

Comparative Study on Selected Strength between Non Sports Performer and Sports Performer College Student of Jamboni Block of West Bengal

* Mr. Suprakash Das CWTT, ** Mr. Ajoy Bag, CWTT
Seva Bharati Mahavidyalaya, Kaptari, Paschim Medinipur. West Bengal

Abstract: *purpose of the present study was to compare the strength between sports perform students and non sports perform students of Jamboni block. The present studies, twenty-five(25) sports perform college student were selected throw purposive sampling process from the Seva Bharati Mahavidyalaya (SBM) boys hostel .Other twenty-five(25) college student fifteen randomly selected from dept. of commerce & science of Seva Bharati Mahavidyalaya, which established at Jamboni block in Paschim Medinipur district in West Bengal state. Age range of selected subjects in present studies were in between 19 to 23 year. The selected strength were evaluated in the present study throw sit-up>abdominal strength, pull-up> arm/shoulder strength, standing broad jump>leg explosive power, selected variables were tested according to “AAPHER youth test Battery” and “t” test used to test the hypothesis.*

Keyword: *Physical Fitness, Strength, Explosive Power*

I. Introduction

Fitness is the term, which is widely used in the present day health conscious society.

The people have realized the importance of fitness in day to day routines and also in achieving sports excellence. Fitness denotes a person status of physique in relation to its physical achievements. It also helps to withstand stress and carry on, in circumstances where a physically unfit person could not continue (Patil et.al.2012). “A measure of the body’s ability to function efficiently and effectively in work and leisure activities, resist hypokinetic diseases (diseases from sedentary lifestyles), and to meet emergency situations.” It depend on tenth major factors Body composition, Strength, Cardiovascular Fitness, Flexibility, Muscular Endurance. The common definition of strength is “the ability to exert a force against a resistance.” Generally the type of strength are – Maximum Strength-the general force that is possible to over come a resistance in a single maximum contraction. Strength Endurance – the ability of express force over a long period of time. Explosive Strength – the ability to overcome a resistance with a fast contraction. we can be developed our muscular maximum strength – weight training, explosive strength – conditioning exercise, plyometric exercise, weight training. Strength endurance – weight training, circuit training, dumbbell exercise,etc. strength training enhances force production of the skeletal muscles trained. (LaChance et al., 1987) The increased force production is accompanied by an increase in muscle cross-sectional area and fast-twitch fiber area (Costill et al., 1979), along with increases in muscle contractile protein.

II. Methology

Selection of the Subjects: The present study subject were selected from Seva Bhaarati Mahavidyalaya, and boys hostel of Seva Bhaarati Mahavidyalaya. There age range in between 18-23 year. **The regular sports perform student (n=25)** were selected throw purposive sampling form boys hostel of SBM, student those are regular go or there trend to participate in play ground but they are not professional player. Other Normal or **non physical active student(n=25)** were selected throw purposive sampling from S B Mahavidyalaya dept. of commerce & science.

Selection Of Variables & Test Applied : Strength was measured throw 1.Sit up-to measure abdominal strength, 2.Pul-up-to measure arm and shoulders strength, 3.Standing broad jump-to measure leg explosive power. Measurement recorded highest effort of the subjects with in one minute for Sit-up & pull-up, and highest effort with in three jumps recorded in feet & inch for Standing Broad jump.

Analysis: For statistical analysis of the collected data mean and standard division were first calculated. Then “t” test used to assess the significant. The significant was set at 0.5 (24=1.711) level.

III. Result

The calculated data on Sit-up, Pull-up & Sanding broad Jump college students have been statistical analyzed and presented in tabular form.

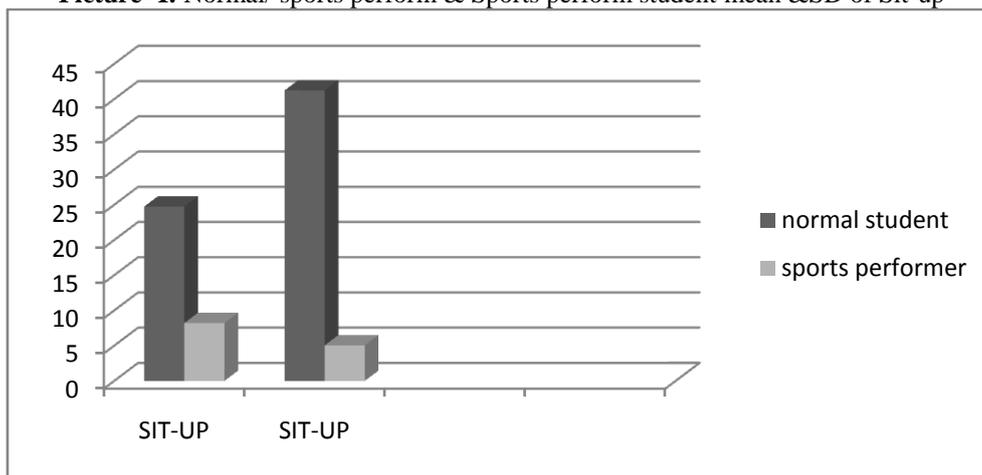
Table - I indicate Mean S.D and t value of both area male student.

VARIABLE	NORMAL STUDENT		PHYSICALLY ACTIVE STUDENT		
	Mean	S.D	Mean	S.D	't' value
SIT-UP	24.76	8.213	41.24	5.046	8.55
PULL-UP	7.38	2.80	14.12	2.337	9.24
SBJ	5.784	0.732	7.008	0.679	6.150

*Significant at 0.05 level

Table 1 it was found that mean and SD of sit-up of non sports perform students were 24.76, 8.213 and physical active or sports perform student were 41.24, 5.046 . The calculated t-value 8.55 as shown in the table no. I was found significantly higher then tabulated value 1.711 which was required it be significant at 0.05 level of significance.

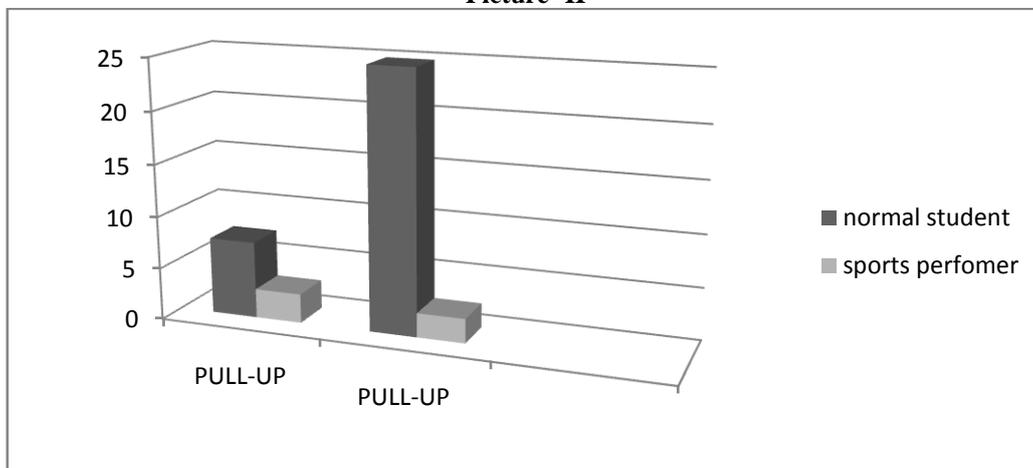
Picture- I: Normal/ sports perform & Sports perform student mean &SD of Sit-up



Mean and SD of Pull-up of Normal/ Non sports perform & Sports perform student.

Table I it was found that mean and SD of pull-up of normal student were 7.38, and 2.80 sports performer were 14.12, 2.337. The calculated t-value 9.24 as shown in the table no. I was found significantly higher than tabulated value 1.711 which was required it to be significant at 0.05 level of significance.

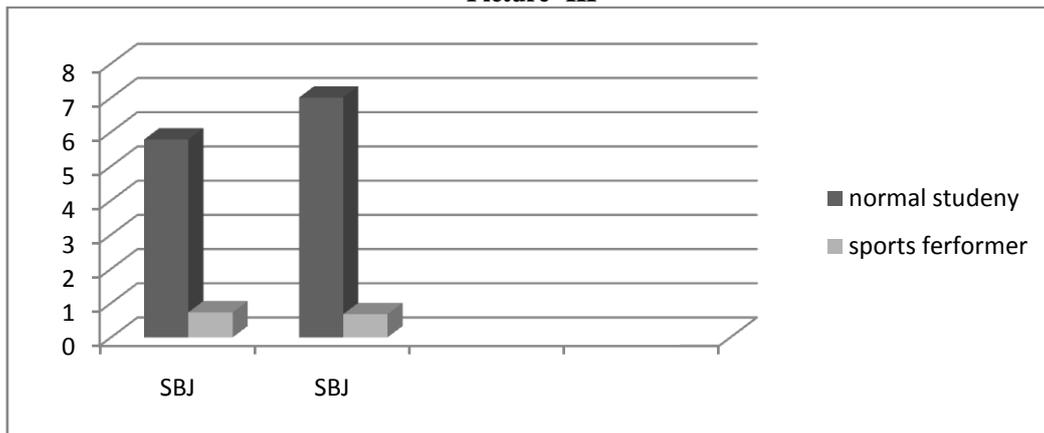
Picture- II



Mean & SD of Standing Broad Jump of normal/Non sports perform & sports perform student.

Table I it was found that mean and SD of Standing Broad Jump of normal student were 5.784, 20.732 and sports performer were 7.008, 0.679(feet). The calculated t-value 6.15 as shown in the table no. I was found significantly higher then tabulated value 1.711 which was required it to be significant at 0.05 of significance.

Picture- III



IV. Discussion

The above mentions table shown that there have grater significant on selected strength variables of sports performer student is then the normal or not sports performer . Regular physical activity prevents or limits weight gain, and gain in body mass index(BMI) (Kyle et al. 2001). Performing exercises that involve a low number of repetitions on a load that is of high resistance effectively increases strength. (Dudley et al., 1985; Sale et al., 1990) It is of importance that athletes have high levels of not only strength but also endurance. For this reason many athletes 'training programs involve simultaneous strength and endurance training. A number of studies have been conducted to investigate the possible interference effects of performing strength training and endurance training concurrently .There is evidence that strength training can help lower risk factors for heart disease, diabetes, osteoporosis and colon cancer. Some studies have shown the improvement in blood lipid profiles and reductions in blood pressure with strength training. The British association of Exercise and Sport Sciences supports strength training as a regular component of any physical activity programme (Stratton et. al, 2004).

V. Conclusion

On the base of t test the present study it was conclude that there is significant difference in selected strength of sports performer. Any individual can belong better fit and healthy life throw the physical activity, so our main target to participate more pupils in any type of physical activity.

Reference

- [1]. Johnson, B. L. and Nelson, J. K. (1982). Practical Measurements for Evaluation in Physical Education. (3rd Edition). Delhi: Surjeet Publication
- [2]. Barrow Harold M. And Mc Gee Rosemary. A practical approach to Measurement in Physical Education. 3rd ed., Lea and Febiger, Philadelphia, (1979).
- [3]. Clarke, H. H. (1976). Application of Measurement to Health and Physical Education. (5th Edition). New Jersey: Prentice-Hall Inc.,
- [4]. Benetti, G., Schneider, P., Meyer, F. (2005). Sports benefits and the importance of muscular strength treinability in prepubertal volleyball athletes. Rev Bras Cineantropom Desempenho Hum, 7: 87–93.
- [5]. President's Council on Physical Fitness (1965). Adult physical fitness: a program for men and women. Washington, DC: U.S. Government Printing Office.
- [6]. Izquierdo, M., Häkkinen, K., Gonzalez-Badillo, J.J., Ibáñez, J., Gorostiaga, E.M. (2002). Effects of long term training specificity on maximal strength and power of the upper and lower extremities in athletes from different sports. Eur J Appl Physiol, 87: 264–271.
- [7]. Rani, A., Singh, J., Kalsi, S.K. (2013). A Comparative study of different motor abilities among college level volleyball and handball female players. International journal physical education, Health and Social Science, 2(2): 1-4.