Experimental

**Effects of Aerobic Yogic And Blended Exercise Programmes on Health and Wellness of College Males**

1Alamgir Mondal, 2Dr. Madhab Chandra Ghosh

1Research Scholar, Dept. of Physical Education, University of Kalyani.  
2Professor, Dept. of Physical Education, University of Kalyani.

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**ABSTRACT**

Considering the importance the Health Fitness and wellness the present study has planned to observed “effects of aerobic yogic and blended exercise programs on health and wellness of college males.” The main purpose of the study was to find out the differences between Experimental group and Control group in health fitness and wellness of college males.

A total of 80 male College going Students were selected from Srikrishna College, Bagula, Nadia districts as the subject of the present study. To continue the study the subject were selected in four groups Such as, Yogic Practice Group(YPG), Aerobic Exercise Group(AEG), Blended Exercise Group(BEG) and Control group(CG). Each group consist of 20 Students. The subject were given Twelve weeks training program and pre-test and post-test data were collected and following variables were measures. Such as – Age, Height, and Weight for Personal data and Health and Wellness related questionnaire were taken for mental health and wellness. To find out differences between Pre-test and Post-test between All Experimental groups and Control group, ANCOVA and LSD was computed and on the basis of result the following Conclusion were drawn-  
1. No difference were found between Experimental group and Control group in Pre-test in mental health and wellness.  
2. In Post-test the difference was observed of Experimental Groups and control group in Health Fitness and Wellness.  
3. No difference was observed in Pre-test and Post-test of Control group in all the parameters.

**Introduction**

The exploration of the ideal health, fitness, and wellness proved to be even more relevant in the contemporary period than before for College students. Given the challenges related to school-linked stress, sedentariness, and the growing rates of mental health problems characteristic of this demographic physical training serves as an effective intervention to foster well-being. As such, exercise programs address numerous mental and emotional effects, as well as physical ones.

Two more forms of exercise have piqued interest as an approach to health, fitness, and well-being thanks to the introduction of programs: aerobic exercise yoga practice and an integrated exercise session. There are aerobic poses that undoubtedly stretch as well as promote flexibility, balance, and cardiovascular stamina,
regardless of one’s age, behind yoga. Meanwhile, mixed-training exercise must attempt to find a lateral perspective on various forms and combine cardiovascular, strength, and flexibility exercise modalities to address numerous dimensions of improved ability.

However, even with the little beggar example progressively democratic, the deep understanding in the way in which they dissent on an effect on college male wellbeing and health still remains blank. The comprehensive study and investigation could be necessary to validate the efficacy and comparative benefits of Aerobic yogic versus Blended workout principles in their population. By integrating experimental expertise, experts and policymakers can identify “best practices” for progression in the all-encompassing behaviour of male college students. Such resources can be utilized to stimulate evidence-based surgery; probe to broaden a health promotion culture in colleges.

College years of young boys are considered to be a time of their formation and establishment of a lifestyle that determines their fitness behaviour for the rest of life and significantly affects health results. Therefore, studying the possibility of exercise programs for reducing stress, anxiety, and depression among college-aged boys and in improving the physical fitness is vital. The uptake and sustainability of effective treatments also necessitate an understanding of the acceptability and adherence to different exercise modality since the group possesses a plethora of needs and inclinations.

This systematic review attempts to bridge the collection of empirical studies by examining the way aerobic yogic and blended exercises workouts impact the health, and wellness of male college students. Specifically, this paper strives to describe the relative trustworthiness of these treatment options, recognize possibly relevant mediators or moderators of effects and suggest directions for future judgment and steps based on a high-quality summary. In addition to the above, this paper seeks to expose three of the physiological, behavioural, and cognitive mechanisms engineered by exercise that target optimal well-being among male college students with the aid of in-depth descriptions of how said treatments operate. In conclusion, there are implications for public health, education, and policy when male college students’ and their attention to exercise health, fitness and wellness treatments are better understood. Using proven intervention strategies, stakeholders can promote the culture of healthy living lifestyles that will support the physical and mental wellness of college students and allow them to perform well in school, life and work.

**Purpose Of The Study**

1. To find out the impact of yogic practices on the selected Physiological and Psychological performance variables of College Male.
2. To find out the impact of aerobic exercises on the selected Physiological and Psychological performance variables of College Male.
3. To find out the impact of Blended exercises on the selected Physiological and Psychological performance variables of College Male.
4. To compare the training effects of yogic practices, Aerobic exercises and Blended Exercise on College Male and find out the better group from the analyses.

**Method**

The purpose of this study was to determine the effect of yogic practice, aerobic exercises and blended exercise programs on health fitness and wellness of college males. To achieve the purpose of the study, eighty male college students in Srikrishna College, Bagula were randomly selected as subjects. Their age ranges from 18 to 20 years as per the respective college records.

The selected subjects (N = 80) were divided into four equal groups and named Group-I as Yogic Practices group (YPG), Group-II, as aerobic exercises Group(AEG), Group-III as Blended Exercise Group (Combination of both, Yogic and Aerobic) (BEG) and Group-IV as Control Group(CG). Thus each group consisted of twenty subjects. As it was an experimental work the data were collected in two phases, before the treatment and after the treatment. To conduct the study the researcher measured Total Health and Total Wellness of the subjects. Total Health of the subjects were measured through- McKenly health centre Psychological questionnaire. There were total 50 questions, and 4,3,2, and 1 numbering system. The Reliability of McKenly health centre Psychological questionnaire is 0.90. The Reliability was established by Split-Half method. Total Wellness of the subjects was measured by Hoeger and Hoeher Wellness questionnaires. There were total 36 questions, and 5,4,3,2, and 1 numbering system. The Reliability of Hoeger and Hoeher Wellness questionnaires is 0.91. The Reliability was established by Split-Half method.
Exercise Protocol

The training was for 45 minutes. The training hours was divided into three parts for AEG. Worming-up 5 minutes Actual training program for 30 minutes and Cooling down program for 10 minutes.

The training hours was divided in to three parts for YPG Asanas 30 minutes, Pranayamas 10 minutes and Relaxation 5 minutes and The training hours was divided in to five parts for BEG Warm Up Exercises 5 minutes, Aerobics Exercises 15 minutes, Cool Down Exercises 5 minutes, Asanas 15 minutes and Relaxation 5 minutes.

RESULT DISCUSSION

Personal Data

Table No. 1
Mean and SD Values of Personal Data of YPG, AEG, BEG and CG of College Males.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Age(year)</th>
<th>Height (meter)</th>
<th>Weight (k.g)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MEAN</td>
<td>SD (±)</td>
<td>MEAN</td>
</tr>
<tr>
<td>YPG</td>
<td>19.05</td>
<td>0.83</td>
<td>169.20</td>
</tr>
<tr>
<td>AEG</td>
<td>19.45</td>
<td>0.60</td>
<td>165.40</td>
</tr>
<tr>
<td>BEG</td>
<td>19.15</td>
<td>0.67</td>
<td>169.65</td>
</tr>
<tr>
<td>CG</td>
<td>19.45</td>
<td>1.09</td>
<td>167.45</td>
</tr>
</tbody>
</table>

From table -1 it showed that the mean and SD values of age of YPG, AEG, BEG and CG were 19.05± 0.83, 19.45 ± 0.60, 19.15± 0.67 and 19.45 ± 1.09 respectively.

Similarly, the mean and SD values of height of YPG, AEG, BEG and CG were 169.20 ± 4.82, 165.40± 6.12, 169.65 ± 5.78 and 167.45 ± 6.05 respectively.

Form the above table it was showed that the age and height of YPG, AEG, BEG and CG were more or less similar. It also appeared from the table -1 that the Mean and SD value of Weight of YPG, AEG, BEG and CG were 58.35±8.54, 57.40±9.76, 57.95±7.59 and 57.25±5.79 respectively.

Total Health:

Table No.2
Mean, SD and ANCOVA Values of Total Health of YPC, AEG, BEG and CG of Pre-Test and Post-Test of College Males

<table>
<thead>
<tr>
<th>Total Health</th>
<th>Statistics</th>
<th>Pre- Test</th>
<th>Post- Test</th>
<th>F Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>YPC</td>
<td>MEAN</td>
<td>150.25</td>
<td>178.80</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SD(±)</td>
<td>10.10</td>
<td>4.88</td>
<td></td>
</tr>
<tr>
<td>AEG</td>
<td>MEAN</td>
<td>147.25</td>
<td>176.60</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SD(±)</td>
<td>10.09</td>
<td>5.86</td>
<td></td>
</tr>
<tr>
<td>BEG</td>
<td>MEAN</td>
<td>146.70</td>
<td>172.40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SD(±)</td>
<td>12.94</td>
<td>8.85</td>
<td></td>
</tr>
<tr>
<td>CG</td>
<td>MEAN</td>
<td>143.25</td>
<td>145.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SD(±)</td>
<td>10.14</td>
<td>7.71</td>
<td></td>
</tr>
</tbody>
</table>

DF= 3, 75

*Table Value at 0.05 Level (3.97)
From the table -2 that the Mean and SD value of Total Health of YPC Pre-test was 150.25 and ±10.10 respectively and the Mean and SD value of YPC Post-test was 178.80 and ±4.88 respectively.

Likewise the Mean and SD value of Total Health of AEG Pre-test was 147.25 and ±10.09 respectively and the Mean and SD value of AEG Post-test was 176.60 and ±5.86 respectively.

It was also appeared from the table -2 that the Mean and SD value of Total Health of BEG Pre-test was 146.70 and ±12.94 respectively and the Mean and SD value of Total Health of BEG Post-test was 172.40 and ±8.85 respectively.

It was also appeared from the table -2 that the Mean and SD value of Total Health of CG Pre-test was 143.25 and ±10.14 respectively and the Mean and SD value of Total Health of CG Post-test was 145.00 and ±7.71 respectively.

The table no-2 also depicted that the mean values of pre-test and post of YPG, AEG, BEG and CG of College Male in Total Health were not similar and to observed the effect of 12 weeks Training programme on Total Health of YPG, AEG, BEG and CG College Male, the ANCOVA was computed and the F-values was found to be 132.40 which was statistically significant at 0.05 level of confidence and it can be concluded that the 12 weeks Training programme had a positive influence on Total Health. However ascertain the difference between and within different Experimental and Control groups the Least significant difference (LSD) were computed and presented in table no- 3.

Table No. 3:
Represents LSD value between Experimental groups and Control Group of Total Health in Pre-test and Post-test data.

<table>
<thead>
<tr>
<th>Dependent Variable: Treatment Total Health, LSD</th>
<th>(I) Group</th>
<th>(J) Group</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>LSD Value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>YPG Pre-Test</td>
<td>YPG Post-Test</td>
<td>-30.60*</td>
<td>2.89</td>
<td>5.85</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>YPG Post-Test</td>
<td>AEG Post-Test</td>
<td>2.15</td>
<td>2.89</td>
<td>5.85</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BEG Post-Test</td>
<td>6.40*</td>
<td>2.89</td>
<td>5.85</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CG Post-Test</td>
<td>33.10*</td>
<td>2.89</td>
<td>5.85</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>AEG Pre-Test</td>
<td>AEG Post-Test</td>
<td>-29.35*</td>
<td>2.89</td>
<td>5.85</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>AEG Post-Test</td>
<td>BEG Post-Test</td>
<td>4.25</td>
<td>2.89</td>
<td>5.85</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CG Post-Test</td>
<td>30.95*</td>
<td>2.89</td>
<td>5.85</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>BEG Pre-test</td>
<td>BEG Post-Test</td>
<td>-25.65*</td>
<td>2.89</td>
<td>5.85</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>BEG Post-Test</td>
<td>CG Post-Test</td>
<td>26.70*</td>
<td>2.89</td>
<td>5.85</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>CG Pre-Test</td>
<td>CG Post-Test</td>
<td>-0.45</td>
<td>2.89</td>
<td>5.85</td>
<td>NS</td>
<td></td>
</tr>
</tbody>
</table>

* The mean difference is significant at the .05 level.
DF= (N-1) X2= (20-1) X2=38
In table-3 it appears that the Least Significant Difference (LSD) between the groups in pre-test and post-test of Total Health of YPC, AEG, BEG and CG of College Male were computed. It was depicted that the YPC Pre-Test and YPC Post-Test, YPG Post-Test and BEG Post-Test, YPG Post-Test and CG Post-Test, AEG Pre-Test and AEG Post-Test, AEG Post-Test and BEG Post-Test, BEG Pre-Test and BEG Post-Test and BEG Post-Test and CG Post-Test were significant. The Least Significant Differences at 0.05 level was 1.84 and the mean difference values were found to be 30.60, 6.40, 33.10, 29.35, 30.95, 25.65 and 26.70 respectively. As all the Mean differences were higher then 5.85, so the differences were significant.

Likewise, the Mean difference between YPG Post-Test and AEG Post-Test, AEG Post-Test and BEG Post-Test and CG Pre-Test and CG Post-Test of College Male and the mean difference value were found to be 2.15, 4.25 and 0.45 respectively which were less than 1.84 the Least Significant Differences value so, the differences were not significant at 0.05 level.

From the interpretation of data and Results, it was depicted that the 12 weeks Exercise Programme significantly effects on Total Health of college Males. The Post-test value of YPC, AEG and BEG was more than the Pre-test value of the same group. Therefore, it can be concluded that the 12 weeks Exercise Programme significantly increase in Total Health of YPC, AEG and BEG College Male.

Total Wellness:

**Table No.4**

<table>
<thead>
<tr>
<th>Wellness</th>
<th>Statistics</th>
<th>Pre- Test</th>
<th>Post- Test</th>
<th>F Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>YPC</td>
<td>MEAN</td>
<td>115.35</td>
<td>158.25</td>
<td>93.95*</td>
</tr>
<tr>
<td></td>
<td>SD(±)</td>
<td>7.41</td>
<td>9.44</td>
<td></td>
</tr>
<tr>
<td>AEG</td>
<td>MEAN</td>
<td>113.90</td>
<td>145.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SD(±)</td>
<td>5.06</td>
<td>12.29</td>
<td></td>
</tr>
<tr>
<td>BEG</td>
<td>MEAN</td>
<td>115.05</td>
<td>150.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SD(±)</td>
<td>6.87</td>
<td>9.67</td>
<td></td>
</tr>
<tr>
<td>CG</td>
<td>MEAN</td>
<td>114.7</td>
<td>117.70</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SD(±)</td>
<td>5.83</td>
<td>11.19</td>
<td></td>
</tr>
</tbody>
</table>

DF= 3, 75  
*Table Value at 0.05 Level (3.97)

From the table -4 that the Mean and SD value of Total Wellness of YPC Pre-test was 115.35 and ±7.41 respectively and the Mean and SD value of YPC Post-test was 158.25 and ±9.44 respectively.

Likewise the Mean and SD value of Total Wellness of YPC Pre-test was 113.90 and ±5.06 respectively and the Mean and SD value of Total Wellness of AEG Post-test was 145.70 and ±12.29 respectively.

It was also appeared from the table -4 that the Mean and SD value of Total Wellness of BEG Pre-test was 115.05 and ±6.87 respectively and the Mean and SD value of Total Wellness of BEG Post-test was 150.80 and ±9.67 respectively.

It was also appeared from the table -4 that the Mean and SD value of Total Wellness of CG Pre-test was 114.70 and ±5.83 respectively and the Mean and SD value of Total Wellness of CG Post-test was 117.70 and ±11.19 respectively.
The table no-4 depicted that the mean values of pre-test and post of Yoga Group, Aerobics Exercise Group, Blended Exercise Group and Control Group of College Male in Total Wellness Fat were not similar and to observed the effect of 12 weeks Training programme on Total Wellness of Yoga Group, Aerobics Exercise Group and Blended Exercise Group College Male, the ANCOVA was computed and the F-values was found to be 93.95, which was statistically significant at 0.05 level of confidence and it can be concluded that the 12 weeks Training programme had a positive influence on Total Wellness However ascertain the difference between and within different Experimental and Control groups the Least significant differences were computed and presented in table no- 5

Table No. 5
Represents LSD value between Experimental groups and Control Group of Total Wellness in Pre-test and Post-test data

<table>
<thead>
<tr>
<th>Dependent Variable: Total Wellness, LSD</th>
<th>Multiple Comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td>(I) Group</td>
<td>(J) Group</td>
</tr>
<tr>
<td>YPG Pre-Test</td>
<td>YPG Post-Test</td>
</tr>
<tr>
<td>YPG Post-Test</td>
<td>AEG Post-Test</td>
</tr>
<tr>
<td></td>
<td>BEG Post-Test</td>
</tr>
<tr>
<td></td>
<td>CG Post-Test</td>
</tr>
<tr>
<td>AEG Pre-Test</td>
<td>AEG Post-Test</td>
</tr>
<tr>
<td>AEG Post-Test</td>
<td>BEG Post-Test</td>
</tr>
<tr>
<td></td>
<td>CG Post-Test</td>
</tr>
<tr>
<td>BEG Pre-test</td>
<td>BEG Post-Test</td>
</tr>
<tr>
<td>BEG Post-Test</td>
<td>CG Post-Test</td>
</tr>
<tr>
<td>CG Pre-test</td>
<td>CG Post-Test</td>
</tr>
</tbody>
</table>

*The mean difference is significant at the .05 level.
Df= (N-1)x2= (20-1)x2=38

16
In table-5 it appears that the Least Significant Difference (LSD) between the groups in pre-test and post-test of Total Wellness of YPC, AEG, BEG and CG of College Male were computed. It was depicted that the YPC Pre-Test and YPC Post-Test, YPG Post-Test and AEG Post-Test, YPG Post-Test and BEG Post-Test, AEG Pre-Test and AEG Post-Test, AEG Post-Test and CG Post-Test, BEG Pre-Test and BEG Post-Test and BEG Post-Test and CG Post-Test were significant. The Least Significant Differences at 0.05 level was 5.64 and the mean difference values were found to be 42.90, 12.55, 7.45, 40.55, 31.80, 28.00, 35.75 and 33.10 respectively. As all the Mean differences were higher then 5.64, so the differences were significant.

Likewise, the Mean difference between AEG Post-Test and BEG Post-Test and CG Pre-Test and CG Post-Test of College Male and the mean difference value were found to be 5.10 and 3.00 respectively which were less than 5.64 the Least Significant Differences value so, the differences were not significant at 0.05 level.

From the interpretation of data and Results, it was depicted that the 12 weeks Exercise Programme significantly effects on Total Wellness of college Males. The Post-test value of YPC, AEG and BEG was more than the Pre-test value of the same group. Therefore, it can be concluded that the 12 weeks Exercise Programme significantly increase in Total Wellness of YPC, AEG and BEG College Male.

Discussion of The Result

The results of the present study indicates that both the experimental groups was significantly increased in the Total Health and Total Wellness when compared to the control group. The result of the study is in consonance with Chen et.al, (2009) Chen et.al, (2009) Madanmohan et.al, (2008) Venkatapreddy et.al (2003) and Tran et.al, (2001).

In the present study the researcher observed that Total health and Total Wellness of the subjects were increase due to training for all the Experimental Group. Among the three experimental group the researcher also observed that the Blended exercise group improved batter then the other two experimental group. The result of the present study supported by the Padmadevi et.al (2007) Ram et.al (2000) and Chandrasekaran et.al (1999).

In Pre-test and Post-test results control group does not improved significantly in their Pre-test and Post-test result in selected psychological variables.

Conclusion

On the basis of result and discussion the following conclusion were drown—

1. All the experimental and control groups were homogeneous in pre-test.
2. In Post-test the difference was observed of Experimental Groups and control group in Health and Wellness and no difference was observed in Pre-test and Post-test of Control group in all the parameters.
3. Due to 12 weeks exercise program the study demonstrates that the Yogic, Aerobic and Blended exercise program was significantly positive effects on the health and wellness of college males.

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http://hdl.handle.net/10603/84193