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Research Article

THE INFLUENCE OF TRADITIONAL GAME WITH EXPERIENTIAL LEARNING METHOD ON SOCIAL COMPETENCE

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ABSTRACT

This research is aimed to attest whether traditional game with *experiential learning* method can improve social competence of school age children and whether this improvement can be moderated by gender. This research is a quasi-experiment with the design of *multiple treatment and control with pretest* which involves three subject groups. Experiment-I Group plays traditional game with *experiential learning* method. Experiment-II Group plays traditional game without *experiential learning* method. Control group is without treatment. The subject of research is the fifth-grade of Elementary School which the group is differentiated between male and female totaled to 168 students. The measuring tool is using two equal scales of social competence. Scale I is used to measure pretest whereas Scale II is used to measure posttest. Data analysis is using Two-Ways Multivariate ANAVA to distinguish *gain score* difference between Experiment-I Group, Experiment-II Group, and Control. Result of research indicates that there is an effect of traditional game with *experiential learning* method or BERLIAN (**B**ermain-**E**xpe**R**iential **L**earning-**A**Nak) and without BERLIAN on the improvement of child social competence ($F = 19.915$; $p = 0.000$). Traditional game with BERLIAN method can improve social competence compared to traditional game without BERLIAN method. Indeed, traditional game without BERLIAN method can improve the aspects of problem-solving and cooperation, but traditional game with BERLIAN method may increase whole aspects of social competence, such as problem-solving, self-control, cooperation and empathy. This research has explained that different role of gender is not quite influential to the improvement of social competence.

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INTRODUCTION

Social competence is the ability that concerns with social, emotional and cognitive skills, and also with children behavior to undergo social adjustment (Welsh and Bierman, 2006). Social competence is important because it gives children a strong base to perform self-adjustment in challenging the future. Some researches indicate that social competence among children matters because it predicts the success and failure of life in the future (Semrud-Clikeman, 2007). Result of research indicates that children with low social competence may show problematic behavior in the next development stages. Such children are often difficult in conducting their social and emotional adaptation and are also hardly to go through their cognitive and academic development (McLellan & Katz, 2001). Social competence can prevent the occurrence of aggressiveness which is predicted as the cause of several

deviances such as delinquency, drug abuse, depression, school dropout, and early parental (Frey, Hirschstein and Guzzo, 2000). Good social competence can contribute to good physical and mental health (Spizberg, 2003).

Some researches have indicated that children with a positive development of social competence may have good relationship with their friends and adult. They can cooperate with others, deal with conflict properly, and have a capacity of problem-solving. Children with risky social competence are risking with negative adjustment issues such as aggressiveness, delinquency, drug abuse, and school failure (Voegler-Lee & Kupersmidt, 2011).

According to Kostelnik, Gregory, Soderman, and Whiren (2012), social competence contains the capacity associated with individual attributes, the social skill and the relation with friends. Social competence can be meant as the effectiveness level of someone in having a social interaction with others

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(Fabes, Gaertner and Popp, 2008). Social competence also comprises of components such as problem-solving capacity (Meadan & Monda-Amaya, 2008; Richardson, Tolson, Huang and Lee, 2009; Webster-Stratton, 2001), self-control (Abdi, 2010; Findlay and Coplan, 2008), cooperation (Findlay & Kaplan, 2008; Klitzing, Stadelmann and Perren, 2007; Pang, 2010), and empathy (Donovan, 2009; Hennessey, 2007).

Enclosure

Table 1 The Span and Means of Research Subjects' Age By The Group

Group	Gender	Age Span	Age Means
Traditional game with BERLIAN method	Female	10.11 – 11.48 years old	10.98 years old
Traditional game without BERLIAN method	Male	9.83 – 11.94 years old	10.76 years old
	Female	10.32 – 12.1 years old	11.04 years old
Control group	Male	10.41 – 11.83 years old	11.36 years old
	Female	10.16 – 11.71 years old	11.18 years old
Total		10.11 – 12.1 years old	11.02 years old

Table 2 The Design of Experiment Research about The Influence of Traditional Game with BERLIAN Method to Improve Social Competence

Group	Gender	Implementation of Research		
Experiment I	Male	O-1	X1	O-2
	Female	O-1	X1	O-2
Experiment II	Male	O-1	X2	O-2
	Female	O-1	X2	O-2
Control group	Male	O-1	--	O-2
	Female	O-1	--	O-2

Note:

- O-1 = The measurement of social competence pretest
- O-2 = The measurement of social competence posttest
- X1 = Treatment with traditional game with BERLIAN method
- X2 = Treatment with traditional game without BERLIAN method

Table 3 Design of Data Analysis

SUBJECTS		Y			
		Y1	Y2	Y3	Y4
Experiment-I Group	Male				
	Female				
Experiment-II Group	Male				
	Female				
Control Group	Male				
	Female				

Note:

- Y = The combination of Y1, Y2, Y3, Y4
- Y1 = Differential score between posttest and pretest of problem-solving aspect
- Y2 = Differential score between posttest and pretest of self-control aspect
- Y3 = Differential score between posttest and pretest of cooperation aspect
- Y4 = Differential score between posttest and pretest of empathy aspect

Table 4 The Summary of Result of Analysis of Variance in Two-Way Multivariate against Social Competence Variable

Effect of Variable	F	Significance	Eta-Square
Corrected Model	57.970	0.000	0.593
Gender	1.028	0.394	0.025
Group	13.915	0.000	0.259
Interaction JK*KLP	1.488	0.161	0.036

The phenomena of the increasing number of children and teenagers committing street fighting, bullying, narcotic consumption, aggressiveness and other destructive behaviors to the self and others, are the problems that must be resolved preventively and curatively. Unsocial behaviors reflect their low social competence. Low social competence may then lead to the problematic behaviors such as aggressiveness, teenager

delinquency and life failure. Good social competence can develop life success in the future (Frey et al, 2002; McClellan & Katz, 2001; Rhoades et al, 2010; Semrud-Clikeman, 2007; Spizberg, 2003; Welsh et al, 2001).

The activity conducted by elementary school students besides learning is playing. Playing represents a pleasure activity and can be a facility of learning (Piaget in Hughes, 2004). Reviewed from playing development stage, school age children are positioned in playing stage with rules because children may be able to think logically. Indeed, playing with rules is then called as *game*. Several games have attracted children interest nowadays including video games, online games and other games supported by computer and other technology.

In reality, school children mostly play video games. Indeed, video games consist of hardness substances and it is consistent with its effect on aggressiveness and pathologic behaviors. Therefore, video games are often correlated negatively with social competence aspects such as pro-social and emphatic behaviors (Anderson & Carnagey, 2009; Anderson & Dill, 2000; Beard & Wolf, 2001; Caplan, 2002; Davis, 2001; Davies and Chappell, 2003; Dietz, 1998; Funk, Hagan and Pukkinem, 2002; Gentile dkk, 2004; Praterelli and Browne, 2002; Thomson and Haninger, 2001). Indonesia has been gifted with various traditional games containing with social competence values (Dharmamulya, 2008; Ismail, 2005; Iswinarti, 2005; Iswinarti et al, 2008; Taufik, 2011).

Intervention programs are using a specific playing structure that is proved as able to improve social competence of school age children (Findlay & Coplan, 2008; Heannessey, 2007; Richardson et al, 2009; Smart & Sanson, 2003; Teglassi & Rothman, 2001). Traditional game is classified as *game with rules* which means that it contains social competence values. Therefore, game can be used as the medium to improve social competence development.

Traditional game is the legacy given throughout generations through which “good values” are disseminated (Bishop & Curtis, 2005). Indonesia is enriched with various traditional games containing highly respected social values. The application of traditional game as the media to improve social competence may facilitate the use of traditional game as the structure to socialize national cultural values to the children who recently have less recognition to traditional game.

A traditional game usually observed and often attended by the game psychologist is *rough & tumble* game (R&T). This game involves physical movements such as chasing, jumping, “roughing”, tumbling, and other physical activities (Jarvis, 2006). This game is laden with the value of a complex social interaction which may contribute to the social maturity during adulthood (Pellegrini & Smith, 1998). Pellegrini (1988) indicates that there is a relationship between R&T game and social competence among the popular boys, but not for the less-popular boys. In addition, Pellegrini (1993) has found a relationship between activeness in playing R&T game and social competence among boys, but there is no relationship between frequency in playing R&T game and social competence among boys. It means that playing is not a matter of how often the children play, but about how active the children are when they play.

Based on the overview above, it can be said that the game that improve social competence is the game with social theme, with rules, and consisting of physical movements. These characteristics are found in traditional game examined in this research. Recalling that traditional game has meaningful values for the development of school age children, hereby principle behind traditional game is the intervention media to improve social competence of the children. Preliminary research done by [Iswinarti et al \(2008\)](#) has identified 34 traditional games and psychological values in each of game types. Although traditional game has high social and psychological values, there are some obstructions constraining the play of traditional game by children. One obstruction is explained by [Bishop & Curtis \(2001\)](#) through the fact that the current days children are not knowing anymore how to play traditional game. [Sedyawati \(1999\)](#) asserts that there are some reasons why traditional game is hardly played in current days. These reasons include no legacies, no land available as play ground, and greater attractiveness to modern games.

The difficulty to play traditional game to children is naturally dealt with the revitalization of traditional game, and this revitalization is an intervening measure in favor of social competence improvement. Revitalization or rejuvenation of noble traditional values respected once by Indonesian must be adapted to the demand of new age. According to [Yudhohusodo \(2010\)](#) and [Santosa & Surono \(2010\)](#), it is important to develop the national character of the children. Revitalizing traditional game in this research can be done by reapplying traditional game or by optimizing the signification of the values of traditional game to school age children.

Theoretically, some learning methods are used for social competence learning. According the social support pyramid model ([Foz et al, 2009](#)), there are some methods to improve social competence, such as coaching, teaching, shaping, modeling and learning with friends, training of problem-solving skill, and cooperation activity in the playing. In this current research, the method used to improve social competence is through the activity of playing with friends but along with *experiential learning* method.

Basically, *experiential learning* theory is a theory closely related with practice ([Beard & Wilson, 2006](#)). Main principle of *experiential learning* method is located within the learning process with reflection on experience. Initially, the application of *experiential learning* theory is as a learning method for the adult, but the next application begins to extend into the children ([Alkhateeb & Midji, 2009](#); [Houck & Stember, 2002](#); [Teglasi & Rothman, 2001](#); [Weinberg, et al, 2011](#)). In this research, *experiential learning* principle can be applied to children as the method of social competence learning.

Gender is a factor which plays the intervening role in the influence of traditional game on social competence ([Colwell & Lindsey, 2005](#); [Dilworth, Mokru, & Elias, 2002](#); [Kostelnik, et al, 2012](#); [Pellegrini, 1988 & 1993](#)). Among school age children, boys are often engaging within competitive games, while girls prefer to play a game which does not harm others ([Goodwin, 2006](#)).

METHOD

The experimental variables in this research are traditional game with BERLIAN method or traditional game without BERLIAN method. The dependent variable is social competence, whereas the moderator variable is gender. The subject of research includes school age children, or those who remain in their *late childhood* or those who study at Elementary School in Malang Regency. If reviewed from the age, the children at Grade 5 of Elementary School are usually in their late childhood. The age in this category is ranging from 8 to 11 years old ([Kostelnik, 2010](#); [Pasterski, Golombok & Hines, 2011](#); [Santrock, 2000](#)). Late childhood is selected because this phase is a transition period when children enter adolescence phase. Indeed, adolescence phase is where children have high social competence in dealing with problems challenging them in adolescence phase. The inclusion criteria of research subject are that children do not experience developmental disability, do not incur heavy disease, and do not suffer from sickness. The description of research subject age in each group is shown in Table 1 (Attachment).

Research design is experiment. This research attempts to manipulate a treatment which helps to induce behavioral change. Experiment type is quasi-experiment because the subjects of Experiment-I Group, Experiment-II Group, and Control Group are not randomly assigned. Research design is displayed in Table 2 (Attachment).

The design of experiment is *multiple treatments and control with pretest*. According to [Shadish, Cook and Campbell \(2002\)](#), this is an experiment plan that provides more than one treatment and involves control group.

Social competence is measured using social competence scales consisting of items such as problem-solving, self-control, cooperation and empathy. Social competence scales involves Scale 1 and Scale 2. Both scales are equivalent for the measurement of social competence during pretest and posttest. The equivalence of Scale 1 and Scale 2 is attested with t-test ($t = 1.080$; $p = 0.282$), meaning that both scales are not showing a difference. Result of calculation over homogeneity of variance has indicated the score of items at both homogenous scales ($Lavene = 0.617$; $p = 0.433$). The reliability of Scale 1 is 0.857, whereas that of Scale 2 = 0.846.

In this research, a traditional game researched is *gembatan* (or also known with several names such as *gebokan*, *pal-palan*, *boy-boy-an*, *ganevo*, or *sepak kereweng*). It is a game played by 8-12 children using baseball ball or similar kind of ball, and *kereweng* (pieces of ceiling tile). Playing *gembatan* involves two teams which play in alternate manner, meaning that one team can be the player while other team is the keeper. Both teams are competing to each other to win the game. The player team is trying to knockdown the pile of *kereweng* and to reorder the pile. The keeper team is to prevent the player team from reordering the pile and to eliminate the player by touching the ball to the player. The player whose the body is touched by the ball (except the head) is considered as "eliminated" and must standstill in the edge of game field until game is exchanged. One team is given score "one" when team is successfully reordering the pile of *kereweng*.

Also in this research, *gembatan* traditional game is done by a group consisting 10 children with similar gender. The ball used in this game is a light-green colored tennis ball. *Kereweng* is “fake money” molded from the clay into a thin round shape at diameter 7 cm. The researched game can be elaborated as follows:

1. Traditional game with *experiential learning* method is played by giving a treatment to children. This treatment is by the play of *gembatan* traditional game through the guidance of the facilitator and also through the reflection on children experience on this game. The objective of this activity is to provide training of social competence through the internalization of social competence values through reflection on children experience in playing *gembatan* game. It involves six sessions starting from introducing children to facilitator and observer, and also explaining game, simulation and evaluation of the game (Session 1); Making a simulation and also a reflection of the game based on children play-experience, and learning the social competence (Session 2); Making a simulation and also a reflection of children play-experience to be applied at the next game (Session 3); Watching the result of previous game session on video, and making a reflection about the result (Session 4); Making a simulation of empathy and learning about it, and making a reflection of the application of social competence learning to the real life (Session 5); and Finalizing the game session and making a reflection of whole game sessions by giving judgment against other team (Session 6). Each session is started by *ice-breaking*. Session 1-3 is given on first-day and Session 4-6 is provided on second-day. Each session consumes 60 minutes covering introduction, *ice-breaking*, *gembatan* play, resting and reflection. Traditional game with *experiential learning* method, hereafter, is called as BERLIAN (**B**ermain-**E**xpe**R**iential **L**earning-**A**Nak).
2. Traditional game without *experiential learning* method is treating children with traditional game “*gembatan*” which the play is guided by facilitator but without facilitation to reflect their play-experience. This activity involves six sessions starting from introducing and explaining the game, simulation and game evaluation at Session 1. It is continued with the playing of *gembatan* game at Session 2, 3, 5 and 6. The activity at Session 4 is watching on video of the game result at previous session. Each session is initiated by *ice-breaking*. Session 1-3 is given on first-day and Session 4-6 is provided on second-day. Each session consumes 40 minutes starting from introduction, *ice-breaking*, playing *gembatan* game, until resting.

After data are collected, it is analyzed using Multivariate ANAVA. Data analysis planning is displayed in Table 3 (Attachment).

RESULT OF RESEARCH

Result of Social Competence Data Analysis

The result of the analysis of variance in two-way multivariate about competence variable is summarized. This result is made based on multivariate test. In this multivariate test, there are

four tests such as Pillai’s Trace, Wilks’ Lambda, Hotelling’s Trace, and Roy’s Largest Root. These results are supporting to each other. According to Patel & Bashvar (2013), Wilks’ Lambda is the most often used multivariate test, and it is very suitable to the use of big sample and the number of subject from each similar group. The summary of the result of this analysis is shown in Table 4 (Attachment).

DISCUSSION

The Influence of Traditional Game on Social Competence

Result of research indicates that the effect of traditional game on social competence is supporting several previous researches showing that there is a relationship between play and social competence. Result of meta-analysis by Iswinarti (2012) through examining twenty articles has shown that there is a correlation between play and social competence although the correlation is not always positive. The positive and negative correlation between play and social competence can be explained from the play type. The games classified into social category are locomotoric game, *rough & tumble*, socio-drama, social play with object, and game with rules. It is then found that social play (playing together) is positively correlated with social competence, whereas solitary play (playing alone) is negatively correlated with social competence (Coplan et al, 2001; McAloney & Stagnitti, 2009; Spinrad et al, 2004; Uren & Stagnitti, 2009).

Traditional game observed in this research is *gembatan* traditional game which in other regions, it is called with different names such as *boy-boy-an*, *pal-palan*, *gebokan*, *sepak kereweng*, *dina boy* and *ganevo*. This game is understood with some characteristics such as: (1) the nature of social play involving more than one person; (2) involving physical activities; (3) game with rules, (4) group-based game because it is played by two teams; and (5) competitive game because there is winner and loser. Various characters of this game are quite identical with *rough and tumble* game examined by Pellegrini (1998). Pellegrini’s longitudinal research onto school age children has shown that *rough and tumble* game can increase social competence of the popular children, but for the rejected children, this game only regulates aggressiveness.

Other explanation to discuss the relationship between traditional game and social competence is about the content of material within the game. Based on the content analysis of *gembatan* traditional game (Iswinarti, 2012), it is estimated that *gembatan* traditional game has contained game indicators containing social competence values such as problem-solving, self-control, cooperation and empathy. The content of game that influences social competence has been examined through meta-analysis by Anderson et al (2010) who have found that video material with hardness theme is correlated positively with aggressiveness and negatively with empathy and pro-social behavior. Aggressiveness is the behavior reflecting low social competence, whereas empathy and pro-social behavior represent the aspect of social competence.

The description from various researches mostly shows that whether the game increases or reduces the aspects of social competence is depending on type and content of the game. This situation can be explained through social learning theory or

social cognition theory (Bandura, 1979; Buckley & Anderson, 2006). Both theories are stating that someone learns something through direct experience or observation. In case of observation, someone can observe themselves or observe others in the same room, others on television, and others on film or video. When someone is observed, it is then considered whether someone's behavior is given *reward* or *punishment*. Someone tends to imitate other's behavior when they see that the behavior deserves reward, and avoids from imitating when the behavior obtains punishment. Based on this theoretical explanation, therefore, the content or material of the game experienced and observed by children will be always important. When the content of observed by children is about hardness, then children tend to express aggressive behavior. If the content experienced and observed by children is containing social values, children tend to show social behavior.

The discussion about the result of current research also indicates that the game is indeed influential to social competence, and this fact is explained by ecology theory proposed by Urie Bronfenbrenner. According to Bronfenbrenner (1979), children development is influenced by environments such as micro-system, mezo-system, exo-system, macro-system and chrono-system. The phrase "children play traditional game with friends" means that friends are the part of micro-system. Micro-system is the environment that is the closest and the most influential to children development, precisely social competence development. Therefore, the result of this current research is supporting to Brenfenbrenner's concept of micro-system.

The discussion about the relationship between traditional game and social competence is also elaborated within the topic of *neuro-science*. However, to provide an insight into the relationship between play and *neuro-science*, this current research also discusses this topic. It is then said that the next research which discusses traditional game is closely related to *neuro-science*.

According to Pellegrini (1998), *rough and tumble* game can improve social competence among school age children. The effect of *rough and tumble* game on social competence is also investigated in the mice to observe the development of "*social brain*". The Natural Sciences and Engineering Research Council of Canada and The Alberta Heritage Foundation for Medical Research (Pellis, Pellis & Bell, 2010) have used the mice in their research, and it is shown that there is an effect of *rough and tumble* game on the improvement of social competence among the mice. Based on the result of research on the brain of the mice, it indicates that there is a control by neuron over play behavior, meaning that there is sub-cortical mechanism that mediates motivation and behavior during the play. The experience of the play may modify the development of other part of *cortex*. The change of cortex can mediate the play for the perfection of social skill.

It is also proved that traditional game with similar characteristic to *rough and tumble* game is closely related to social competence improvement. Children who play traditional game are possible to experience "*social brain*" development. Pursuant to Donald (2007), basically, *social brain* is a place of neurobiology in social cognition. Therefore, if *social brain* develops, then social cognition is then more establishing. Some

experts also determine that play is closely related with brain development (Brown & Vaughan, 2009; Goldstein, 2012; OECD, 2007; Sattelmair & Ratey, 2009).

Other reference about *neuro-science* that explains about the development of play and the social competence among children is TOM (*Theory of Mind*). Some researches about TOM (*Theory of Mind*) have concluded that TOM predicts social competence whereas social relationship or social interaction influences the development of TOM. Good TOM can predict good relational capability, such as positive cooperation and relation with other boys (Hughes & Leekam, 2004; Symons, 2004).

Other concept related also with *neuro-science* is *executive function*. The definition of *executive function* is referred to the capability to stay longer with others, to make a compromise, to make a planning, to undergo negotiation, to give attention, and to walk on *problem-solving*. Executive Function has covered three dimensions of capability such as *working memory*, *inhibitory control*, and *cognitive flexibility* (Anderson, 2001; Thorell, et al, 2009). This capability represents the base for successful learning and social relationship.

Several researches have found that *executive function* can be stimulated with play activity (Bodrova, Germeroth & Leong, 2013; Kelly, Hammond, Dissanayake & Ihsen, 2011; Petty, Thereza, & Souza, 2012; White, 2012). According to Petty, Thereza and De Souza (2012), through their review about the relationship between play and *executive function*, Piaget Theory has concluded that game with rules played by 7-11 years old children under supervision of the professional may challenge the children to develop their reasoning and their autonomy such that it will contribute to the development of *executive function*.

The Role of BERLIAN Method to Improve Social Competence

Result of this research indicates that traditional game with BERLIAN method is highly influential to social competence improvement compared to traditional game without BERLIAN method. This result also shows that traditional game with reflection under the guidance of facilitator about children play-experience is playing greater role to increase children social competence.

BERLIAN (**B**ermain-**E**xpe**R**iential **L**earning-**A**Nak) Method in this research is used to drill the children about social competence through the medium of traditional game. According to Silberman (2007a), *experiential learning* is properly suitable for interactive training. The important thing behind *experiential learning* is the involvement of participants into concrete activities such that they will "experience" what they have learned through the existing opportunities to reflect on the activity they experience.

Children treated with traditional game with BERLIAN method are purposively exposed to an experience and persuaded to learn social competence values contained within *gembatan* traditional game. In this game, children are fully engaged physically, cognitively, emotionally and behaviorally. According to Zigmont et al (2011) and Kohonen (2005), the most contributive experience to the learning process is always emotionally triggering, stimulatory and challenging someone to

produce full involvement. Simulation design that can produce optimum change over the body may stimulate powerful reflection but not induce adequate pressure for the learning process.

Reflection in *experiential learning* process is defined as to facilitate the experience such that the experience has a certain meaning (Guthrie & McCracen, 2010; Kolb, 1984; Schutte & Wetmore, 2012). By undergoing the reflection about what children have experienced during the play of traditional game, children will learn about social competence values within the game such that children are easier to obtain signification about experience if compared to children who just play without reflection on experience. It occurs because there is *experiential learning* process on children or because children learn through their experience.

Role of Gender on The Improvement of Social Competence through Traditional Game

Pursuant to the result of this research, it is noted that gender is not different obviously in its influence on the improvement of social competence and its aspects after treating the subject of research with BERLIAN-based and NON-BERLIAN-based traditional game. It means that both genders, male or female, are similarly experiencing an improvement for their social competence, and the degree of this improvement is not different at all. It differs from a hypothesis that gender moderates social competence improvement. It delivers information that the role of gender can influence play activity and that the resultant social competence is varying.

This result differs from the findings of previous researches that underscore the connection between different gender and children social competence. Pellegrini (1990) has said that there is a relationship between behavior at playground and social cognition status among the boys, but this relationship is never found among the girls. Daigle (2003) asserts that boys and girls are different in understanding others' support to the physical activity and the sport. The feeling of capable among the girls to undergo physical activity is more influential to their participation into physical activity and sport than among the boys. Through this manner, the support from teachers and friends is more influential to physical activity and sport among the girls than the boys.

Gender factor in this research plays significant role in explaining not only the condition of social competence but also the condition of play. It also explains the relationship between variables, precisely the play and the social competence. Most studies do not recognize the difference among genders for its relation with pro-social behavior of children. It means that male and female have similar capacity to perform pro-social behavior (Kostelnik, 2012). Some studies, however, show different result. Female tends to participate into pro-social behavior than male (Keane & Calkins, 2004; Hastings, Rubin & De Rose, 2005).

Various results about the role of gender on the social development among children are inseparable from the development of children capacity to play certain games. By reviewing some literatures, Kostelnik et al (2012) have suggested that the older the age of children is the greater

difference among genders in how to play the games. Children interest to various plays is influenced by their social culture, and therefore, choice habit toward certain game type is always different between boys and girls when they grow up. School age children, according to Goodwin (2006), either boys or girls, are engaged into competitive game, but boys tend to be likely involved into the open competitive game whereas girls prefer to the game that is less harmful to other children because they perceive as having different role from boys.

As reviewed from the development of play among school age children in their final grade, early aged children (8-11 years old) tend to play together with similar gender. Boys spend mostly their time playing competitive game, while girls are busy telling their stories and chatting to the other girls (Pastersi, Golombok & Hines, 2011). Fabes, Hanish & Martin (2003) have assured that the friendship group consisting similar gender is a potential power to socialize social competence across children because current days are witnessing group dynamic.

The explanation about the less difference of social competence between boys and girls is obtained from the experiment. Based on the result of observation in an experiment, it is known that boys and girls do not show a salient difference about their behavior during the play. Enthusiasm and willingness of research subjects are very apparent either for boys or girls. It is proved by the result of *manipulation checklist* which shows that the means of three observers' judgments for boys or girls, either BERLIAN or NON-BERLIAN groups is not far different.

Result of research indicates that the effect of traditional game, either with or without BERLIAN method, on social competence, is 25.9 %. The percentage point of other factor is 74.1 % which is unobserved in this research but it influences social competence of school age children. This factor includes internal and external factors which in various researches are shown as influential to social competence. Fabes, Gaertner & Popp (2008) and Mulder (2008) give similar notes by saying that (1) temperament or personality factor, (2) socio-cognitive skill involving communication skill, (3) family environment covering the interaction between parent and children, and the parental care style, (4) school environment concerning with relation between teacher and student, interaction between children and friends at class, school curriculum, and culture in class, and (5) socialization with friends.

CONCLUSION AND RECOMMENDATION

Conclusion

Based on the result of research, it is concluded that there is an influence of traditional game with BERLIAN method on the improvement of social competence among school age children. Traditional game with BERLIAN method is very influential to social competence improvement than traditional game without BERLIAN method. Traditional game without BERLIAN method can improve social competence if compared to when children do not accept traditional game treatment. Traditional game with BERLIAN method can improve all social competence aspects, such as problem-solving, self-control, cooperation, and empathy. Traditional game without

BERLIAN method can improve the problem-solving aspect and the cooperation of school age children.

It is hereby found in this research that gender is not functioned as the moderator in the relationship between traditional game with or without BERLIAN method and the improvement of social competence among school age children. It means that the improvement level of social competence among school age children either boys or girls is quite different to each other.

Recommendation

Several recommendations are given to various parties such that:

1. The expert of children development shall apply traditional game and *experiential learning* method to optimize children development. Not only traditional game is representing national culture wealth but also is providing meaningful values to stimulate children development at their early age.
2. The Principal of Elementary School and the related parties must include traditional game playing activity into the character-building program for school age children, especially to stimulate social competence development.
3. The government, through its elementary education official, shall consider the traditional game program as the part of curriculum that must be applied for Elementary School. This curriculum can be set into sport lesson or extracurricular activities such as Youth Scout and self-development program.
4. Further researchers are suggested to develop this current research by taking the subjects with different age, such as Fourth and Sixth Grades or students in Junior High School. More researches can be focused upon other traditional games such as *gobag sodor*, *wak-wak gung*, *kasti* and others. Recalling that the discussion increases the possibility of reviewing traditional game based on neuro-psychology in relative with brain development and social cognition, it must be noted that next author must deeply review traditional game through *neuro-science* perspective.

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