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EFFECT OF SUPERVISED LEARNING AND SELF LEARNING ON PASSING SKILLS IN BASKETBALL AMONG SCHOOL BOYS

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ABSTRACT

The aim of this study was to find out the effect of supervised learning method (SPLM) and self learning method (SLM) on passing skills in basketball among school boys. Forty five male students in the age group between 13 and 14 years were selected as subjects at random from Higher Secondary School, Nagercoil, Kanyakumari District. The subjects were healthy and physically active. They were divided into three groups at random consisting fifteen subjects in each group and they were randomly assigned as experimental group I Self Learning Method (SLM) group, experimental group II Supervised Learning Method (SPLM) group, and control group. All the subjects were beginners in the game of basketball. As suggested by the Clarke and Clarke (1985) and Best (1987) the pre-test, post-test random group design was chosen by the investigator to conduct the study. Experimental group I, group II, and control groups were selected and assigned by random method. They were tested prior to and after the treatment. Experimental group I was given the SLM, experimental group II was given by the SPLM on passing skills, namely, chest pass and bounce pass. The subjects were given 6 weeks experimental treatment. The results of this study proved that comparing with control group, self learning method (SLM); supervised learning method (SPLM) significantly contributed for improving chest pass and bounce pass skills of the school boys. Considering among the treatment groups, SPLM group was found to be superior to SLM group and control group. And the differences were found to be significant at 0.05 level. It was concluded Basketball passing skills, chest pass and bounce pass can be improved by self learning method and supervised learning method, however, supervised learning method was found superior than self learning method.

Key Words: *Self Learning Method; Supervised Learning Method; Chest Pass, Bounce Pass.*

Introduction

Teaching is a purposeful activity, its goal being the all round development of the individual. By reason of its inherent complex nature, teaching requires a planned and systematic approach in order to be effective to the clientele as well as the client. The systematic actions of the process of teaching induce learning through effective communication and interpersonal relationship. (Vedanayagam, 1991) . The teacher is to select suitable content, activities, methods and devices of teaching. Keeping in view the aims of teaching on one hand and the children, their varied needs, capacities and interests on the other, the teacher should create learning situations in which the various powers of the child are exercised leading to the balanced development of his personality. (Bhatia and Narang, 1984)

The process involved in the learning and retention of motor skills are not well understood, and as yet no single theory of motor learning has gained complete acceptance. Although we have only limited insight into the mechanisms that control complex movements, we know much of practical significance about motor learning during the growing years. Practice with the intent to learn is essential, although the nature, frequency, and duration of practice sessions vary with the maturational level. Fatigue, reduced attention span and loss of interest adversely affect motor learning, such factors being of particular significance in young children. (Zeigler, 1982) .

The acquisition of motor skills is an important goal of physical education. Knowing how motor skills are acquired is essential to planning and conducting physical education experiences. Motor learning is the field of study concerned with describing how individuals learn motor skills. One of the physical education teacher's main roles is to be directly involved in helping others to learn skills. Learning can only be inferred from a person's behavior or performance. Performance is observable whereas learning is not. As a result, learning must be inferred on the basis of performance measures that possess certain characteristics. First, scores should change over time as a result of practice, and those scores should reflect improvements. Second, also as a result of practice, performance and or scores should become less variable from day to day or trial to trial. When learning motor skills, information must be processed by the learner. In the performance of each motor skill, an individual must gather much information from different sources (visual, verbal and kinesthetic) make decisions about that information, and then select a response that is deemed most appropriate for the situation.

The need for efficiency in selecting the proper teaching method is apparent for a number of reasons. First, efficiency will save time and allow the teaching of more activities in school programme. Secondly efficient method will enable each individual to attain a high degree of skill.

There has been a standard model of teaching physical education activities, even though individual teachers may deviate from the model in several aspects of their teaching. The traditional model is characterized as 'explain it to them', 'demonstrate it for them', 'let them practice it' and 'correct their errors' (Singer, 1976) . The other model commonly used in schools in India is 'throw the balls out and let them play' without observation and correction, whereas the beginners in sports should start with use of some form observing others playing, from films and also from looking at diagrams.

Basketball is probably the leading ball game in the world as far as "action occurrence" is concerned. More things happen per second than in any other comparable game. (Thomas, 1972) Basketball game is played all over the world. Over the years, this versatile game has established as important, due to its physical and educational values as well as to its tremendous dynamics. The concept of play and the rules make high demands on the players. It is estimated that over seventy million people world wide play basketball more or less regularly and two hundred and eight countries are members of the International Basketball Federation. Performance in competitive sports at every level of competition has attained new heights in recent years. Basketball is also played as a highly competitive game in schools and colleges throughout the world.

Weast JA et al. (2011) studied affordances both for themselves and for others, and affordance perception is a function of perceptual-motor experience involved in playing a sport. They found that Basketball players were more accurate at perceiving maximum reach-with-jump for another person than were nonbasketball players, but were no better at perceiving maximum reach or sitting heights. Further in another experiment Only basketball players improved at perceiving an action-scaled affordance (maximum reach-with-jump), but not body-scaled affordances (maximum standing-reach and sit) with exposure to kinematic information, suggesting that action-scaled affordances may be specified by kinematic information to which athletes are already attuned by virtue of their sport experience. Lonsdale C and Tam JT. (2008) examined basketball player's dominant behavioural routine was identified and each shot was classified as "sequence followed" or "sequence not followed" and found players were more successful when they followed their dominant behavioural sequence (83.77% success) than when they deviated from their specific behavioural pattern (71.43% success) ($P < 0.05$). The formal instruction and structured practice in a motor development programme had greater percentages of increased skill levels on the children (Melinda, 2000) ; The stick figure model was a better model than the full body model for teaching. The acquisition retention and transfer performance were better when the stick figure model was provided to the students. (Pena et.al, 2000) . Taking into consideration of the theoretical considerations based on available related researches, the investigator found that there was further scope for research to find out the effect of self learning method and supervised learning method on Basketball passing skills among school boys.

METHODOLOGY

Forty five male students in the age group between 13 and 14 years were selected as subjects at random from LMS Higher Secondary School, Nagercoil, Kanyakumari District. The subjects were healthy and physically active. They were divided into three groups at random consisting fifteen subjects in each group and they were randomly assigned as experimental group I Self Learning Method (SLM) group, experimental group II Supervised Learning Method (SPLM) group, and control group. All the subjects were beginners in the game of Basketball. As suggested by the Clarke and Clarke (1985) and Best (1987) the pre-test, post-test random group design was chosen by the investigator to conduct the study. Experimental group I, group II, and control groups were selected and assigned by random method. They were tested prior to and after the treatment. Experimental group I was given the SLM, experimental group II was given by the SPLM on passing skills, namely, chest pass and bounce pass. The subjects were given 6 weeks experimental treatment. The data collected on selected passing abilities using standard tests, prior to and after the treatment were analyzed statistically to find out the significant difference among the groups using ANCOVA. In all cases 0.05 level was fixed.

RESULTS

Tab 1: Effect of Supervised Learning and Self Learning Methods on Passing Skills in Basketball

	Supervised Learning	Self Learning	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained F
CHEST PASS								
Pre Test Mean	16.73	16.20	16.13	Between	3.24	2	1.62	0.14
				Within	497.07	42	11.83	
Post Test Mean	20.53	18.20	16.33	Between	132.84	2	66.42	5.97*
				Within	467.47	42	11.13	
Adjusted Post Test Mean	20.17	18.35	16.55	Between	97.99	2	48.99	201.30*
				Within	9.98	41	0.24	
Mean Diff	3.80	2.00	0.20					
BOUNCE PASS								
				Between	0.93	2	0.47	
Pre Test Mean	13.27	12.93	13.20	Within	72.27	42	1.72	0.27
				Between	28.93	2	14.47	
Post Test Mean	15.27	14.60	13.33	Within	71.87	42	1.71	8.45*
Adjusted Post				Between	29.57	2	14.79	
Test Mean	15.15	14.78	13.27	Within	12.44	41	0.30	48.73*
Mean Diff	2.00	1.67	0.13					

Required F(df 2,42),0.05, 3.22, F(df 2,41),0.05: 3.21 * Significant at 0.05 level

Since significant results were obtained, the results were further subjected to post hoc analysis using Scheffe's Confidence Interval test and the results are presented in Table 2.

DISCUSSIONS

The results of this study proved that comparing with control group, self learning method (SLM); supervised learning method (SPLM) significantly contributed for improving chest pass skill of the school boys. Considering among the treatment groups, SPLM group was found to be superior to SLM group and control group. And the differences were found to be significant at 0.05 level.

The results presented on bounce pass skill test proved that comparing with control group, SLM group and SPLM group significantly improved the skill among school boys. Considering among the treatment groups, SPLM group was found to be superior, than SLM group and control group. However, the mean differences between the treatment groups were not significant at 0.05 level set for this study.

Tab 2: Multiple Comparisons of Paired Adjusted Means on Passing Skills in Basketball

Supervised Learning Method	Self Learning Method	Control Group	MEAN DIFF	Reqd. C.I
CHEST PASS				
20.17	18.35		1.82*	0.46
20.17		16.55	3.62*	0.46
	18.35	16.55	1.80*	0.46
BOUNCE PASS				
15.15	14.78		0.36	0.52
15.15		13.27	1.87*	0.52
	14.78	13.27	1.51*	0.52

* Significant at 0.05 level.

The findings of this study were in agreement with the findings of McLaughlin (1999) who found both the traditional teaching method and the interactive instructional method have potential for increasing learning in undergraduate physical education teacher education training programs and Tennant (2000) who found task-oriented group won significantly more points and games compared to the self directed and control groups, regardless of skill.

CONCLUSIONS

Basketball passing skills, chest pass and bounce pass can be improved by self learning method and supervised learning method, however, supervised learning method was found superior than self learning method.

REFERENCES

Bhatia, K.K.& Narang, A.J. (1984) **Method of Teaching**, Parkash Brothers, Jullundhar.

Lonsdale C and Tam JT. (2008), "On the temporal and behavioural consistency of pre-performance routines: an intra-individual analysis of elite basketball players' free throw shooting accuracy.", **J Sports Sci**. Feb 1;26(3):259-66.

McLaughlin, E. J. (1999) "Effect of a Web Based Intervention Program on the Acquisition of Knowledge and Visual Recognition of Critical Elements and the Precision of Feedback for Selected Sports Skills", **Unpublished Doctoral Dissertation**, University of Northern Calorado, U.S.A.

Melinda, B. (2000) "The Effects of Motor Development Programme on Preschool Children's Motor Skills", **Unpublished Master's Thesis**, Northern Illinois University, U.S.A.

Pena, D.D., Janelle, C.M., Hall, C.J. & Ellis, S.R. (2000) "Video-Modeling of a Self-paced Task: Attentional Considerations", **Research Quarterly for Exercise and Sport**, March Supplement A-55.

Singer, R.N. (1976) **Physical Education: Foundations**, Rinehart and Winton, New York.

Tennant, L.M. (2000) "Cognitive Learning Strategies their Effectiveness in Acquiring Racquetball Skill", **Perceptual Motor Skills**, 90 (3) 867-74.

Vaugan Thomas (1972), **Basketball Techniques and Tactics** (Champaign, Illinoise: Human Kinetic Publishers), p. 31

Vedanayagam, E.G.(1991) "Teaching Technology", **Paper Presented in Seminar on Teaching Strategies**, YMCA College of Physical Education, Chennai.

Weast JA et al. (2011)," The influence of athletic experience and kinematic information on skill-relevant affordance perception.", **Q J Exp Psychol** (Hove). 2011 Apr;64(4):689-706

Zeigler, E.F. (1982) **Physical Education and Sport: An Introduction,** Lea and Febiger, Philadelphia.