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The Effect of Visualization Exercise through Video Media on Increasing Basketball Free Throw Shooting

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ABSTRACT: This study aims to determine the effect of visualization exercises through video media on the increase in basketball free-throw shooting. This type of research is a pseudo-experimental study with the design of "The One Group Pretest Posttest Design". The population in this study was a 24-person male basketball extracurricular participant who was taken with a total sampling technique. The instrument used is a free throw shot test. The analysis of the data used a 5% significance test. Research results show a significant effect of visualization exercise over video media on the increase in basketball free throw shooting, with a count value of 9.859 ± t table of 2.069, and a significance value of 0.000 ± 0.05.

KEYWORDS: visualisation, video media, shooting a free throw

INTRODUCTION

Basketball is a group ball sport consisting of two teams of five people, each competing to score points by putting the ball into the opponent's basket (Candra, 2020); (Ilham et al., 2020); (Christanto et al., 2019). Basketball provides many physical, mental, and social benefits. Skills such as shooting, passing, dribbling, rebounding, and teamwork to attack or defend are prerequisites for success in playing this sports (Lubay, 2019). In general, there are several basic techniques in basketball, namely a) basic passing techniques, b) basic techniques for receiving the ball, c) basic dribbling techniques, d) basic shooting techniques, e) basic footwork techniques, f) pivot training techniques (Abady & Syaleh, 2020); (Hussen et al., 2020).

The game in basketball often causes violations (violations) and mistakes (fouls). In a basketball game, with ten players moving quickly over a limited distance, contact is unavoidable, resulting in a foul. A free throw is a gift given by the referee to a player for scoring one point in a position just behind the free throw line, the distribution of free throws is usually given if the opposing player commits a violation in a prohibited area (Goldschmied et al., 2021); (Bühren & Kadriu, 2020). The victory of a team is sometimes determined by the success in making free throws or free throws, the better the free throws, the more points or the team's score, with a high score. Will be declared the winner.

The facts on the field before shooting the free throw did not bend the knee maximally (90 degrees), thus causing the released ball not to be able to form the correct parabolic angle, which in the end, the ball did not enter the basketball hoop, because when shooting the parabolic angle was expected to be around 30 degrees from the vertical direction or 60 degrees from the horizontal direction. Free throw shooting practice is determined by how many minutes to rest, if a 5-minute break means that the overall athlete shoots free throws for 5 minutes, and this will continue to be done to fill the training rest session. Another observation of the author shows that in the training session, there is no particular program for shooting free throws, so shooting free throws is considered a free throw shooting exercise to determine who has the right to drink or rest first, for example, who can enter the ball during free throw shooting may drinking. In contrast, those who do not enter the ball while shooting free throws are penalized for doing push-ups or running around the field.

In the shooting movement, there is the term balance, eyes, follow through (BEEF), where in shooting, the body must be balanced with a focused view on the ring, then the elbows form a 90-degree angle and end with a follow-up movement (Koh & Wang, 2020). Shooting is a basketball game technique that is quite complex to other techniques, which means that the shooting technique consists of several elements of motion coordinated into a series to produce good shooting movements.

Shooting training methods have not been performed to the maximum extent, so the free throw shooting results have not shown good results. Although there are quite a few methods of shooting training that can be used, one of them is mental training in the form of visualization using video media. The terms describing mental training for athletes in games include visualization, mental

rehearsal, imaging, meditation, and mental practice (Hut et al., 2021); (Snelgrove & Gabbott, 2020). These terms are in principle the same, "to create or recreate an experience in mind".

Imagery in sports can also be referred to as visualization or mental exercise. Imagery is imagining a particular movement or situation that has either been performed or has never been performed by involving all senses. Imagery means using all senses (Seeing, feeling, hearing, feeling, kissing) to train the sport played on the athlete's mind (Dave & Nandhinee, 2019); (Munroe-Chandler & Guerrero, 2018).

Visualization exercises are performed using a free throw technique video medium played through a laptop. By utilizing audiovisual media, it is expected to understand and perform free throw shooting movements correctly according to what is seen in the audio-visual medium through images and sounds. In an audio medium, the visual medium can both listen and watch the actual technique and form of free throw shooting.

Visualization Exercise Steps

The steps for doing visualization exercises, first of all, is done with relaxation. In visualization exercises, there will be a dialogue between the brain and the athlete's body during the exercise. The implementation of visualization exercises in general is first carried out with an opening in which there are (prayers, preparations, and explanations about the exercises to be carried out). The following is the order in which the basketball free-throw shooting visualization exercise is implemented:

Table 1. Visualization Exercise Program Implementation Guide

No	Description	Information
1.	Visualization exercise is a mental training method using video assistance to assist athletes in visualizing related to understanding and inculcating a correct basketball free throw shooting technique.	
2.	Visualization exercises are performed at the beginning of each training session. The training sessions were held face-to-face 16 times. Each training session is held for 60 minutes. With details of a 10-minute visualization session, 10-minute warm-up, 20-minute actualization session, 10-minute game, and 10-minute cool down.	Exercise Frequency: 16 times face-to-face (1 week 4 times)
2.	One coach accompanies each group.	
3.	The coach directs the athlete to place himself in a conducive corner of the training area.	Exercise is done in a quiet place.
4.	The coach instructs the athletes to do static stretching.	Athletes do light stretching to relieve muscle tension.
5.	The coach conditions the athletes to position themselves as relaxed as possible in a sitting position.	The best position for visualization practice is sitting.
6.	The coach carries out visualization exercises by giving videos related to basketball free-throw shooting techniques	Visualization exercise volume: 10-minutes
7.	When the athlete watches and pays attention to the video, the coach gives instructions and suggestions to the athlete regarding keywords from a series of basketball free throw shooting techniques.	Trainers in giving instructions using keywords (triggers).
8.	At the stage, after paying attention to the video and visualization related to shooting basketball free throws, the coach instructs the athletes to visualize a series of basketball free-throw shooting movements briefly and then shoot real basketball free throws.	Free throw shooting Set: 4 Reps: 10 Duration 20 minutes
9.	At the end of the training, the coach evaluates the course of the training session.	

Stimulation through video playback like this is done repeatedly during the 10-minute visualization training. After 10 minutes of doing visualization exercises, the coach instructs the athletes to do a real free throw basketball shooting practice, with the implementation of the exercise, Sets 4, Reps: 10.

Table 2. Visualization Exercise Program Implementation Guide

No	Practice Guide Order	Information	Duration
1.	Coaches and athletes carry out prayer activities according to their respective beliefs before carrying out the next activity.	(Opening)	10-minute
2.	Coaches and athletes position themselves.	(core exercise)	6-minute
3.	The coach instructs the athlete to position the body as relaxed as possible.		
4.	The coach showed a video related to the basketball free-throw shooting technique series.		
5.	When the athlete focuses on watching the video, the coach gives instructions regarding the correct series of basketball free-throw shooting techniques. In addition, the coach gives keywords for each series of basketball free throw shooting movements		
6.	When the athlete watches the video, the coach also directs the athlete to visualize the correct series of basketball free-throw shooting movements.		
7.	The coach's role is to direct the athlete to have a picture of the correct basketball free-throw shooting sequence.		
8.	The coach gives instructions with keywords regarding the correct sequence of shooting free throw basketballs.		
9.	Athletes doing static and dynamic warm-up	10-minute	
10.	The last stage of training is for each athlete to visualize the basketball free throw shooting technique	Sets: 4 Reps: 10 20 minutes duration	
10.	Athletes cool down in pairs, followed by evaluation and closing.	(Closing) 10 minutes	

METHODS

This type of research is quasi-experimental research. The experimental method is defined as a systematic method for building relationships that contain causal-effect connections. The design used in this study was "The One Group Pretest Posttest Design," or the absence of a control group. The population in this study were male basketball extracurricular participants, totaling 24 people. Sampling in this study was carried out by total sampling. All 24 male basketball extracurricular participants were taken as samples. The instrument to be used is a penalty shot test / free throw, as many as ten throws then added up. The scoring criteria are: a score of 0 is given if the shot does not enter, a value of 1 if the direction of the shot is straight against the ring and the ball touches the ring (the ball does not enter), and a value of 2 if the ball enters. The implementation of this test is that athletes are collected and given an explanation, athletes warm up for 15 minutes, athletes who will take the penalty shot test are called one by one, and the ball is given to athletes after athletes are ready and behind the penalty shot line. Each athlete has a chance to make ten penalty shots and then add up the scores.

FINDING

The complete statistical description of the pretest and posttest shooting free throw basketball is presented in table 3 as follows:

Table 3. Basketball Shooting Freethrow Pretest and Posttest Results

Statistik	Pretest	Posttest
N	24	24
Mean	8.17	12.29
Median	8.00	12.00
Mode	8.00	10.00a
Std. Deviation	1.61	2.31
Minimum	5.00	9.00
Maximum	12.00	17.00

Table 4. Normality Test Result

Group		p	Sig.	Description
Shooting Free-throw	Pretest	0,448	0,05	Normal
	Posttest	0,156	0,05	Normal

From the results of table 4 above, it can be seen that the free throw shooting pre-test and post-test data have a p-value (sig.) > 0.05. then the variable is normally distributed.

Table 5. Homogenitas Test Result

Variable	Levene Statistic	df1	df2	Sig.
Pretest dan posttest shooting free-throw	4,344	1	46	0,243

From table 5 above, it can be seen that the value of sig. Pretest and posttest shooting free throw 0.243 > 0.05, so the data is homogeneous.

Table 6. T-Test Results in Pretest and Posttest Shooting Free-throw Basketball

Group	Average	t-count	t-table	signifikansi	Percentage
Pretest	8,17	9,859	2,069	0,000	**25,09%**
Posttest	12,29				

From the results of the t-test, it can be seen that the t-count is 9.859 and the t-table (df 23) is 2.069 with a p significance value of 0.000. Because t arithmetic 9.859 > t table 2.069, and a significance value of 0.000 <0.05, these results indicate a significant difference. Thus the alternative hypothesis (Ha), which reads, "There is a significant effect of visualization exercise through video media on increasing basketball free throw shooting," is accepted. Free throw shooting pretest data has an average of 8.17 and at the time of posttest increased by 12.29, while the percentage increase was 25.09%.

DISCUSSION

Based on the results of the analysis, showed that there was a significant effect of visualization exercise through video media on increasing basketball free throw shooting. The use of audio-visual media can stimulate athletes to be more focused and focused. This is because audio-visual media can improve the athlete's ability to understand an abstract concept more easily so that the athlete remembers the lessons that have been delivered better. By using audio-visual media in the practice process, providing information to students is more varied because audio-visual media already contains text, audio, graphics, and video.

Field's research (Khan et al., 2018) findings showed that the participants in the PETTLEP imagery interventions showed better accuracy in netball shooting compared to the participants in the traditional intervention group. However, both audio and combination of audio and video PETLLEP interventions enhanced similar netball shooting performances. In conclusion, from this study, the PETTLEP imagery model was found to improve players' performance, especially when combined with audio imagery and video modeling. Research (Satriawan & Amar, 2020) imagery training significantly improves lay-up shots' results for students taking basketball extracurricular activities at SMA N 1 Woha. In a study (Novriansyah et al., 2019), the results show a significant difference between internal and external imagery training on the results of free-throw extracurricular basketball balls, which is evident from the value sig = 0.010.

Imagery training is a form of mental exercise in the form of self-image and movement in the mind (Yadolahzadeh, 2020); (Pop & Tiba, 2019). The benefits of imagery exercises, among others, are to learn or repeat new movements, correct a wrong or imperfect movement, simulation exercises in mind, and training for athletes undergoing injury rehabilitation. Imagery exercises are often equated with visualization exercises because they visualize the movement in mind. However, the athlete's image not only "sees" his movement but also functions the senses of hearing, touch, smell, and taste. To be able to master imagery exercises, an athlete must first be proficient in doing relaxation exercises.

By doing imagery or visualization exercises, an athlete will be able to change his perception of something. All the experiences and exercises that have been carried out are imagined in every detail and the movements to the possible strategies used in the match. Through the process of imagery or visualization exercises that are carried out regularly, an athlete can form an image (something imagined in mind) of a situation in various perceptual frames persepsi (Bedir & Erhan, 2021); (Ivanova, 2019).

Athletes (and coaches in training) can use this form of mental training to learn or repeat new movements and correct incorrect or incomplete movements. Simply put, an athlete can simulate technical training in his mind, besides that, it can also be used as a training tool for athletes recovering from injury.

Mental imagery exercises carried out in this study are a series of activities to imagine and bring back the activities carried out in mind in the form of events or experiences of accurate motion stored in memory. Repeating continuously by imagining activities or movements that are in a relaxed state can make a person more focused in carrying out their activities and program one's mind. The words spoken repeatedly will become a program of thoughts in your mind. Therefore, the significant effect of this mental imagery exercise can be seen in this study. Imagery is one of the most important techniques in the cognitive regulation of an athlete, whether it is used to understand how a skill should be performed, practice different possible competitive situations, or what experience would be like to achieve one dream goal. It can be concluded that imagery can have an impact on self-confidence and then have an effect on the appearance of athletes, or imagery can have a direct impact on both appearance and self-confidence.

CONCLUSION

Based on the results of data analysis, description, testing of research results, and discussion, it can be concluded that there is a significant effect of visualization exercises through video media on increasing basketball free throw shooting at SMA Negeri 3 Klaten, with a t value of 9.859 > t table 2.069, and a significance value of 0.000 <0.05.

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