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Effect of Twelve Weeks Physical Education Programme on Motor Performance of College Men Students

M.Ezhilarasan¹ & D.J.Asath Ali Khan²

¹M.Phil Research Scholar, Department of Physical Education & Sports Sciences, SRM University, Chennai, Tamilnadu, India.

²Assistant Professor, Department of Physical Education & Sports Sciences, SRM University, Chennai, Tamilnadu, India.

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Abstract

The purpose of the present was to find out the effect of twelve weeks physical education programme on motor performance of college men students. To achieve the purpose of the study thirty students were selected from Alagappa University affiliated college's, sivaganga district, during the year 2016-2017. The subject's age ranges from 19 to 25 years. The selected players were divided into two equal groups consists of 15 students each namely experimental group and control group. The experimental group underwent physical education programme for twelve weeks. The control group was not taking part in any exercise during the course of the study. Speed and agility were taken as criterion variables in this study. Pre-test was taken before the exercise period and post- test was measured immediately after the twelve week exercise period. Statistical technique 't' ratio was used to analyze the means of the pre-test and post test data of experimental group and control group. The results revealed that there was a significant difference found on the criterion variables. The difference found is due to physical education programme given to the experimental group on Speed and agility when compared to control group.

Keywords: Physical Education Programme, Speed and Agility.

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Introduction

“Physical education is an important part of the educational process. It is neither a “frill” nor an “ornament” tacked on to the school or other program as a means of keeping students busy. It is, instead, a vital part of education. Through a well-directed physical education program, students develop skills for the worthy use of leisure time, engage in activities conducive to healthful living, develop socially, learn about their body, and contribute to their physical and mental health (Bucher 1979). Physical education has a special significance, unique role and has made unlimited contribution in the modern age as it caters to the biological, sociological, and psychological necessities of the man (Singh et al. 2005). It is a common observation that regular physical activity or the lack of activity can alter body composition. There are various studies (Katch 2003; Blake et al.2000; Slobodan 2002). Which have demonstrated that fat free body weight to fat weight ratio increases during periods of physical training? Also, results of several researchers (Liszka 2005; Wisloff et al. 2005; Pascal et al. 2005; Thompson et al. 2006) on the body composition changes during various types of physical training programs have shown the shift in the

fat free weight and fat weight ratio that tends to increase as the activity level increases. The main purpose of the study was to find out the effect of twelve weeks physical education programme on motor performance.

Methodology

For the purpose of the study was to find out the effect of twelve weeks physical education programme on motor performance among college men students. To achieve his purpose of the study, thirty students were selected as subjects at random. The age of the subjects were ranged from 19 to 25 years. The selected subjects were divided into two equal groups of fifteen subjects each, such as twelve weeks physical education programme (Experimental Group) and control group. The experimental group underwent physical education programme for three days per week for twelve weeks. Control group which they did not undergo any special exercise programme apart from their regular physical activities as per their curriculum. The following variables namely Speed and agility were selected as criterion variables. Speed was measured by 50 meters dash, agility was measured by shuttle run. All the subjects of two groups were tested on selected criterion variables at prior to and immediately after the exercise programme. The ‘t’ test was used to analysis the significant differences if any in between the groups respectively. The 0.05 level of confidence was fixed to test the level of significance which was considered as an appropriate.

Correspondence

M.Ezhilarasan

E-mail: drarunprasanna@gmail.com

Experimental Design

This study was formulated as post test group design .one group was assigned physical education programmed. The other group acted control group no training programmed.

Selection of Variables

| S.NO | VARIABLES | TEST ITEMS | SCORING |
|------|-----------|----------------|--------------------|
| 1 | Speed | 50 meters dash | In seconds |
| 2 | Agility | Shuttle run | In Seconds/minutes |

Table 1

Analysis of 't'-ratio for the pre and post tests of experimental and control group on speed

| Variable | Group | Mean | | SD | | SD Error | Df | 't' ratio |
|----------|--------------|-------|-------|-------|-------|----------|----|-----------|
| | | Pre | Post | Pre | Post | | | |
| Speed | Control | 0.258 | 0.310 | 0.057 | 0.054 | 0.052 | 14 | 2.097 |
| | Experimental | 0.260 | 0.328 | 0.046 | 0.056 | 0.068 | | 9.377* |

*Significance at .05 level of confidence. (The table value required for 0.05 level of significant with df of 14 is 2.14)

The Table 1 shows that the mean values of pre-test and post-test of control group on speed were 0.258 and 0.310 respectively. The obtained 't' ratio was 2.097, since the obtained 't' ratio was less than the required table value of 2.14 for the significant at 0.05 level with 14 degrees of freedom it was found to be statistically insignificant. The mean values of pre-test and post-test of experimental group on speed were 0.260 and 0.328 respectively. The obtained 't' ratio was 9.377* since the

Statistical Technique

The following statistical procedures were used. The "t" ratio was calculated to find out the significance of the difference between the mean of the initial and final test of the experimental group.

Analysis of the Data

The significance of the difference among the means of experimental group was found out by pre-test. The data were analyzed and dependent 't' test was used with 0.05 levels as confidence.

obtained 't' ratio was greater than the required table value of 2.14 for significance at 0.05 level with 14 degrees of freedom it was found to be statistically significant. The result of the study showed that there was a significant difference between control group and experimental group in speed. It may be concluded from the result of the study that experimental group improved in speed due to twelve weeks of physical education programme.

Table 2

Analysis of 't' ratio for the pre and post-tests of control and experimental group on agility

| Variable | Group | Mean | | SD | | SD Error | Df | 't' ratio |
|----------|--------------|-------|-------|-------|-------|----------|----|-----------|
| | | Pre | Post | Pre | Post | | | |
| Agility | Control | 1.373 | 1.466 | 0.220 | 0.213 | 0.093 | 14 | 0.960 |
| | Experimental | 1.508 | 1.625 | 0.148 | 0.150 | 0.117 | | 4.206* |

*Significance at .05 level of confidence. (The table value required for 0.05 level of significant with df of 14 is 2.14)

The Table 2 shows that the mean values of pre-test and post-test of control group on Agility were 1.373 and 1.466 respectively. The obtained 't' ratio was 0.960 since the obtained 't' ratio was less than the required table value of 2.14 for the significant at 0.05 level with 14 degrees of freedom it was found to be statistically insignificant. The mean values of pre-test and post-test of experimental groups on Agility were 1.508 and 1.625 respectively. The obtained 't' ratio was 4.206* since the obtained 't' ratio was greater than the required table value of 2.14 for significance at 0.05 level with 14 degrees of freedom it was found to be statistically significant. The result of the study showed that there was a significant difference between control group and experimental group in Agility. It may be concluded from

the result of the study that experimental group improved in Agility due to twelve weeks of physical education programme.

Discussions on Findings

The result of the study indicates that the experimental group namely physical education programme group had significantly improved the selected dependent variables namely Speed, agility and power when compared to the control group. It is also found that the improvement caused by physical education programme when compared to the control group.

Conclusions

1. There was a significant difference between experimental and control group on Speed, agility and power after the exercise period.
2. There was a significant improvement in Speed, agility and power among college men students. However the improvement was in favour of experimental group due to twelve weeks of physical education programme.

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