

ISSN: 0474-9030 Vol-68, Special Issue-14 National Seminar on "The Importance of Sports, Physical Education and Psychology for Personality development At Present Scenario"



Sponsored by ICSSR

Held on (01 February 2020, Saturday)

Organized by: Department of Psychology, Sports and Physical Education

Shivaji College, Hingoli-431513 (Maharashtra)

# Effect of Physical Activity Awareness Model on Muscular Endurance of Junior College girls

## Mrs.Suvarna Hitendra Deolankar<sup>a</sup>,

## Dr.AmeetPrabhu<sup>b</sup>, Mrs.EktaJadhav<sup>c</sup>

 <sup>a</sup> PhysicalEducation Teacher, Email id - suvarnadeolankar@gmail.com,
 <sup>b</sup> Associate Professor,ChandrashekharAgashe Email id- prabhu.ameet@gmail.com
 <sup>c</sup>Director of Physical Education, Email id -ekta.jadhav@gmail.com,

St. Mira's College for Girls, Pune , Contact-94235333511 College of Physical Education, Pune. Contact- 9922910629 St. Mira's College for Girls, Pune Contact -8275697069

## Abstract

The purpose of the study was to see the effect of Physical Activity Awareness Model on Muscular Endurance of Junior College girls. This was an experimental study where single group pre testpost test design was used. Total 119 girls having average age  $\pm 17.4$  years old, studying at St. Mira's College for Girls were selected on purpose. Muscular Endurance is the dependent variable which was measured by 1 min situps test and 1 min pushups test. The collected data was analyzed by using paired sample't' test to find out the effect of Physical Activity Awareness Model program which was independent variable. The result of the study shows that there was a significant difference between the pre-test and post-test scores. Hence, it was concluded that Physical Activity Awareness Model program had positive effect on the muscular endurance of JuniorCollege girls.

Keywords- Physical Activity Awareness model, Muscular Endurance

## Introduction



ISSN: 0474-9030 Vol-68, Special Issue-14 National Seminar on "The Importance of Sports, Physical Education and Psychology for Personality development At Present Scenario"



Sponsored by ICSSR

Held on (01 February 2020, Saturday)

Organized by: Department of Psychology, Sports and Physical Education

Shivaji College, Hingoli-431513 (Maharashtra)

In our daily life,physical activities are very important as they bring individuals and communities together. Sports and physical activities also teach us how to face the situation boldly by accepting victory or defeat (Pradeep, 2014). Physical activities are one of the excellent ways for development of global human resource. However participation rates across the population are generally too low to accrue these benefits. Thus, promotion of physical activity is a public health priority. Therefore it is very essential to generate awareness in the society and amongcollege going students who are addicted to the cell phones, internet, social media, etc. (Buckworth, J. and Nigg, C., 2004).

Physical Activity is any activity that involves or requires some form of physical exertion. Physical activities are any bodily activity that enhances or maintains Physical Fitness, overall health and wellness (Ravi K. T., 2014). It includes sports, play active transport, chores, games fitness activities, recreation and some forms of work. Physical activity has been defined as any body movement produce by skeletal muscles that results in energy expenditure. Some examples of physical activity include children playing in the playground adults walking to work, walk to the shops, climbing a tree, going for a ride along a bike path, using the stairs rather than escalators, gardening etc.

The current levels of physical inactivity are partly due to insufficient participation in physical activity during leisure time and an increase in sedentary behavior during occupational and domestic activities.Due to the advancement in science and technology and because of impact of the globalization all the work gets done only at the desks, all day long instead of doing any physical work. Man has been replaced by machine. People in general are addicted to the internet which in turns has reduced their participation in physical activities. Even in small children's they are growing weaker as computers have replaced outdoor physical activities (Campbell, 2011). Due to less muscular and physical task which is avoided by present generation has lead to concern about the impact on children health. Research has shown the children are becoming unfit, less active and more sedentary than before.

Likewise, an increase in the use of "passive" modes of transport has also been associated with declining physical activity levels. Increased urbanization has resulted in several environmental factors which may discourage participation in physical activity such as walking and jogging. In order to increase an individual's participation in physical activities, motivational drive, population-based, multi-disciplinary, and culturally relevant policies need to be implemented to increase physical activity levels globally.



ISSN: 0474-9030 Vol-68, Special Issue-14 National Seminar on "The Importance of Sports, Physical Education and Psychology for Personality development At Present Scenario"



Sponsored by ICSSR

Held on (01 February 2020, Saturday)

Organized by: Department of Psychology, Sports and Physical Education

Shivaji College, Hingoli-431513 (Maharashtra)

The current study is intended to document the motivating factors of the students of St. Mira's college students to prepare an exercise model to make an awareness of physical activity in order to enhance good heath of the students. Healthy students in turn will lead to healthy citizens of our nation.

### Objective

The purpose of this study was to investigate the effects of physical activity training program on muscular endurance, and to create an awareness of physical activity in the society.

### Material and Method

This study was an experimental method of descriptive research where single group pre test-post test design was used. The study was conducted on 119 Junior College girls from St. Mira's College for girls, Pune having average age of  $\pm 17.4$  years old whichwere purposively selected.Researcher used 1 min push-up test and 1 min sit-ups test to measure the muscular endurance of Junior college girls. Descriptive Statistics and pair sample t test techniques used to analyze the research data. This Physical Activity Awareness Model includes Physical Fitness training thrice a week, recreational games, Lectures- related to health and physical fitness awareness, and nutrition, Importance of Yoga in daily life, Fitness for all, Adventurous Sports. Also Interview of various Sports Personalities, were organized. Training was conducted on Importance of Fitness to defend oneself through self-defense techniques.

### Result

Table 1.1
Descriptive Analysis of Pre-test and Post Test of Performance of Push-ups Test (N=119)

	Mean	Median	Std. Deviation	Std. Error Mean	Minimum	Maximum
Pre-Test	23	23	4.46375	0.40919	12.00	35.00
Post Test	26	25	4.16880	0.38215	14.00	38.00



ISSN: 0474-9030 Vol-68, Special Issue-14 National Seminar on "The Importance of Sports, Physical Education and Psychology for Personality development At Present Scenario"



Sponsored by ICSSR

Held on (01 February 2020, Saturday)

Organized by: Department of Psychology, Sports and Physical Education

Shivaji College, Hingoli-431513 (Maharashtra)

The performance of Push-ups Test from 119 students through Pre-Test and Post Test were received. The descriptive analysis of the performance of Push-ups test is given in table 4.1 and shows that the Pre-test and Post test mean is 23 and 26 respectively and the pretest and posttest median is 23 and 25 respectively, and the standard deviation is 4.46 and 4.17 respectively.

It is therefore interpreted that there has been an increase in the performance of Push-ups due to the implementation of physical Activity program which proves that the program was effective to increase muscular strength and muscular endurance of arms.

## Table 1.2

# Comparison of Pre-test and Post Test of Performance of Push-ups Test through Paired Sample't' Test

Mean	Standard Deviation	Std. Error Mean	Т	df	Sig. (2-tailed)
-2.50	2.06	0.19	-13.25	118	0.00

The Paired Sample't' test was employed and the analysis given in table 4.2 proves that the 't' value is -13.25 and the df is 118 and the 'P' value is 0.00 which is significant at 0.05 level of Significance.

It is therefore interpreted that after implementation of the Physical Activity program there was significant change in the performance of push-up test, which shows that this program was effective for improvement in arm strength of the girls.

 Table 1.3

 Descriptive Analysis of Pre-test and Post Test of Performance of Bend Knee Sit-ups Test (N=119)

	Mean	Median	Std. Deviation	Std. Error Mean	Minimum	Maximum
Pre-Test	20	20.00	3.85291	0.35320	11.00	29.00
Post Test	22	22.00	4.23863	0.38855	12.00	33.00

The performance of Bend knee Sit-ups Test from 119 students through Pre-Test and Post Test were received. The descriptive analysis of the performance of Bend Knee Sit ups test is given in table 4.5



ISSN: 0474-9030 Vol-68, Special Issue-14 National Seminar on "The Importance of Sports, Physical Education and Psychology for Personality development At Present Scenario"



Sponsored by ICSSR

Held on (01 February 2020, Saturday)

Organized by: Department of Psychology, Sports and Physical Education

Shivaji College, Hingoli-431513 (Maharashtra)

and shows that the Pre-test and Post test mean is 20 and 22 respectively and the pretest and posttest median is 20 and 22 respectively, and the standard deviation is 3.85 and 4.23 respectively.

It is therefore interpreted that there has been an increase in the performance of and Bend knee Situps Test due to the implementation of physical Activity program which proves that the program was effective to increase performance in Bend Knee Sit-ups test

## Table 1.4

# Comparison of Pre-test and Post Test of Performance of Bend knee Sit-ups Test through Paired Sample't' Test

Mean	Standard Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
2.38	2.21	0.20	-11.74	118	0.00

The Paired Sample't' test was employed and the analysis given in table 4.6 proves that the 't' value is -11.74 and the df is 118 and the 'P' value is 0.00 which is significant at 0.05 level of Significance.

It is therefore interpreted that after implementation of the Physical Activity program there was significant change in the performance of Sit-ups test, which shows that this program was effective for improvement of Abdominal Strength among the girls.

## Discussion

The result of the study supports previous findings, that such kind of Physical Activity Awareness programs are very helpful to improve the muscular strength of girls in day to day life. Our study also supports to (W. L.Haskel) research that physical activity and exercise are very beneficial to improve health related physical fitness components.

Buckworth, J. and Nigg, C. also explained the importance of Physical Activity, Exercise, and Sedentary Behavior in College Students. They analyzed sedentary activities and indicators of participation in exercise and physical activity by demographic variables. They had also mentioned to accessibility and reinforcing properties of sedentary activities, the gender-related relationships



ISSN: 0474-9030 Vol-68, Special Issue-14 National Seminar on "The Importance of Sports, Physical Education and Psychology for Personality development At Present Scenario"



Sponsored by ICSSR

Held on (01 February 2020, Saturday)

Organized by: Department of Psychology, Sports and Physical Education

Shivaji College, Hingoli-431513 (Maharashtra)

between sedentary and active behaviors should be considered in designing interventions to promote exercise in this population.

However, it is important to acknowledge that present study had physical activity awareness program effect may have contributed to the increased performance in addition to the improved muscle function.

### Conclusion

It can be concluded that Physical Activity Awareness Model program had a positive effect on the muscular endurance of Junior College Girls. This kind of Physical Activity Awareness program can be beneficial to develop other physical fitness components. More programs should organised to improve the fitness of College going girls.

More research and better health-promoting programs are the need of the hour in order to increase the awareness of the advantages of physical activity and exercise.

## References

- 1. Best, J.W, & Kahn, J.V. (1999). Research in education. New Delhi: Prentice Hall of India. 7 Th editions.
- 2. Buckworth, J. and Nigg, C. (2004). "Physical Activity, Exercise, and Sedentary Behavior in College Students". Journal of American college health, 53 (1)
- 3. Buckworth, J. and Nigg, C.(2017) "Physical Activity, Exercise, and Sedentary Behavior in College Students" Journal of American college health, Vol.53, No 1
- 4. Campbell, D. (2011, May 21). Children growing wearker as computers replace outdoor activity. Retrieved from 1. https://www.theguardian.com/society/2011/may/21/children-weaker-computers-replace-activity.
- 5. Haskell,W.L.,Mortoye,H.J and Orenstein, D. (1985) "Physical activity and exercise to achieve health-related physical fitness components" Public Health Reports.202-212
- 6. Kumar, R. (1999). Research Methodology a step by step guide for beginners. New Delhi: SAGE Publication
- Pradeep, K. (2014). Effect of Yogic Exercise Intervention On The Strength Development Of Athletes. International Journal Of Health, Physical Education and Computer Science in Sports, 15 (1), 36 to 38



ISSN: 0474-9030 Vol-68, Special Issue-14 National Seminar on "The Importance of Sports, Physical Education and Psychology for Personality development At Present Scenario"



Sponsored by ICSSR

Held on (01 February 2020, Saturday)

Organized by: Department of Psychology, Sports and Physical Education

Shivaji College, Hingoli-431513 (Maharashtra)

- 8. Physical Activity Exercise and Sedentary Behavior in College Studentshttps://www.researchgate.net/publication/8442268
- 9. Ravi, K. T. (2014). Physical Activity And Exercise: Importance and its effect on Motor Components. International Journal of health, Physical Education and Computer science in Sports , 367-368.