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COMPARE OF SELF-PATTERNING AND VIDEO SHOW OF A SKILLED PERSON ON LEARNING THE SHORT SERVICE SKILL IN BADMINTON

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ABSTRACT
This study was done to compare the effects of self-patterning and video show of a skilled person on learning the short service skill in badminton. Thirty girl students of Azad University of Khoy in the range of 19 to 22 years old, was chosen randomly. Groups were synchronized after performing the pre-test based on the gained points and divided into two groups of "self-patterning" and "video show". Two groups practiced in 2 separate training grounds and them training 12 sessions (3 sessions per week). The self-patterning group watched their own performance and was instructed orally about fixing their foul movements. The video show group watched a skilled person's performance and received oral instructions. Acquisition and retention test were run at the end of 12th session and 48 hours respectively. To test the hypothesis and statistical analysis correlated t-test and to compare the two groups, independent t-test was used. Level of significance was considered 0.05. The in-group research result showed significant difference from pre-test to post-test and both groups progressed in acquiring and remembering short service skill in badminton. Comparing the points between the two groups did not show any significant difference in acquisition test, but in remembering the short service skill in badminton significant difference was seen and the video show group performed better.

Keywords: Structural Equation Modeling, Employee Participation, Resistance to Change, Job Burnout, Youth and Sport Administration

INTRODUCTION
Since the beginning of the 20th century, scientists have used learning through observation as a base in researches and this method has been accepted effectively and vastly in acquiring physical activities and athletic skills. Generally, it is believed that acquiring new skills is promoted through observation (2010), Since observation provides chances for observer to determine key space-time aspects (a tool that a person needs to create a review for recognition practice pattern through trial - error) so that he/she can ease learning skill moves (2011).
There are two important perspectives in observational learning: first one is Bandura's social recognition theory (1986), which states that observer, encrypts the skill information symbolically. Learner can use encrypted data for better performance. Based on this patterning theory, using a show as a tool for transferring data is about how to do that skill and is effective when it follows these four procedures: attention, rebuilding and motivation reminding. Scolly and Newvel (1985) had a different perspective, they stated that visual system receives constant dynamic data about relationship between different parts of the body directly and is able to recognize special dynamic features from the show (2007).
Patterning is an effective tool for transferring related data which eases the process of learning. The importance of patterning process lies in its effectiveness on the observer's behavior. It's clear that the observer can memorize the acts of pattern on some levels and repeat what he has learnt without oral instructions (Williams, 1994). According to ecological theory, modeling helps the learner to have a better

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understanding of the skill before the actual performance happens and then converts the image to dynamic command (1989), The skilled pattern, because of the accurate performance of the skill, leads to better data receive and success in performing the skill by the apprentice (1991). This study was done to compare the effects of self-patterning and video show of a skilled person on learning the short service skill in badminton.

Chin-Yun (1999), studies the effect of different display pattern on performing dynamic skill during video educating. The results showed that the video show group gained better points than the group without a pattern.

Vernadakis and Teztezis (2002), in evaluating the effect of two methods of skilled person show and self-patterning on learning set and service skills of volleyball, showed that the first group had better improvements in acquiring and remembering those skills comparing to second group.

Hodges *et al.,* (2003) evaluated the role of video in easing the understanding and acting a new movement. Results indicated that the video show group had a better performance in acquiring and remembering test compared to the control group. In foul recognition test the video show group was higher in understanding the difference between the wrong and right pattern.

Barbi *et al.,* (2005) evaluated the effect of self-patterning on the way of performing skate jump and psychological variables. The result of their study showed that there was no significant difference between the experiment and control group in the way they performed the jump.

Bayodri *et al.,* (2006), by evaluating the way and the result for rotating skills on the gymnastic vault in the physical practice and control group of their model and skilled model, understood that the group who watched the skilled model, performed better in remembering and performing the action compared to the group who only did physical exercises.

Barzouka (2007), in a study, evaluated the effect of the feedback of watching the skilled person model and self-patterning on learning volleyball skills. The results showed equal headway for both groups at the end of the program. Zeto *et al.,* (2002) showed superiority of the self-patterning group compared to physical exercise groups in beach volleyball service skill.

As studies show, social learning theorists emphasize on the fact that learning through observation is very useful. Most studies done in patterning field have reached ambiguous results and haven't declared clearly which way is more effective, but most researchers claim that using a video of the skill eases the learning process.

MATERIALS AND METHODS

This study is semi-experimental population of this study was all of the students in Islamic Azad University of Khoy who were between the ages of 19 and 22.Of 337 of students, 30 students who did not have any history of playing badminton were chosen randomly. At the beginning of the program, all participants received equal oral instructions about how to do service skill in badminton and then researcher performed some movements and all of participants watched the performance. All of subjects practiced for 60 minutes. Pre-test was done at the end of the session and they were synchronized based on their score and were put in one of the self-patterning and video show groups.

Scoring was done by French standard test, so that the subjects should throw the shuttle within the net and a rope which was parallel to the net with a distance of 50.8 cm, to the front field in the marked area with the radiuses of 55.8, 76.2, 96.42, and 116.84 and based on falling the shuttle in each area (5 for the 5th area, 4 for 4th, 3 for 3rd, 2 for 2nd and 1 for 1st) the scores were obtained (figure 3).

After the pre-test, based on the gained scores, groups were matched and divided into 2 groups of video show (15 participants) and self-patterning (15 participants). Two groups practiced for 12 sessions (3 sessions a week) in separate training grounds. Examinees did 30 short badminton services. After the 12th session, performance test was run for both groupsand48 hours later remembering test was ran too.

Participants in the video show group were 15 students who stood 2 meters away from a TV and watched a skilled person performance for 2 minutes and after that show, each subjects performed skill acquisition tries. After 40 minutes, they watched the video show again and received equal oral instructions. And then

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another 15 tries for the subjects was programmed. The course took 12 sessions (3 sessions per week) for 4 weeks.

Participants in self-patterning group were 15, each performance was being recorded. They watched the filmed performance of themselves for 2 minutes. The research group gave oral instructions about fixing their mistakes and then again they did 15 tries and were filmed and they watched their moves again and tips were given them to correct their problems.

RESULTS AND DISCUSSION
Results
To analyze the data, in the first step, Kolmogorov-Smirnov test was used to determine the normal being of the scores hypothesis which showed normal data distribution. Also the results gained from the Levine's test determined that there's homogeneity of variance between both groups. The correlated t-test was used to compare the pretest acquisition and pretest remembering. To compare the under study groups in acquisition and remembering stages, independent t-test was used. Also for the entire hypothesis, significant level was considered 0.05.

Correlated t table of the pretest with acquisition in two groups of skilled model and self-patterning

Paired samples test				**Acquisition**		**Task point** **pre-test**		**groups**
P	**sig**	**t**	**df**	**s.d**	**mean**	**s.d**	**mean**	
.05	.00*	-6.43	14	.78	3.1	.99	2.13	video show group
.05	.01*	-4.39	14	1.12	2.9	.41	1.73	self-patterning

 * *sign shows significant in 0.05 level*

Based on the presented data, in the table above, both methods lead to acquisition of the short service skill in badminton.
Correlated t table of the pretest with remembering in two groups of skilled model and self-patterning

Paired samples test				**Remembering**		**pre-test**		**Groups**
p	**Sig**	**t**	**df**	**s.d**	**Mean**	**s.d**	**Mean**	
.05	.00*	-5.06	14	.67	3.16	.99	2.13	video show group
.05	.03*	-2.35	14	.72	2.26	.41	1.73	self-patterning

sign shows meaningful in 0.05 level

Based on the presented data, in the table above, both methods lead to remembering the short service skill in badminton.
Comparing the average of performance of the skill for the examinees of both groups in acquisition and remembering stages

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	T-test			self-patterning		Video show group		
P	Sig	t	df	s.d	Mean	s.d	Mean	Stages
.05	.57	.56	28	1.12	2.9	.78	3.1	Acquisition
.05	*.02	3.51	28	.72	2.26	.67	3.16	Remembering

Discussion

Based on the presented information in the above table, there weren't any significant difference between two groups in acquisition test, but in remembering test of the short service in badminton, the video show group performed better.

Discussion:

The main goal of this study was to determine which method of video show and self-patterning leads to better learning. Analysis shows that 12 sessions improved acquisition and remembering significantly in both groups. In both groups, examinees were developed comparing to pretest. But in acquisition there weren't any significant difference. However in remembering test video show group gained better points and the difference was meaningful.

Bayodri *et al.,* (2006) and Zeto *et al.,* (2002) achieved same results. They stated that the skill display of the skilled person meaningfully causes improvement in remembering test.

Scully and Newell (1985) and Whiting (1998) emphasized that the performance of a skilled might provide information that eases the coordination process of the movement of the body. Hodges *et al.,* (2003) achieved same result and stated that showing a skill; ease the acquisition and performance of a new movement.

According to data analysis, right display of model creates potential advantages considering the learning conditions. Adams (1971) and Schmitt (1994) emphasized that learning skill movements is a problem solving process and engages learning models of the observer actively in solving the problem.

Therefore, this study, in effectiveness of patterning in acquiring a new skill, is consistent with to Chin (1999) and Hudges *et al.,* (2003) and is not similar to Barbi *et al.,* (2005) and Barzooka's (2007).

In Zeto *et al.,* (2001) superiority of the skilled model in acquiring skill comparing to self-patterning group is shown which is inconsistent with this study's findings.

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