National Journal of Multidisciplinary Research and Development
ISSN: 2455-9040
Impact Factor: RJIF 5.22
www.nationaljournals.com
Volume 3; Issue 3; September 2018; Page No. 27-30

Effect of twelve weeks sports training on selected motor variables of Hockey players

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Abstract
The present study was an attempt to explore the effect of sixteen week training on motor Factors of hockey players, Physical Training on Physical variables on hockey girl players. To carry out this study, 100 girl hockey players has selected. The age limit of players was ranged between 14 to 17 years. The samples were taken from the Sanganabasava Residential School, Kawalgi in Vijayapur district, Karnataka. Motor variables speed and flexibility were chosen as dependent variables to assess the 16th week training on motor variables and hockey plying ability. To assess the significance impact of training on motor and skills performance of hockey players and see significant difference between pre& post training effect on research variables t- test was applied. Significant effect was noticed in motor variables of school hockey players.

Keywords: sixteen weeks sports training, motor variables, Hockey girls Players

Introduction

Fitness is an essential component in the concept of wellness which might be defined as persistent Endeavour to achieve highest probability for total well-being. The basic concern is human movement, primarily in the sense of larger movements rather than the more minutes or finer movements of body. More specifically, physical education is concerned with the relation between human movement and other areas of education that is, with the relationship of the body's physical development to the mind and soul as they are being developed. This concern for the effect of physical development and other areas contributes to the uniqueness broad scope of physical development for the broadest possible view of that field.

A well-balanced athlete has good coordination and control when performing sports actions. When a player absorbs a hit in football or hockey, it is clear that maintaining balance is difficult. Air resistance, friction, and gravity also affect how well an athlete can maintain balance. The way in which an athlete resists and handles these outside forces is called stability. The better and more sports persons, specifically athletes train their bodies, the more balance and stable they will be during sports performance. And in the recent years the term that is very much related to balance is properties.

Training is an educational process. People can learn new information, re- learn and reinforce existing knowledge and skill, and most importantly have time to think and consider what new options can help them improve their effectiveness at work. Effective training conveys relevant and useful information that inform participant and develop skills and behaviors that can be transferred back to the workplace.

The goal of training is to create an impact that lasts beyond the end time of the training itself. The focus is on creating specific action steps and commitments that focus people's attention on incorporating their new skills and ideas back at work. Training can be offered as skill development for individuals and groups. In general, trainings involve presentation and learning of content as a means for enhancing skill development and improving workplace behaviors.

Hockey

Chris Moore has defined Hockey, "a sport which emerged in the 19thcentury, has seen huge changes in the latter part of the 20thcentury". As we move towards the start of the 21stcentury even more changes can be expected. "It will be, through more evolution than revolution, and that is how it should be." Hockey is a dynamic team game played by both sex requiring high level of skill, excellent conditioning and well co-ordinate team effort. Modern Hockey demands that all the players should be adapted to all the situations whether defending or attacking. Hockey is a game which calls for strenuous, continuous, thrilling action and therefore attracts the youth hall over the world. The skills involved are simple, natural and yet are highly stimulating and satisfying to any child. These skills are dribbling, pushing, flicking, scooping, tackling and dodging the opponent. Hockey is rated as one of the most popular team games in the world. With the involvement of Dhyanachand and dung from India. This sport is getting a dimensional popularity in India. Asian countries and in other European countries as well.

Hockey

It is defined as hockey is a dynamic game played by both sex, requiring high level of skills, excellent conditioning and well co-ordinate team effort. (Horst wein, 1981).

Field hockey is played with 11 players on each tea muses their hooked hockey sticks to control, dribble and hit the ball. The object is to score goals by putting the ball in the opposing team's goal. The team to score the most goals wins the match.

Motor Fitness

Motor fitness refers to the ability of an athlete to perform

successfully at their sports. The components of motor fitness are speed, flexibility, agility, and co-ordination.

The neuromuscular components of fitness, which enable a person to perform successfully at a particular motor skill, game or activity. Specific motor fitness components include agility, coordination, speed and flexibility. Motor fitness is sometimes referred to as skill-related fitness.

Speed

In kinematics speed of an object is the magnitude of its velocity (the rate of change of its position) it is thus scalar quantity. The average speed of an object in interval of time is the distance travelled by the object divided by the duration of the interval the instantaneous speed is the limit of the average speed as to the duration of the time interval approaches zero.

Flexibility

Uppal (2001) Flexibility is defined as the ability to perform movement with greater

Range of motion or large amplitude

Hypotheses

1. There would be a significant difference in speed variable between control and experimental groups.
2. There would be a positive effect of 12 weeks training on flexibility variable between control and experimental groups.
3. The experimental training leads to increase in the agility component comparing to the control group.
4. There would be significant difference in the dependent variables of control and experimental groups.
5. There would be no significant difference between the motor variables of the control group at both pre and posttest.

Delimitations

1. The study is delimited to the hockey players only.
2. The study is delimited to girl's hockey players.
3. The sample age range is restricted to age group of 14 to 17years.
4. The Secondary school hockey players were chosen as samples for this study.
5. The sample is delimited to 50 girl hockey players.
6. The study is delimited to Motor variables such as. Speed, flexibility etc.

Limitations

1. So equipment for measuring the performance would be considered has limitation for the study.
2. The food habit of the samples is limited to the research.
3. The involvement in physical activities is limitation of research.
4. There was no motivation techniques used during the training.
5. The health issues of the girl students during the training were limited to the research.

Table 1: Showing the Mean, SD and t-value of 50 meters Dash speed of control group collected at Pre-Post condition during the study

Speed Variables	Mean	SD	t-value	D f	p-value	Remark
Pre test	6.8000	0.39791	1.459	24	0.065	S
Post test	6.8880	0.42360				

The level of significant is 0.05

In the table we see that the Mean, SD and 't' value score of control group with respective speed variable for pre-and posttest condition is 6.80 and 6.88 respectively and calculated' value is 1.459, as it is lesser than table value 0.05 level of significant, Hence the formulated hypothesis there would be no significant difference between speed variable of the control group at both pre and posttest and thus the hypotheses was rejected, and alternative hypothesis that null hypothesis is accepted.

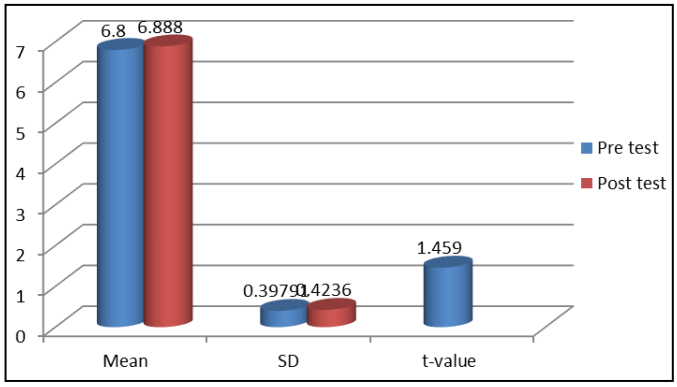

Fig 1: The fig showing the mean, SD and't' value of Speed Variables of control group

The above table and fig clearly express that the interval session did not influence and not effected on speed variables of the control group, when it was tested at pre-post-test. It is assumed that because the control group was not made to expose to any kind of training at pre and post-test; hence twelve week training gap given to control group also does not make any significant influence on their speed factors. The constant and similar life style condition and environment and sample nature has maintained previous status in their motor qualities.

Table 2: Mean, SD and t-value of 50Mtr Dash to test Speed of Experimental group to pre-test and post-test of secondary school students of Vijayapur

Speed Variables	Mean	SD	t-value	D f	p-value	Remark
Pre test	7.5280	0.22642	20.640	24	0.000	S
Post test	7.2440	0.18726				

The level of significant is 0.05

Shows that the Experimental group's mean performance value of speed of pretest is 7.5280 and the post test is 7.2440 the post-test speed performance is less than pre and posttest speed performance and also the t value is 20.640,which is more than the table value. Hence it indicates that there is a significant development of speed. Thus the hypothesis is accepted.

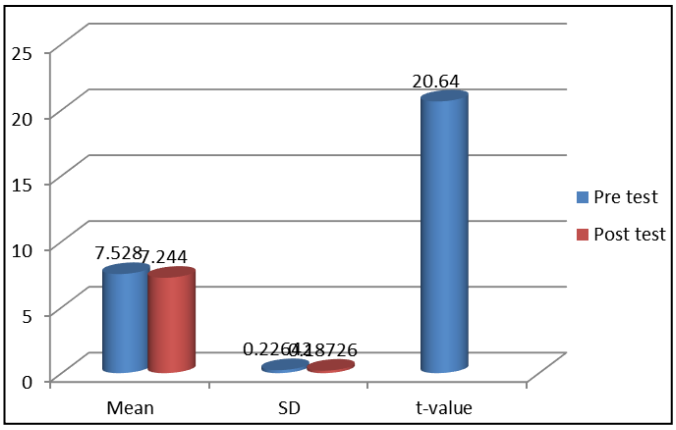

Fig 2: The fig showing the Speed means and‘t’ value of pre-post impact of Experimental group

The above figure clearly indicates that 12 weeks motor variable (Speed) for the game of (Hockey), training performance is statistically improved the speed variable of girls. The pre and posttest of 50 mtrs dash has improved in the motor ability component of speed.

Table 3: Mean SD and t-value of Sit and reach test for Flexibility of control group to pre- test and post-test of secondary school students of Vijayapur

Flexibility Variables	Mean	SD	t-value	D f	p-value	Remark
Pre test	2.0000	0.95743	1.326	24	0.0689	S
Post test	2.7200	0.79162				

The level of significant is 0.05

The mean and SD score of control group at pre-and posttest is 2.0000and 2.7200 respectively and calculated’ value is 1.326, it is lesser than table value i.e.0.005 level of significant, hence as per the formulated hypothesis there would be no significant difference between control group variables of Flexibility at both pre and posttest, the hypotheses was rejected, and alternative hypothesis that null hypothesis is accepted.

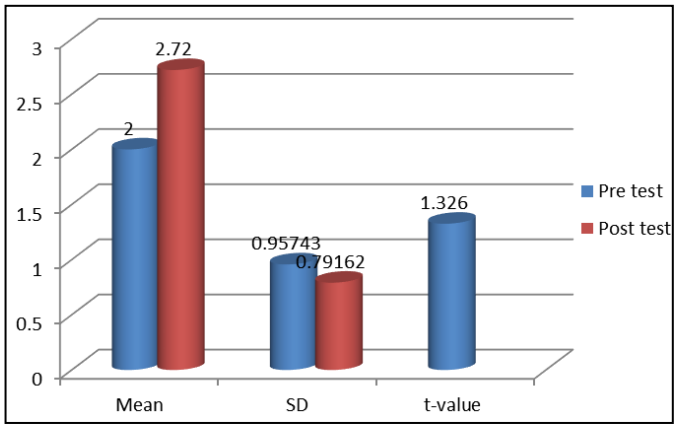

Fig 3: The fig showing the Flexibility means and t value of pre-post impact of control group

The above table and fig clearly express that the interval session did not influence and not effected on flexibility variables of the control group, when it was tested at pre-post-test. It is assumed that because the control group was not made to expose to any kind of training at pre and post-test; hence twelve week training gap given to control group also does not make any significant influence on their flexibility factors. The constant and similar life style condition and environment and sample nature has maintained previous status in their motor qualities.

Table 4: Mena, SD and t-value of Sit and reach test for Flexibility of experimental group to pre- test and post-test of secondary school students of Vijayapur

Flexibility Variables	Mean	SD	t-value	D f	p-value	Remark
Pre test	3.0000	.81650	9.364	24	.000	S
Post test	4.2400	.59722				

The level of significant is 0.05

The mean and SD score of Experimental group at pre-and posttest is 3.0000and 4.2400 respectively and calculated’ value is 9.364, it is lesser than table value i.e.0.005 level of significant, Hence it indicates that there is a significant development of flexibility component. Thus the hypothesis is accepted.

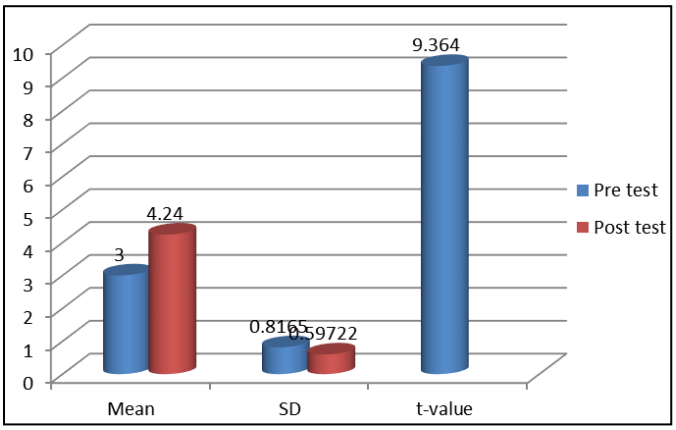

Fig 5: The fig showing the Flexibility means and t value of pre-post impact of Experimental group

The above figure clearly indicates that 12 weeks motor variable (flexibility) for the game of (Hockey), training performance is statistically improved the Flexibility of girls. The nature of sit and reach test for flexibility has shown the significant difference in the flexibility. Hence the hypothesis was accepted.

Conclusions

Based on the research findings and the results of the study the following conclusion may be drown

1. The statistical significant difference was noticed in Speed variable of experimental group it was due to the prospective training, there is no statistical significant difference between pre and posttest of the control group due to absence of training.
2. The statistical significant difference between pre and posttest of Agility variable in experimental group is due to the prospective training, there is no statistical significant difference between pre and posttest of the control group due to absence of training.
3. The statistical significant difference was noticed between

pre and posttest of Flexibility in experimental group was due to the prospective training there is was statistical significant difference between pre and posttest of the control group due to absence of training.

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