The Effect Of Recreational Activities On Improvement Of Selected Physical Fitness Components On 16 -19 year Male Students

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Abstract: The study was conducted to investigate the effect of recreational activities on improvement of selected physical fitness components on 16-19 yr. male students. 40 (N=40) male students were selected as study subjects from male schools through purposive sampling method and their age range 16-19 years. All Selected subjects were participated in active recreational activities for 12 consecutive weeks, on the bases of training principles. Pre, during and post training tests were conducted on selected components of physical fitness variables. The data collected from the study subjects were analyzed by Repeated Measure ANOVA using SPSS version20 software. According to analyzed data in 12minutes run 0.2903mile mean difference was recorded. The mean difference value of push up performance was boosted by 20.85 after 12 weeks aerobic exercise. In sit and reach test 5.12 cm increments were observed. The results obtained from this study indicated that there were significant improvements in cardiovascular endurance, muscular endurance and flexibility performance of subjects.

INTRODUCTION

The term recreation appears to have been used in English first in the late 14th century, first in the sense of "refreshment or curing of a sick person" Lean et al. (2005) and derived turn from Latin (re: "again", creare: "to create, bring forth, beget."). Sports and recreation programs for young people often provide a vehicle for improving educational engagement, academic achievement, and job-readiness; reducing antisocial behavior; and providing avenues for more positive types of risk taking Nichols (2007).

Outdoor recreation’s contribution to health can be considered in the context of wellness. The World Health Organization (2003) defines health as a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity. This definition moves from a strictly medical model of health toward the concept of wellbeing. The Alberta Centre for Well Being (1989) finds that the concept of wellbeing or optimal health involves a delicate balance among physical, emotional, spiritual, intellectual and social health and then lists a wide range of dimensions, from fitness, nutrition, and stress management to meditation, education, and relationships. Outdoor recreation touches on all those aspects of health and can enhance not only physical health but also emotional wellbeing. Just being outdoors, for example, has been shown to confer health benefits.

Treatments and study Design

This research work was focused on experimental field study within 12 weeks of active recreational activities on improvement of selected health related physical fitness variables. A single subject design was used for this research study. A single subject design is an experimental or longitudinal design in which measurements are taken repeatedly before, during and after an intervention. The researcher selected (N=40) students with age group of 16-19 years old through required parameters of purposive sampling technique. The pre, training physical fitness tests of 12 minutes run test, 90 degree pushup test and sit and reach test were given. After pre training tests, regular trainings of walking, jogging, rope jumping, table tennis, volley ball, football 1.2 km walking, Observing nature, bird observation, small mountain climbing, admiring nature and other warming up and stretching exercises were given. During (mid) training physical fitness tests of 12 minute run test, 90 degree pushup test and sit and reach test were given then regular training continued up to the end of third month and post training tests were given. Indeed the role of active recreational activities on improvement of physical fitness components among 16 -19 year Male Students were studied according to work plan. Principle of progression was kept in mind on intensity, frequency and time during training session.

Description of population and Sampling Method

The source of population for this study was 16 -19 year Male school students. The total populations of students were 410. Out of this population 195 female students and 215 students were male
Results and Discussion

The purpose of this study was to investigate the effect of recreational activities on improvement of selected physical fitness components among school male students. 40 students with age ranges from 16-19 years old were selected through purposive sampling from preparatory school and subjected to three month active recreational activity program. Then push up test, 12 minute run test and sit and reach test were taken 3 times (pre, during and post) to evaluate whether muscular endurance, cardiovascular and flexibility improvement was there or not. Then results of those variables were discussed as follows.

Table 1. Mean and Standard Deviation Values of Push Up Test (Pre, During and Post Test) Result of Study Subjects

<table>
<thead>
<tr>
<th>Variable</th>
<th>PT Mean ±SD</th>
<th>DT Mean ±SD</th>
<th>POT Mean ±SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUPT</td>
<td>7.1500±2.1</td>
<td>16.3750±2.734</td>
<td>28.0000±3.013</td>
</tr>
</tbody>
</table>

The mean values of push-ups (rep/min) was 7.15 before active recreational activities, which was improved to 16.375 during test and improved by 28.00 after 12 week active recreational activities test, this means the push up performance improved by 20.85 (74.5%) after 12 weeks of active

Table 2. Mean and Standard Deviation Values of Sit and Reach (Pre, During and Post Test) Result of Study Subjects

<table>
<thead>
<tr>
<th>Variable</th>
<th>PT Mean ±SD</th>
<th>DT Mean ±SD</th>
<th>POT Mean ±SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRT</td>
<td>6.2125±.88497</td>
<td>9.135±1.06712</td>
<td>12.400±.97402</td>
</tr>
</tbody>
</table>

SRT=Sit and Reach test

The table 2 showed above that there was significance difference before the exercise and after 12 weeks of active recreational activities on individuals’ sit and reach test performance. The mean values of Sit and Reach (in cm) was 6.2125 before active recreational activities, which was improved to 9.135 during test and improved by 12.4cm after 12 week active recreational activities test, this means the sit and reach test performance improved by 6.1875cm (49.9%) after 12 weeks of active recreational activities; which was statistically significant. Therefore, this finding showed that continues active recreational activity training program (3 months) elicited a statistically significant improvement on upper body Muscular Endurance performance of the study subjects.
Table 3. Mean and Standard Deviation Values of 12 Minutes Run Test (Pre, During and Post Test) Result of Study Subject

<table>
<thead>
<tr>
<th>Variable</th>
<th>Experimental group</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PT Mean ±SD</td>
<td>DT Mean ±SD</td>
<td>POT Mean ±SD</td>
</tr>
<tr>
<td>TMRTT</td>
<td>1.5022 ± .06403</td>
<td>1.6275 ± .05768</td>
<td>1.7925 ± .6299</td>
</tr>
</tbody>
</table>

The above table showed that there was significance difference before the exercise and after 12 weeks of active recreational activities on individuals’ twelve minute run test performance. The mean values of 12 minute run test (in mile) was 1.5022 before active recreational activities, which was improved to 1.6275 during test and improved by 1.7925 after 12 week active recreational activities test, this means the 12 minute run performance was improved by 0.2903 mile (467.39 m) after 12 weeks of active recreational activities; which was statistically significant. Therefore, this finding showed that continues recreational activity training program (3 months) elicited a statistically significant improvement on twelve minute run test performance of the subjects.

Table 4. The Mean Difference Value and Significance Level of Each Test Result of the Parameters

<table>
<thead>
<tr>
<th>Variables</th>
<th>Para. (I)</th>
<th>Para. (II)</th>
<th>MD (I-II)</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Push up test</td>
<td>PoT</td>
<td>PT</td>
<td>20.85</td>
<td>17.052</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>DT</td>
<td></td>
<td>11.625</td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>Sit and reach test</td>
<td>PoT</td>
<td>PT</td>
<td>6.1875</td>
<td>12.559</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>DT</td>
<td></td>
<td>3.255</td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>12 minute run test</td>
<td>PoT</td>
<td>PT</td>
<td>0.290</td>
<td>7.836</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>DT</td>
<td></td>
<td>0.165</td>
<td></td>
<td>0.000</td>
</tr>
</tbody>
</table>

The above table showed that there was significant mean difference in push up test, in sit and reach test and in 12 minute run test results. The mean difference value for push up test from pre to post was recorded 20.85 and in between during to post it was recorded 11.625. For sit and reach test the mean difference value from pre to post 6.18 and from during to post 3.265. In same way in 12 minutes run 0.290 and 0.165 mean difference was recorded from pre to post and during to post respectively. The calculated F value was also found greater than the required value. This proved that there was significant difference in the result of push up. In the same manner sit and reach test and 12 minutes run test also have significant difference because the calculated F value was found more than the required value after the 12 weeks of recreational activities. The findings of this study showed that there was a significant improvement on muscular endurance, flexibility and cardiovascular endurance performance of study subjects (Average, Above Average and Good Norm Standards respectively) due to 12 weeks active recreational activity programs.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary
The study assessed the effect of recreational activities on improvement of physical fitness components among Preparatory School Male Students. In this study, the role of active recreational activity programs on the improvement of physical fitness components; (cardiovascular endurance, Flexibility and muscular endurance) were investigated. The dependent variables selected for the study were muscular endurance, cardiovascular endurance and flexibility. Experimental measurements used were; push up test, 12 minute run test and sit and reach test with in 3 time intervals (pre, during and post test) each. The data were collected; before the training program was started, one and half month during training program and at the end of 3 months
training program. Finally the recorded data were analyzed by ANOVA with repeated measures with significance level of 0.05%. Final result of the study summarized and demonstrated that the results of pre to post training tests showed a significant and progressive improvements in selected health related physical fitness components of the subjects. All in all, due to the remarkable improvements seen in all the component variables tested, we can conclude that; active recreational activity played a great role on health related physical fitness performance of study subjects.

**Conclusions**

Based on the major findings of the study the following points were stated as a conclusion.

- The result of the study showed that active recreational activities bring a significant benefit on improvement of muscular endurance performance.
- The output of the study showed that active recreational activities provide a significant improvement on cardiovascular endurance performance.
- The finding of this study yields a significant benefit on improvement of flexibility performance.

**Recommendations**

Based on results, discussions and findings of the research done on the role of active recreational activities on improvement of selected health related fitness components; the following recommendations were made.

- Since the goal of education is producing physically and mentally productive man power and active recreational activities are a key solution; they should give big attention for it.
- Physical education teachers, coaches, health professionals, and school leaders should be aware to understand, formulate and implement more effective strategies of promoting active recreational trainings and equipments.
- Curriculum developers and policy designers should concentrate on active recreational activity programs, equipment and facilities that support active living for all students.
- Physical education teachers and coaches should make their training session through active recreational activity depending on training principles.

**REFERENCES**


