Publisher
www.theuniversityacademics.com

E-ISSN:2319-3050

International Journal of Research Padagogy and Technology in Education and Movement Sciences

2023 Volume 12 Number 02 APR-JUN

Research Article

Training and Football

EFFECT OF DYNAMIC STRETCHING ROUTINE PROGRAM ON LOWER BODY MUSCULAR PREPARATION AND FLEXIBILITY OF FOOTBALL PLAYERS

Deore M.[1*]

DOI: https://doi.org/10.55968/ijems.v12i02.270

[1*] Manish M. Deore, Director of Physical Education and Sports, , Mahatma Gandhi Vidyamandir's Karmaveer Bhausaheb Hiray Arts, Science and Commerce College, Nimgaon, Malegaon, Nashik, Maharashtra., India.

The aim of this study was to find out effect of dynamic stretching routine program on lower body muscular preparation and flexibility of football players. It was an experimental study in which equivalent groups design was used. In this study 30 intercollegiate malefootball players were selected as sample by using purposive sampling techniquetotal intercollegiate male football players(n=30) from Nashik city. Footballers equally divided into the 15 each experimental and control group. Static flexibility test - ankle, Static flexibility test- hip & trunk used for pre-test were conducted on both the groups prior after implemented dynamic stretching routine program conducted post test obtained collected data was analyzed by using independent sample t-test. Result dynamic stretching routine program was effective to improve muscular flexibility. This shows the significant effect at 0.05 level thus researcher concludes that there was significant improvement on flexibility performance of experimental group as compared to control group due to the treatment given.

Keywords: Dynamic Stretching, Static Flexibility Ankle, Hip And Trunk and Football Players

Corresponding Author

Manish M. Deore, Director of Physical Education and Sports, , Mahatma Gandhi Vidyamandir's Karmaveer Bhausaheb Hiray Arts, Science and Commerce College, Nimgaon, Malegaon, Nashik, Maharashtra., India.

Email: manishdeore10@gmail.com

How to Cite this Article

Manish M. Deore, EFFECT OF DYNAMIC STRETCHING ROUTINE PROGRAM ON LOWER BODY MUSCULAR PREPARATION AND FLEXIBILITY OF FOOTBALL PLAYERS . IJEMS. 2023;12(02):43-47.

Available From

https://ijems.net/index.php/ijem/article/view/270

To Browse

Manuscript Received	Review Round 1	Review Round 2	Review Round 3	Accepted
2023-02-15	2023-02-28	2023-03-16	2023-04-19	2023-05-17

Conflict of Interest	Funding	Ethical Approval	Plagiarism X-checker	Note
NIL	NO	YES	11%	

Introduction

The football players most of involving themselves in physical exertion every day by sweating hours at ground practice, gyms with conditioning or football matchesin clubs or playing some games apart from recreation. In the recent many new forms of exercise have been discovered for rehabilitation or fitness purpose among them one of the popular exercises. In recent years many athletes have been paying attention to the prior stretching for the prepare muscles for the major activity or be safe for injuriesand also included in their exercise routine, those helps them to enhance their performance in competition. Researcher was madedynamic stretching routine program for intercollegiate footballer to regularly practiceto implement his scheduled.Stretching improves and increases flexibility also strengthens muscles.

Dynamic stretching can take place first thing in the morning too and consists of more circular or action-orientated movements, which mobilize joints. A 30-minute routine before replicates movements found in your sport or in your fitness training sessions will 'kick start' your mobility for the day. Rather than wait for your body to become mobile throughout the day, a structured session can fast track this progress.

Related literature

Holt et al. (1996) has defined flexibility as "the intrinsic property of body tissues, which determines the range of motion achievable without injury at a joint or group of joints'. Flexibility is the ability of a muscle to relax and yield to stretch. This definition emphasizes the contractile component of soft tissue structures around a joint rather than the movement available at a specific joint or joints. When measuring flexibility, it should not be thought of as a whole body component but as a joint or body segment specific issue. Flexibility will often be joint specific in different sports and measurement should therefore reflect those variations (Winter et al, 2007).

Methodology

Method

The present study was experimental research which was conducted with a purpose to find out the effect of six weeks effect of dynamic Stretching routine program on lower body muscular preparation and flexibility of football players.

Research Design

Experimental design was used for this study to check the hypothesis; this research was based on pre-test & post- test equivalent groups design.

Method of Sampling

The purpose of the study 30 intercollegiate male footballers was randomly selected from Nashik city. The total number of subjects was divided into two groups' i.e. experimental group and control group each group consisted of 15 subjects.

Selection of Variable

In this study lower body flexibility variable was selected and measures through Static flexibility test - ankle, Static flexibility test - hip & trunk test used for collected data.

Dynamic stretching routine program

The dynamic stretchingwas administered for 6 weeks. At the start of programme pre-test conducted both groups, after implemented the program and post-tested of both groups. Dynamic stretching four days per weekin 30 minute session.1. Knee raises - lift knee to chest. 2. Bum kicks - kick your bum with your heel. 3. Knee circles out to in - bring knee out to the side, thigh parallel with the floor and then into the middle of your body and down. 4. Knee circles in to out - bring knee up to the middle of your chest, then out to the side of your body and back down. 5. Leg swings forward - stand with left leg slightly in front of the right, swing your right leg forward and off the floor so foot is level with hip (or higher if you are more flexible) and back down. 6. Leg swings backward - swing right leg back behind you to about a 45-degree angle and back down. 7. Leg swings out to in - same idea as for the knees, but with leg straight (it is a bit harder) so keep your leg straight and bring it out to the side, foot level with your hip and around to the front of your body and down. 8. Leg swings in to out - bring your foot level with your hip to the front and then around to the side of your body and down. 9. Chest hugs - cross both your arms across your body and hug then straighten the arms out and back to the side. 10. Chest hug diagonals - same as above, but release your arms diagonally, so one hand is pointing to the

Floor and the other to the ceiling, squeeze in and then reverse

Procedure of the study

The researcher assembled the subjects and given to them instruction about the need, about the experiment also provide explanation of flexibility test after theexperimental group implement six weeks dynamic stretching program and control group they didn't part program but they keep on regular football activity. Subjects were conductedpre-testof Static flexibility test - ankle, Static flexibility test - hip & trunk test onexperimental and control groups, after the implementedprogram conductedpost testsfor data collection.

Statistical Tools

After collected data pre-test or post-test of experimental and control group byanalyzed usedindependent sample 't'test and interpretation were drawn.The level of significance was kept at 0.05 to test the hypothesis.

Results and Discussion

The obtained results are present in the following table which represents the results of independent sample t-test to compare the mean values of experimental and control group.

Table no. 1 Enclosed as Annexure

The findings regarding the effect of dynamic stretching routine program on lower body flexibility variable of experimental and control group revealed the following indications. Static flexibility ankle test and static flexibility hip and trunk test conducted on experimental group indicated significant improvementcompared to control group. To find out significance of mean differences between experimental and controlgroups mean scores, t-test was applied at 0.05 level of significant with t-value similarly 5.57, 141, 4.88 & 1.22. The pre-test and post-test scores for experimental group on flexibility variable i.e.static flexibility ankle test and static flexibility hip and trunk test the t-value were found to be statistically significant.The research finding of Amorim et al. (2011) support the findings of the present study. He concluded that Pilates Training has a positive effect on flexibility and muscular strength in dance student.

Conclusion

On the basis of the result obtained in the study the researcher made the concluded that lower body flexibility is improved through regular participation in six weeks of dynamic stretching routine program in the intercollegiate male football players.

Annexure

Annexure 01

Table no. 1 Statistical Analysis

Test	Groups		N	Mean (Inch)	SD	MD	't' value
Static flexibility test-ankle	Exp Group	Pre-test	15	27.50	6.78	5.10	5.57
		Post-test	15	32.50	7.47		
	Con Group	Pre-test	15	26.10	5.32	1.10	1.41
		Post-test	15	27.20	5.18		
Static flexibility test-hip & trunk	Exp Group	Pre-test	15	15.5	2.22	1.8	4.88
		Post-test	15	17.3	2.86		
	Con Group	Pre-test	15	15.3	2.10	0.4	1.22
		Post-test	15	15.7	2.15		

Reference

Best, J. W. and Kahn, J. V. *(2008) Research in education tenth edition. Published by Asoke K. Ghosh, PHI learning private limited, M-97, Connaught circus, New Delhi-110015. Pp.168 [Crossref][Google Scholar]*

Bloom & Joyce, L. (1982). "A Study of the Effects of Static and Ballistic Stretching Exercise Programs on Flexibility", Dissertation AbstractsInternational, 43/04: 1078-A. *(2008) Research in education tenth edition. Published by Asoke K. Ghosh, PHI learning private limited, M-97, Connaught circus, New Delhi-110015. Pp.168 [Crossref][Google Scholar] [Crossref][Google Scholar]*

Cakmakci, O. et al. (2011). "The Effects of 8 Week Pilates Exercise on Body Composition in Obese Women". *Coll. Anthropol. 35/4/ 1045-1050 [Crossref][Google Scholar]*

Caldwell, K. et al. , (2009). "Effect of Pilates and Taiji Quan Training on Self- Efficacy, Sleep quality, mood, and Physical Performance of College Students". *Journal of Bodywork and Movement Therapies, Volume: 13,Issue 2, pp. 155-163 [Crossref][Google Scholar]*

Emery, K. Sophie, J. D. S. *McMillan, A. Cote, J. N. (2010). The Effects of a Pilates Training Program on Arm-Trunk Posture Movement". ClinicalBiomechanics, Volume: 25, Issue-2, pp.124-130 [Crossref][Google Scholar]*

Eric, G. J. et al. (2007). *"The effects of Pilates-based exercise on dynamic balance in healthy adults ". Journal of Bodywork and MovementTherapies. Volume: 11, Issue 3, pp. 238-242 [Crossref][Google Scholar]*

Gagnon, L. H. (2005). "Efficacy of Pilates Exercises as therapeutic intervention in treating patients with low back pain", Dissertation, University ofTennessee. *[Crossref][Google Scholar]*

Singh, M. , Kadhim, M. M. , Turki Jalil, A. *et al. A systematic review of the protective effects of silymarin/silibinin against doxorubicin-induced cardiotoxicity. Cancer Cell Int 23, 88 (2023). https://doi.org/10.1186/s12935-023-02936-4 https://cancerci.biomedcentral.com/articles/10.1186/s12935-023-02936-4 [Article][Crossref][Google Scholar]*

Mandeep Singh Nathial, Analysis of set shot in basketball in relation with time to perform the course and displacement of center of gravity, American Journal of Sports Science, Vol. 2 Issue. 5 pp: 122-126 (2014). Retrieved from https://www. *sciencepublishinggroup.com/journal/paperinfo.aspx?journalid=155&doi=10.11648/j.ajss.20140205.13 [Crossref][Google Scholar]*

Mandeep Singh (2010). Evaluation And Improvement Of Sports Techniques Through Biomechanical Updated Analyzing Technology, University News, Journal of Higher Education Association of Indian Universities, Association of Indian Universities, Vol:48:Issue. 05;2010 Pp45-57, 2010. *sciencepublishinggroup.com/journal/paperinfo.aspx?journalid=155&doi=10.11648/j.ajss.20140205.13 [Crossref][Google Scholar] [Crossref][Google Scholar]*

. . 05;2010 Pp45-57, 2010. *Sciencepublishinggroup.com/journal/paperinfo.aspx?journalid=155&doi=10.11648/j.ajss.20140205.13 [Crossref][Google Scholar] [Crossref][Google Scholar] [Crossref][Google Scholar]*

Mandeep Singh Nathial, A Study of Adjustment and Emotional Intelligence of University Coaches In India, American Journal of Applied Psychology. Volume 3, Issue 6, November 2014 , pp. 122-126. doi: 10. *11648/j.ajap.20140306.11 [Crossref] [Google Scholar]*

Nathial, Mandeep Singh. A COMPARATIVE AND ANALYTICAL STUDY OF SELF-ESTEEM AND JOB SATISFACTION IN ATHLETES AND NON ATHLETES. Journal of Advances in Social Science and Humanities, 2(10). https://doi. *org/10.15520/jassh210123 [Crossref][Google Scholar]*

Singh, M. , Kour, R. , & Kour, A. ,. *A collaborative diversified investigation of respective responses of sports person coaches and organizations on criminalization of doping.International Journal of Health Sciences,6(S3), 11295–11310. [Article] [Crossref][Google Scholar]*

Mandeep Singh. , Assessment of Vocational Interests of Pahadi&Bakarwal School Students In Relation To Their Gender. Int J Recent Sci Res. 9(3), pp. *24817-24819. DOI: [Article][Crossref][Google Scholar]*

Dr. Mandeep Singh, 2017. "A study of awareness of inhouse doping errors among national level players and sports administrators in J&K state of India", International Journal of Current Research, 9, (01), 45226-45227. http://www. *journalcra.com/sites/default/files/issue-pdf/20036.pdf [Crossref][Google Scholar]*

Mandeep Singh, 2019; "Effect of Mobile Screen Psychomotor Digital Image Motivators in Person Technique in Reducing Anxiety Level of Intervarsity Players of Cluster University Jammu, Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP). Volume-9 Issue-1, October 2019, PP: 3750-3752, DOI: 10. 35940/ijeat. A9811. *109119. [Article][Crossref][Google Scholar]*

Mandeep Singh. (2018). THE AWARENESS OF MOVEMENT AND FITNESS SCIENCES AMONG SCHOOL, UNDER GRADUATE AND POST GRADUATE LEVEL STUDENTS: EMPOWERING EDUCATION THROUGH PHYSICAL EDUCATION. European Journal of Physical Education and Sport Science, 4(3). *[Article][Crossref][Google Scholar]*

SINGH SIDHU, A. , & SINGH, M. (2022). KINEMATICAL ANALYSIS OF HURDLE CLEARANCE TECHNIQUE IN 110M HURDLE RACE. *International Journal of Behavioral Social and*

Movement Sciences, 4(2), 28–35. Retrieved from [Article][Crossref][Google Scholar]

Singh, A. , & Singh , D. M. (2013). *PROMOTION OF RESEARCH CULTURE –ENHANCING QUALITY IN HIGHER EDUCATION. International Journal of Behavioral Social and Movement Sciences, 2(2), 202–208. Retrieved from [Article][Crossref][Google Scholar]*

SINGH, M. , & SINGH SIDHU, A. (2016). A COMPARATIVE STUDY OF BODY COMPOSITION AND RELATIVE HEALTH STATUS AMONG RESIDENT AND NON-RESIDENT STUDENTS IN DIFFERENT SCHOOLS OF J&K. *International Journal of Behavioral Social and Movement Sciences, 5(3), 08–13. Retrieved from [Article][Crossref][Google Scholar]*

Singh Nathial, D. M. (2012). ANALYZING THE CREDIT BASED SYSTEM IN PHYSICAL EDUCATION. *International Journal of Behavioral Social and Movement Sciences, 1(3), 172–176. Retrieved from [Article][Crossref][Google Scholar]*

SHARMA, N. P. , & SINGH, M. (2014). *SENIOR AGE GROUP RELATIVE EXERCISES AND IMPACT ON THEIR LIFESTYLE. International Journal of Behavioral Social and Movement Sciences, 3(04), 78–82. Retrieved from [Article][Crossref][Google Scholar]*

CHAND PURI, P. , MISHRA, P. , JHAJHARIA, B. , & SINGH, M. *(2014). COORDINATIVE ABILITIES OF VOLLEYBALL IN DIFFERENT AGE GROUPS: A COMPARATIVE STUDY. International Journal of Behavioral Social and Movement Sciences, 3(3), 56–68. Retrieved from [Article][Crossref][Google Scholar]*

Dr. Mandeep Singh & J N Baliya, 2013; "A study of family stress among working and non-working parents", International Journal of Research in Social Sciences. Vol 2, 2. 194-201. *[Article][Crossref] [Google Scholar]*

Kloubec, J. A. (2010). "Pilates Improvement of Muscle Endurance, Flexibility, Balance, and Posture". *Journal of Strength and Conditioning Research,Volume: 24, Issue-3, pp. 661-667 [Crossref][Google Scholar]*

Krishnan, K "The Effects of Selected Yogic Exercises upon the Development of Flexibility" (Unpublished Master's Thesis, submitted To the University of Madras, 1977), P. 40. . *Journal of Strength and Conditioning Research,Volume: 24, Issue-3, pp. 661-667 [Crossref][Google Scholar] [Crossref][Google Scholar]*

Moses, Robson. "Effect of yoga on flexibility and Respiratory Measures of Vital Capacity and Breath Holding Time", Unpublished Doctoral Dissertation, University of Oregon, 1972. . *Journal of Strength and Conditioning Research,Volume: 24, Issue-3, pp. 661-667 [Crossref][Google Scholar] [Crossref] [Google Scholar] [Crossref][Google Scholar]*