

The Effect of Gobak Sodor Game on the Increase of Tai Sabaki in Adolescent Kenshi Dojo Triharjo

FransFile Manihuruk^{1,*}, Djoko Pekik Irianto¹, Suharjana¹, Widiyanto¹, Gunathevan Elumalai²,
Carles Nyoman Wali¹

¹Sport Science Study Program, Postgraduate Program, Yogyakarta State University, Road Colombo No. 1, Karangmalang,
Yogyakarta 55281, Indonesia

²Faculty of Sport Science and Coaching, Sultan Idris Education University, Tanjung Malim, Malaysia

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Abstract Background: Tai Sabaki technique is one of the basic techniques in Shorinji Kempo martial arts. Every move made by a kenshi must have elements of the tai sabaki technique regardless of the level in shorinji kempo martial arts. Therefore, the tai sabaki technique must be justified through various training methods, because the tai sabaki technique will play an important role when a kenshi attacks or defends. This study aims to determine the effect of the game gobak sodor on the improvement of the Tai Sabaki technique in martial arts kempo, in which there are factors of speed, accuracy and agility. The method in this research is an experimental one group pretest-posttest design. The population in this study were the teenage kenshi of Triharjo with a total of 20 teenage kenshis. The sample of the study was 20 adolescent conditions which were determined by using purposive sampling technique. The analytical technique used is descriptive quantitative as outlined in the form of a percentage. The results of the study show that 1). The influence of the game gobak sodor on the tai saibaki technique in the training process at the Triharjo dojo. 2). The gobak sodor game has a positive impact on adolescent kenshi in expressing their ability to perform shorinji kempo martial arts techniques. 3). The improvement of adolescent kenshi ability on the tai saibaki technique can be seen from the results of the pretest and posttest, where the results of the pretest are 18.50% and the post-test are 35.80%. Thus, the game of gobak sodor can improve the Tai Sabaki technique in shorinji kempo

martial arts.

Keywords Gobak Sodor, Tai Saibaki, Kenshi

1. Introduction

Traditional games are a cultural heritage in a country that must be preserved because traditional games are loved by all levels of society, including Indonesia [1]. Traditional games have become an activity that has occurred since ancient times with its own characteristics [2]. Traditional sports are not only games for fun but can be used as a method of learning and training in an agency or self-defense [3]. Traditional games should be a very easy method to use in the learning process or as a training method in a branch of sport [4]. This can be seen from the traditional games that are used as learning media to improve the three aspects of cognitive, psychomotor, and affective humans found in the games of congklak, engkle and gobak sodor [5], [6].

The term game comes from the basic word "play which gets the suffix 'role'". According to the Big Indonesian Dictionary, "play" is to do something that is used to play, an item or something to be played with, an act that is not taken seriously, is just normal [7]. A game is a certain situation or consensus when a person seeks pleasure or

satisfaction through an activity called "play", its form can take the form of concrete objects and abstract objects [8]. From some of the opinions of these experts, it can be concluded that the game is a playing situation associated with certain rules and goals, to seek pleasure and satisfaction [9].

Traditional games are games inherited from ancestors that are mandatory and need to be preserved because they contain local wisdom values [10]. Traditional games can be interpreted as an activity that is carried out voluntarily and creates pleasure for the perpetrators, governed by game rules that are run based on hereditary traditions [11]. Traditional games are games that are played from generation to generation that have cultural value and are usually played using the language and characteristics of a particular area [12].

The gobak sodor game is one of the traditional games in Indonesia [13]–[15]. The game of gobak sodor can also be interpreted as a game to block or prevent the opponent, so that the opposing player does not reach the finish line [16], [17]. If the opposing player reaches the finish line, the opposing team will get a score, with a weight of 1. Gobak sodor is played by two teams, each team has 3-5 people, one team as a guard or a barrier the other team acts as an attacker [18]. The team in charge of guarding is in a horizontal position while the players acting as attackers are in a vertical position [19]. The gobak sodor game really requires speed, agility and excellent endurance, because to do this game requires speed [20]. The values contained in this game are identical to some of the values contained in all martial arts, including Shorinji, which is mandatory for every member of the martial arts [21]. These values are character values that are closely related to the personality of a kenshi, more specifically related to the value of honesty, the value of responsibility, the value of discipline and the value of hard work [22]. All of these values must be carried out by a kenshi both in the shorinji kempo martial arts environment in particular and in society in general.

Although this game is a traditional sport, this game can be said to be a competitive sport, because this game is closely related to competition [23]. In the sense that competitive or combat can be interpreted as a condition of seizing or competing in the form of a team or individually [24]. This game does not only apply to shorinji kempo martial arts, but this game can be used as a training medium in several other martial arts such as Boxing, Karate, Judo, Kendo, Taekwondo and team sports such as Soccer and Futsal [25]. It can be seen that this game involves fine motor and gross motor skills [26], [27]. Gross motor skills in this game are balance and coordination between body parts such as walking and running [28]. While the fine motor skills in this game are eye-hand coordination when touching opposing players and blocking the opponent to prevent the opponent from scoring [29].

Based on the description above, it can be concluded that traditional games are a result of community culture that has grown and lived until now, a game inherited from ancestors

that is carried out voluntarily where the game is played using the language and characteristics of a particular area that must be preserved in order to strengthen the national identity. Traditional games make people skilled, tenacious, agile, agile, and so on and have benefits for children.

Playing for children is an exciting thing, especially with traditional games that have many benefits for children. The benefits of traditional games are: (1) children become more creative; (2) can be used as therapy for children; (3) develop children's intellectual intelligence; (4) develop children's interpersonal emotional intelligence; (5) develop children's logical intelligence; (6) develop children's kinesthetic intelligence; (7) develop children's natural intelligence; (8) develop children's spatial intelligence; (9) develop children's musical intelligence; and (10) develop children's spiritual intelligence.

Indonesia is a country that has a variety of traditional games which are cultural treasures [30], [31]. Various traditional games, namely engkle, lompat tali, lari karung, getrik kayu, congklak, engrang bambu dan gobak sodor [32], [33]. The gobak sodor game is one of the cultural heritages that is still being preserved and is still being played by children in this modern era [34]. Through the game of gobak sodor, children are given the breadth to express their abilities in the three shutters, both psychomotor, cognitive, and affective. However, in this study, the game of gobak sodor focuses on psychomotor activity in self-defense training [35].

Kenshi in a general sense is someone who learns martial arts using sharp weapons [36], [37]. This corresponds to two syllables namely Ken and Deshi, Ken means Disciple of Sword Deshi [38]. However, kenshi in Shorinji Kempo martial arts is someone who has joined the Shorinji Kempo martial arts organization, please note that the kenshi label applies until someone dies [39], [40].

Tai Sabaki is one of the basic techniques found in shorinji kempo martial arts [41]. Tai saibaki can be interpreted as a body movement technique or body movement regulation when doing movements. Tai Sabaki has a big influence on every movement made by the kenshi therefore tai saibaki has similarities with the game of gobak sodor [42]. Every move contained in the game of gobak sodor is very suitable in the formation of the tai saibaki technique [43]. This can be seen from the movements that are still carried out by the kenshi when playing the game of gobak sodor [44]. This aspect is the benchmark for the game of gobak sodor, it is recommended to practice the Tai Sabaki technique [45].

The aspects contained in the game of gobak sodor are speed, agility, and accuracy [46]. These three aspects are a basic element for a kenshi to perform tai saibaki in pairs or individually when performing basic kempo martial arts techniques such as geri, zhuki and uke. [47]. Fast, precise and flexible movements enable Kenshi to perform basic martial arts techniques [48].

However, this is rarely applied by kempo trainers when providing training, this simple method of training should

be used as a driving force for the enthusiasm of the kenshi in practicing in dojos in Indonesia [49]. Training through a traditional game approach has a good added value for the kenshi, in addition to practicing kempo martial arts techniques, the kenshi can also get to know their own culture, namely the game of gobak sodor.

Exercises in self-defense with an approach to local wisdom are very rare, even in self-defense training, kempo only applies semi-game exercises. However, the game used is not a traditional game but a game that is characterized by its origins in Kempo martial arts, for example, the struggle for a belt.

This can also be seen from several literature studies that the author found. For example, Dani Nurdiansyah who researched the game of Gobak Sodor to improve agility in martial arts, previous authors examined only one aspect in the game of gobak sodor, different from the author who examines three aspects, namely speed, accuracy and agility in improving the tai saibaki technique in martial arts kempo.

The purpose of this study is whether the game of gobak sodor can improve the Tai Sabaki technique in kenshi at the Triharjo dojo. Benefits of this research: 1) theoretically this research opens a paradigm in the field of coaching in general and in particular on kempo martial arts so that they always use local wisdom in practicing basic kempo martial arts techniques; 2) This research is expected to increase the knowledge of the trainers so that they choose simple training methods but can improve various basic techniques in martial arts; 3) as a reference value for the quality of further research.

2. Materials and Methods

This type of research is experimental research, in the sense that experimental research has a treatment [50]. The experimental method can be used as a method to find out the effect or not of the treatment given to the kenshi through the game of gobak sodor [51]. The design in this study used a one-group pretest-posttest design. This design was conducted pretest to determine the condition of the subjects studied before or after being given treatment, then

the results were compared to see whether the kenshi experienced changes or not [52]. The place in this research is in the Triharjo dojo, Sleman sub-district, Special Region of Yogyakarta, which is still actively doing exercises. The duration of the research was carried out for 8 weeks or 2 months, this research was honored on 03 September 2020 - 03 November 2020. Frequency of exercise 3 times a week. The number of meetings as many as 16 times. Triharjo dojo practice schedule on Thursday, Saturday, and Sunday. Practice starts at 15-17 WIB. WIB stands for West Indonesia Time. Because time in Indonesia is divided into three parts of the time area, namely WITA (Central Indonesian Time, East Indonesian Time and West Indonesian Time). Population is the total number of subjects in a study [53]. The population in this study was the active Triharjo dojo teenage kenshi with a total of 20 kenshi. The sample is part of the population to be studied in a research [54]. The sample in this study was the entire population of 20 people in the Triharjo dojo kenshi youth, adolescent kenshi who have been selected and determined by the researcher according to the sampling criteria will then be given treatment. The 20 kenshi who were taken as subjects in this study had joined Shorinji Kempo for approximately 2 years and 6 months. I got this data from the coach or Sempai at the Dojo. Sampling in this study was carried out carefully so that the samples used in the study met the criteria and needs in this research. The sample taken is representative of the teenage kenshi owned by Triharjo's dojo. The time required for each 1 meeting is 20-30 minutes. However, when entering the final test the time duration was reduced to 5-10 minutes. The goal in reducing the duration of time is to see whether or not the kenshi changes when performing the taisabaki technique through the Gobak Sodor game in a fairly short time.

3. Result

Based on the research results obtained a hypothesis which states: there is an increase in the Tai Sabaki technique in aspects of speed, accuracy and agility in adolescent kenshi through the game of gobak sodor. The results can be seen in table 2 below.

Table 1. Distribution of pretest and posttest data

Treatment	N	Lowest Score	Highest Score	Average	Standard Deviation	Significant
Pre-test	20	30	80	34	0,34	5%
Post-test	20	50	90	54,5	0,545	

Based on table 2, it is described using descriptive statistical analysis as follows: the results of the pretest in moving tai saibaki through the game of gobak sodor in that there are speed, accuracy and agility, the lowest score is 30, and the highest is 80, the average value is 34 and the standard deviation value is 0,34. While the results of the posttest in moving the Tai Saibaki with the lowest score of 50, the highest score of 90, the average value of 54,5 and the standard deviation of 0,545. Thus, there is an influence of the gobak sodor game in kempo martial arts training to improve tai saibaki techniques, especially speed, endurance and agility.

Table 2. Percentage of Pretest Assessment

Value Range	Description	Number of Kenshi	Percentage
86>	Excellent		0
81-85	Good		0
75-80	Sufficient		0
70-74	Less		0
<70	Very Less	20	100%
Total		20	100%

Based on table 3, the initial data values from the gobak sodor game to improve the Tai Sabaki technique which include speed, accuracy and agility are obtained, there are

20 teenage kenshi that do not experience a significant increase in these three aspects.

Table 3. Percentage of Post-test Assessment

Value Range	Description	Number of Kenshi	Percentage
86>	Excellent	5	7,34%
81-85	Good	8	50%
75-80	Sufficient	7	36,8%
70-74	Less	0	
<70	Very Less	0	
Total		20	100%

After being given treatment using the modified Gobak Sodor game and applying the Tai Saibaki technique in full, all adolescent Kenshi experienced a very good improvement in performing Tai Saibaki movements or moving their bodies quickly, precise and full of agility when performing every basic technique in martial arts kempo with a percentage of 100%.

Based on the graph below, it shows that there is an effect of the Gobak Sodor game on the improvement of the Tai Saibaki technique of speed, accuracy and agility in carrying out every move with a pretest of 18,50% and a post-test of 35,80%.



Picture 1. Average Value of Pretest and Posttest

Table 4. Normality test

One-Sample Kolmogorov-Smirnov Test		
N	20	
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	5.11778154
Most Extreme Differences	Absolute	.131
	Positive	.131
	Negative	-.128
Test Statistic	.131	
Asymp. Sig. (2-tailed)	.200 ^{c,d}	

a. Test distribution is Normal.

b. Calculated from data.

Table 5. Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
.110	1	8	.748

Table 6. Data of Effect Test results

		Mean	N	Std. Deviation	Std. Error Mean
		Pair 1	Pretest	50.0000	20
	Posttest	87.0000	20	4.70162	1.05131

Based on table 4, the data is declared normal if the value of sig (2-tailed) is less than 0,05. Thus the table value above is sig. (2-tailed) 0,000 then the data can be declared normal.

Based on table 5, the data is declared homogeneous because the significant value is greater than 0,05, which is 0,748. The conclusion is that the pretest and posttest data have the same variance (homogeneous).

Based on table 6, the results of the tai saibaki training through the game of gobak sodor are known to be more posttest than pretest, this is evidenced by the significant post-test results, namely 35,80% and pretest 18,50%. This shows that H_a is accepted and H_o is rejected. So it can be concluded that the game of gobak sodor on the saibaki dance technique from the aspect of speed, accuracy and agility in martial arts kempo.

(a) Gobak Sodor and Speed, accuracy, agility

Through this gobak sodor game, it can have a big impact on the teenage kenshi, because the kenshi have a real improvement which has been described in the results of the pretest and posttest. This game is a medium in triggering to improve fine and gross motor skills in adolescent kenshi [55]. The basic technique of shorinji kempo martial arts is a mandatory basis for kenshi / kohai when practicing. The basic techniques of kempo martial arts that kenshi must

know are the basic techniques of geri, uke, shuki and ashi. In this study, researchers used the traditional game of gobak sodor to improve the tai sabaki technique.

The reason for modifying the gobak sodor game as a training medium in shorinji kempo martial arts, especially to improve the taisabaki technique, is to change the size of the field and increase the number of players so that it looks like the effort that a kenshi will make to avoid being touched by the opposing team's players. As for the purpose of adding players in this game, a kenshi gets an unusual challenge in passing opposing players, or a kenshi is challenged to practice in a different setting. In addition to improving taisabaki techniques, a kenshi also learns the values of teamwork and increases confidence in getting past the opposing team's players.

The game of gobak sodor can also increase the confidence of adolescent kenshi in performing every basic technique of kempo martial arts, especially the Tai Sabaki technique [56]. In doing this technique a kenshi does not only rely on strength alone but there are several other supporting factors, namely speed, accuracy, agility and endurance [57]. Tai sabaki technique is one of the basic techniques that plays an important role in performing advanced basic techniques [58]. The tai sabaki technique does not only play a role in helping kenshi to perform other basic techniques. However, it can play a dual role, namely expressing the heart of a kenshi through body language.

(b) Gobak Sodor dan Tai Sabaki

The gobak sodor game is very identical to the group/team game. The gobak sodor game uses several aspects that are very identical to the tai sabaki technique, namely speed, agility and good endurance when playing this game. So that this game can be used as the right training method to train speed, accuracy, and agility in adolescent skills. This is in accordance with the rules of the game that require a player to be required to move continuously to score points for his/her team [59]. Thus the Gobak Sodor game has an effect on training speed, accuracy and agility in the Tai Sabaki Kempo martial arts technique.

Accuracy and agility will have a big impact when a kenshi makes moves that are goho (hard) or Juho (soft/smooth) [60]. Tai Sabaki is a body movement by an athlete when getting an attack or dodging or attacking an opponent. Speed, accuracy and agility will have a big impact when a kenshi performs a combination of basic techniques or performs more than one basic technique. Because of the dynamic nature of science, this study has various limitations, namely: the total of subjects is still small, the martial arts experts involved in this research are still very lacking, the research place is still single and the research time is not long.

4. Conclusion

The game of gobak sodor is a cultural heritage of the Indonesian state, therefore it needs to be preserved and implemented for all groups, especially as a method of practicing basic martial arts techniques. Based on the results of the data analysis of this study, it can be concluded: 1) the influence of the game of gobak sodor on the improvement of the Tai Sabaki technique in adolescent kenshi; 2) the game of gobak sodor is proven to increase speed, accuracy and agility when the kenshi perform kempo martial arts techniques; 3) Gobak Sodor game can also increase self-confidence and excitement in adolescent kenshi in participating in kempo self-defense training.

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