

The Influence of Instructional Model and Gender on Traditional Game Skill Mastery

Robi Sumantri, Amung Ma'mun and Tatang Muhtar

Universitas Pendidikan Indonesia, Jln. Dr. Setiabudhi No. 229, Bandung, Indonesia

robisumantri25@gmail.com

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Abstract: The aim of this study was to find out the influence of instructional model and gender on traditional game skill mastery at the Public Elementary School of Panyingkiran I, Majalengka. To this end, an experimental study design was employed involving 20 students, consisting of 10 male students and 10 female students. The traditional game skill mastery was measured using the Game Performance Assessment Instrument (GPAD). The obtained data were analyzed using a two-way ANOVA. The results revealed that the traditional game skill mastery of students who attended lesson applying the Teaching Games for Understanding (TGfU) approach was different from that of students who attended lesson applying Team Games Tournament (TGT) teaching model. The instructional model and gender influenced the traditional game skill mastery. The traditional game skill mastery of male students who attended lesson applying the TGfU approach was different from that of students who attended lesson applying the TGT teaching model. The traditional game skill mastery of female students who attended lesson applying the TGfU approach was different from that of students who attended lesson applying the TGT teaching model. This finding showed that the instructional model influenced the traditional skill mastery. The TGT teaching model was suitable for male students, and the TGfU approach was suitable for female students.

1 INTRODUCTION

This research analyzes the influence of instructional model and gender on traditional game skill mastery in physical education class. Physical education as part of a comprehensive education has a positive impact not only on students' health (Cohen, 2008), but also, if well-understood and well-implemented, on the overall educational process (Bailey et al., 2009) because it is not only focused on psychomotor domain, but also on cognitive and affective domain (Cheryan et al., 2014; Koekoek and Knoppers, 2015).

There are some problems in the process of physical education teaching in schools (Cheng, Tang, and Cheng, 2016). Sports and education has a positive impact on students' academic achievement (Sabin, 2012; Cheng et al., 2016).

Our preliminary observation found that teachers still used direct instruction during the lesson where students did what they were told to by the teachers (Cohen, 2008; Dudley and Baxter, 2013). Direct instruction cannot create a conducive learning environment for students (Sabin, 2012; Cheryan et al., 2014; Bailey et al., 2009). In addition, the psychological condition of students who are still at

the childhood age and a boring instructional process also worsen the learning process of physical education (Cohen, 2008). It takes the teacher's creativity to make the instructional process fun, one of which by providing games during the lesson that are appropriate to students' mental and physical development (Hanover, 2014).

Referring to the above phenomena, reintroducing traditional games as a new approach is expected to elicit Indonesian students' fondness, knowledge, and skills of traditional games (Kim and Ke, 2017), especially at Sekolah Dasar Panyingkiran I Majalengka. Many traditional games can be implemented in the physical education class; for example, *bébénténgan* and *gobak sodor*. Among instructional models that can be used to implement these traditional games are Teaching Games for Understanding (TGfU) and Teams-Games-Tournaments (TGT).

TGfU is one of appropriate models to implement traditional games in the physical education class (Light and Fawns, 2003). TGfU trains students' tactical, decision making, and problem-solving skills simultaneously (Butler, 2006; Wang and Ha, 2013) as well as traditional game skills per se (Webb et al., 2006; Pearson and Webb, 2008; Tan et al., 2012).

Another instructional model appropriate to implement traditional games is TGT. It is cooperative instructional model implemented using academic tournament of small groups and quizzes (Slavin, 1995).

In addition to instructional model, students' traditional game skills are also allegedly influenced by other factors like gender. According to Santrock (2010), gender is a sociocultural and psychological dimension of men and women. Mulia (2004) states that in Women's Studies Encyclopedia, gender is a cultural concept used by society to distinguish roles, behaviors, mentality, and emotional characteristics of men and women (Brody and Hall, 2008; Chaplin, 2015; Westbrook and Schilt, 2014).

Gender plays an important role in an individual life (Westbrook and Schilt, 2014). Gender determines men and women's IQ level. A study revealed that women's IQ is likely to be lower than that of men (Chaplin, 2015). Traditional game skill mastery of male and female students also tends to be different (Gutierrez and García-López, 2012; Wilhelm, 2016).

Referring to the aforesaid explanation, this research investigates the influence of TGfU, TGT, and gender on students' traditional skill game mastery.

2 METHODS

2.1 Design and Participant

This research applied a 2x2 factorial design, involving 20 students. 10 students (five male students and five female students) were assigned to the experimental group, and the other 10 (five male students and five female students) to the control group. The research is conducted with consent of the school principal.

2.2 Measurement

Traditional game skill mastery was measured using the Game Performance Assessment Instrument or GPAI that was stated valid and reliable to measure football skills (Oslin, Mitchell, and Griffin, 1998). The measurement was conducted before and after treatment sizing method. Lot sizing methods used in this research are Lot for Lot, Economic Order Quantity (EOQ), and Periodic Order Quantity. The software for data analysis use Production and Operation (POM) for Windows ver. 3 (build 18).

2.3 Treatment

The experimental group learned using TGFU model, and the control group used TGT. The treatment was conducted in 16 meetings, three meetings in a week.

2.4 Data Analysis

The collected data were analyzed using a two-way ANOVA. If the main effect is significant, a further analysis would be conducted using the Tukey Test.

3 RESULTS AND DISCUSSION

3.1 Results

Based on results of data analysis, it was revealed that there was a significant difference in the traditional game skill mastery between male students who learned traditional games using TGFU and male students who learned traditional games using TGT.

Similar result also applies to the female students in that there was a significant difference in the traditional game skill mastery between those who learned using TGFU and those who learned using TGT.

3.2 Discussion

Based on the results of data analysis, it can be concluded that overall there was a difference in traditional game skill mastery between students who learned using TGFU and those who learned TGT. TGFU is an instructional approach directly associated with cognitive learning by instructing students to learn tactical games (Koekoek and Knoppers, 2015). According to Thrope, Bunker, and Almond (1986), cited in Hopper (2002), TGFU is an instructional approach focusing on tactical ability and on the use of technical ability (Tan et al., 2012).

It was also revealed that instructional model and gender influenced the improvement of traditional game skills. It can also be said that there was a difference influence of different instructional models as the independent variable on gender as the moderate variable. TGFU and TGT had different impacts on male students and female students. Riddoch et al. (2003) in Smiley (2015) state "...At age 9, boys were 21% more active than girls, and at the age of 15, boys were 26% more active than girls." This statement is associated with student participation in physical education (Mogari, 2010).

Further analysis revealed that there was a significant difference in the traditional game skill mastery between male students who learned traditional games using TGFU and male students who learned traditional games using TGT, with TGT being more effective in improving traditional game skill mastery than TGFU. In this respect, Gerdin (2008) state, “Boys tend to enjoy physical education in school further up the years compared to the girls.”

4 LIMITATIONS

The main limitations of this research were the small sample size and the time constraints for students to participate in the extracurricular activities.

5 CONCLUSIONS

This research has revealed there are different impacts between TGT and TGFU instructional model on traditional game skill mastery at the elementary school level and has determined an effective instructional model in terms of gender.

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