ISSN: 2349 - 4891

International
Journal of Recent Research and Applied Studies
(Multidisciplinary Open Access Refereed e-Journal)

Effect of Perceptual Skill Training on Development of Selected Motor Fitness Components of Inter- Collegiate Women Volleyball Players

J. Loura Humbliena[1], Dr. G. Kumaresan[2]

[1]*M.Phil Scholar, Department of Physical Education, Bharathiar University, Coimbatore, Tamilnadu, India.*
[2]*Assistant Professor, Department of Physical Education, Bharathiar University, Coimbatore, Tamilnadu, India.*

Received 15th February 2015, Accepted 8th May 2015

Abstract

The purpose of the study was to find out the effect of perceptual skill training on development of selected motor fitness components of inter- collegiate women volleyball players. To achieve these purpose 30 female college students were studying in periyar university college of arts and science, Mettur Dam, Salem, Tamilnadu. The subjects were selected on a random basis and were divided into two equal groups. Such as experimental group and control group. Each group consist of 15 subjects. Group-I underwent perceptual skill training (PST) and group-II acted as control group (CG), they didn't take part in any specific activities. The ages of the subjects were ranged from 18 to 22 years. The training session were conducted five days a week over a period of eight weeks. The selected motor fitness components for this study are: Speed, agility and leg explosive power. The data were collected by using standardized tools. Initial reading has been taken for both experimental and control groups and the readings have been carefully recorded. After completion of ten weeks training period, the post test was conducted for both experimental and control groups and the final readings have been recorded carefully. The collected data were analyzed statistically by using dependent 't' test. In all the cases, 0.05 level of confidence was fixed to test the level of significance. The results of the study show that experimental group shows better improvement on selected motor fitness components when compared to control groups.

Keywords: Perceptual skill training, motor fitness components, Speed, agility, leg explosive power and college women.

Introduction

Sport is all forms of usually competitive physical activity which, through casual or organized participation, aim to use, maintain or improve physical ability and skills while providing entertainment to participants, and in some cases, spectators. Perceptual skill training is the process of learning improved skills of perception. These improvements range from simple sensory discriminations (e.g., distinguishing two musical tones from one another) to complex categorizations of spatial and temporal patterns relevant to real-world expertise (e.g., reading, seeing relations among chess pieces, knowing whether or not an X-ray image shows a tumor). Sensory modalities may include visual, auditory, tactile, olfactory, and taste. Perceptual skill training forms important foundations of complex cognitive processes (i.e., language) and interacts with other kinds of learning to produce perceptual expertise. Underlying perceptual learning are changes in the neural circuitry. The ability for perceptual learning is retained throughout life. Perceptual skill training is prevalent and occurs continuously in everyday life. As our perceptual system adapts to the natural world, we become better at discriminating between different stimuli when they belong to different categories than when they belong to the same category. Motor fitness, or motor physical fitness, refers to how an athlete can perform at his or her sport, and involves a mixture of agility, coordination, balance, power, and reaction time. Improving this form of fitness is an indirect result of training in any of these attributes. All five components of fitness are essential for competing at high levels, which is why the concept is seen as an essential part of any athlete's training regime.

Correspondence
J.Loura Humbliena,
E-mail: lora.humble@gmail.com, Ph: +9199528 31250

Methodology

The purpose of the study was to find out the effect of perceptual skill training on development of selected motor fitness components of inter- collegiate women Volleyball players. To achieve these purpose 30 female college students were studying in periyar university college of arts and science, Mettur Dam, Salem, Tamilnadu. The subjects were selected on a random basis and were divided into two equal groups. Such as experimental group and control group. Each group consists of 15 subjects. Group-I underwent perceptual skill training (PST) and group-II acted as control group (CG), they didn't take part in any specific activities. The ages of the subjects were ranged from 18 to 22 years. The training session were conducted five days a week over a period of eight weeks. The selected

motor fitness components for this study are: Speed, agility and leg explosive power. The data were collected by using standardized tools. Initial reading has been taken for both experimental and control groups and the readings have been carefully recorded. After completion of ten weeks training period, the post test was conducted for both experimental and control groups and the final readings have been recorded carefully. The collected data were analyzed statistically by using dependent 't' test. In all the cases, 0.05 level of confidence was fixed to test the level of significance. The results of the study show that experimental group shows better improvement on selected motor fitness components when compared to control groups.

Results

Table I. Computation of 't' ratio between pre and post test means of experimental group and control group on speed.

	Pre test		Post test				
Group	**Mean**	**SD**	**Mean**	**SD**	**Mean Diff**	**SEM**	**'t' ratio**
Experimental Group	**8.88**	**1.07**	**8.56**	**1.15**	0.32	0.07	4.39
Control Group	**9.07**	**0.64**	**9.15**	**0.85**	0.077	0.098	0.08

*Significant at 0.05 level

The analysis of the table- I clearly reveals that the obtained 't' ratio of perceptual skill training, the calculated t-value was 4.39 and 0.08 respectively. It had a significant effect in improving speed at 0.05 level. The increases in speed from pre and post training for perceptual skill training group were significantly higher than that of the control group, where as the control group did not have significant effect. The 't' ratio required to be significant at 0.05 level was 2.14.

Figure I. Bar diagram shows the mean values of pre and post -test on speed of experimental groups and control.

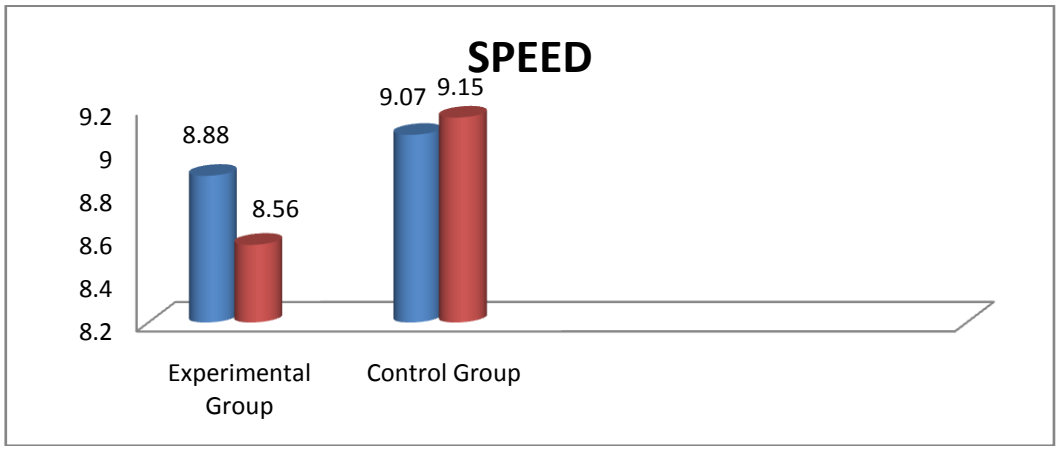


Table II. Computation of 't' ratio between pre and post test means of experimental group and control group on agility.

	Pre test		Post test				
Group	**Mean**	**SD**	**Mean**	**SD**	**Mean Diff**	**SEM**	**'t' ratio**
Experimental Group	**12.67**	**1.05**	**12.45**	**1.07**	0.22	0.02	7.68
Control Group	**13.53**	**0.75**	**13.39**	**0.88**	0.141	0.07	1.99

*Significant at 0.05 level

The analysis of the table- II clearly reveals that the obtained 't' ratio of perceptual skill training, the

calculated t-value was 7.68 and 1.99 respectively. It had a significant effect in improving agility at 0.05 level. The increases in agility from pre and post training for perceptual skill training group were significantly higher than that of the control group, where as the control group did not have significant effect. The 't' ratio required to be significant at 0.05 level was 2.14.

Figure II. Bar diagram shows the mean values of pre and post -test on agility of experimental groups and control

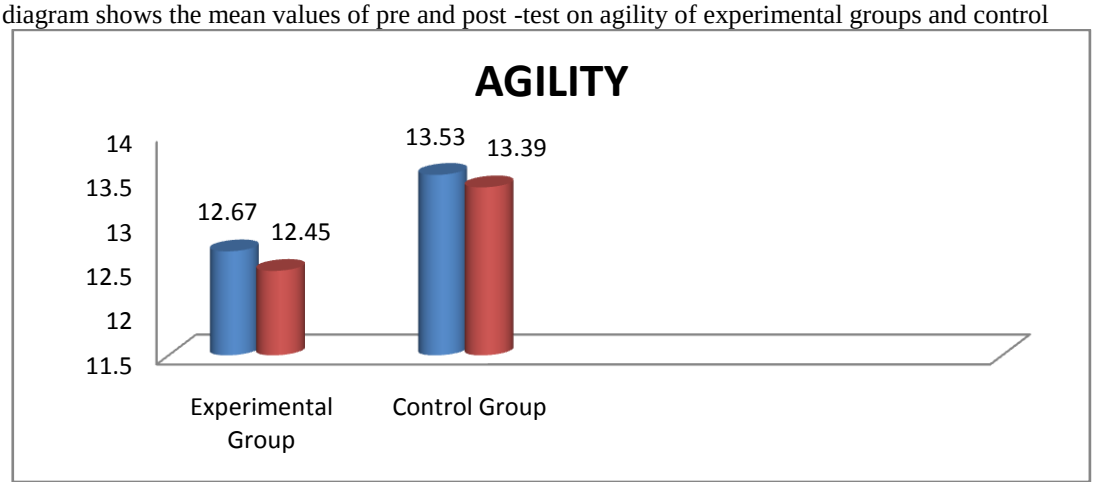


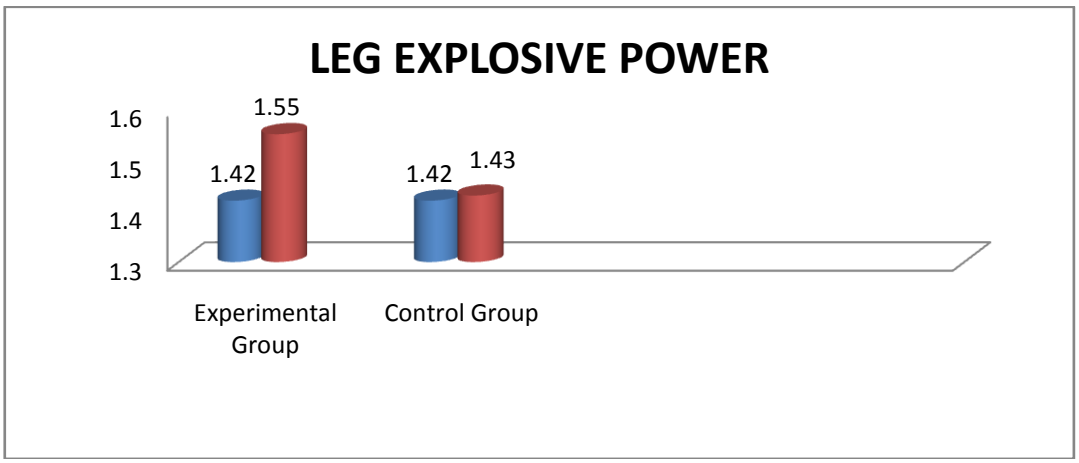
Table III. Computation of 't' ratio between pre and post test means of experemental group and control group on leg explosive power.

	Pre test		Post test				
Group	**Mean**	**SD**	**Mean**	**SD**	**Mean Diff**	**SEM**	**'t' ratio**
Experimental Group	**1.42**	**0.26**	**1.55**	**0.26**	0.14	0.01	9.41
Control Group	**1.42**	**0.16**	**1.43**	**0.15**	0.003	0.002	1.32

*Significant at 0.05 level

The analysis of the table- III clearly reveals that the obtained 't' ratio of perceptual skill training, the calculated t-value was 9.41 and 1.32 respectively. It had a significant effect in improving leg explosive power at 0.05 level. The increases in leg explosive power from pre and post training for perceptual skill training group were significantly higher than that of the control group, where as the control group did not have significant effect. The 't' ratio required to be significant at 0.05 level was 2.14.

Figure III. Bar diagram shows the mean values of pre and post -test on leg explosive power of experimental groups and control.



Discussion on Findings

Human beings have consistently tried to develop fitness and to maintain fitness level throughout life. We are naturally ambitious to achieve excellent fitness level. Based on the statistical analysis result on the study revealed that there is significant improvement in the selected motor fitness components of inter-collegiate women volleyball players due to perceptual skill training program for period of eight weeks. The hypothesis of this study stated that there may be significant improvement on speed, agility and leg explosive power of volleyball players in inter – collegiate level due to influence of perceptual skill training. Hasrani (1987) conducted a study to determine the relationship of selected motor fitness components (speed, power and agility) to performance in volleyball. Stojanovic Nikola, et al.,(2012)was find out the Effects of perceptual skill Training on Motor fitness components of volleyball. The result of the study showed that there was significant improvement on speed, agility and leg explosive power by the effect of perceptual skill training. Hence the investigators hypothesis was accepted. Hence it is concluded that the training programmer employed in carrying our study can be used interchangeably to those sports and games.

Conclusion

1. It was concluded that eight weeks of perceptual skill training has significantly improvement on Speed of inter- collegiate women volleyball players.
2. It was concluded that eight weeks of perceptual skill training has significantly improvement on Agility of inter- collegiate women volleyball players.
3. It was concluded that eight weeks of perceptual skill training has significantly improvement on leg explosive power of inter- collegiate women volleyball players**.**

References

1. Carlo castagn, amichaouachl, ErmannoRampinini, France Impellizzeri(1987) Aerobic and explosive power performance of elibeitation regional level basketball players. Journals of strength and conditioning research volume: 23, issue: 7, Pages: 1982-1987.
2. Citation Information: Baltic Journal of Health and Physical Activity. Volume 6, Issue 2, Pages 79–89, ISSN (Online) 2080-9999.
3. Buvanendiran (Jaffan) And R. Barathiraj (2013) Effect of Perceptual Skill Training on basketball players. India streams Research, Journal, Vol. III, Issue. VIII, DOI: 10.9780/22307850
4. Sing Hardayal. Scienc of Sports Training, D.A.V.Publishing, New Delhi; 1991, p. 85.
   Gothi, Ekta. Dictionary of Sports and Physical Education, Addison WeseleyPublishing Company.London; 1993, p 25.
5. Stojanovic Nikola, JovanovicNikodije, StojanovicToplica, "The Effects of Perceptual Skill Training on the Development of the explosive power in Volleyball Players", FACTA UNIVERSITATIS Series: Physical Education and Sport Vol. 10, N1, 2012
6. Turner AM The study on improvement in running economy after six weeks of Perceptual Skill Training.
7. Verkhoshansky Yuri (1966). "Perspectives in the Improvement of Speed Strength Preparation of Jumpers". LegkayaAtletika (track and Field) 9 www.power-system.com/n-243-plyomrtric exercise.
8. Yessis Michael (2009). Perceptual Skill Training. UltimateAthlete Concepts
9. ZeareiaHoda, Ramezanpourb Mohammad Reza,PakdelanSaeid, "Comparison of the Effect of Perceptual Skill Training on Explosive Power and Speed in Female Taekwondo Players", Journal of Basic and Applied Science Research, 3(1s) 2013.
10. Judy Battles, et.al, (1991). Prediction Equation for Selection of Women Inter-Collegiate Volleyball Team Members. Abstracts Research Papers AAHPERD Convention (1980): 65.