



EFFECT OF PASSIVE EXERCISES ON JUNIOR ATHLETE PLAYERS

Krishna Pal Singh Naruka¹ and Dr. Sunil Dudhale²

¹Ph.D Research Scholar, School of Physical Education Davv Indore. (bantunaruka@gmail.com)

²Ph.D Research Supervisor, School of Physical Education DAVV Indore.

ABSTRACT :

The Purpose of this study was to find out effect of Passive stretching exercises on flexibility of junior Athlete players of sports academy of Nagda. For this purpose researcher selected 20 players of Nagda Sports Academy & Age group between (14-18 years) of players. In this study researcher know the effect of Passive stretching exercises program on flexibility of junior Athlete players. Researcher prepared training schedule of twelve weeks which was based on flexibility exercises. Pre data collected in first day of training then after twelve weeks again post data collected by researcher. And compare the effect of Passive stretch exercises on flexibility. To analysis the data between pre and post test of Passive stretching exercises group paired't' test was applied. Mean of pre test was 9.35 & post test mean was 18.025. To compare the mean difference (MD) between pre and post test that was (-8.675). Result shown that there will be significance difference on pre test and post test, hence the hypothesis was rejected on Active stretching exercises group on flexibility of Nagda Sports Academy Players.



KEYWORDS : Fitness, Passive exercise, Flexibility, Sit and Reach Test etc.

INTRODUCTION

Fitness is the ability to live a full and balanced life. The totally fit person has a healthy and happy outlook towards life. Fitness is the young man's absolute necessity. It breeds self-reliance and keeps man mentally alert. Physical fitness is essential for human beings to adjust well with his environment as his mind and body are in complete harmony. It is generally agreed that physical fitness is an important part of the normal growth and development of a child, a generic definition regarding the precise nature of physical fitness has not been universally accepted. Through research and scholarly inquiry, it is clear that the multi-dimensional characteristics of physical fitness can be divided into two areas: health related physical fitness and skill related physical fitness. Found that physical fitness is not a static factor and it varies from individual to individual and in the same person from time to time depending on factors. Physical fitness is probably the most popular and frequently used term in physical education. The most important objective of physical educators is to develop physical fitness. According to Nixon and cozens 1964, it was the desire to establish a scientific approach to the development of physical fitness which formed the basis of the first meeting of physical educators in 1885 when the profession of physical education originated. The United States president's Council on physical fitness and sports defined the terms "physical fitness as the ability to carry out daily task with vigor and alertness, without undue fatigue, with ample energy to enjoy leisure time

pursuits and to meet unforeseen emergencies” Clarke, 1971. General fitness implies the ability of a person to live most effectively with his and her potentials, which depend upon the physical, mental, emotional, social and spiritual components of fitness which are highly interrelated. The primary components of physical fitness identified by the president’s council on physical fitness and sports were muscular strength, muscular endurance and cardio respiratory endurance. However, later on the president council also included some other motor performance components namely agility, speed, flexibility and balance in physical fitness. But keeping in view the general opinion of the majority of the researchers, the author has not included the components such as speed, agility, power and balance which are more important for success in specified sports as essential components of basic physical fitness. However, the author defines physical fitness by group of five components, namely muscular strength, muscular endurance and cardio respiratory endurance, flexibility and body composition. It is important to mention here that some experts e.g. Clarke and Clarke, 1987; AAHPERD, 1980, 1984 call such fitness tests which include the measurement of percentage body fat, as health related physical fitness tests.

PASSIVE EXERCISES

Passive exercises are directed towards the flexibility of body parts. Relaxed passive movement, forced passive movement and stretching are the subcategories of passive exercises. During Relaxed passive movement exercise, a joint is moved through the existing range of motion. Forced passive movements are localized quick movements where the joints are moved passively beyond the existing range. These are also referred to as manipulation. Both the exercises can be applied to physiological movement or accessory movement. Physiological movements are the movements which a person can produce voluntarily. Flexion, extension, abduction, adduction, rotation are the physiological movements available in human joints. Accessory movements are those movements that take place in a joint during normal movement but cannot be performed actively by an individual. They consist of spin, glide and slide of one joint surface over the other. Execution of accessory movement requires specialized knowledge of joint anatomy and biomechanics. Stretching exercise refers to taking the joints to such position where a given muscle or a soft tissue is stretched to its maximum possible length. It is a therapeutic procedure that aims to elongate the soft tissue of the body. These are exercises which are usually directed towards the muscles. The muscle is elongated passively to its maximum length. Stretching exercise is also known as flexibility exercise. The external force for stretching is provided by the physiotherapist or by the patient or by mechanical means such as pulley or weights. Passive stretching, active stretching and ballistic stretching are the subcategories of stretching exercises. Passive stretching is performed by another person. Active stretching refers to the technique in which the patient does stretching himself. Here the force of stretching is generated by the contraction of the opposite muscle group or by the gravity. Display one self-stretching exercise for the hamstring muscle. The person is doing an active contraction of the quadriceps muscle to stretch the hamstring muscle. On the other hand in hamstring stretching is done passively by another person. Ballistic stretching is a form of active stretching characterized by the application of quick oscillations at the end range of the movement.

METHODOLOGY

In this experimental research study on flexibility, the research scholars selected 20 players of Sports Academy of Nagda Jn Ujjain District M.P. Purpose was to know the hamstring and lower back flexibility of players, For this purpose researcher selected sit and reach test for flexibility & Testing Box or Yard stick for measuring tool. For this experiment work researcher selected purposive sampling on Passive stretching exercises group. Sample group age was 14 to 18 years all are belonging to male gender category. Passive stretch exercise group was trained with the method of Passive Exercise Stretch programmed of twelve weeks. The training sessions were conducted six days in a week and the last day of the week is for the recovery. In the training session of twelve week hamstring flexibility was measured twice before and after the experimental period. The subjects were clarified the purpose of tests & execution the test by demonstration of the tests all efforts were put to ensure accuracy, uniformity and standardization of the

administration in the test. To obtain the impact of passive stretch exercise on hamstring flexibility, pre and post-test result were compared.

RESULT AND DISCUSSION

GROUPS	MEAN		MD	SEDM	Cal 't'
	PRE	POST			
Passive Group	9.35	18.025	-8.675	0.443	-13.84
*significant at 0.05 level for one tailed test Tab t.05(19) =1.729 N=20 df= 19					

Result shown that pre data was collected in first day of the training program and the mean of pre test was 9.35 then after given twelve week Passive stretching exercise program post data was collected. post test mean was 18.025. & there is mean difference (MD) between -8.675 shown on table -1. **Result shown** that there will be significance difference on pre test and post test; hence the hypothesis was rejected on Passive stretching exercises group on flexibility of Sports Academy Players of Nagda.

Table -1 Pre and Post Test of Passive Stretching Exercise Group

CONCLUSION

After the result in this part concluded that there was as significance difference between pre data and post data which was compared after the twelve week Passive stretching Exercise program, the difference shown that there was a difference between pre and post test of Passive stretch group, this difference was shown in the result due to twelve week specific Passive stretching training schedule, the effect and impact of training schedule was very beneficial for Junior Athlete players. Passive stretching training program was very accurate and suitable to enhance the performance on flexibility of junior Athlete players of sports Academy of Nagda Players.

REFERENCE:

- <http://www.health-galaxy.com/What-Is-Physical-Fitness.html>.
- www.faqs.org/health/topics/4/Physical-Fitness.html#ixzz3RMGkTnh9.
- H. David Clarke and H. Harrison Clarke, "Application of Measurement Health and Physical Education", New Jersey: Englewood Cliffs Prentice Hall Inc, 1989: p.3-10.
- N. Hastad Douglas and C. Lacy Alan, "Measurement and Evaluation in Physical Education and Exercise Science", USA: Gorsuch Scarisbrick, Publishers, 1994: p.12.
- Devinder K. Kansal, "Test and Measurement in Sports and Physical Education", New Delhi: D.V.S Publications, 1996: p.112.
- http://epgp.inflibnet.ac.in/epgpdata/uploads/epgp_content/S000834PN/P001517/M016130/ET/1465281323CH14M6.1TherapeuticExercisetxt.pdf.