



## THE EFFECT OF PLYOMETRIC TRAINING PROGRAMME ON SYSTOLIC BLOOD PRESSURE OF TAEKWONDO PLAYER

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**Abstract:**To evaluate the efficiency of 06 weeks Plyometric Training Programme on Systolic Blood Pressure of Taekwondo Player. pre-test and post- test randomized group design were undertaken for the present study which consist of an Experimental group and control group. Equal number of subjects (N=50) were assigned randomly to both groups. The experimental group was exposed to 06 weeks Plyometric Training Programme, whereas, no treatment was given to control group. For the purpose of the present research work a total of (N= 100) Taekwondo Players were randomly selected for the present research work. The level of significance to test the obtained 't'-ratio was fixed at 0.05 level of confidence, which was considered to be appropriate in review of the fact that highly sophisticated instruments and devices were not used for more stringent level of significance. By Using 't'-ratio the finding of the study showed that there was no significant difference in the pre-test and post-test scores of experimental group in Systolic Blood Pressure as a result of 06 weeks plyometric training practices. Whereas the finding of the study reveals that there is no significant difference in Systolic Blood Pressure in the pre-test and post-test of experimental group and No significant difference in control Group. whereas, no treatment was given to control group.

**Keywords:**Plyometric Programme, Taekwondo, Systolic Blood Pressure

### Introduction:

Sport today is worldwide phenomena on physical activity participation in sport and competition is a require of present society as a result one section of a society is really engaged in exploring various aspects of sports. Every physical activity has different effect on the individual as a result lead to different type of adaptation different activity of sports there for to develop different physical, physiological, psychological and social capacity and abilities of sportsman.

Taekwondo is one of the most systematic and scientific Korean traditional martial arts, that teaches more than physical fighting skills. It is a discipline that shows ways of enhancing our spirit and life through training our body and mind. Today, it has become a global sport that has gained an international reputation, and stands among the official games in the Olympics.

First, Taekwondo is the right way of using Tae and Kwon 'fists and feet,' or all the parts of the body that are represented by fists and feet. Second, it is a way to control or calm down fights and keep the peace. This concept comes from the

meaning of Tae Kwon 'to put fists under control' (or 'to step on fists'). Thus Taekwondo means "the right way of using all parts of the body to stop fights and help to build a better and more peaceful world."

### Statement of the problem:

The Effect of Plyometric Training Programme on Systolic Blood Pressure of Taekwondo Player.

### Purpose of the study:

1. The purpose of the study is to improve of Systolic Blood Pressure.
2. The purpose of the study is to find out the level of Systolic Blood Pressure.
3. To study the importance of Systolic Blood Pressure.

### Significance of the study:

1. The result of the present study would be helpful to the Physical Education Teachers and coaches and other professionals, in order to understand the importance Systolic Blood Pressure.
2. The study will help to know the significance of Systolic Blood Pressure.

3. The study may provide an opportunity to assess the Systolic Blood Pressure of Taekwondo players.

**Hypothesis:**

On the basis of literature reviewed, available findings, experts opinion and scholar’s own understanding of the problem it was hypothesized that there were significant effect of specific training program on Systolic Blood Pressure of Taekwondo Player.

**Selection of the samples:** Hundred Taekwondo players was randomly selected as subjects for the purpose of this study all the subjects participated in the regular taekwondo activities in the taekwondo Interuniversity Tournament. The age of the subjects ranged between 18 to 28 years.

**Criterion measure:** Systolic Blood Pressure

**Data Collection:**

Researcher first took the test of Systolic Blood Pressure then Gave the 6 Weeks Specific Plyometric Training to Intercollegiate Taekwondo players then again took the Test of Systolic Blood Pressure

**Data Analysis:**

Table-1.Comparison Between the means of pre-test and Post Test of Control Group and Experimental on the basis of ‘t’-ratio for Systolic Blood Pressure

Item	M1	M2	MD	t'-Ratio	Required t'-Ration
Systolic Blood Pressure Control Group	121.52	119.60	1.92	1.855	1.671
Systolic Blood Pressure Experimental Group	119.60	121.52	1.92	1.855*	1.671

M<sub>1</sub> = Mean of Pre-Test

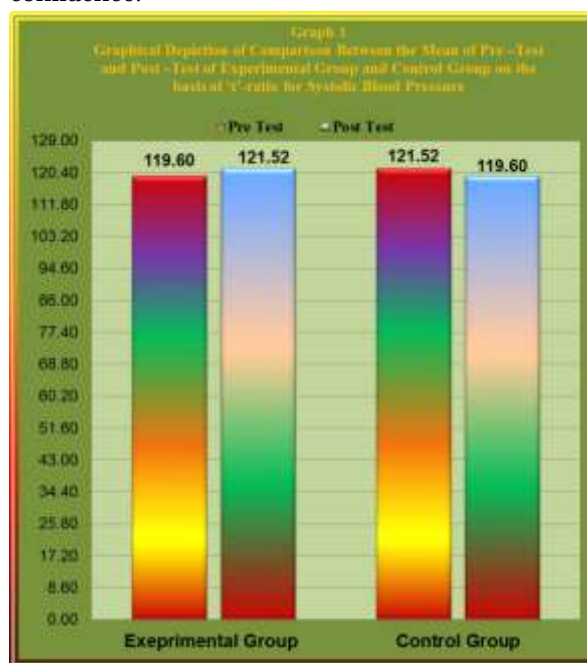
M<sub>2</sub> = Mean of Post Test

**Discussion:**

Table1 Indicates that the mean for Systolic blood Pressure of pre- test and post- test of control group 121.52 and 119.60 respectively. Similarly, examination of the same table reveals that there is no significant difference in the mean of Systolic blood Pressure of pre- test and post- test

scores of control group as the obtained ‘t’-ratio value 1.855 is much more than the required ‘t’-ratio value 1.671 at 0.05 level of confidence.

The mean for Systolic blood Pressure of pre- test and post- test of Experimental group 119.60 and 121.5200 respectively . Similarly, examination of the same table reveals that there is no significant difference in the mean of Systolic blood Pressure of pre- test and post-test scores of Experimental group as the obtained ‘t’-ratio value 1.855 is much less than the required ‘t’-ratio value 1.671 at 0.05 level of confidence.



**Conclusions:**

- 1) In Systolic blood Pressure no significant difference was found between Pre-test and Post- test of Control group, As a result no treatment was given to control group whereas, the post-test scores were found to be less than that of pre-test scores.
- 2) No Significant difference was found in the Systolic blood Pressure of Experimental Group. As a result practices of different Plyometric Training for 06weeks as the post-test scores were found to be more than that of pre-test scores
- 3) It Means no effect of Plyometric training on the Systolic blood Pressure of Taekwondo Player.

**References:****Books**

- 1) Taekwondo Textbook, Kukkiwon Edition, O Sung Publishing Company, Korea.
- 2) Totally Taekwondo, Produced and Published by: Harrow Martial Arts in association with Rayners Lane Taekwon-do Academy, Issue 11 - January 2010.
- 3) **Barrow, M. Harold, and McGee, Rosemary.** A Practical Approach to Measurement in Physical Education. 3rd ed. Philadelphia: Les & Febiger, 1979.
- 4) **Clarke, H. David, and Clarke, Harrison H.** Research Processes in Physical Education. 2nd ed. New Jersey: Prentice - Hall, 1970.
- 5) **Johnson, L. Barry, and Nelson, Jack K.** Practical Measurements for Evaluation in Physical Education. 3rd ed. India: Burgess Publishing Company, 1988.
- 6) **Kamlesh M.L.** Methodology of Research in Physical Education and Sports. New Delhi: Metropolitan Book Co. Pvt. Ltd., 1986.
- 7) **Kansal, Devider K.** Textbook of Applied Measurement Evaluation & Sports Selection. 2nd ed. New Delhi: Sports & Spiritual Science Publications, 2008.

**Journals**

- 1) **Aziz, Rashid Abdul, Tan, Benedict and Teh, Chuan Kong.** "Physiological Responses During Matches and Profile of Elite Pencak Silat Exponents", Journal of Sports Science and Medicine (2002) 147 – 155.
- 2) **Ha, Chul-Soo, Choi, Man-Ho & Kim, Bong-Gyung.** "The Kinematical Analysis of the Taekwondo Sparring Players' Bandal Chagi in Kinematics", International Journal of Applied Sports Sciences Vol. 21(1), (2009) :115-131.
- 3) **Han, H. Doug, et. al.** "Influence of Temperament and Anxiety on Athletic Performance", Journal of Sports Science and Medicine (2006) 381 – 389.
- 4) **Kazemi, Mohsen, et. al.** "A Profile of OlympiC Taekwondo Competitors", Journal of Sports Science and Medicine (2006) 114-121.
- 5) **Kima, Hyun-Bae et. al.** "Taekwondo training and fitness in female adolescents",

Journal of Sports Sciences Volume 29(2), (2011) 133-138.

**Websites**

- 1) Wtforg. (2016). *World Taekwondo Federation*. Retrieved 15 July, 2016, from [http://www.wtf.org/wtf\\_eng/main/main\\_eng.html](http://www.wtf.org/wtf_eng/main/main_eng.html)
- 2) Tfiindiacom. (2016). *Tfiindiacom*. Retrieved 15 July, 2016, from <http://tfindia.com/index.aspx>
- 3) Tamorgin. (2016). *Tamorgin*. Retrieved 15 July, 2016, from <http://tam.org.in/>
- 4) Googlecoin. (2016). *Googlecoin*. Retrieved 15 July, 2016, from <http://www.google.co.in/>
- 5) Wikipediaorg. (2016). *Wikipediaorg*. Retrieved 15 July, 2016, from [http://en.wikipedia.org/wiki/Martial\\_arts](http://en.wikipedia.org/wiki/Martial_arts)
- 6) Torbjørnarntsen. (2016). *Your-martial-arts-resources.com*. Retrieved 15 July, 2016, from <http://www.your-martial-arts-resources.com>
- 7) Lwwcom. (2016). *Lwwcom*. Retrieved 15 July, 2016, from <http://journals.lww.com/nsca>

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