

An Assessment of Blood Pressure (Systolic & Diastolic) and Heart Rate of B.p.ed Students and B.a General Students (Boys)



Physical Education

KEYWORDS : B.P.ED students, B.A general students, Blood pressure (systolic & diastolic), Heart rate

Mr. Ansar Khan

Ph.D Scholar & Lecturer, Kharagpur College, Kharagpur, Paschim Medinipur,W.B.

Mr. Kalidas Karak

Ph.D Scholar & Lecturer, SBSS Mahavidyalaya, Goaltore, Paschim Medinipur, W.B.

ABSTRACT

The purpose of the study was to compare the level of blood pressure (systolic & diastolic) and heart rate of B.P.ED students and B.A general students (Boys). Total 40 subjects were taken for the study. They were divided into two groups such as B.P.ED group and B.A general group. Twenty (20) B.P.ED students and Twenty (20) B.A general students (Boys) age level (18-25 years) were randomly selected for the study. All the parameters i.e. blood pressure (systolic & diastolic) and heart rate were measured by a reputed physician. For statistical analysis and interpretation of data 't'-test was conducted. It was observed that there was significant difference in blood pressure (systolic & diastolic) and heart rate. Result showed that B.P.ED students (Boys) have lower level of blood pressure (systolic & diastolic) and heart rate than B.A general students.

INTRODUCTION:-

In reality, man has explored the outer space but he has not dived sufficiently into the spaces within. Application of science and technology has resulted in cognitive development. Our knowledge and understanding of objects and the world have increased tremendously. In the process, however, man ignored his emotional patterning in life. As a result, in spite of plenty of wealth, physical comfort, and knowledge of sources of energy, space and communication skills, man is dissatisfied, disturbed and unhappy. Selfishness, greed, wrath and lust are playing havoc. They have given rise to distrust, insecurity, anxiety, stress and conflict, and have made individuals and society restless and emotionally and socially weaker. Coleman (1970) rightly remarked, "The seventeenth century has been called the Age of Enlightenment; the eighteenth, the Age of Reason; the nineteenth, the Age of Progress; and the twentieth, the Age of Anxiety" The science and art of yoga has for millenia guided man in his search for truth. Modern man is the victim of stress and stress related disorders which threaten to disrupt his life totally. Being holistic in its approach, yoga offers the best way out of this 'whirlpool of stress'. Yogic lifestyle, yogic diet, yogic attitudes and various yogic practices help man to strengthen his body and mind and develop positive health, enabling him to withstand stress by normalizing the perception of stress, optimising the reaction to it and by effectively releasing the pent-up Stress through various yogic practices. A short time (30-45 minutes) of regular yogic practice may give mental relief to the people. Yoga has a sound scientific basis and is an ideal tool for improving the health of our masses. . Pranayamas help us to control our emotions which are linked to breathing. Pranayamas also influence our pranamaya kosha i.e. the vital energy sheath. Slow, deep and rhythmic breathing is ideal for controlling stress and overcoming emotional hang-ups. The practice of pranayams helps us to regulate our emotions and stabilize the mind, which has been compared to a 'drunken monkey bitten by a scorpion'. The findings of the present study will encourage the people of the world to participate in "Yoga program". B.P.ED students (Boys) are those who regularly used to go for Yoga classes and participate various types of games and tournament willingly. On the other hand B.A general students (Boys) are those who never used to take part in any Yoga classes and tournaments.

METHODOLOGY:-

In the present study all the subjects (18-25 years) were divided into two groups' namely B.P.ED group and B.A general group. B.P.ED group consisted of Twenty (20) male students of Garhbeta college, Garhbeta, Paschim Medinipur district, and B.A general group consisted of Twenty (20) male students of S.B.S.S Mahavidyalaya, Goaltore, Paschim Medinipur district.

Physiological parameters selected for the study were blood pressure (systolic & diastolic) and heart rate. All the parameters i.e. Blood Pressure (systolic & diastolic) and Heart Rate were measured by a reputed Physician. To assess Blood Pressure (systolic & diastolic) and Heart Rate Digital Blood Pressure Monitor (Omran Corporation, model no-IA2 HEM 7001-c-1) was used.

RESULTS AND DISCUSSION:-

For statistical analysis and interpretation of data 't'-test was conducted. The results have been presented in table 1, 2 and 3.

Table - 1: Mean, SD of Systolic Blood Pressure (mmHg) and Comparison of t-test Between B.P.ED students and B.A general students.

Group	Mean	SD	MD	t-value
B.P.ED Group	121.00	6.08	4.0	1.92*
B.A General group	125.00	6.67		

*Significant at 0.05 level.

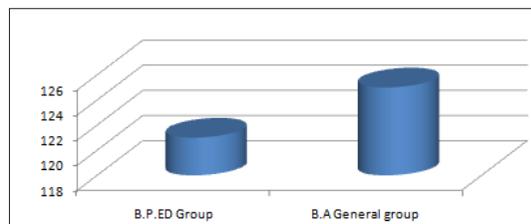


Fig. 1: Graphs Showing Means of Systolic Blood Pressure between B.P.ED students and B.A general students (Boys).

Table -1 show that the Mean of B.P.ED group and B.A general group (Boys) were 121.00 and 125.00 respectively. 't' test was applied and t-value (1.92) appeared significant at 0.05level of confidence. Table-1 was illustrated through graphical representation (Fig. 1).

Group	Mean	SD	MD	t-value
B.P.ED Group	80.50	2.64	5.00	4.81*
B.A General group	85.50	3.63		

Table - 2: Mean, SD of Diastolic Blood Pressure (mmHg) and Comparison of t-test Between B.P.ED students and B.A general group (Boys).

*Significant at 0.05 level

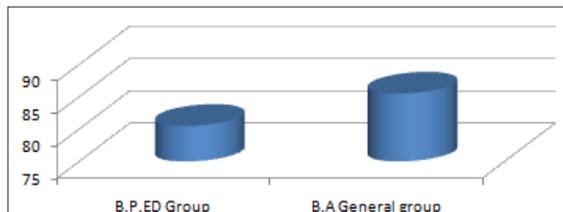


Fig. 2: Graphs Showing Means of Diastolic Blood Pressure between B.P.ED group and B.A general group (Boys).

Table-2 gives information regarding Diastolic Blood Pressure of B.P.ED group and B.A general group (Boys). Table shows that there were significant differences in Diastolic Blood Pressure of B.P.ED group and B.A general group (Boys). The Mean of B.P.ED and B.A general group (Boys) were 80.50 and 85.50 respectively. 't' test was applied and t-value (4.81) appeared significant at 0.05 level of confidence. Graphical representation (Fig. 2) also indicates similar trend of this study.

Table - 3: Mean, SD of Heart Rate (beats/min) and Comparison of t-test Between B.P.ED group and B.A general group (Boys).

Group	Mean	SD	MD	t-value
B.P.ED Group	72.00	2.65	6.50	5.72*
B.A General group	78.50	4.12		

*Significant at 0.05 level.

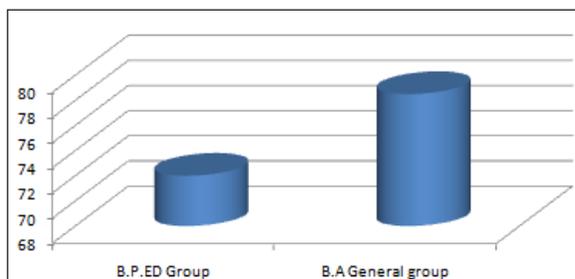


Fig. 3: Graphs Showing Means of Heart Rate between B.P.ED group and B.A general group (Boys).

Table-3 gives information regarding Heart Rate of B.P.ED group and B.A general group (Boys). Table shows that there were significant differences in Heart Rate of B.P.ED group and B.A general group (Boys). The Mean Heart Rate of B.P.ED group and B.A general group were 72.00 and 78.50 respectively. 't' test was applied and t-value (5.72) appeared significant at 0.05 level of confidence. Graphical representation (Fig. 2) also indicates similar trend of this study.

CONCLUSION:-

Based on the result of the present study and within the limitation, the following conclusions may be drawn.

- B.P.ED students (Boys) show lower level of Systolic Blood Pressure in comparison to B.A general students (Boys).
- B.P.ED students (Boys) show lower level of Diastolic Blood Pressure in comparison to B.A general (Boys).
- B.P.ED students (Boys) show lower level of Heart Rate in comparison to B.A general students (Boys).

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