



ISSN: 2456-0057

IJPNPE 2024; 9(1): 64-67

© 2024 IJPNPE

www.journalofsports.com

Received: 05-11-2023

Accepted: 13-12-2023

P Anbu MaryPh. D Research Scholar, Mother
Teresa Women's University,
Kodaikanal, Tamil Nadu, India**Dr. A Rajam**Assistant Director of Physical
Education, Mother Teresa
Women's University,
Kodaikanal, Tamil Nadu, India

Effect of hockey training on selected psychological and physiological variables of women students

P Anbu Mary and Dr. A Rajam

Abstract

The objective of this study was to find out the impact of hockey training on psychological and physiological variables of women students. To achieve the purpose of this study, forty women students. Their age were ranged from 18 to 21 years. The selected subjects were randomly divided into two groups such as Group 'I' underwent hockey training (n=20) and Group 'II' acted as control group (n=20). Group 'I' underwent hockey training for three alternative days and one session per day and each session lasted for an hour for eight week period. Group 'II' was not exposed to any specific training but they were participated in regular activities. The data on and stress was measured by standardized questions (points) and vo2 max was measure by cooper test (ml/kg). The pre and post-tests data were collected on selected criterion variables prior to and immediately after the training programme. The pre and post-tests scores were statistically examined by the dependent 't' test. The level of significance was fixed at 0.05 levels for all the cases in order to find out the significance. It was concluded that the hockey training on stress and vo2 max of women students. However the control group had not shown any significant improvement on selected variables such as stress and vo2 max.

Keywords: Hockey Training, Stress and Vo₂ max Power and Women students

Introduction

Being a new field hockey player can be exciting and overwhelming at the same time. There are many skills a field hockey player should learn and knowing where to start is important. These five basic field hockey skills are commonly taught by club and high school coaches, as well as at summer field hockey camps, and are a great way to improve a beginner's game. It helps develop the body's cardiovascular system. The sustained energy and holistic muscular strength required in a hockey match help develop the body's cardiovascular system. This system, made up of the heart and lungs, feeds muscles with oxygen. A stronger cardiovascular system will therefore improve both your breathing and general sports performance by pumping more oxygen around the body. Hockey improves lower and upper body muscle strength. Playing hockey is a great way of developing your body's leg muscles, including the hamstring, hips and calves. It also improves the endurance of shoulder muscles, triceps and forearms. Having a clean flat stick tackle is what every field hockey player should make on the field. Committing too early to the tackle and being flat-footed can cause you to make a bad tackle, which can result in injury or being carded. Just be patient, wait for the right moment, and make sure to keep your stick down to make a clean tackle. Schnabel and Muller (1988) review the present nation of ideas of sports training and conclude that the kingdom is now not very satisfactory.

Methodology

In order to address the hypothesis presented herein, we selected 40 football players from Tutricorin district. Their age ranged from 18 to 21 years. The subjects were randomly assigned in to two equal groups namely, hockey training Group (HTG) (n=20) and Control Group (CG) (n=20). The respective training was given to the experimental group the 3 days per weeks for the training period of eight weeks. The control group was not given any sort of training except their routine. The evaluated parameters were vo2 max was assessed by cooper test in ml/kg, stress was assessed by standardized questions was recorded in points. The parameters were measured at baseline and after 12 weeks of hockey training were examined. The intensity was

Corresponding Author:**P Anbu Mary**Ph. D Research Scholar, Mother
Teresa Women's University,
Kodaikanal, Tamil Nadu, India

increased once in two weeks based on the variation of the exercises.

Statistical analysis

The means and standard deviations of both control and hockey training groups were calculated for vo2 max and stress for the pre as well as post-tests. The collected data was analyzed using “t” test. Statistical significance was set to a priority at p< 0.05. All statistical tests were calculated using

the statistical package for the social science (SPSS).

Training programme

The training programme was lasted for 60 minutes for session in a day, 6 days in a week for a period of 12 weeks duration. These 60 minutes included warm up for 10 minutes, 40 minutes hockey trainings and 10 minutes warm down. The equivalent in hockey training is the length of the time each action in total 6 day per weeks. (Monday to Saturday)

Table 1: Computation of ‘T’ Ratio on Vo2 Max on Experimental Group and Control Group (Scores in Numbers)

Groups	Pre Test	Post Test	SD	“T” Ratio
Experimental Group	41.05	45.35	1.99	15.79*
Control Group	41.45	41.85	1.61	2.03

*Significant level 0.05 level (degree of freedom 2.09, 1 and 19)

Table I reveals the computation of mean, standard deviation and ‘t’ ratio on selected variables namely vo2 max of experimental group. The obtained ‘t’ ratio on vo2 max were 15.79 respectively. The required table value was 2.09 for the degrees of freedom 1 and 19 at the 0.05 level of significance. Since the obtained ‘t’ values were greater than the table value it was found to be statistically significant.

Further the computation of mean, standard deviation and ‘t’ ratio on selected variables parameters namely vo2 max of control group. The obtained ‘t’ ratio on vo2 max were 2.03 respectively. The required table value was 2.09 for the degrees of freedom 1 and 19 at the 0.05 level of significance. Since the obtained ‘t’ values were lesser than the table value it was found to be statistically not significant.

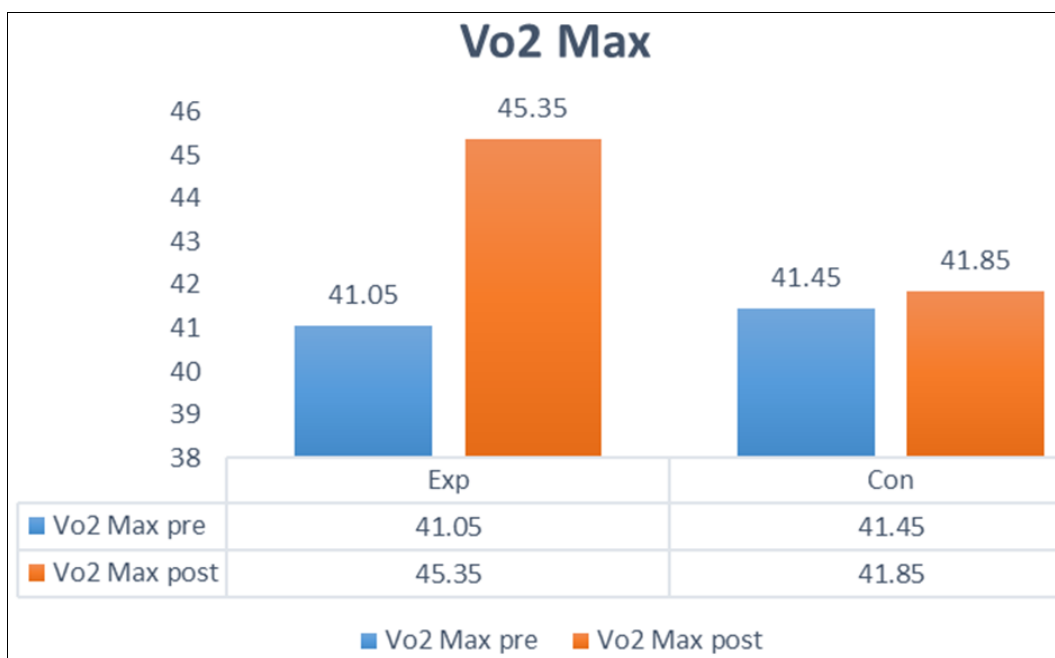


Fig 1: Bar diagram showing the mean value on Vo2 max on experimental group and control group

Table 2: Computation of ‘T’ Ratio on stress on experimental group and control group (Scores in Numbers)

Groups	Pre Test	Post Test	SD	“T” Ratio
Experimental Group	28.4	27.1	0.99	16.74*
Control Group	24.43	26.87	0.65	1.36

*Significant level 0.05 level (degree of freedom 2.09, 1 and 19)

Table 1 reveals the computation of mean, standard deviation and ‘t’ ratio on selected variables namely stress of experimental group. The obtained ‘t’ ratio on stress were 16.74 respectively. The required table value was 2.14 for the degrees of freedom 1 and 19 at the 0.05 level of significance. Since the obtained ‘t’ values were greater than the table value it was found to be statistically significant.

Further the computation of mean, standard deviation and ‘t’ ratio on selected variables parameters namely stress of control group. The obtained ‘t’ ratio on stress were 1.36 respectively. The required table value was 2.09 for the degrees of freedom 1 and 19 at the 0.05 level of significance. Since the obtained ‘t’ values were lesser than the table value it was found to be statistically not significant.

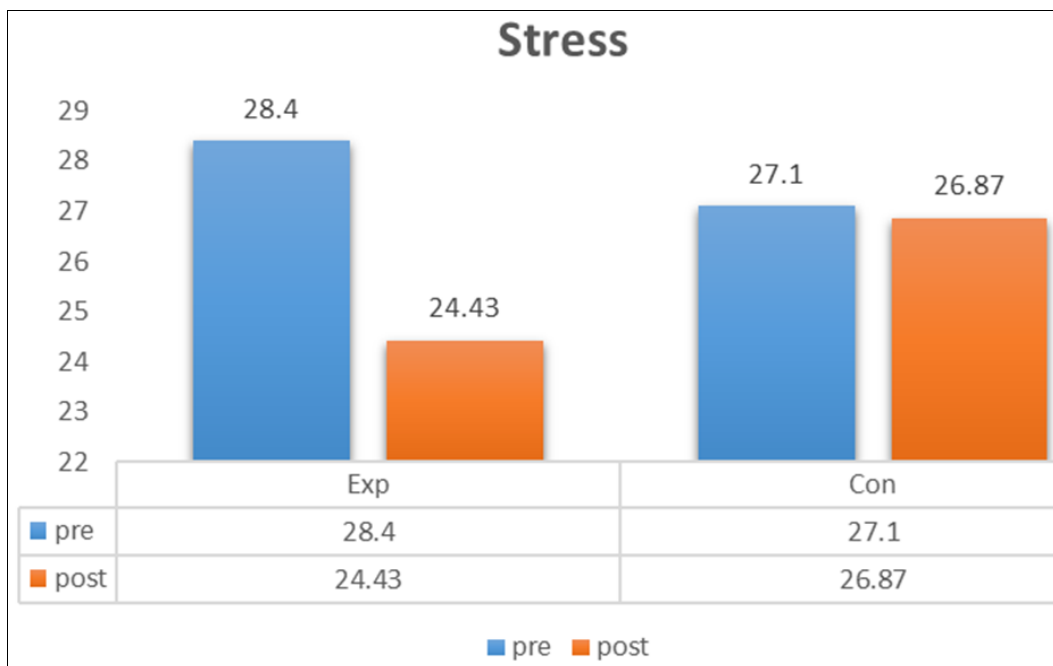


Fig 2: Bar diagram showing the mean value on stress on experimental group and control group

Discussion and Findings

The present study experimented the influence of eight weeks hockey training on the selected parameters of women students. The results of this study indicated that hockey training is more efficient to bring out desirable changes over the vo2 max and stress of women students. The results of this study indicated that hockey training is more efficient to bring out desirable changes over the psychological and physiological variables of the women students. Investigators have extended their interest to consider the vo2 max and stress commencement from the way a footballers approaches the hockey training. Like hockey training is probably the new found chic workout among the youths. Though initially chose aerobic exercises simply as a hobby to developing liking to it. Also, the pressure training with yogic practice helps maintain health and fitness part from making feel bold and equipped. Pre and post-test vo2 max and stress scores between the experimental and control groups were examined, there was a significant difference in posteromedial and posterior directions.

Dhurga *et al.*, (2023) findings revealed that the Lydiard training group, combined yogic practise, and control group all differed significantly from each other. When compared to the control group, the combined yoga and Lydiard training group also reported significantly lower levels of somatic anxiety, cognitive anxiety, and higher level self-confidence.

Diehel *et al.*, 1986 Participation in collegiate field hockey jeopardizes body iron stores, and iron reserves tend to become progressively more depleted after successive seasons of competition.

Hence, it concluded that for kicking ability and self-confidence improvement of football players.

Conclusions

From the results of the study and discussion the following conclusions were drawn.

From the result of the study it was concluded that the 12 weeks training of hockey training have been significantly improved vo2 max of women students. The twelve weeks training of hockey training have been significantly improved stress of women students

References

1. Vallimurugan, Senthil Kumaran S. Effects of yoga on physiological parameters among school level hearing impairment students. *International Journal of Childhood and Development Disorders*. 2023;4(1):06-09.
2. Vallimurugan V, Sounderrajan P, Senthil Kumaran. Effects of Circuit Training on Selected Physical Fitness Variables among Hockey Players. *International Research Journal of Modernization in Engineering Technology and Science*, 4(6), 3916-3920.
3. Kodeeswaran N, Senthil Kumaran, Ooraniyan K, Rajesh S, Princy S. Impacts of Pressure Training Intervention with Yogic Practices on Ability of Kicking and Self-Confidence among Football Players. *J Adv. Sport. Phys. Edu.* 2022;5(10):235-239.
4. Dr. Vallimurugan V, Gowtham R, Senthil Kumaran S, Pavithra M. Effects of Ladder Training on Selected Physical Fitness Variables among Hockey Players. *EPR International Journal of Multidisciplinary Research*. 2022;8(6):261-264.
5. Eswari, Senthil Kumaran, Rajesh, Abdul Halik. Stress level to the persuade of asanas and meditation on working women in pandemic. *International Journal of Research Publication and Reviews*. 2021;2(7):583-586.
6. Prabakaran, Kodeeswaran, Senthil Kumaran, Abdul Halik. Physiological Reaction to the Persuade of Yogic Practice on Disabilities. *International Journal of Research in Special Education*. 2021;1(1):19-22.
7. Diehl DM, Lohman TG, Smith SC, Kertzer R. Effects of physical training and competition on the iron status of female field hockey players. *International journal of sports medicine*. 1986;7(05):264-270.
8. Ramya R, Rajalakshmi D, Alaguraja K, Selvakumar K, Kaviyaran K. Effect of Specific Skill and Drill Training Combined with Pranayama Practices on Physiological Variable among Women Hockey Players. *Indian Journal of Public Health Research & Development*. 2020;11(6):760-763.
9. MacLeod H, Cooper S, Bandelow S, Malcolm R, Sunderland C. Effects of heat stress and dehydration on cognitive function in elite female field hockey players.

- BMC sports science, medicine and rehabilitation. 2018;10:1-13.
10. Rai N, Peter VF. Assessment of psychological aspects of female hockey players of Gwalior academy; c2019.
 11. Rai N, Peter VF. Relationship of psychological variables of female hockey players of Gwalior academy of Madhya Pradesh; c2019.
 12. Rocznik R, Stanula A, Maszczyk A, Mostowik A, Kowalczyk M, Fidos-Czuba O, *et al.* Physiological, physical and on-ice performance criteria for selection of elite ice hockey teams. *Biology of sport.* 2016;33(1):43-48.
 13. Dominikus F, Fauzee OSM, Abdullah MC, Meesin C, Choosakul C. Relationship between mental skill and anxiety interpretation in secondary school hockey athletes. *European Journal of Social Sciences.* 2009;9(4):651-658.
 14. Veysel T, Kazim N. The Effect of Personality Characteristics of Students on Positive Perception Level: A Study to Hockey Super League Players. *Asian Journal of Education and Training.* 2019;5(1):269-274.
 15. Swamy Kumar P. Influence of sand surface and firm soil surface SAQ training followed by skill training on selected physical physiological and skill performance variables of hockey players (Doctoral dissertation, Department of Physical Education and Sports, Pondicherry University; c2017.