

EFFECT OF THERABAND TRAINING ON UPPER BODY STRENGTH AMONG HOCKEY PLAYERS

Dr. K. Rajeshkumar

Assistant Professor, Department of Physical Education, Tamilnadu Physical Education and Sports University Chennai, Tamilnadu

Cite This Article: Dr. K. Rajeshkumar, "Effect of Theraband Training on Upper Body Strength among Hockey Players", International Journal of Advanced Trends in Engineering and Technology, Volume 5, Issue 1, Page Number 19-21, 2020.

Abstract:

The purpose of the study was to find out the effect of theraband training on upper body strength among hockey players. To achieve the purpose of the present study, thirty hockey players from Tamilnadu Physical Education and Sports University, Chennai were selected as subjects at random and their ages ranged from 18 to 25 years. The subjects were divided into two equal groups at random. The subjects were divided into two equal groups of fifteen players each. Group I acted as Experimental Group (Theraband training) and Group II acted as Control Group. The requirement of the experiment procedures, testing as well as exercise schedule was explained to the subjects so as to get full co-operation of the effort required on their part and prior to the administration of the study. The pre test and post test scores were subjected to statistical analysis using Analysis of Covariance (ANCOVA) to find out the significance among the mean differences. In all cases 0.05 level of significance was fixed to test hypotheses.

Key Words: Theraband Training, Upper Body Strength, Hockey **Introduction:**

The Thera-band is a resistance band that can be an excellent tool for people who want to train at home, travel, stretch, rehabilitate or for those just want to add variety to their exercise program. It comes in different resistance levels that are determined by the colour and thickness of the band. They provide resistance during strength exercises, assistance during flexibility exercises and in some cases can assist in stability. Made of natural rubber latex, they are easily recognized by the trademark Thera- Band colors – yellow, red, green, blue, black and silver, as well as our other colors of tan and gold. Advancing through the sequential system of progressive resistance provides positive reinforcement and feedback for gauging results. Effects of resistance band exercises on strengthening a specific muscle group. As a result no definite guidelines exist as to the number of sets, repetitions and amount of resistance that should be used. However, many health and fitness practitioners use resistance tubing routinely to prevent and rehabilitate overuse injuries by strengthening often smaller, neglected muscle groups.

For example, athletic movements such as a bowling and batting in cricket can place considerable demand on the posterior rotator cuff muscles (external rotators, supraspinatus, infraspinatus, teres minor). These muscles undergo eccentric contraction during the declaration phase of the bowling, which places considerable strain on the shoulder). However, the same muscles may not be effectively worked with traditional isotonic exercises. If larger muscle groups, such as the deltoids, become stronger and are able to cope with and apply greater force, this may further compromise the rotator cuff muscles. A program of resistance band exercises to compliment regular strength training may be able to improve the strength of more isolated muscle groups such as the rotator cuff. Additionally, training these otherwise neglected muscles may even improve performance (Kyungmo Han., Mark Ricard, D., Gilbert Fellingham, W. (2009).

Methodology:

The purpose of the study was to find out the effect of theraband training on upper body strength among hockey players. To achieve the purpose of the present study, thirty hockey players from Tamilnadu Physical Education and Sports University, Chennai were selected as subjects at random and their ages ranged from 18 to 25 years. The subjects were divided into two equal groups at random. The subjects were divided into two equal groups of fifteen players each. Group I acted as Experimental Group (Theraband training) and Group II acted as Control Group. The requirement of the experiment procedures, testing as well as exercise schedule was explained to the subjects so as to get full co-operation of the effort required on their part and prior to the administration of the study. The pre test and post test scores were subjected to statistical analysis using Analysis of Covariance (ANCOVA) to find out the significance among the mean differences. In all cases 0.05 level of significance was fixed to test hypotheses.

Results:

Table 1: Computation of Mean and Analysis of Covariance of Upper Body Strength of Experimental and Control Groups

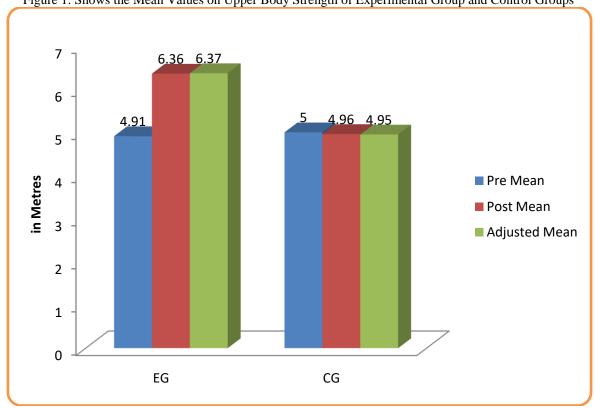
	Experimental Group	Control Group	Source of Variance	Sum of Squares	df	Mean Square	F
Pre Test Mean	4.91	5.00	BG	0.05	1	0.05	0.68
rie Test Mean			WG	2.19	28	0.07	

Post Test	6.36	4.96	BG	14.64	1	14.64	195.55*
Mean	0.30		WG	2.09	28	0.07	
Adjusted Post	6.37	4.95	BG	14.75	1	14.75	204.86*
Mean			WG	1.94	27	0.07	

^{*} Significant at 0.05 level, Table value for df 1 and 28 was 4.20, 1 and 27 was 4.21

The above table indicates the adjusted mean value of upper body strength of experimental and control groups were 6.37 and 4.95 respectively. The obtained F-ratio of 204.86 for adjusted mean was greater than the table value 4.21 for the degrees of freedom 1 and 27 required for significance at 0.05 level of confidence. The result of the study indicates that there was a significant difference among experimental and control groups on upper body strength. The above table also indicates that both pre and post test means of experimental and control groups differ significantly.





Conclusion:

It was observed that the six weeks of experimental group have significantly improved the upper body strength of hockey players.

References:

- Anderson, C. E., Forzo, G. A., & Sigg, J. A. (2008). The Effects of Combining Elastic and Free Weight Resistance on Strength and Power in Athletes. Journal of Strength Conditioning Research, 22(2), 567-74.
- 2. Baker, D., Wilson, G., Carylon, R. (1992). Periodisation; The Effect on Strength of Manipulating Volume and Intensity. Journal of Strength and Conditioning Research, 8(4), 235-242.
- 3. Boyer, B. T. (1990). A comparison of the effects of three strength training programs on women", The Journal of Applied Sport Science Research, pub Id: 103-365-232.
- 4. Brunelli, Stefano, Anwer, Shahnawaz. & Jeelani, Shayista I. (2021). Effects of Thera Band and Theratube Eccentric Exercises on Quadriceps Muscle Strength and Muscle Mass in Young Adults. 5560144.
- 5. Christopher, & Hughes, (1999). Resistance Properties of Thera-Band@ Tubing during Shoulder Abduction Exercise", Journal of Orthopaedic & Sports Physical Therapy, 29 (7). Al3-420
- 6. Colado & Triplett (2008). Elastic resistance exercise program effective in high school-based exercises for teens", American Journal of Sports Medicine, 26(4), 510-5.
- 7. Colado J. C., Garcia-Masso, X., Pellicer, M., Alakhdar, Y., Benavent, J., & Cabeza-Ruiz, R. (2010). A Comparison of Elastic Tubing and Isotonic Resistance Exercises. International Journal of Sports Medicine, 31(11), 810-7.

International Journal of Advanced Trends in Engineering and Technology (IJATET)

Impact Factor: 5.965, ISSN (Online): 2456 - 4664

(www.dvpublication.com) Volume 5, Issue 1, 2020

- 8. Ghigiarelli, & Jamie Jude. (2006). The Effects of a 7-Wk Heavy Elastic Band and Weighted Chain Program on Upper Body Strength and Upper Body Power in a Sample of Division 1-Aa Football Players", International Journal of Sports Medicine, Etd-08042006-102934.
- 9. Kyungmo Han., Mark Ricard, D., Gilbert Fellingham, W. (2009), "Effects of a 4-Week Exercise Program on Balance using Elastic Tubing as a Perturbation Force for Individuals with a History of Ankle Sprains", Journal of Orthopaedic and Sports Physical Therapy ,39(4), 246-255.