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Influence of physical education programme on health related physical fitness of female students in respect to general education programme

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Abstract

Purpose of the present study was to find out the influence of physical education programme on health related physical fitness of female students in respect to general education programme. For conducting this study total fifty female students [25- M.P.Ed and 25- M.Ed girls students] of 25 to 30 years old were selected randomly from S.I.P.E.W Hastings House and B.Ed college, Hastings House. Criteria measured for conducting this study were age, height and weight as personnel data and muscular strength, flexibility, cardiovascular endurance as health related physical fitness components. The data were collected by standard tools and techniques. Mean and standard deviation was used as descriptive statistics, t-test was used to measure the significance of difference between two groups. Result of the present study revealed that there were significant differences between the M.P.Ed and M.Ed girls students on explosive strength, flexibility, and muscular endurance and Students of Physical Education were the better performer than the students of general education. So, it can be concluded that physical education programme has a significant positive influence on healthy living.

Keywords: Physical education, general education, muscular strength, flexibility, endurance

Introduction

Prior to the period of Hippocrates, health was considered as divine gift ^[1]. Health is a state of physical, mental, emotional, and social well being. Good health enables people to enjoy life and to have the opportunity to achieve the goals they have set for themselves ^[2]. According to Who, it is "A state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity. It is the soundness of the body. It should be seen as a process of continuous adjustment to changing demands of living ^[3]. This health has three interwoven dimensions- Physical dimension, mental dimension, and social dimension. Among these three dimensions, Physical dimension refers to the perfect functioning of the body externally as well as internally ^[2]. This perfect functioning of the body will be perfect when the body have a certain level of physical fitness, as because fitness implies soundness and readiness of the body and it is a condition of the entire organism ^[3]. This fitness has two parts. One is the fitness for life – health related fitness and another one is fitness for sports - performance related fitness. Fitness for life is a condition which we almost desire. It includes the components like- body composition, cardio vascular endurance, muscular strength, muscular endurance, and flexibility. Each of these components are the product of adequate and varied exercise, adequate and balanced nourishment, adequate but not excessive sleep, avoidance of excess in using social drugs, plentiful stimulation without excessive stress, and psycho-social wellbeing. Though, the influences of genetics and of environment are inescapable in attaining certain level of fitness for life, and this fitness attained by one will vary from person to person, but all components of fitness will approach their individual optima by personal application of the balanced principles ^[3]. But through the evolution, modern age became the age of technology. This age increases the prevalence of sedentary lifestyle in the population. Sedentary lifestyle is the most important problem for individual health growth. Low level of physical activity and sedentary lifestyle among students develop some diseases such as cardio respiratory disease, obesity, high blood pressure and diabetes ^[4]. Regular physical activity is an important component of healthy lifestyle and helps to keep the body fit ^[5].

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Regular physical activity is an effective function of physiological systems, body weight preservation, and reduces the risk of diseases and an overall better quality of life [6]. Physical education is the way of education through physical activities [2], Where the students are the regular participants of planned physical activities. On the other hand for the students of education there was no any mandatory routine of physical activity. From this back ground the investigators want to know that have there any differentiation between the M.Ed and M.P.Ed students in the varied components of health related physical fitness.

Materials and methods

Total fifty female students [25- M.P.Ed and 25- M.Ed girls

students] of 25 to 30 years old were selected randomly from S.I.P.E.W Hastings House and B.Ed college, Hastings House. Criteria measured for conducting this study were age, height and weight as personnel data and muscular strength, flexibility, cardiovascular endurance as health related physical fitness components. Among health related physical fitness variables, muscular strength was measured by using standing broad jump, flexibility was measured by sit and reach test method, cardio vascular endurance was measured by Queens college step test.

Results & Discussion

Table 1: Mean and standard deviation (SD) of personal data (age, height and body weight)

Group	Age(year)		Standing height (centimeter)		Body weight(kg)	
	Mean	SD	Mean	SD	Mean	SD
M.Ed.girls	26.16	±1.31	153.64	±3.70	57.88	±5.35
M.P.Ed girls	25.16	±1.40	153.82	±2.30	47.53	±6.51

Table showed the mean and standard deviation of age, height and weight of M.P.Ed and M.Ed girls students.

Table 2: Mean, Standard Deviation and 't'- values of selected motor fitness variables.

Si. No	Variables	M.P.ED girls	M.Ed Girls	Mean difference	t-value
		Mean& SD	Mean& SD		
1.	Flexibility(inch)	38.52± 5.049	32.52± 6.552	5.99	3.252*
2.	Explosive strength (M)	1.70±0.1455	1.20±0.2456	0.49	9.769*
3.	Cardiovascular endurance (bt/min)	39.77±11.96	37.18±15.44	2.546	63.65 *

**significant at 0.05 and 0.01 level, *= Significant at 0.05 level

M.Ed= Master of Education

M.P.Ed= Master of Physical Education

From table 2 it was found that there were significant differences between the M.Ed and M.P.Ed girl students on selected health related physical fitness variables and students of Physical Education were better performer than the students of general education. Though, in case of muscular strength, Basak *et al* (2016) showed no significant difference between the students of training college and the students of general college, but, S. Das and A. Bag, (2015), found that there have greater significant on selected strength variables of sports performer student than the normal or not sports performer [7]. Basically, strength training has been reported to cause muscle fibre hypertrophy, associated with an increase in contractile protein, which contributes to an increase in maximal contractile force (Sale *et al.*, 1990) [8]. Present study also revealed that there was significant difference between the M.Ed and M.P.Ed girls students and M.P.d girls students were better performer. It may be due to the result of regular participation in planned physical education programme where some trainings are strength training that helps to improve or to maintain strength. In case of flexibility, Sermeev (1966) [9] found that The girls who are trained and participate continuously in physical activity programme, then they develop a good amount of flexibility and maintain it according to their performed activities intensity, duration and quality. Basically, flexibility is a highly trainable factor (Singh, 1991). Present study also revealed that the students who participate regularly in physical education activity they showed greater flexibility and there was significant difference in flexibility between the girls Students of M.P. Ed and M.Ed. According to Sale *et al.*, (1990) It is of importance that athletes have high levels of not only strength but also endurance. In case of cardio vascular endurance there was

also a significant difference between two groups and the students of physical education have better cardio-vascular endurance than the M.Ed. students. Endurance is the ability to resist fatigue (Hare, 1986) [10]. It is a conditional ability [10]. Neumann (1984), discovered that, endurance loads with 70-80% of best performance intensity and over 60 min. duration have the best effect for prevention and therapy of heart-circulatory disorder. The more improvement of endurance takes place when a person trains longer and frequently under extreme conditions of fatigue [10]. As the students of Physical education participate regularly for a long period of time under certain level of condition of fatigue in a planned physical education programme then their resistance ability to fatigue was improved.

Conclusions

There were significant differences on leg explosive strength, flexibility and cardio-vascular endurance between M.Ed and M.P.Ed girls students. M.P.d girls Students had better health related physical fitness.

So, it can be concluded that physical education programme has a significant positive influence on selected health related physical fitness in respect to general education programme.

References

1. Mondal SK. Health and Wellbeing: An Interdisciplinary Perspective. Man in Motion, Sarir Saksha Prokasani, Birbhum, 2013, 276-281. ISBN No. 978-81-923488-8-9
2. Sing A *et al.* Essentials of physical education. (3rd Ed). New Delhi: Kalyani Publishers, 2008, 197.
3. Kamlesh ML. Physical Education An Objective Perspective. New Delhi: Khel Sahitya Kendra. 2009, 552.

4. Bathrellou E, Lazarou C, Panagiotakos DB, Sidossis LS. Physical activity patterns and sedentary behaviors of children from urban and rural areas of Cyprus. *Central European journal of public health*. 2007; 15(2):66.
5. Basak S, Dutta S. A Comparative Study of Physical Fitness Parameters between General Collage Students and Training College Students. *International journal of Experimental Research and Review*. 2016; 4:26-30. ISSN: 2455-4855.
6. Rani R. Comparative study of physical fitness component between male and female kho-kho players of Haryana *International Journal of Physiology, Nutrition and Physical Education*. 2016; 1(2):210-212.
7. Das S, Bag A. Comparative Study on Selected Strength between Non Sports Performer and Sports Performer College Student of Jamboni Block of West Bengal. *IOSR Journal of Sports and Physical Education*. 2015; 2(4):12-14.
8. Sale DG, MacDougall JD, Jacobs I, Garner S. Interaction between concurrent strength and endurance training. *Journal of Applied Physiology*. 1990; 68(1):260-270.
9. Sermeev BV. Development of Mobility in the Hip Joint in Sportsman. *Yessis Review*, Cited in *Science of Stretching*. 1966; 2(1).
10. Singh H. *Science of Sports Training*. New Delhi: D.V.S. Publication, 1991, 43.