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INFLUENCES OF MULTIMEDIA COURSEWARE IN COACHING VOLLEYBALL SKILLS AMONG PHYSICAL EDUCATION TRAINEES

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Abstract

The purpose of the study was to analyse the influences of multimedia courseware in Coaching Volleyball skills among physical education women trainees on playing ability. To achieve the purpose, twenty four female undergraduate physical education trainees, randomly selected from H.H. The Rajah's College, Pudukkottai, Tamil Nadu State, India were chosen as subject for this study. All the subjects chosen for this study were non-Volleyball players and their age ranged from 18 to 21 years. The subjects were randomly assigned to two equal groups of twelve each and named as Group 'I' and Group 'II'. Group 'I' underwent teaching & coaching along with multimedia courseware in Volleyball coaching package and Group 'II' underwent teaching & coaching alone. The teaching and coaching were administered for both groups in the field for a period of 10 working days with each session lasting for one hour, each day in the evening. The multimedia courseware in Volleyball coaching developed by the investigator was shown to Group 'I' for 20 minutes per day before the commencement of teaching and coaching session. For displaying multimedia courseware in Volleyball coaching, the computer laboratory of H.H. The Rajah's College, Pudukkottai, Tamil Nadu state was used. The collected data from two groups were statistically analyzed for significant difference if any, by applying the dependent 't' test. The result reveals that the both groups showed significant improvement. However teaching & coaching combined with multimedia courseware group showed greater improvement in the Volley ball playing ability.

Key words: Coaching, Multimedia, Physical Education trainees and Volleyball.

INTRODUCTION

In physical education and sports, to learn a skill, one needs effective teaching and coaching in the ground. The teaching and coaching efficiency differ from teacher to teacher. For effective teaching and coaching in physical education, the teacher generally prepares lesson plan for each skill and then executes it in the ground. Generally lesson plan consists of various parts. In teaching and coaching in the field, the teacher first demonstrates the skill, and then teaches the skill part by part method. Teacher/coach uses drills and minor games to make learning skill much faster. The modern day teacher / coach use very many teaching aids to make teaching and coaching more effective among students. With fast paced changes in coaching and teaching methodology, Multimedia courseware coaching is gaining tremendous popularity in the recent times.

Multimedia courseware coaching is now the most preferred solution for learning effectiveness. Generally content is delivered via Internet,

intranet/extranet, audio or videotape, satellite TV and CD-ROM. Development of Multimedia courseware in Volley ball coaching is highly technical one, where several professionals such as researchers, coaches, players, cameramen, editors, etcetera work together. Multimedia courseware development involves lot of planning and needs to be edited after getting genuine feedback from various quarters. Volley ball is a popular Olympic sport, played in more than 220 countries around the globe and has more than 119 year's history. Volleyball though played in outdoor, the major competitions are organised in indoor only. The other variation of volleyball is beach volleyball. Technology has played influencing role in teaching and learning process. The researcher had keen interest in using technology in teaching sports & games. The investigator being a Volley ball player, coach, selector, official and administrator was motivated to develop the multimedia courseware in Volleyball coaching for teaching Volleyball skills and to see its influence on playing ability. The purpose of the study was to analyse the influences of multimedia courseware in Coaching Volleyball skills among physical education women trainees on playing ability.

METHODOLOGY

To achieve the purpose, twenty four female undergraduate physical education trainees, randomly selected from H.H. The Rajah's College, Pudukkottai, Tamil Nadu State, India were chosen as subject for this study. All the subjects chosen for this study were non-Volleyball players and their age ranged from 18 to 21 years. The subjects were randomly assigned to two equal groups of twelve each and named as Group 'I' and Group 'II'. Group 'I' underwent teaching & coaching along with multimedia courseware in Volleyball coaching package and Group 'II' underwent teaching & coaching alone. The teaching and coaching were administered for both groups in the field for a period of 10 working days with each session lasting for one hour, each day in the evening. The multimedia courseware in Volleyball coaching developed by the investigator was shown to Group 'I' for 20 minutes per day before the commencement of teaching and coaching session. For displaying multimedia courseware in Volleyball coaching, the computer laboratory of H.H. The Rajah's College, Pudukkottai, Tamil Nadu state was used. After analysing various literatures and in consultation with coaches and experts, the following skills were taken up by the investigator for developing the multimedia content electronically. The lesson plan was prepared for the

following skills, namely underarm pass, upper arm pass, underarm service, sidearm service, tennis service, floating service, jump service, attacking service, blocking and diving. Apart from the above mentioned skills the foot work, body position, execution and follow through were also focussed. The teaching & coaching lesson plan and multimedia courseware in Volleyball coaching were designed by the investigator in consultation with the experts. The skills were demonstrated by a qualified coach, who was former player of Bharathidasan University. The investigator and subject experts were duly involved in the editing process. The subjects were tested on Volleyball playing ability, using subjective rating by three qualified coaches in the field. They were asked to rate the subject's performance on 10 point scale on each of 10 skills. The criteria for giving points were given to all the coaches. The average score obtained from coaches was taken as the individual score and divided by 10 to get Volleyball skill performance score. The study was formulated as a random group design, consisting of a pre-test and post-test. The collected data from two groups were statistically analyzed for significant difference if any, by applying the dependent 't' test.

RESULTS AND DISCUSSION

The analysis of dependent 't' test on the data obtained for scores of Volleyball playing ability of the pre-test and post-test means of teaching and coaching volleyball skills with multimedia courseware group and teaching & coaching volleyball skills group have been analyzed and presented in Table - 1.

TABLE-1 SUMMARY OF MEAN AND DEPENDENT 't'-TEST FOR THE PRE AND POST TESTS ON SCORES OF VOLLEYBALL PLAYING ABILITY OF TEACHING AND COACHING VOLLEYBALL SKILLS WITH MULTIMEDIA COURSE WARE

GROUP AND TEACHING & COACHING VOLLEYBALL SKILLS GROUP

Tests		Pre test	Post test	't' - Value
Teaching and coaching volleyball skills with multimedia courseware group (TCM)	Mean	4.33	7.83	. 19.50*
	SD(±)	0.78	0.90	
Teaching and coaching volleyball skills group (TC)	Mean	4.16	6.08	7.00*
	SD(±)	3.15	4.00	

^{*}Significant at 0.05 level. The table value required for 0.05 level of significance with df 11 is 2.20.

The table-1 shows that the pre-test mean value of teaching and coaching volleyball skills group with multimedia courseware group and teaching & coaching volleyball skills group are 4.33 and 4.16 respectively and the post test means are 7.83 and 6.08 respectively. The obtained dependent t-ratio values between the pre and post test means of teaching and coaching volleyball skills group with multimedia courseware group and teaching & coaching volleyball skills group are 19.50 and 7.00 respectively. The table value required for significant difference with df 11 at 0.05 level is 2.20. Since, the obtained 't' ratio value of both teaching and coaching volleyball skills group with multimedia courseware group and teaching & coaching volleyball skills

group are greater than the table value, it is understood that teaching and coaching volleyball skills group with multimedia courseware group and teaching & coaching volleyball skills group had shown significant improvement in the scores of volleyball playing ability. From this it was clear that the trainees are greatly influenced by showing the video than others. This study supports the findings of Jabakumar, et al., (2011), Elayaraja, et. al., (2010), Chandrasekaran, et. al., (2010).

The mean values of teaching and coaching volleyball skills group with multimedia courseware group and teaching & coaching volleyball skills group on scores of volleyball playing ability were graphically represented in the figure-4.1.

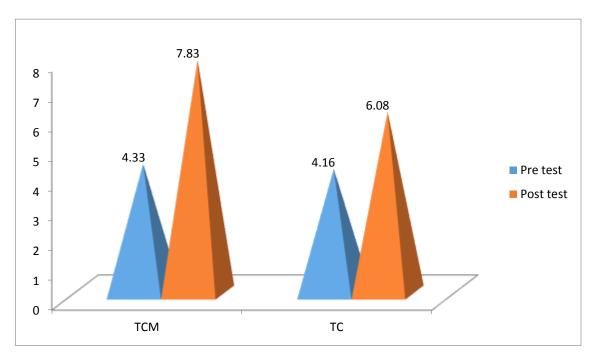


Figure - 1 The pre and posttest mean values of teaching and coaching volleyball skills group with multimedia courseware group and teaching & coaching volleyball skills group on scores of volleyball playing ability.

CONCLUSION

The result reveals that the both groups showed significant improvement. However teaching & coaching combined with multimedia courseware group showed greater improvement in the Volley ball playing ability.

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