

Teaching Children *Sepaktakraw* through the Cart *Sepaktakraw* Game

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Abstract: The learning process of the child is not the same as the adult, so the child in learning a skill requires modification of the tools and regulations. Basketed sepaktakraw (krawnjang) is a form of child sepaktakraw game that combines sepaktakraw game techniques and basketball. The purpose of this research is to develop the form of game with prototype of tool model and rule of the game, which has been learning basic skills conventionally. This research is a research development (Research and Development). The subjects of this research are elementary school students class IV, V and VI, amounting to 120 children who are joining the sepaktakraw sport. The results of this research is a prototype of the tool and the basic rules of the basketed sepaktakraw game. Equipments are basket-like baskets as high as 130 cm, with two baskets 35-40 cm, balls of rattan coated with soft sponge with size 14 cm, diameter 150 cm game field. The game is played by 4 to 6 children, with the basic rule of putting as many balls as possible into the basket within 8 minutes for 2 innings.

1 INTRODUCTION

Sports become a phenomenon that can not be separated from the life of people in this world because it is something interesting and has become a major requirement. To grow, the fulfillment of the necessities of life, people will always move. Motion has a meaning, in which, to change the position from a stationary position to a different position or move. Likewise sport is moving the body both the position of the legs, arms, shoulders and parts of the human body from static to dynamic. Mutohir, (2007: 26) an activity to actualize human rights as an opportunity to develop and maintain physical, mental and moral abilities. Therefore everyone should have access to physical education and sport. Sport is divided into three domains namely sports education activities, sports achievements and recreational sports.

Sepatakrav movement is a collection of badminton courts,volleyball rules and tactics,football tehique and Chinese shuttlecock kicking skills,is a kind of modern social fashion sports (Kongmeechon, 2017). Sepak Takraw is a popular sport among the Southeast Asian countries and various brands of takraw balls are available in the local market to suit the needs of players (Adam, N.M., 2014). Sepak takraw is a highly complex net-barrier kicking sport that involves dazzling displays of quick reflexes,

acrobatic twists, turns and swerves of the agile human body (Maseleno, A. and Hasan, M.M., 2011) .The takraw ball is a very unique interwoven ball used in the action game of sepak takraw. The traditional takraw ball is manufactured by conventionally weaving split rattan strips into a spherical basket (Ahmad, N., Taha, Z., Ya, T.M.Y.S.T. and Hasanuddin, I., 2012). Sepaktakraw which originally a culture of society, now a sport of achievement recognized by the international community, is a form of cultural transformation of society that existed in the past until now. Rezai (2013: 936) said that, sepaktakraw has been included in the Asian Games since 1990 in Beijing. Sepaktakraw is basically a modified game of the traditional sport in the concept of a sport of recreational games being a contested sport, as we know that this game has been played and popular throughout Indonesia, partly in the Malacca Peninsula from Burma to Singapore border.

Passing the ball is an extremely important basic skills in Sepak takraw.From defense into attack,passing the ball was mainly rely on in sepak takraw game (ZHANG, Y.B. and ZHANG, S.Z., 2009).

Sepaktakraw learning system that is known conventionally still be the basic practice principle to date, namely learning by individual way, pasing autonomous, pasing in pairs, pasing with the media of wall and rope. Therefore it is necessary to develop a

new concept of learning the basic techniques of sepak takraw conducted outside the conventional concept.

Modifications, forms of sports development that are tailored to the needs and abilities of a particular group of people. A busy activity with busy work, encouraging people to adjust it, for example with the sport of the night (futsal, badminton) in due to work activities until the evening, so it is possible to do it at night. Nurhasan (2007) defines modification is an attempt to make changes with the adjustments both in terms of physical materials ie facilities and equipment and goals and ways (methods, styles, approaches, rules and judgments). The essence of a modification step is to analyze and develop the learning materials by way of guiding in the form of potential learning activities so that it can easily in the process.

Wijono (2011: 26) in the Australian Sports Commission recommends children to take part in sports modifications, in order to adapt their skills by using equipment appropriate to the child's abilities.

Yusup (2004: 48) said that, modification is manifested in some ways, without objective standards, because the priority is the process and the pedagogic impact rather than on the outcome. Such modifications are (a) changes in the size, shape, and material of the tool such as bulbs made larger and lighter, the beaters are shorter, the ball catcher is made of fabric, (b) the field size change, the net height or the ring height, such as narrowed fields, (c) simplified game rules, shortened time.

The development model of the researcher is the game of basketed sepak takraw game which is the development of sepak takraw game of sepak takraw and basketball game, which is done in groups and put the ball into the basket. Basketed sepak takraw game is a form of learned concepts sepak takraw for children elementary school age that are fun, easy, and can be played by several children at a time in a circle with equipment that can be modified with simple materials.

2 METHODS

2.1 Research Design

This research is a research development (research and development) which means research oriented to a product. In this case the development is a game of basketed sepak takraw which is used as a new model of basic lesson sepak takraw for children.

According to Borg and Gall (2003: 571) the steps of implementing research and development strategies to produce a particular product and to test the

effectiveness of the product in question are problem formulation, prototype creation, expert and material validation, small group trial, revision and validation, moderate, expert validation, large group trials, and results reports.

2.2 Research Subject

The subjects of this basketed sepak takraw game model are students who are active in elementary school grade IV, V and VI in Kota Kediri, East Java Indonesia which consists of 120 children.

2.3 Research Instruments

Instruments in this research development is used to reveal the form of product development of learning tools of basketed sepak takraw at Primary School in Kediri by using small-scale test sheets, large-scale test sheets. The grid is arranged based on need is as follows:

Table 1: Research Instrument Grid.

Variables	Indicator	Assessment Indicator Item	Item
Development of Sepaktakraw Kids Through Playing Basketed Sepaktakraw	Small Scale and Large Scale Trial (students)	a) Secure	1-3
		b) Easy and festive	4-5
		c) Interesting	6-7
		d) In accordance with the purpose	8-10
		e) Durable and easy to repair	11-13
		f) In accordance with the environment	14-15
		g) There are elements of motor motion	16-18
		Amount	18

(Sumber: Riyanto, 2013)

2.4 Product Specifications

The product specification developed is a development research in the form of a game of sepak takraw games for children in the form of tools and means of

modification in the form of combining sports sepaktakraw and basketball or sepaktakraw motion with the final result is to insert the ball into the basket.

The shape of the product in the form of means game that focuses on the stimulation of basic skills, namely football sila sepak takraw, soccer turtle, comprehend and heading the ball into the appliance or pole baskets made in such a way. The krawnjang game model (takraw and basket) consists of cast pole posts, supporting poles, iron plates, two baskets and a modified ball of spun-coated rattan.

The principle of this game is a separate team or team of 4 children to enter the ball with sepaktakraw skills as much as possible with a predetermined time target that is 8 minutes times 2 innings. So this game basically uses sepaktakraw skills, but the gain of the numbers with the execution of the ball into the basket and determined by the time the game where the most inserted is the winner.

3 RESULTS AND DISCUSSION

3.1 Research of Data Analysis

Analysis of this data is used to answer the formulation of the problem arised in front of how is the development of basket facilities as learning skills sepaktakraw for elementary school children in Kediri? The data analysis is described as follows:

3.1.1 Initial Product Process

The initial process of making the basket, including several stages, as follows:

- a. basket bending process
This is done by arranging woven bamboo and rattan basket with attention to the needs of the desired researchers.
- b. Making iron plate, used as bamboo basket brace.
- c. Basket knitting (jaring ring), as well as on a basketball game, with a 4mm diameter plastic strap string.
- d. Results of the product, which is the result of modification basket in the form of bamboo woven basket and rattan knitted rope.

3.1.2 Modified Ball Making Process

- 1) Preparation of rattan for further in the woven in such a way, with a size larger 1- 2 centimeters than the standard ball circumference size.

- 2) Once the ball is wounded the ball is coated with soft colored sponge.

3.1.3 Initial Product Revision

Once the game media in the form of a prototype model is created, there are several revisions related to the product made by the researcher, which are:

Table 2: Modified Ball Making Process.

No	Indicator	Information	Initial Revision
1	Game Model Form	Cheal, lively, fun, easy to do and safe	Orientation to the needs of children's movement, especially the basic motion <i>sepak takraw</i>
2	Equipment	Portable or easily disassembled and moved.	Portable or easily disassembled and moved.

3.1.4 Expert Infrastructure Validation

The researcher performs expert validation of the infrastructure facilities of Sepaktakraw Coach, Koke Wiluyo and the modification expert Dr. Ria Lumintuarso, M.Si as lecturer of Yogyakarta State University and inventor of Kids Atheltic which was conducted through 3 stages of meeting. Briefly the results of expert validation of infrastructure facilities or expert input are as follows:

- a. First meeting: woven baskets are made loose (see-through), woven rattan more tightened, appearance is still less tidy;
- b. The second meeting: should be given a knit like a basketball, and the knit should be colorful. Expected in the rules of the game also incorporated elements of the formation of a positive character of children;
- c. Third meeting: suggestion no validation of expert facilities of infrastructure. Tools can be used as small-scale trials.

3.1.5 Expert Materials Validation

Validation of expert learning materials with prof. Dr Achmad Sofyan Hanif, State University of Jakarta as a sepaktakraw expert. The validation of the instructional expert is done as a whole in two stages of the meeting. Brief description of input from the material expert is as follows:

- a. First meeting stage: Knitting color is less attractive. Conclusion: a small-scale trial with improvement can be used.
- b. Second meeting stage: no suggestion from expert validation. Conclusion: can be used in small-scale trials without repair

3.1.6 Small Scale Trial

Small-scale trials were conducted at SDN Baluwerti 3 Kediri club involving 15 children after validation of expert facilities and materials. In the small-scale test period found several revisions of the materials are:

Table 3: Small Scale Trial.

No	Indicator	Information	Small Scale Revision
1	Pole Material	Material is made of iron	Materials should be cheap and affordable, as well as lightweight
2	Circle of basket	Material is made of iron ring	Material is too expensive
3	Elevation of the pole	Height of 2.40 cm	The child's ability level should be determined (height of reflection)

3.1.7 Large Scale Trial

Large group trials, researchers involved subjects as many as 30 children of class V-VI coming from SDN in three sub-districts in Kediri City. The results of the revision of expert validation on large-scale trials are:

Table 4: Large Scale Trial.

No	Indicator	Information	Large-scale revisions
1	Material pole	Made of wood lined with paralon pipes	Poles in paint and given quasi / pavers
2	Circle of basket	Made of rattan and bamboo, with a diameter of 35 cm	Larger circumference 38-40 cm (element of ease of inserting)
3	Elevation of the Pole	High 2.10 cm for male, and 1.70 cm for females	The size of the pole can be adjusted to the needs of females may be 1.50 cm

			and males 1.70 cm
4	Ball	Made of rattan	The rattan balls are covered in soft, colorful sponges
5	Rules of the game	Play the focus of putting the ball into a basket	Please enter a rule that emphasizes character formation
6	Krawnjang model	Krawnjang is made from 2 baskets	Create another game form, form the original Krawnjang

3.1.8 Product Implementation

After passing some validation and trial processes then the resulting product is the game manual of Krawnjang along with the equipment and video of the game instruction to train or learn basic technique sepak takraw through group basket game.

4 CONCLUSIONS

Development of learning tools for basket sepak takraw for elementary school children can improve the activity of students in learning sepak takraw game. This can be concluded through the results of large-scale trials that, from some of the above conclusions caused by several factors, among others:

- a. Students judge that the game by putting the ball into the basket through the game sepak takraw easy and interesting to be done.
- b. Students judge that the basketed sepak takraw model is interesting (spiky knitted and sponge ball, made of wicker, bamboo and sponge) and different from the original game that is sepak takraw with net.
- c. Students assess that basketed sepak takraw is easy to be moved and does not have to open field, under any tree or in door space can be done.
- d. Students assess that basketed sepak takraw game is interesting to be done in groups, so it is useful for team collaboration.

REFERENCES

Adam, N.M., 2014. *Experimental analysis of mechanical properties of selected takraw balls in Malaysia*. Movement, Health & Exercise, 3.

- Ahmad, N., Taha, Z., Ya, T.M.Y.S.T. and Hasanuddin, I., 2012. Finite element simulation of takraw balls and their impact on a flat surface. *Movement, Health & Exercise*, 1.
- Australian Sports Commission, 2015. *Play Sport Australia, The Australian Commission's*.
- Borg, W.R and Gall, M.D., 2003. *Educational Research: an Introduction. 7th ed.* New York: Longman.
- Kongmeechon, C., 2017. The effect of nine squares to play Takraw sports with the inside of the foot of students in Nakhon Pathom Rajabhat University. *Journal of Thai Interdisciplinary Research*, 12(1), pp.1-8.
- Maseleno, A. and Hasan, M.M., 2011. Fuzzy Logic Based Analysis of the Sepak takraw Games Ball Kicking with the Respect of Player Arrangement. *World Applied Programming Journal*, 2(5), pp.285-293.
- Mutohir, Toho Cholik, 2007. *Sport Development Index (SDI): Alternative Baru Mengukur Kemajuan Pembangunan Bidang Olahraga.* Jakarta: Kementerian Olahraga.
- Nurhasan, H. and Cholil, D., 2007. *Tes dan pengukuran keolahragaan.* Bandung: Universitas Pendidikan Indonesia.
- Rezai, Mahdi, Mimar. 2013. *Middle East Journal of Scientific* 16(7):936-941.
- Rosdiani, Dini. 2012. *Dinamika Olahraga dan Pengembangan Nilai.* Alfabeta Bandung.
- ZHANG, Y.B. and ZHANG, S.Z., 2009. Study on Training Methods of Passing Technique in Sepak Takraw [J]. *Journal of Harbin Institute of Physical Education*, 4, p.038.