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Effect of Continuous Training with and Without Mental Training on Speed Performance Among Inter Collegiate Women Athletes

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ABSTRACT

Aim of the study was to find out the effects of Continuous training with and without Mental Training on Speed performance among Inter Collegiate women athletes. To achieve the purpose of the study, forty five(N=45) women athlete students studying at K.S.R Educational Institutions, Tiruchengode, Namakkal, Tamilnadu, India who have participated inter collegiate athletic meet during the academic year 2011-2012 were selected randomly as subjects. The subjects were divided into three groups of fifteen each, namely Continuous training with mental training (n-15), Continuous training without mental training (n-15) and Control group. The training period was limited to twelve weeks. Speed was selected as criterion variable and it was assessed by 30 meters run test. The selected variable was assessed prior to and immediately after the training period. The data obtained from all the groups before and after the experimental period were statistically analyzed by Analysis of Covariance (ANCOVA). Whenever 'F' ratio for adjusted Post test means was found to be significant, the Scheffe's test was applied as post-hoc test to determine the paired mean's differences. The level of confidence was fixed at 0.05 levels for all the cases to find out the significance. The results showed that there was a significant difference among Continuous training with Mental Training, Continuous training without Mental Training and control groups on Speed among Inter Collegiate women athletes. Among the experimental groups, Continuous training with Mental Training group significantly improved in Speed than that of Continuous training without Mental Training.

KEYWORDS: Continuous Training, Mental Training, Speed.

INTRODUCTION

Sports training consist of activities and movements which generally lead to high fatigue. Fatigue is the direct result of the load by physical activity. Load therefore, is of central importance in sports training. Without maintaining the load caused through physical exercise performance cannot be improved, stabilized and maintained because over load results in stagnation of performance.

Continuous training is when low- to mid-intensity exercises are performed for more than 20 minutes without resting intervals. Generally, this type of training is used to prepare the body for sustained workouts such as marathons and triathlons, but can also be effective for more casual athletes. It allows the body to work from its aerobic energy stores to improve overall fitness and endurance. Chief benefits of continuous training include fat burning, muscle building, and increasing maximum aerobic potential.

Mental training is not only one of sports training fields, but it is also an important and complementary part of motor training. It represents the basic part of player preparation to get involved in competitions as it includes conception of the movement and sequence of skills and situations **(Allawi, 1997).**

Mental-skills training can be a difficult topic for the athletes to not only understand but also to be willing to participate in as well as take seriously. Some people will look at mental training and think it is for "weak" people, and that they do not need it. That is by no means the case. Mental-skills training's purpose is to assist athletes in developing better practice and competition techniques and preparation. Every athlete is different; therefore, not every athlete will follow the same practice procedure or competition preparation **(Sponhol, 2012).**

METHODOLOGY

The Purpose of the study was to find out the effects of Continuous training with and without Mental Training on Speed performance among Inter Collegiate women athletes. To achieve the purpose of the study, forty five(N=45) women athlete students studying at K.S.R Educational Institutions, Tiruchengode, Namakkal, Tamilnadu, India who have participated inter collegiate athletic meet during the academic year 2011-2012 were selected randomly as subjects. The subjects were divided into three groups of fifteen each, namely Continuous training with mental training (n-15), Continuous training without mental training (n-15) and Control group. The training period was limited to twelve weeks. Speed was selected as criterion variable and it was assessed by 30 meters run test. The selected variable was assessed prior to and immediately after the training period.

RESULTS AND DISCUSSION

The data obtained from all the groups before and after the experimental period were statistically analyzed by Analysis of Covariance (ANCOVA). Whenever 'F' ratio for adjusted Post test means was found to be significant, the Scheffe's test was applied as post-hoc test to determine the paired mean's differences. The level of confidence was fixed at 0.05 levels for all the cases to find out the significance.

The analysis of covariance on Speed of the pre, post and adjusted test scores of Continuous Training with mental training, Continuous Training without mental training and Control group, have been analyzed and presented in table - I.

TABLE - I
ANALYSIS OF COVARIANCE OF THE DATA ON SPEED OF PRE, POST AND ADJUSTED SCORES OF EXPERIMENTAL GROUPS AND CONTROL GROUP

Test	Continuous Training with Mental Training Group (Group–I) Expt. Group 'A'	Continuous Training without Mental Training (Group-II)Expt. Group 'B'	Control Group (Group- III)	Source of Variance	Sum of Squares	df	Mean Squares	F-ratio
Pre-Test Mean	**4.63**	**4.51**	**4.51**	Between Groups	0.15	2	0.08	1.05
SD	±0.2**6**	±0.2**9**	±0.26	Within Groups	3.02	42	0.07	
Post-Test Mean	**4.10**	**4.18**	**4.50**	Between Groups	1.37	2	0.69	8.61*
SD	±0.**28**	±0.**33**	±0.2**8**	Within Groups	3.35	42	0.08	

Adjusted Post-Test Mean	**4.02**	**4.22**	**4.55**	Between Sets	2.07	2	1.03	146.44*
				Within Sets	0.29	42	0.01	

* Significant at 0.05 level of confidence

Table value for df (2, 42) at 0.05 level = 3.22 Table value for df (2, 41) at 0.05 level = 3.23

The above table shows that the pre-test mean & standard deviation values on Speed of experimental groups 'A' and 'B' and control group were 4.63, 4.51 & 4.51 and ±0.26, ±0.29 & ±0.26 respectively. The obtained 'F' ratio of 1.05 for pre-test scores was lesser than the table value of 3.22 for df 2 and 42 required for significance at 0.05 level of confidence on Speed.

The post test mean & standard deviation values on Speed of experimental groups 'A' and 'B' and control group were 4.10, 4.18 & 4.50 and ±0.28, ±0.33, & ±0.28 respectively. The obtained 'F' ratio of 8.61 for post-test scores was greater than the table value of 3.22 for df 2 and 42 required for significance at 0.05 level of confidence on Speed.

The adjusted post-test means on Speed of experimental groups 'A' and 'B' and control group were 4.02, 4.22 and 4.55 respectively. The obtained 'F' ratio of 146.44 for adjusted post-test mean was greater than the table value of 3.23 for df 2 and 41 required for significance at 0.05 level of confidence on Speed.

The results of the study indicated that there was a significant difference between the adjusted post-test means of Continuous Training with mental training, Continuous Training without mental training and Control group on Speed.

Since, three groups were compared, whenever the obtained 'F' ratio for adjusted post test was found to be significant, the Scheffe's test was used to found out the paired mean difference and it was presented in table-II.

TABLE - II
SCHEFFE'S TEST FOR THE DIFFERENCE BETWEEN PAIRED MEANS ON SPEED

Continuous Training with Mental Training Group (Group–I) Expt. Group 'A'	Continuous Training without Mental Training (Group-II) Expt. Group 'B'	Control Group (Group- III)	**Mean Difference**	**Confident Interval Value**
4.02	4.22	---	0.20*	0.08
4.02	---	4.55	0.53*	
---	4.22	4.55	0.33*	

*Significant at 0.05 level of confidence.

The above table shows that the mean difference values of experimental groups 'A' and experimental groups 'B', experimental groups 'A' and Control group and experimental groups 'B' and Control group were 0.20, 0.53 and 0.33 respectively, which were greater than the confidence interval value of 0.08 on Speed at 0.05 level of confidence. The results of the study showed that there was a significant difference between experimental groups 'A' and experimental groups 'B', experimental groups 'A' and Control group and experimental groups 'B' and Control group.

The above data also reveals that Continuous Training with mental training group had better Speed.

The pre, post and adjusted mean values of Continuous Training with mental training, Continuous Training without mental training and Control group on Speed were graphically represented in the Figure -I.

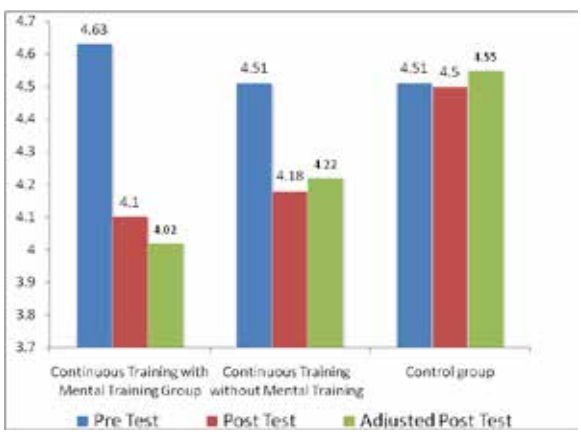

Figure: IX The pre, post and adjusted mean values of Continuous Training with mental training, Continuous Training without mental training and Control group on Speed

CONCLUSIONS

From the analysis of the data, the following conclusions were drawn.

1. There was a significant difference among Continuous training with Mental Training, Continuous training without Mental Training and control groups on Speed among Inter Collegiate women athletes.
2. Significant improvements noticed on selected Speed due to Continuous training with Mental Training, Continuous training without Mental Training.
3. Among the experimental groups, Continuous training with Mental Training group significantly improved the Speed Performance than that of Continuous training without Mental Training.

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