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Page (13-20)

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Effect of Interval Training Programs on Aggression of Kabaddi Players

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Abstract *– The study was conducted Effect of Meditation Practice, Interval Training Programs on Aggression Kabaddi Players. For the purpose of the study, correlation design was used consisting of dependent variable aggression variables and independent variable. Subjects of the study were selected from Sholapur University, Maharashtra and their age group were between 16 and 28 years. The selected subjects were randomly divided into three groups and each group contains forty subjects. Group-1 acted as experimental Group-I, Group-II acted as experimental group-II and group-III acted as Meditation group. Experimental group 1 was given 12 weeks interval training, experimental group II was given 12 weeks fartlek training, and experimental group III was given 12 weeks meditation practice. One hundred twenty (120) subjects who play judo and kabaddi was selected as subjects. Only those subjects were selected who participated in any sports and games. Random sampling method was employed to select the subjects.*

Keywords: *Interval Training, Aggression, Kabaddi Players*

INTRODUCTION

Kabaddi demands physical fitness, strength, speed, stamina, and a certain amount of ability. Dodging, feinting and bursts of controlled speed make this game quite thrilling. To catch by pursuit - to chase, rather than just run is the capstone of Kabaddi. The game develops qualities such as obedience, discipline, sportsmanship, and loyalty between team members. By playing the game of Kabaddi one can develop all the fitness qualities. The basic movements required to play the game resulted in the improvement of fitness. The movements are high level of speed and agility with its quick turns, speed of play in defending and chasing. And the game requires leg strength, endurance, quick sit ups. Alertness and presence of mind are also improved. So, playing Kabaddi individual can achieve all the physical fitness qualities such as speed, strength, agility, coordination, endurance and flexibility.

Significance of the study

Meditation practices are considered effective in improving physiological and psychological balances of the players. In this study, a combination of interval training with meditation practices and fartlek training with yogic practices was attempted. The research is significant in the following respects.

1. The results of this study may help to identify the effect of interval training combined with meditation practices and fartlek training combined with meditation practices on selected physical variables speed and agility of the Kabaddi players.
2. The results of this study may help to identify the effect of interval training combined with meditation practices and fartlek training combined with meditation practices on physiological variables cardiovascular endurance and vital capacity of the Kabaddi players.
3. The results of this study may help to identify the effect of interval training combined with meditation practices on psychological variables aggression of subjects.
4. The results of this study would clearly show the importance of interval training combined with meditation practices with meditation practices for Kabaddi players.
5. The results of this study would clearly show the importance of interval training combined with meditation practices with meditation practices for Kabaddi players.

STATEMENT OF THE PROBLEM

The statement of the problem is to know the "Effect of Meditation Practice, Interval training Programs on Selected Psychological Kabaddi Players".

OBJECTIVES OF THE STUDY

The objectives of the studies were:

1. To assess the psychological variables namely aggression of Kabaddi Players.
2. To assess the effect of meditation training in aggression of studied subjects.
3. To assess the effect of interval training in aggression of subjects to be studied.

Hypothesis

It was hypothesized that:

1. There would be a significant improvement in psychological variable namely aggression due to interval training program.
2. There will be a significant improvement in meditation practice due to the result of interval training.

SCOPE AND DELIMITATION OF THE STUDY

The study was delimited to:

1. 120 male subjects
2. 40 subjects for Meditation group, 40 subjects for interval training group, and 40 subjects for fartlek training group
3. Only male subjects was selected as subjects.
4. Age group of subjects was 16-28 year.
5. The study may be delimited to the time period of 40 months from the date of PhD Registration

LIMITATION

Below points were treated as limitation of the study:

1. Genetic condition of the subject will be beyond the control of the researcher.
2. Diet and food habit of the subjects.
3. Unknown health issues of the subjects.
4. Motivation level of the subjects to participate in the study will be beyond the control of researcher.

METHODOLOGY

Method of Study

The purpose of the study was to find out whether there would be any significant improvement on selected physiological and psychological variables as a result of interval training and fartlek training and meditation practices. In this chapter, selection of subjects, experimental variables, test administration, and statistical techniques were discussed.

Population and sampling of Study

One hundred twenty (120) subjects who play judo and Kabaddi will be selected as subjects. Only those subjects was selected who participated in any sports and games. Random sampling method was employed to select the subjects. The subjects of the study was selected from Solapur University, Maharashtra and their age group were between 16 and 28 years.

The selected subjects was randomly divided into three groups and each group contains forty subjects. Group-1 acted as experimental Group-I. Group-II acted as experimental group-II and group-III acted as Meditation group. Experimental group 1 were given 12 weeks interval training, experimental group II were given 12 weeks fartlek training, and experimental group III were given 12 weeks meditation practice.

Variable of the study

Psychological Variables: Aggression

Criterion measures and tools

The following criterion measures were chosen for testing the hypothesis.

Aggression were measured through standard questionnaire. This questionnaire is developed by Buss and Perry (1992). The reliability of the questionnaire is reported with correlation coefficient value ranges from 0.7 to 0.8.

ANALYSIS AND INTERPRETATION OF DATA

To draw meaning full conclusions descriptive and comparative analysis was employed with the help of SPSS 23.0.

EDUCATIONAL IMPLICATION OF THE STUDY

Result of the study was help sports persons to understand the psychological and physiological factors which affect their performance. The importance of meditation practice and training was well known by sports persons, coach, teachers, and all sports lovers. The present study was beneficial to judo and Kabaddi players to identify the effect of interval training, fartlek training and meditation practices on selected physical variables such as speed and agility of the school and college level judo and Kabaddi players. The study would be helpful in selecting suitable training method and yogic practices for the preparation of judo and Kabaddi players. Research may help individuals to cope up with psychological factors such as stress.

Subject's Selection

One hundred twenty (120) subjects who play judo and kabaddi was selected as subjects. Only those subjects was selected who participated in any sports and games. Random sampling method was employed to select the subjects.

Data Collection

The subjects of the study were selected from Solapur University, Maharashtra and their age group were between 16 and 28 years. The selected subjects were randomly divided into three groups and each group contains forty subjects. Group-1 acted as experimental Group-I. Group-II acted as experimental group-II and group-III acted as Meditation group. Experimental group 1 were given 12 weeks interval training, experimental group II were given 12 weeks fartlek training, and experimental group III were given 12 weeks meditation practice.

Design of the study

For the purpose of the study, correlation design was used consisting of dependent variable aggression variables and independent variable.

STATISTICAL TECHNIQUES FOR ANALYSIS OF DATA

To draw meaning full conclusions descriptive and comparative analysis was employed with the help of SPSS 23.0.

ANALYSIS OF DATA AND RESULTS OF THE STUDY

The results and findings of the study have been experimental groups i.e. interval training group and meditation group of kabaddi players. Psychological variables (aggression). In this study, t-test was used to compare among the variables.

All the assumptions are based on data.

There are four assumptions which should be fulfilled before applying t-test.

(i) By Descriptive Statistics
(ii) By Q-Q Plots and Normal Curve
(iii) By Formal Tests (Kolmogorov-Smirnov[a]&Shapiro-Wilk)
(iv) Levene Test to test the Homogeneity of Variance

Testing basic assumption to apply T-test

Testing Normality of data

By Descriptive Statistics

Table-1: Skewness and Kurtosis of the scores of pre-test & post-tests in Aggression

Measures	Pre-test	Post test
Skewness	-.655	.262
Std. Error of Skewness	.374	.374
Kurtosis	.797	-.587
Std. Error of Kurtosis	.733	.733

When numerical value of "skewness" was compared with twice the "standard error skewness" and included the range from minus twice the standard error of skewness to plus twice the standard error of skewness, in most of the cases, the value for skewness lie within this range. This shows that data or degrees of skewness are not significantly skewed or skewness is considered not seriously violated.

The Same numerical process was used to check the normal distribution in relation to "kurtosis". Again a range of "normality" by multiplying the standard error of kurtosis by .733 was constructed from minus that value to plus that value. This distribution was also found significantly normal in terms of kurtosis.

Figure: 1: Q-Q Plots and Normal Curve to show data distribution of pretest and posttest of Aggression

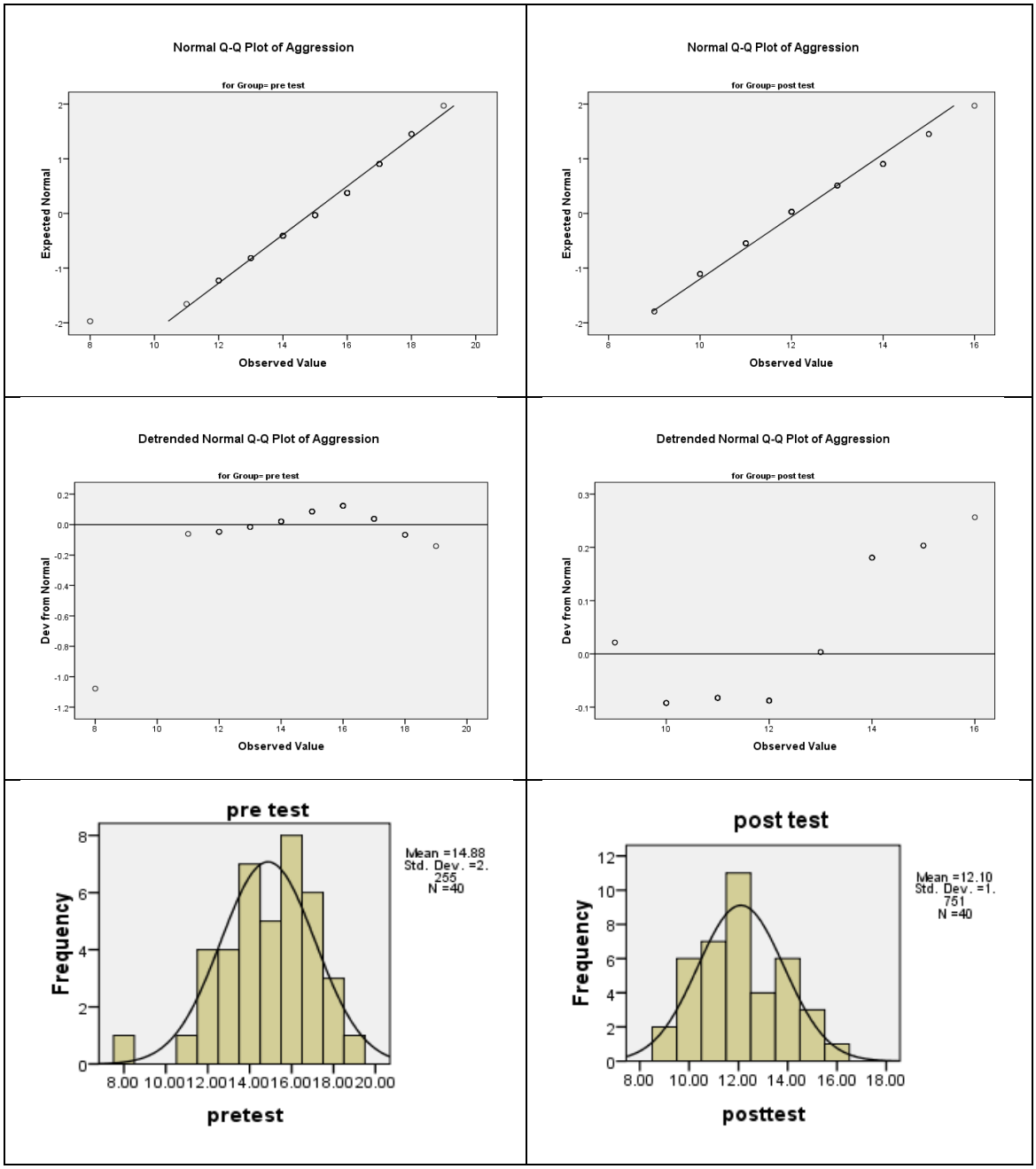

Figure 1 shows the Q.Q Plot & normal curve to compares the quantiles of a data distribution with the quintiles of a standardized theoretical distribution from a specified family of distributions (in this case, the normal distribution). So, with this normality assumptions satisfied, we could use the t test to check whether the pre-test and post-test of aggression in kabaddi players. The above Q.Q. plots, the points are plotted along a line. The Q.Q. plots also verify that the distribution is normal.

Figure 2: Box Plot (figure- 2) to show confidence interval related to pre test and post test of aggression

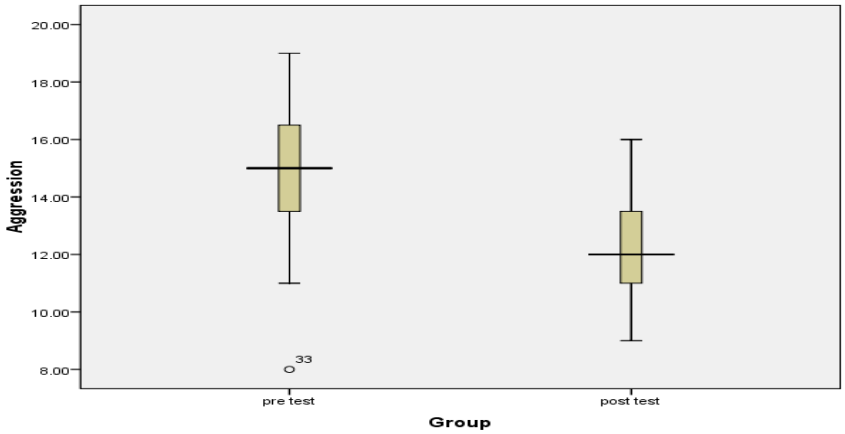

Figure- 2 shows the confidence interval related to pre test and post test of aggression in kabaddi players. Only one outliers is found in pre test of aggression in kabaddi players.

By Formal Tests

Table-2

Tests of Normality							
		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Group	Statistic	Df	Sig.	Statistic	df	Sig.
Aggression	pre-test	.141	40	.044	.956	40	.125
	post test	.173	40	.004	.954	40	.102
a. Lilliefors Significance Correction							

Table- 2 shows the formal tests for the checking of the normality assumption of both pre-test & post-test in aggression related to kabaddi players. Two formal tests (Kolmogorov- Smirnow test & Shapiro-Wilk tests) were also used to conform normality of data. The significance value of .04 & .00 (Kolmogorov-Smirnow test) in pre-test is violated but basing on their histograms (figure 1), normality assumptions are feasible and significance value of post-test are shows (Shapiro-Wilk test) that the distribution is normal.

Since data fulfils basic assumptions to apply t-test, independent t-test was applied to compare aggression of pre-test & post-test kabaddi players.

Livened Test to test the Homogeneity of Variance
Table-3

Test of Homogeneity of Variances			
Aggression			
Levene Statistic	df1	df2	Sig.
2.361	1	78	.128

Above table shows the Levene Test is found insignificant the significance value of .128 greater than the defined significance level of .05. Specific assumption (Homogeneity of Variance) has been fulfilled to apply t test.

Findings

Table-4

Descriptive Statistics of pre test & post test in Aggression

Measures	***Aggression***	
	pre test	***post test***
Mean	14.875	12.1
Standard Error	0.356	0.276
Standard Deviation	2.255	1.751
Range	11	7
Minimum	8	9
Maximum	19	16
Confidence Level (95.0%)	0.721	0.560

Table 4 shows the descriptive statistics of pre-test and post-test of aggression in kabaddi players.

In pre-test observed mean, standard error, standard deviation, Range, Minimum Values, Maximum Values and confidence level (95%) are found 14.875, 0.356, 2.255, 11, 8, 19, and 0.721 respectively.

In post-test observed mean, standard error, standard deviation, Range, Minimum Values, Maximum Values and confidence level (95%) are found 12.1, 0.276, 1.751, 7, 9, 16 and 0.560 respectively.

Table-5: T-Test to compare sportsmen spirit of pre-test and post-test in Aggression

		t-test for Equality of Means						
							95% Confidence Interval of the Difference	
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Aggression	Equal variances assumed	6.147	78	.000	2.775	.451	1.876	3.673

Table-5 clearly shows that significant difference was found between pre-test and post-test in case of aggression. The calculated t value found is 6.147 ($p<0.05$) higher than tabulated t value. Pre-test mean value greater than post-test value. Results indicate that aggression level in kabaddi players are found less after interval training.

CONCLUSIONS

Significant difference was found between pre-test and post-test in case of aggression. The calculated t value found is 6.147 ($p<0.05$) higher than tabulated t value. Pre-test mean value greater than post-test value. Results indicate that aggression level in kabaddi players are found less after interval training.

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