124.26 respectively. The obtained Fratio for the pre-test was 1.18 and the table F-ratio was 2.76. Hence the pre-test mean F-ratio was not significant at 0.05 level of confidence for the degree of freedom 3 and 56.

The post-test means of the game-specific field training, game-specific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 121.06, 121.00, 119.20 and 124.00 respectively. The obtained F-ratio for the post-test was 113.05 and the table F-ratio was 2.76. Hence the pre-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 56.

The adjusted post-test means of the game-specific field training, gamespecific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 121.07, 120.98, 119.17 and 124.03 respectively. The obtained F-ratio for the adjusted post-test means was 109.51 and the table F-ratio was 2.77. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 55.

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

#### TABLE - XVIII

# THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON SYSTOLIC BLOOD PRESSURE

	Adjusted P	ost-Test Means	Mean	Confidence	
GSFT	GSFTYP	GSFTYPMT	CG	Difference	Interval
121.07	120.98			0.09	
121.07		119.17		1.90*	
121.07			124.03	2.96*	0.75
	120.98	119.17		1.81*	
	120.98		124.03	3.05*	
		119.17	124.03	4.86*	

\* Significant at 0.05 level of confidence

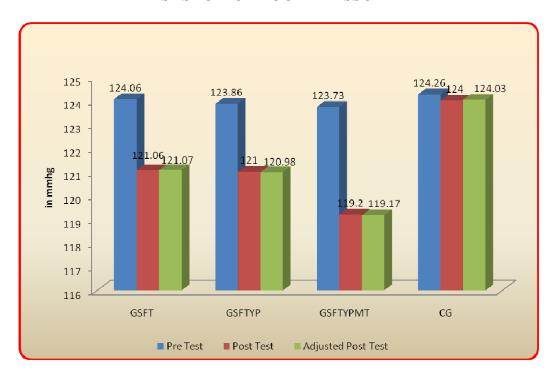
Table shows that the mean difference between game-specific field training and game-specific field training, yogic practices and mental training, game-specific field training and control group, game-specific field training with yogic practices and game-specific field training, yogic practices and mental training, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and control group, game-specific field training and control group, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and mental training and control group were 1.90, 2.96, 1.81, 3.05 and 4.86 respectively on systolic blood pressure are greater than the confidence interval value 0.75, which shows significant difference at 0.05 level of confidence.

The mean difference between game-specific field training and gamespecific field training with yogic practices groups was 0.09, on systolic blood pressure which was lesser than the confidence interval value 0.75, which shows no significant difference at 0.05 level of confidence.

The pre, post and adjusted means on systolic blood pressure were presented through bar diagram for better understanding of the results of this study in Figure-IV.

### FIGURE - IV

## PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, EXPERIMENTAL AND CONTROL GROUPS ON SYSTOLIC BLOOD PRESSURE



#### 4.9.1 DISCUSSION ON SYSTOLIC BLOOD PRESSURE

The results presented in table XVI showed that obtained adjusted means on systolic blood pressure among game-specific field training, yogic practices and mental training group was 119.17, followed by game-specific field training with yogic practices group with mean value of 120.98, followed by gamespecific field training group was 121.07 and control group with mean value of 124.03. 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 1.18, 113.05 and 109.51 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 2.76 and 2.77 respectively. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of game-specific field training with yogic practices and mental training has decreased systolic blood pressure than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that game-specific field training, yogic practices and mental training group was significantly better than the other experimental groups in decreased systolic blood pressure of the cricket players.

The study conducted by Sivakumar (2014) proved that there was an decrease in systolic blood pressure.

## TABLE - XIX

# COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF GAME-SPECIFIC FIELD TRAINING, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES AND MENTAL TRAINING AND CONTROL GROUPS ON DIASTOLIC BLOOD PRESSURE

	GSFT	GSFTYP	GSFTYPMT	CG	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test	81.73	82.26	82.33	82.20	BG	3.33	3	1.11	1.16
Means					WG	53.60	56	0.95	
Post-Test	81.06	81.06	79.20	82.06	BG	64.45	3	21.48	36.23*
Means	01.00	01.00	79.20	02.00	WG	33.20	56	0.59	
Adjusted					BS	63.72	3	21.24	35.28*
Post-Test Means	81.05	81.07	79.20	82.06	WS	33.11	55	0.60	55.28 <sup>4</sup>

BG- Between Group MeansBS – Between SetsWG- Within Group MeansWS- Within Sets2.76)df- Degrees of Freedom2.77)2.77)

\*Significant at 0.05 level of confidence (Table Value for 0.05 Level for df 3 & 56 =

(Table Value for 0.05 Level for df 3 & 55 =

#### 4.10 RESULTS OF DIASTOLIC BLOOD PRESSURE

An examination of table - XIX indicated that the pretest means of gamespecific field training, game-specific field training with yogic practices, gamespecific field training with yogic practices and mental training and control groups were 81.73, 82.26, 82.33 and 82.20 respectively. The obtained F-ratio for the pre-test was 1.16 and the table F-ratio was 2.76. Hence the pre-test mean Fratio was not significant at 0.05 level of confidence for the degree of freedom 3 and 56.

The post-test means of the game-specific field training, game-specific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 81.06, 81.06, 79.20 and 82.06 respectively. The obtained F-ratio for the post-test was 36.23 and the table F-ratio was 2.76. Hence the pre-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 56.

The adjusted post-test means of the game-specific field training, gamespecific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 81.05, 81.07, 79.20 and 82.06 respectively. The obtained F-ratio for the adjusted post-test means was 35.28 and the table F-ratio was 2.77. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 55.

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

### TABLE - XX

# THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON DIASTOLIC BLOOD PRESSURE

	Adjusted P	ost-Test Means	Mean	Confidence	
GSFT	GSFTYP	GSFTYPMT	CG	Difference	Interval
81.05	81.07			0.10	
81.05		79.20		1.96*	
81.05			82.06	0.90*	0.80
	81.07	79.20		1.86*	0100
	81.07		82.06	1.00*	
		79.20	82.06	2.86*	

\* Significant at 0.05 level of confidence

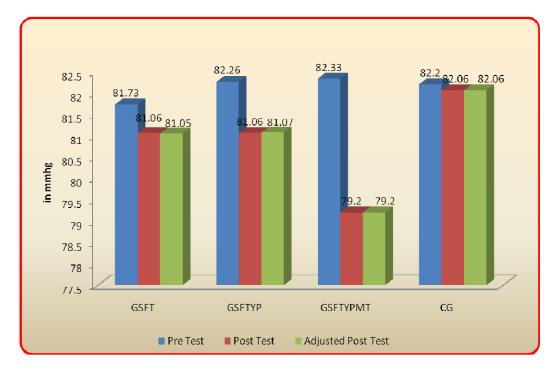
Table shows that the mean difference between game-specific field training and game-specific field training, yogic practices and mental training, game-specific field training and control group, game-specific field training with yogic practices and game-specific field training, yogic practices and mental training, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and control group, game-specific field training and control group, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and mental training and control group were 1.96, 0.90, 1.86, 1.00 and 2.86 respectively on diastolic blood pressure are greater than the confidence interval value 0.80, which shows significant difference at 0.05 level of confidence.

The mean difference between game-specific field training and gamespecific field training with yogic practices groups was 0.10 on diastolic blood pressure which was lesser than the confidence interval value 0.80, which shows no significant difference at 0.05 level of confidence.

The pre, post and adjusted means on diastolic blood pressure were presented through bar diagram for better understanding of the results of this study in Figure-V.

### FIGURE - V

# PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, EXPERIMENTAL AND CONTROL GROUPS ON DIASTOLIC BLOOD PRESSURE



#### 4.10.1 DISCUSSION ON DIASTOLIC BLOOD PRESSURE

The results presented in table XIX showed that obtained adjusted means on diastolic blood pressure among game-specific field training, yogic practices and mental training group was 79.20, followed by game-specific field training with yogic practices group with mean value of 81.07, followed by game-specific field training group was 81.05 and control group with mean value of 82.06. 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 1.16, 36.23 and 35.28 respectively. It was found that obtained F value on pre test scores was 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 2.76 and 2.77. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of gamespecific field training with yogic practices and mental training has decreased diastolic blood pressure than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that game-specific field training, yogic practices and mental training group was significantly better than the other experimental groups in improving diastolic blood pressure of the cricket players.

The study conducted by Sivakumar (2014) proved that there was an decrease in diastolic blood pressure.

### TABLE - XXI

## COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF GAME-SPECIFIC FIELD TRAINING, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES AND MENTAL TRAINING AND CONTROL GROUPS ON VITAL CAPACITY

	GSFT	GSFTYP	GSFTYPMT	CG	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test	3.32	3.26	3.28 3.32	3.32	BG	0.03	3	0.01	1.07
Means				5.20 5.52	WG	0.65	56	0.01	
Post-Test	3.79	3.85	4.02	3.30	BG	4.32	3	1.44	174.40*
Means	0117	0.00		0100	WG	0.46	56	0.008	
Adjusted	2 50	2.05	1.02	2.20	BS	4.29	3	1.43	174.45*
Post-Test Means	3.79	3.85	4.03	3.30	WS	0.45	55	0.008	1/7.73

BG- Between Group MeansBS – Between SetsWG- Within Group MeansWS- Within Setsdf- Degrees of Freedom

\*Significant at 0.05 level of confidence (Table Value for 0.05 Level for df 3 & 56 = 2.76) (Table Value for 0.05 Level for df 3 & 55 = 2.77)

#### 4.11 RESULTS OF VITAL CAPACITY

An examination of table - XXI indicated that the pretest means of gamespecific field training, game-specific field training with yogic practices, gamespecific field training with yogic practices and mental training and control groups were 3.32, 3.26, 3.28 and 3.32 respectively. The obtained F-ratio for the pre-test was 1.07 and the table F-ratio was 2.76. Hence the pre-test mean F-ratio was not significant at 0.05 level of confidence for the degree of freedom 3 and 56.

The post-test means of the game-specific field training, game-specific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 3.79, 3.85, 4.02 and 3.30 respectively. The obtained F-ratio for the post-test was 174.40 and the table F-ratio was 2.76. Hence the pre-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 56.

The adjusted post-test means of the game-specific field training, gamespecific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 3.79, 3.85, 4.03 and 3.30 respectively. The obtained F-ratio for the adjusted post-test means was 174.45 and the table F-ratio was 2.77. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 55.

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

### **TABLE - XXII**

# THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON VITAL CAPACITY

	Adjusted P	ost-Test Means	Mean	Confidence	
GSFT	GSFTYP	GSFTYPMT	CG	Difference	Interval
3.79	3.85			0.06	
3.79		4.03		0.24*	
3.79			3.30	0.49*	0.09
	3.85	4.03		0.18*	
	3.85		3.30	0.55*	
		4.03	3.30	0.73*	

\* Significant at 0.05 level of confidence

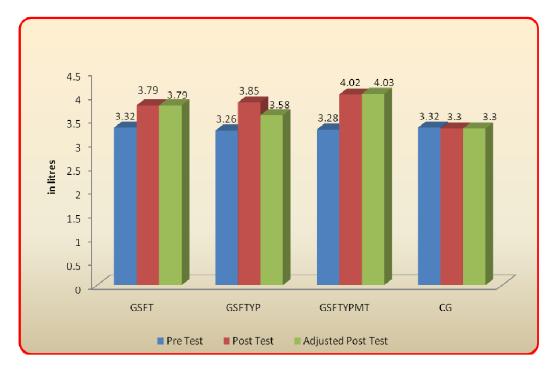
Table shows that the mean difference between game-specific field training and game-specific field training, yogic practices and mental training, game-specific field training and control group, game-specific field training with yogic practices and game-specific field training, yogic practices and mental training, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and mental training and control group were 0.24, 0.49, 0.18, 0.55 and 0.73 respectively on vital capacity are greater than the confidence interval value 0.09, which shows significant difference at 0.05 level of confidence.

The mean difference between game-specific field training and gamespecific field training with yogic practices groups was 0.06 on vital capacity which was lesser than the confidence interval value 0.09, which shows no significant difference at 0.05 level of confidence.

The pre, post and adjusted means on vital capacity were presented through bar diagram for better understanding of the results of this study in Figure-VI.

#### FIGURE - VI

### PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, EXPERIMENTAL AND CONTROL GROUPS ON VITAL CAPACITY



#### 4.11.1 DISCUSSION ON VITAL CAPACITY

The results presented in table XXI showed that obtained adjusted means on vital capacity among game-specific field training, yogic practices and mental training group was 4.03, followed by game-specific field training with yogic practices group with mean value of 3.85, followed by game-specific field training group was 3.79 and control group with mean value of 3.30. 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 1.07, 174.40 and 174.45 respectively. It was found that obtained F value on pre test scores was 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 2.76 and 2.77 respectively. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of game-specific field training with yogic practices and mental training has improved vital capacity than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that game-specific field training, yogic practices and mental training group was significantly better than the other experimental groups in improving vital capacity of the cricket players.

The study conducted by Divya and Shenbagavalli (2010) proved that there was an improvement in vital capacity.

### TABLE - XXIII

# COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF GAME-SPECIFIC FIELD TRAINING, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES AND MENTAL TRAINING AND CONTROL GROUPS ON ANXIETY

	GSFT	GSFTYP	GSFTYPMT	CG	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test	58.60	58.93	57.00	59.53	BG	52.71	3	17.57	1.08
Means					WG	910.26	56	16.25	
Post-Test	42.26	41.80	36.20	58.60	BG	4196.85	3	1398.95	82.00*
Means	12.20	11.00	50.20	50.00	WG	955.33	56	17.06	
Adjusted					BS	4070.29	3	1356.76	78.21*
Post-Test Means	42.27	41.81	36.14	58.63	WS	954.10	55	17.34	/0.21

BG- Between Group MeansBS – Between SetsWG- Within Group MeansWS- Within Setsdf- Degrees of Freedom

\*Significant at 0.05 level of confidence (Table Value for 0.05 Level for df 3 & 56 = 2.76) (Table Value for 0.05 Level for df 3 & 55 = 2.77)

#### 4.12 RESULTS OF ANXIETY

An examination of table - XXIII indicated that the pretest means of gamespecific field training, game-specific field training with yogic practices, gamespecific field training with yogic practices and mental training and control groups were 58.60, 58.93, 57.00 and 59.53 respectively. The obtained F-ratio for the pre-test was 1.08 and the table F-ratio was 2.76. Hence the pre-test mean Fratio was not significant at 0.05 level of confidence for the degree of freedom 3 and 56.

The post-test means of the game-specific field training, game-specific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 42.26, 41.80, 36.20 and 58.60 respectively. The obtained F-ratio for the post-test was 82.00 and the table F-ratio was 2.76. Hence the pre-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 56.

The adjusted post-test means of the game-specific field training, gamespecific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 42.27, 41.81, 36.14 and 58.63 respectively. The obtained F-ratio for the adjusted post-test means was 78.21 and the table F-ratio was 2.77. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 55.

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

#### **TABLE - XXIV**

# THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON ANXIETY

	Adjusted P	ost-Test Means	Mean	Confidence	
GSFT	GSFTYP	GSFTYPMT	CG	Difference	Interval
42.27	41.81			0.46	
42.27		36.14		6.13*	
42.27			58.63	16.36*	4.38
	41.81	36.14		5.67*	1.50
	41.81		58.63	16.82*	
		36.14	58.63	22.49*	

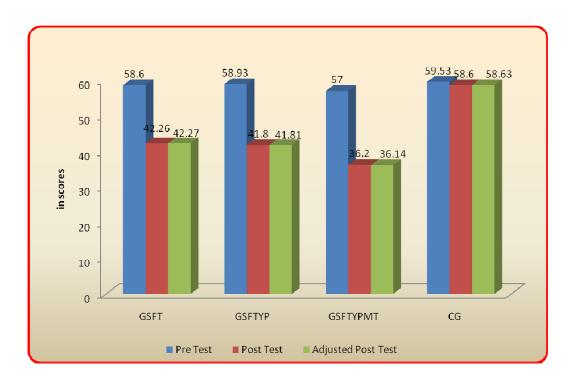
\* Significant at 0.05 level of confidence

Table shows that the mean difference between game-specific field training and game-specific field training, yogic practices and mental training, game-specific field training and control group, game-specific field training with yogic practices and game-specific field training, yogic practices and mental training, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and control group, game-specific field training and control group, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and mental training and control group were 6.13, 16.36, 5.67, 16.82 and 22.49 respectively on anxiety are greater than the confidence interval value 4.38, which shows significant difference at 0.05 level of confidence.

The mean difference between game-specific field training and gamespecific field training with yogic practices groups was 0.46 on anxiety which was lesser than the confidence interval value 4.38, which shows no significant difference at 0.05 level of confidence.

The pre, post and adjusted means on anxiety were presented through bar diagram for better understanding of the results of this study in Figure-VII.

# FIGURE - VII PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, EXPERIMENTAL AND CONTROL GROUPS ON ANXIETY



#### **4.12.1 DISCUSSION ON ANXIETY**

The results presented in table XXIII showed that obtained adjusted means on anxiety among game-specific field training, yogic practices and mental training group was 36.14, followed by game-specific field training with yogic practices group with mean value of 41.81, followed by game-specific field training group was 42.27 and control group with mean value of 58.63. 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 1.08, 82.00 and 78.21 respectively. It was found that obtained F value on pre test scores was 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 2.76 and 2.77 respectively. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of game-specific field training with yogic practices and mental training has decreased anxiety than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that gamespecific field training, yogic practices and mental training group was significantly better than the other experimental groups in decreasing anxiety of the cricket players.

The study conducted by Sivakumar (2014) proved that there was an decrease in anxiety.

### TABLE - XXV

# COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF GAME-SPECIFIC FIELD TRAINING, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES AND MENTAL TRAINING AND CONTROL GROUPS ON AGGRESSION

	GSFT	GSFTYP	GSFTYPMT	CG	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test	14.60	15.33	14.46 15.66	6 15.66	BG	14.98	3	4.99	1.37
Means					WG	204.00	56	3.64	
Post-Test	11.13	10.06	7.93	15.06	BG	402.31	3	134.10	49.23*
Means	11.10	10.00	1.55	12.00	WG	152.53	56	2.72	
Adjusted	11.10	10.00	0.00	4.4.00	BS	371.96	3	123.98	45.72*
Post-Test Means	11.18	10.02	8.00	14.98	WS	149.15	55	2.71	+3.72

BG- Between Group MeansBS – Between SetsWG- Within Group MeansWS- Within Setsdf- Degrees of FreedomWS- Within Sets

\*Significant at 0.05 level of confidence (Table Value for 0.05 Level for df 3 & 56 = 2.76) (Table Value for 0.05 Level for df 3 & 55 = 2.77)

#### 4.13 RESULTS OF AGGRESSION

An examination of table - XXV indicated that the pretest means of gamespecific field training, game-specific field training with yogic practices, gamespecific field training with yogic practices and mental training and control groups were 14.60, 15.33, 14.46 and 15.66 respectively. The obtained F-ratio for the pre-test was 1.37 and the table F-ratio was 2.76. Hence the pre-test mean Fratio was not significant at 0.05 level of confidence for the degree of freedom 3 and 56.

The post-test means of the game-specific field training, game-specific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 11.13, 10.06, 7.93 and 15.06 respectively. The obtained F-ratio for the post-test was 49.23 and the table F-ratio was 2.76. Hence the pre-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 56.

The adjusted post-test means of the game-specific field training, gamespecific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 11.18, 10.02, 8.00 and 14.98 respectively. The obtained F-ratio for the adjusted post-test means was 45.72 and the table F-ratio was 2.77. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 55.

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

#### **TABLE - XXVI**

# THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON AGGRESSION

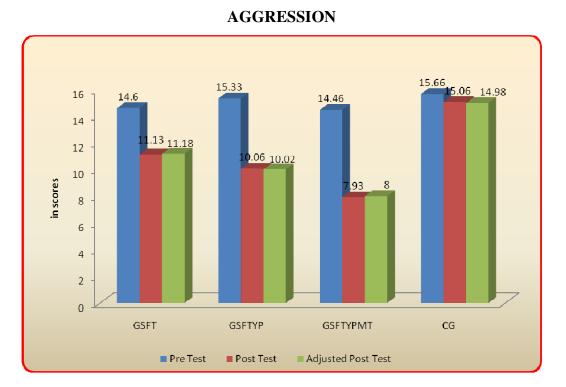
	Adjusted P	ost-Test Means	Mean	Confidence	
GSFT	GSFTYP	GSFTYPMT	CG	Difference	Interval
11.18	10.02			1.16	
11.18		8.00		3.18*	
11.18			14.98	3.80*	1.73
	10.02	8.00		2.02*	
	10.02		14.98	4.96*	
		8.00	14.98	6.98*	

\* Significant at 0.05 level of confidence

Table shows that the mean difference between game-specific field training and game-specific field training, yogic practices and mental training, game-specific field training and control group, game-specific field training with yogic practices and game-specific field training, yogic practices and mental training, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and mental training and control group were 3.18, 3.80, 2.02, 4.96 and 6.98 respectively on aggression are greater than the confidence interval value 1.73, which shows significant difference at 0.05 level of confidence.

The mean difference between game-specific field training and gamespecific field training with yogic practices groups was 1.16 on aggression which was lesser than the confidence interval value 1.73, which shows no significant difference at 0.05 level of confidence.

The pre, post and adjusted means on aggression were presented through bar diagram for better understanding of the results of this study in Figure-VIII.



#### **FIGURE - VIII**

PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE,

EXPERIMENTAL AND CONTROL GROUPS ON

#### 4.13.1 DISCUSSION ON AGGRESSION

The results presented in table XXV showed that obtained adjusted means on aggression among game-specific field training, yogic practices and mental training group was 8.00, followed by game-specific field training with yogic practices group with mean value of 10.02, followed by game-specific field training group was 11.18 and control group with mean value of 14.98. 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 1.37, 49.23 and 45.72 respectively. It was found that obtained F value on pre test scores was 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 2.76 and 2.77 respectively. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of game-specific field training with yogic practices and mental training has decreased aggression than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that game-specific field training, yogic practices and mental training group was significantly better than the other experimental groups in decreasing aggression of the cricket players.

The study conducted by Sathiyanarayanamoorthi. (2013) proved that there was an decrease in aggression.

### TABLE - XXVII

## COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF GAME-SPECIFIC FIELD TRAINING, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES AND MENTAL TRAINING AND CONTROL GROUPS ON SELF CONFIDENCE

	GSFT	GSFTYP	GSFTYPMT	CG	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test	38.60	37.46	38.80	38.80 39.40	BG	29.40	3	9.80	1.20
Means					WG	457.33	56	8.16	
Post-Test	13.13	12.33	8.20	39.26	BG	9058.33	3	3019.44	499.67*
Means	10.10	12.00	0.20	57.20	WG	338.40	56	6.04	
Adjusted	12.12				BS	8730.88	3	2910.29	497.02*
Post-Test Means	13.12	12.54	8.15	39.10	WS	322.05	55	5.85	197.02

BG- Between Group MeansBS – Between SetsWG- Within Group MeansWS- Within Setsdf- Degrees of FreedomWS- Within Sets

\*Significant at 0.05 level of confidence (Table Value for 0.05 Level for df 3 & 56 = 2.76) (Table Value for 0.05 Level for df 3 & 55 = 2.77)

#### 4.14 RESULTS OF SELF CONFIDENCE

An examination of table - XXVII indicated that the pretest means of game-specific field training, game-specific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 38.60, 37.46, 38.80 and 39.40 respectively. The obtained F-ratio for the pre-test was 1.20 and the table F-ratio was 2.76. Hence the pre-test mean F-ratio was notsignificant at 0.05 level of confidence for the degree of freedom 3 and 56.

The post-test means of the game-specific field training, game-specific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 13.13, 12.33, 8.20 and 39.26 respectively. The obtained F-ratio for the post-test was 499.67 and the table F-ratio was 2.76. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 56.

The adjusted post-test means of the game-specific field training, gamespecific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 13.12, 12.54, 8.15 and 39.10 respectively. The obtained F-ratio for the adjusted post-test means was 497.02 and the table F-ratio was 2.77. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 55.

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

#### **TABLE - XXVIII**

# THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON SELF CONFIDENCE

	Adjusted P	ost-Test Means	Mean	Confidence	
GSFT	GSFTYP	GSFTYPMT	CG	Difference	Interval
13.12	12.54			0.58	
13.12		8.15		4.97*	
13.12			39.10	25.98*	2.54
	12.54	8.15		4.39*	210 1
	12.54		39.10	26.56*	
		8.15	39.10	30.95*	

\* Significant at 0.05 level of confidence

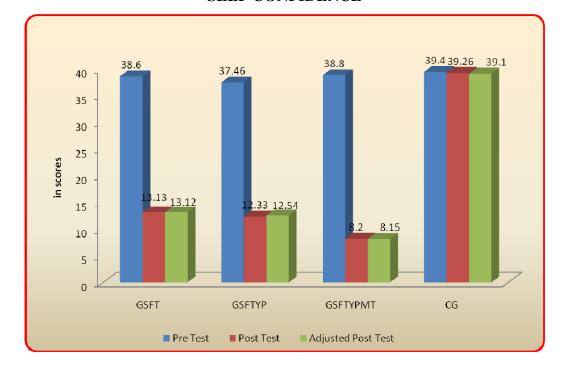
Table shows that the mean difference between game-specific field training and game-specific field training, yogic practices and mental training, game-specific field training and control group, game-specific field training with yogic practices and game-specific field training, yogic practices and mental training, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and control group, game-specific field training and control group, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and mental training and control group were 4.97, 25.98, 4.39, 26.56 and 30.95 respectively. on self confidence are greater than the confidence interval value 2.54, which shows significant difference at 0.05 level of confidence.

The mean difference between game-specific field training and gamespecific field training with yogic practices groups was 0.58 on self confidence which was lesser than the confidence interval value 2.54, which shows no significant difference at 0.05 level of confidence.

The pre, post and adjusted means on self confidence were presented through bar diagram for better understanding of the results of this study in Figure-IX.

### FIGURE - IX

### PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, EXPERIMENTAL AND CONTROL GROUPS ON SELF CONFIDENCE



#### **4.14.1 DISCUSSION ON SELF CONFIDENCE**

The results presented in table XXVII showed that obtained adjusted means on self confidence among game-specific field training, yogic practices and mental training group was 8.15, followed by game-specific field training with yogic practices group with mean value of 12.54, followed by game-specific field training group was 13.12 and control group with mean value of 39.10. 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 1.20, 499.67 and 497.02 respectively. It was found that obtained F value on pre test scores was 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 2.76 and 2.77 respectively. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of game-specific field training with yogic practices and mental training has improved self confidence than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that game-specific field training, yogic practices and mental training group was significantly better than the other experimental groups in improving self confidence of the cricket players.

The study conducted by Sivakumar (2014) proved that there was an improvement in self confidence.

### TABLE - XXIX

## COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF GAME-SPECIFIC FIELD TRAINING, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES, GAME-SPECIFIC FIELD TRAINING WITH YOGIC PRACTICES AND MENTAL TRAINING AND CONTROL GROUPS ON PLAYING ABILITY

	GSFT	GSFTYP	GSFTYPMT	CG	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test	3.53 3.26 3.46 3.06	3.06	BG	2.00	3	0.66	1.19		
Means				5.00	WG	31.33	56	0.56	
Post-Test	6.40	6.53	7.93	3.33	BG	169.25	3	56.41	44.12*
Means	0110	0.00	,,,,,,	0.00	WG	71.60	56	1.27	
Adjusted	( 22		<b>7</b> 00	2.42	BS	152.69	3	50.89	41.24*
Post-Test Means	6.33	6.55	7.88	3.42	WS	67.87	55	1.23	71.27

BG- Between Group MeansBS – Between SetsWG- Within Group MeansWS- Within Setsdf- Degrees of Freedom

\*Significant at 0.05 level of confidence (Table Value for 0.05 Level for df 3 & 56 = 2.76) (Table Value for 0.05 Level for df 3 & 55 = 2.77)

#### 4.15 RESULTS OF PLAYING ABILITY

An examination of table - XXIX indicated that the pretest means of gamespecific field training, game-specific field training with yogic practices, gamespecific field training with yogic practices and mental training and control groups were 3.53, 3.26, 3.46 and 3.06 respectively. The obtained F-ratio for the pre-test was 1.19 and the table F-ratio was 2.76. Hence the pre-test mean F-ratio was not significant at 0.05 level of confidence for the degree of freedom 3 and 56.

The post-test means of the game-specific field training, game-specific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 6.40, 6.53, 7.93 and 3.33 respectively. The obtained F-ratio for the post-test was 44.12 and the table F-ratio was 2.76. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 56.

The adjusted post-test means of the game-specific field training, gamespecific field training with yogic practices, game-specific field training with yogic practices and mental training and control groups were 6.33, 6.55, 7.88 and 3.42 respectively. The obtained F-ratio for the adjusted post-test means was 41.24 and the table F-ratio was 2.77. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 3 and 55.

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

### THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON PLAYING ABILITY

	Adjusted P	ost-Test Means	Mean	Confidence	
GSFT	GSFTYP	GSFTYPMT	CG	Difference	Interval
6.33	6.55			0.22	
6.33		7.88		1.55*	
6.33			3.42	2.91*	1.16
	6.55	7.88		1.33*	1.10
	6.55		3.42	3.13*	
		7.88	3.42	4.46*	

\* Significant at 0.05 level of confidence

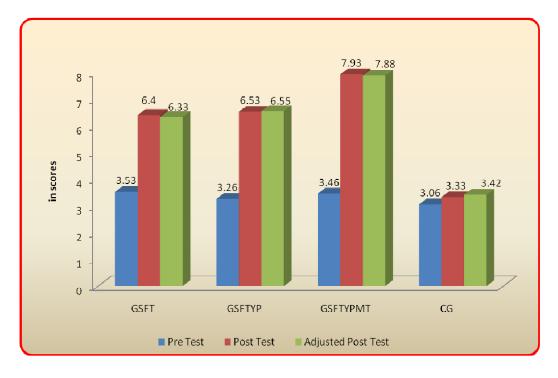
Table shows that the mean difference between game-specific field training and game-specific field training, yogic practices and mental training, game-specific field training and control group, game-specific field training with yogic practices and game-specific field training, yogic practices and mental training, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and control group, game-specific field training and control group, game-specific field training with yogic practices and control group, game-specific field training with yogic practices and mental training and control group were 1.55, 2.91, 1.33, 3.13 and 4.46 respectively on playing ability are greater than the confidence interval value 1.16, which shows significant difference at 0.05 level of confidence.

The mean difference between game-specific field training and gamespecific field training with yogic practices groups was 0.22 on playing ability which was lesser than the confidence interval value 1.16, which shows no significant difference at 0.05 level of confidence.

The pre, post and adjusted means on playing ability were presented through bar diagram for better understanding of the results of this study in Figure-X.

#### FIGURE - X

### PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, EXPERIMENTAL AND CONTROL GROUPS ON PLAYING ABILITY



#### 4.15.1 DISCUSSION ON PLAYING ABILITY

The results presented in table IX showed that obtained adjusted means on playing ability among game-specific field training, yogic practices and mental training group was 7.88, followed by game-specific field training with yogic practices group with mean value of 6.55, followed by game-specific field training group was 6.33 and control group with mean value of 3.42. 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 1.19, 44.12 and 41.24 respectively. It was found that obtained F value on pre test scores was 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 2.76 and 2.77 respectively. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of game-specific field training with yogic practices and mental training has improved playing ability than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that game-specific field training, yogic practices and mental training group was significantly better than the other experimental groups in improving playing ability of the cricket players.

The study conducted by Samsudeen (2011) proved that there was an improvement in playing ability.

### 4.16 DISCUSSION ON THE HYPOTHESES

1. First hypothesis stated that there would be a significant improvement on the selected physical, physiological, psychological and performance factors among Cricket players due to the influence of game-specific field training.

The findings of the study showed that there were significant improvement in selected physical, physiological, psychological and performance factors among Cricket players from their baseline to post training due to influence of game-specific field training. Hence the first hypothesis was accepted on the above said variables.

2. Second hypothesis stated that there would be a significant improvement on the selected physical, physiological, psychological and performance factors among Cricket players due to the influence of game-specific field training with yogic practices.

The findings of the study showed that there were significant improvement in selected physical, physiological, psychological and performance factors among Cricket players from their baseline to post training due to influence of game-specific field training with yogic practices. Hence the second hypothesis was accepted on the above said variables.

3. Third hypothesis stated that there would be a significant improvement on the selected physical, physiological, psychological and performance factors

among Cricket players due to the influence of game-specific field training, yogic practices and mental training package.

The findings of the study showed that there were significant improvement in selected physical, physiological, psychological and performance factors among Cricket players from their baseline to post training due to influence of game-specific field training, yogic practices and mental training package. Hence the third hypothesis was accepted on the above said variables.

4. Fourth hypothesis stated that game-specific field training, yogic practices and mental training group would show significant improvement on selected physical, physiological, psychological and performance factors among Cricket players than the other experimental groups and control groups.

The findings of the study showed that the game-specific field training, yogic practices and mental training group showed significant improvement in selected physical, physiological, psychological and performance factors among Cricket players from their baseline to post training than the other experimental groups and control groups. Hence the fourth hypothesis was accepted on the above said variables.