

Effectiveness of Traditional Games to Increase Ethno Cultural Empathy

Taufik

Faculty of Psychology, Muhammadiyah University of Surakarta

Ethnocultural empathy is the ability to understand or as a personal trait related to certain personality characteristics in ethnic groups or other any cultural groups. The purpose of this study was to reveal the effectiveness of Javanese traditional games in increasing ethno cultural empathy in Javanese as well as Chinese children in Surakarta. Participants consisted of 240 Javanese and Chinese children. The results of the experiment shows that 1) traditional game can increase ethno cultural empathy in Javanese and Chinese children; 2) Participants taking one game show higher ethno cultural empathy compared with control, and participants given two treatments did not show higher ethno cultural empathy than participants given one treatment.

Key words: ethno cultural empathy, Javanese traditional game, ethnic Javanese, ethnic Chinese.

Empati etnobudaya sebagai kemampuan memahami atau merupakan trait personal yang berkaitan dengan karakteristik kepribadian tertentu pada kelompok etnis, ras, maupun berbagai kelompok budaya lainnya. Penelitian ini bertujuan untuk mengungkap efektivitas permainan tradisional Jawa untuk meningkatkan empati etnobudaya (EB) pada anak-anak Jawa dan Tionghoa di Surakarta. Partisipan dalam penelitian eksperimen ini terdiri atas 240 anak-anak etnis Jawa dan Tionghoa. Hasil penelitian menunjukkan bahwa: 1) permainan tradisional dapat meningkatkan EB pada anak-anak Jawa dan Tionghoa; dan 2) partisipan yang memperoleh satu perlakuan (*game*) menunjukkan EB yang lebih tinggi dibandingkan dengan partisipan yang tidak memperoleh perlakuan (kelompok kontrol), dan partisipan yang memperoleh dua perlakuan tidak menunjukkan EE yang lebih tinggi dibandingkan dengan partisipan yang memperoleh satu perlakuan.

Kata kunci: empati etnobudaya, permainan tradisional Jawa, etnis Jawa, etnis Tionghoa

The violent conflicts between Javanese and Chinese in Surakarta have undergone long hardships, since it was founded. It showed that ethnic and culture diversity calls for serious attention, for conflict potentials which have risen as the effect of diversity Rahardjo (2005) asserted that some conflicts that happened in Surakarta have reached the highest prejudice level, which is extermination. The extermination is prejudice expression which is manifested in many forms, such as: lynching¹, massacre², and genocides³. The extermination could be seen in the May 1998 incident, where the Chinese people became the violent object of other ethnics (including Javanese).

Correspondence concerning this article should be addressed to Taufik, SPsi., MSi, PhD Student Prisma Building, Room P2.138.FSBS-Tilburg University Phone: +31616571506. Faculty of Psychology, Universitas Muhammadiyah Surakarta. Jl. A. Yani Tromol Pos 1, Pabelan, Surakarta 57102, Indonesia. E-Mail: taufikums@yahoo.com

Based on some analyses, at least, there are three factors, namely: political, economical, and sociocultural. Problems in political instability and inequality in policy in economy have made people distrust the government and had negative perception toward Chinese. In addition, the cultural differences push the local people to address their prejudice and stereotype to Chinese. In some conflicts between Chinese and Javanese in Surakarta, stereotype and prejudice was considered as a

1 Lynching represents group violence at its extreme, and they represent a form of social control through terror that is often consistent with government goals, although not "officially" sanctioned by the government. Lynching typically occurs, not during a war, but in civilian conditions (Dutton, 2007).

2 "Spontaneous" massacres are similar to "unplanned" to homicide or manslaughter or second degree murder in a civilian context (Dutton, 2007).

3 Genocide based on the UN Resolution of 1948 as acts committed with the intent to destroy, in whole or in part, a national, ethnical, racial, or religious groups, as such: a) killing members of the group, b) causing serious bodily harm or mental harm to members of the group, c) deliberately inflicting on the group conditions of life to bring about its destruction in whole or in part, d) imposing measures intended to prevent births within the group, e) forcibly transferring children of the group to another group (Dutton, 2007).

raw motive of conflict to happen. In Javanese's viewpoint, the Chinese has some negative characters, like miserly, arrogant, differentiate between friends, in which the Chinese only make friend with the Chinese. In other word, the Chinese could not socialize with the Javanese. The Chinese views Javanese negatively.

From the perspectives of intergroup relations, the interaction between Javanese and Chinese in Surakarta has not showed a significant change. As a minority group, Chinese acts as if they live in their own world, they make a border with Javanese's life. Javanese and Chinese live in one place but actually they live as if in different places (Taufik, 2006). Thus, in the Surakarta society, social segregation happened between Javanese as local people with Chinese. The segregation happened almost in all aspects of life. For instance, Chinese people more interested in sending their children to join in the private school which is dominated by Chinese (Taufik). Most of Chinese people considered that their degree is higher than Javanese. This consideration influenced their relationship with Javanese, included in decision to get married in which Chinese mature women only get married with Chinese men, but Chinese men are allowed to marry with other ethnic, included Javanese women⁴.

The condition makes their children can not socialize with the Javanese children. Between them, they did not make friends again. There is no interaction or communication between them. Consequently, the Javanese and the Chinese children often have miscommunication, moreover physical conflict caused by little problems often happened. A little incident can become a big problem if it is related to both ethnics, like the social riot in 1980⁵. Meanwhile, Javanese and Chinese parents are not aware that social interaction condition between their children is dangerous for Javanese and Chinese relationship as whole. Even, implicitly they plant negative attitudes (prejudice) toward other ethnic to their children. That phenomenon was supported by Taufik's findings that Chinese parents gave advices to their children to be careful if he or she makes friend with Javanese (Taufik, 2007)⁶. That finding was in line with some Hughes's studies (see Hughes & Chen, 1997; Hughes & Johnson, 2001; and Hughes *et al.*, 2006). Hughes & Chen (1997) found that parent's message toward children about cultural history and heritage was more common than communication about racial bias and discrimination or messages that

might promote intergroup trust. Hughes & Johnson (2001) examined African American parents' racial socialization practices in relation to happenings in children's live. They found evidences that the parent's message will influence children's when it contains unfair experiences.

Hughes *et al* (2006) concluded that socialization about ethnic bias, like ethnic discrimination which was felt by parents as it is told to their children, will influence ethnic identity, self esteem, and intergroup bias. Tajfel & Turner (1986) proposed that intergroup bias was a remarkably omnipresent feature of intergroup relations. It happened when individuals tended to favour the ingroup over the outgroup in evaluations and behaviour. Intergroup bias could lead to ingroup favouritism and prejudice toward the out-group. That argument was supported by Allport (1979) who wrote that ethnic group categorization, classifying people into groups based on common attributes, like ingroup-outgroup and majority-minority, are the basis of prejudice. Prejudice brings individual to think wrongly about the others.

If that situation continues, one may expect more conflicts in the future. Thus, it is important to reduce prejudice, and to promote relationships by which emotional and cognitive understanding can grow, leading to more respect for one another, or in other words to show empathy. According to the contact hypothesis, intergroup contact can be effective in reducing negative stereotypes and mutual prejudice, at least when certain conditions are met (Maoz, 2000). Empathy can reduce prejudicial attitudes when it leads people to share a sense of common identity with other cultural groups (Stephan & Finlay, 1999). They added that empathy has a host of beneficial effects on attitudes and behaviour, whereas a lack of empathy has a host of negative effects on attitude and behaviour.

Regarding to the development of empathy, Selman (1980) proposed that empathy can be learned and trained based on the developmental stages. He developed five stages of perspective-taking⁷: undifferentiated perspective-taking (3-6 years), social-informational perspective-taking (5-9 years), self-reflective perspective-taking (7-12 years), third-party perspective-taking (10-15 years), and societal perspective-taking (14 years -adult). Based on Selman's theory above, it is assumed that the traditional games can help participants (from 13 to 16 years) to induce "third-party perspective-taking" in which individual can step outside a two-person situation and imagine how the self and other are viewed from the point of view of a

4 In little number found Chinese men get married with Javanese women.

5 The riot was triggered by bicycle rider nudge between Chinese and Javanese student. It was spread throughout cities in Central Java and East Java.

6 The most widely held theory of the acquisition of prejudice is that it is learned from parents and peers (Frances & Fenwick, 1999).

7 The different scholars used the different term to describe the empathy concept (Bierhoff, 2002).

third, impartial party, and “societal perspective-taking” in which individual understands that third-party perspective-taking can be influenced by one or more systems of larger societal values.

With regard to empathy, a number of studies have shown that it is possible to increase levels of empathy through of a variety of different types of training programs. In one set of studies, Batson et al. (1997) found that reading scenarios under emotional empathy instructions led to more favourable attitudes toward the group of which they themselves were members, whereas reading the same material under instructions designed to minimize empathy did not. Stephan and Findlay (1999) conducted a similar study, but used a racial group as target group. Their central finding was that reading vignettes – about African Americans who has suffered from discrimination – under instructions to empathize with the victims, eliminated the difference between the evaluation of African Americans and Whites, which was found in the control condition. The students in the experimental condition also reported more parallel empathic emotions (i.e., anger, annoyance, hostility, discomfort, and disgust) than students in the control condition.

Participants in the current research were Javanese and Chinese children in Surakarta. As the name implies, they stem from two ethnics which were expected to oppose each other. With regard to that kind of issue, Wang et al. (2003) introduced the notion of ethnocultural empathy (EE). This refers to a learned ability which defines certain personality traits on which people of any race, ethnicity, or culture can vary. The construct is composed of intellectual empathy, emphatic emotions, and the combination of the two (Ridley & Lingle, 1996).

In this study, the EE was manipulated by means of some traditional games which were taken from the local culture, namely: the *betengan* and the *gobag sodor* game. These manipulations might be new and rarely used as a means to increase EE, but according to some scholars of traditional games, the *betengan* and the *gobag sodor* contained empathy aspects. For example, according to Arikunto (1996), traditional games played a significant role in the children’s socialization, and they increased their cognitive, affective and psychomotor abilities. According to Dharmamulya (1996), traditional games contained certain values which could be transferred to children, such as feelings of happiness, feelings of need and to be needed, learning democratic rules responsibility and tolerance (empathy).

Marsono, Suwandi, and Setyorini (1999) considered that the *betengan* game as a game that could improve solidarity, especially solidarity among players within a

group, but it could improve other pro-social behaviours as well, such as helping each other. Moreover, the *betengan* and the *gobag sodor* could function as refreshment or recreation, could train honesty, loyalty, solidarity, and sensitivity (Sedyawati, 1999), could keep unity between players, and could educate children to be helpful (Marsono et al, 1999).

How can the game increase EE-level? The game as a learning media to understand other people through direct experience. Deaux, Dane, & Sigelman (1993) described, that through direct experience individual may understand something easier than when he/she hears presentations or reads books. Wang et al (2003) introduced ethnocultural empathy. It is a learned ability related to certain personality traits in which people of any race, ethnicity, or culture vary. The construct is composed of intellectual empathy, emphatic emotions, and communication (Ridley & Lingle, 1996). In the present research, the EE manipulations used the traditional games searched from local culture, namely: the *betengan* and *gobag sodor* game. It is rarely used as a treatment to increase EE or empathy. However, based on researches done by some scientists of traditional games (see Dharmamulya, 1996; Marsono, 1999) *betengan* and *gobag sodor* contained empathy aspects.

Research questions: The primary research questions focused on examining the effects of the treatment toward increasing ethnocultural empathy level, namely: 1) Are there effects of the treatment toward increasing ethno cultural empathy level? 2) Is the ethno cultural empathy level of participants who took part in two treatments higher than participants who took part in one treatment, and is the EE level participants who took part in one treatment higher than participants who took part in no treatment?

Hypothesis 1: The traditional games could increase ethno cultural empathy

Hypothesis 2: Participants who take part in two treatments will show greater ethno cultural empathy compared to those participants who receiving one treatment, and the participants who take part in one treatment will show greater ethno cultural empathy compared to those participants who receiving no treatment.

Method

The design of this research was quasi-experiment non-equivalent group design. Like randomized experiments, the quasi-experiments are used to estimate the effect of one or more treatments on one or more outcome variables.

Table 1
Non-Equivalent Group Design

Group	Pre-Response Measure	Treatment	Post-Response Measure	Difference
Experimental Group	Y1	X	Y1	Pre Y1–Post Y1
	Y2	X	Y2	Pre Y2–Post Y2
	Y3	X	Y3	Pre Y3–Post Y3
	Y4	X	Y4	Pre Y4–Post Y4
Control Group	Y1 ¹	-	Y1 ¹	Pre Y1 ¹ –Post Y1 ¹
	Y2 ¹	-	Y2 ¹	Pre Y2 ¹ –Post Y2 ¹
	Y3 ¹	-	Y3 ¹	Pre Y3 ¹ –Post Y3 ¹
	Y4 ¹	-	Y4 ¹	Pre Y4 ¹ –Post Y4 ¹

The difference is that the quasi-experiment does not have random assignment for treatment conditions. In quasi-experimental design, the prospective causal variable is called the “treatment” or “intervention” and the potential effect is often called the “outcome” (Mark & Reichardt, 2004). This design used treatment groups and untreated control groups, with both pretest and posttest.

In the present experiment, the pretest scores were used to identify the initial difference in EE scores between the experimental and control groups. The control group was used as a standard of comparison to verify the outcome of the treatments. All participants were pre-tested and post-tested on the SEE (in *Bahasa Indonesia* version) to see if there were significant changes in ethnocultural empathy levels.

Participants

Two hundred and forty students of thirteen through sixteen years of age who agreed to participate in this study. These participants were recruited from some Private Junior High School (JHS) in Surakarta area. The researcher contacted the headmaster of the schools to obtain permission⁸ to conduct research at their site. All the 160 students were chosen to participate in this research as experimental group and 80 students as control group. Out of these 112 (46.67 %) were males and 128 (53.03 %) were females. Their ages range from 13 to 16 years. They consisted of Javanese 124 (51.67 %) and 116 Chinese children (48.33 %). Due to the big number of JHS students in Surakarta, researcher had to select them to form some appropriate experimental groups. Purposive non random sampling was used to select students from some JHS to form the experiment and the control groups. The purposive non random sampling, meant that participants were chosen based on characters

needed in the research, namely: Javanese and Chinese students where they could be different from their face⁹, their age ranged 13 years to 16 years, body height¹⁰ less than 165 cm and body weight less than 65 kg, they lived in Surakarta.

Participants were divided into four groups, namely: Opposition Group (OG), Interaction Group (IG), Chinese Majority Group (CMG), and Javanese Majority Group (JMG). Herewith was enclosed the description of the group division on figure 1.

Treatments

In the present research, the treatments were Javanese traditional games, and *gobag sodor*. The *betengan* game has also other names, like *Jeg-jegan*, *raton*, *tembung*, and *gembung* (Dharmamulya, 1996). They reveal that the *betengan* game is a group game which includes a form of competition. The term *betengan* stems from the Javanese term “*beteng*”, which means “fortress”. They define the *betengan* game as a traditional game in which two groups defend their fortress against enemy attack (other group), and the group which succeeds in occupying the other fortress is considered the winner.

The *betengan* game is easier to play than to explain, in fact, to understand it completely, it must be practiced. But to understand it as much as possible, the procedures of the game are described as follows:

1. The game starts with the determination of group members. Players are divided into two groups, for instance: group 1 (members: A, B, C, D, and E) and group 2 (members: F, G, H, I and J).
2. Each group determines a place as a fortress and a place as a prison. The distance between fortresses is about 10-20 meters, and the distance between the fortress and its prison is about 3-5 meters.

⁸ Actually, researcher was somewhat difficult to obtain permission from headmasters, some of them rejected it. They had reason that the research topic was sensitive for student interaction (Javanese-Chinese) and they were afraid if the treatment involved a new problem for ethnic interaction.

⁹ Sometimes he or she is Javanese but his or her performance looks like a Chinese, and vice versa.

¹⁰ The characteristics correlated to nimbleness and fastness in playing.

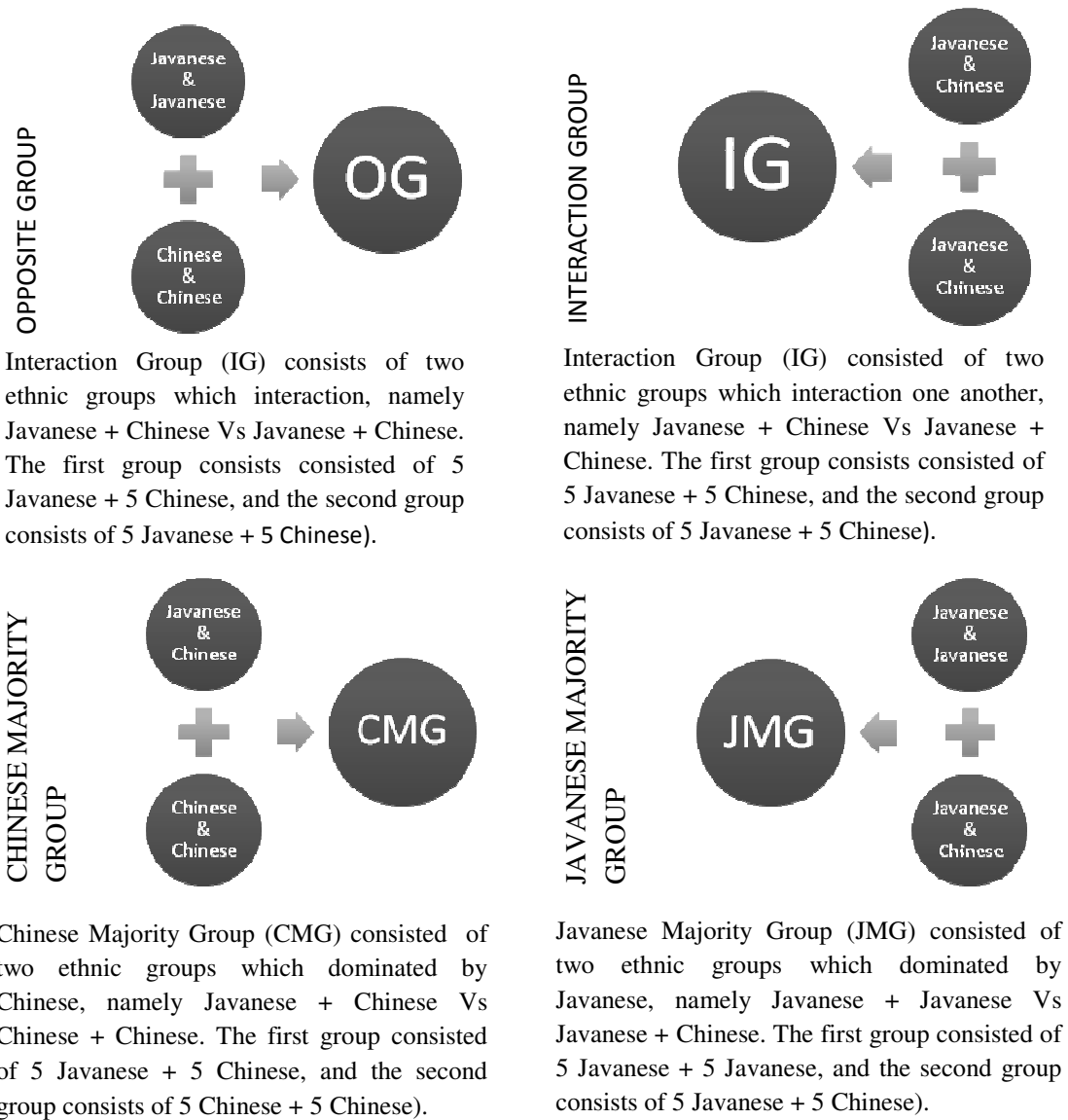


Figure 1. Groups of participants

3. Each group determines a place as a fortress and a place as a prison. The distance between fortresses is about 10-20 meters, and the distance between the fortress and its prison is about 3-5 meters.
4. Players determine the border of the game area. This is important to delineate their activities. Perhaps, the area is just in the garden, and players are not allowed to go out the area, or when players do not want to be disturbed by the small area, the border can be given up.
5. To start the game, the representatives of the groups do "pingsut". *Pingsut* is a process to determine the winner group (the winner is the group that starts the game). This

- is done by using the right hand fingers of the leader or the representative of each group. Three fingers are used, namely the little finger, the forefinger, and the thumb. The little finger symbolizes an ant ("semut"), the forefinger symbolizes a person ("orang"), and the thumb symbolizes an elephant ("gajah").
6. The leader of group 1 faces the leader of group 2. To start, they count from one to three together. Then, they make one of the three finger signs with the right hand. If both leaders make the same sign, the *pingsut* must be repeated. In the rule of the *pingsut*, there are specific relations within couples of sings.

First, the *semut* and the *gajah*. When the *semut* fights with the *gajah*, the *semut* will defeat the *gajah*, because the *semut* can crawl on the *gajah*, tickle his ear and drive him crazy. Second, the *orang* and the *semut*. When the *orang* fights with the *semut*, the *orang* will defeat the *semut*, because he will stomp the *semut* and squashes him. Third, the *gajah* and the *orang*. When the *gajah* fights with the *orang*, the *gajah* will defeat the *orang*, because the *gajah* will trample him.

7. Based on the *pingsut* result it can be determined which group will start the game, for example group 2. If that is the case, then one of the members of the other group 1, for example member D, has to step out from its fortress. He or she tries to tease members of group 2. Then, a member of group 2, for example F, leaves its fortress to chase and to catch D.
8. If D is chased by F (but D has not chased), D must hurry to get back in the fortress of group 2 by touching it. After he or she touched the fortress, he or she can chase F (if F has not come back to touch the fortress of group 1). In other words, every player who leaves the fortress earlier (Javanese: *luwih tuwa*, which means 'older'), or in other words, who is the so called 'older', can be touched or be caught by enemy players who are 'younger' (Javanese: *luwih enom*).
9. A player who can touch or catch an enemy player must hurry back to his or her fortress, to be able to chase a following enemy player.
10. Players who are staying within the fortress are immune from enemy attacks as long as they hold the fortress. Thus, they are considered more *luwih enom* than enemy players who are not touching their fortress. If a player who is keeping the fortress is touched or touches one of the enemy players who are surrounding his or her fortress, then the enemy is considered caught (*dadi*).
11. If F can touch or catch D, then D must go to the enemy's prison.
12. When D is chased by F, other members of group 1, thus A, B, C, or E, can help their friend D against F's threat, for example by chasing F.
13. When the fortress of group 1 is left by all its members, then members (one or more) of group 2 can *ngejegi* (occupy) it, and will shout "beteeeng!!!". In that case, group 2 will be considered the winner. On the other hand, if there is only one person of group 1 left the fortress of group 1 (because the other members are caught or left their fortress), members of group 2 can attack and occupy fortress 1. In that condition, group 2 is considered the winner

and gets score 1 (group 2 has score 1, and group 1 has score 0).

14. The game continues until the players feel bored. When they are bored, they can modify the game. They can put in new members, or they can exchange members with each other, and then start again.
15. The loser group gets punished by having to piggyback the winner group, or by some other punishment, depending on what they agreed upon before.
16. The game is usually in the afternoon or in the holiday morning.
17. The time that is needed to play the game depends on the player's consensus, and is usually about 1 hour.

In this study, the researcher manipulated some procedures of the game, by placing the players, determining the game's duration, choosing the arena borders, determining the strategy before playing, and by giving a gift to the winner. However, all in all, the procedures were compatible with the nature of *betengan* game.

The Procedure of Betengan

Researcher placed every player in his or her group (the members of the groups have been chosen by the researcher the day before).

1. The instructor introduced himself and his members (two facilitators and two observers).
2. Before starting the game, players were given a description about "what the *betengan* game was, and how to play it". Subsequently, the instructor and his assistants trained the players in playing the game by using description and simulation (for about 30 minutes).
3. Instructor told about how long the game will be (i.e., 45 minutes) and where is the border of the arena.
4. Before playing the game, the strategic positions (fortresses) were chosen, and to decide who would play first, the leaders of both groups did *pingsut*.
5. The instructor asked each group to discuss how they thought they would defeat the enemy group. Then, the members of each group hugged each other, and they yelled something at their own choice.
6. To motivate them, the instructor told that the winner would get an interesting gift. The winner was the group whose score was higher scores than that of the other group.
7. In the game, the instructor as a referee. He was assisted by two assistants who as group facilitators.
8. The game was then played as just described above.

The term "*gobag sodor*" consists of "*gobag*" and "*sodor*." *Gobag* means pass by other fare-road. *Sodor* is the synonym of "*watangan*", which means a kind of

spear which is used in warfare (Poerwadarminta, 1939). The term *sodor* indicates the position of a keeper group member who stands on the middle line of the game arena. The *sodor* line delineates the activity of a sodor keeper, to border and to touch, or to catch enemy players (Yunus, 1981). The *gobag sodor game* is a kind of Javanese traditional game that has the following characteristics: played by children, located in a wide area, consisting of two groups, one of which acts as player (*mentas*) and the other as keeper or *dadi* (Dharmamulya, 1996). It may also be called by other Indonesian people as “*sodoran*” or “*nggobag*”.

The Procedures of Gobag Sodor

(a) The first step is to determine number of each group member, and to construct the arena together. (b) Each group chooses one of their group members to become a leader. Usually, a member with a strong body will be chosen as leader. (c) The leader of group 1 and of group 2 do the *pingsut*. The *pingsut* (see above) is to determine who is the winner group (the player group, *mentas*), and who is the loser group (the keeper group, *dadi*). (d) The *pingsut* also determines who will start the game. For instance, if group 2 wins, then this group is the player group (*mentas*) and starts, and group 1 is keeper group (*dadi*). (e) All member of group 1 stand in their position, the leader on the *sodor* line (vertical line) and other members on the horizontal lines. A keeper on the *sodor* line can move vertically, but can move horizontally at the front side, whereas keepers on the horizontal lines can only move horizontally. (f) Next, members of group 2 concoct a strategy to penetrate the defence of the enemy. Sometimes, before entering the arena, they shout something to motivate their group. (g) One by one members of group 2 enter the arena from the front side. Then, they go left or right and surpass some boxes which are kept strictly by keepers from group 1. (h) Group 2 will be considered having defeated group 1, if all members of group 2 have surpassed all obstacles and are back at the front side. (i) If one of the keeper members touches one of the player members, the player group is called “*dadi*” (defeated). It means that the player group (i.e., group 2) has to become keeper group, and the keeper group (i.e., group 1) has to become player group. (j). If two or three of the keeper members stand around one of the player members, the condition is called “*gosong*” (burned). Then other members of the player group will help him or her. They will tease the keeper members in order to let free their friend.

The researcher made some manipulations in the procedures of game, such as: placing the players, timing, creating arena borders for 20 players (10 players and 10 keepers), concocting a strategy before the game, two players as keepers of *sodor* line, and the awarding of a gift to the winner. However, the procedures remained generally compatible with the nature of *gobag sodor* game.

The Procedures of Actual Playing

(1) The composition of players in both games, the *betengan* and the *gobag sodor*, was kept the same. (2) The researcher placed the players in their group (the members of the groups have been chosen by the researcher beforehand). (3) The instructor introduced himself and his members (two facilitators and two observers). (4) Before the game starts, players were given a description of “what the *gobag sodor* game was and how it should be played”. Subsequently, the instructor and his assistances trained the players for about 30 minutes, by means of description and mulation. (5) The instructor makes it two. (7) To determine who was the player group (*mentas*) and who was the keeper group (*dadi*), the two leaders from both groups did the *pingsut*. (8) The instructor asked each group to discuss about how to defeat the enemy group. After that, members of each group hugged each other, and yelled something at their own choice. (9) To motivate them, the instructor told that the winner would get an interesting gift. The winner was the group which had a higher score than the other group. (10) In the game, the instructor, the researcher conducted a pilot study. The pilot study was meant to examine whether the traditional games used as treatment really contained emphatic values, and how they might increase ethnocultural empathy (EE). The participants in the pilot study were students from Junior High School in Surakarta, namely 16 students (9 Javanese, 7 Chinese) as treatment group, and 6 students as control group.

Three traditional games were examined, namely *Lintang Alihan*, *Betengan*, and *Gobag Sodor*. From the findings of the pilot study, it could be said that EE values were not dominant in the *Lintang Alihan* game (the dominant values in the *Lintang Alihan* game were togetherness and happiness) and that the game did not increase the EE level. The *Betengan* and the *Gobag Sodor* game, on the other hand, contained EE values like solidarity, loyalty, sensitivity, understanding of others, etc. In Table 2 we could see the values contained in the two games

Table 2
Empathic Values in the Games

<i>Betengan's Values</i>	<i>Gobag Sodor's Values</i>
1. Solidarity, loyalty	1. Solidarity, Helpfulness
2. Sensitivity	2. Sensitivity
3. Sportivity	3. Sportivity
4. Cooperation	4. Cooperation
5. Understanding of others	5. Understanding of others
6. Struggle	6. Togetherness

In the *betengan* game, empathic values can be found in various forms, such as: (1) Solidarity, loyalty: The solidarity or loyalty among players can be seen when one of the players is caught and he or she is imprisoned in an enemy prison lead to the defeat of their group. (3) Sportivity or honesty: It can be seen when a player who has been caught by an enemy player, will confess that he or she has been caught by the player. Moreover, there is a rule in the game which says that an older player (*tuwo*), a player who touched or held the fortress before, can be chased by a younger player (*enom*), a player who will touch or hold the fortress in the following time. Thus the older player must be honest in telling that he or she is an older player who can be chased or caught by a younger player. (4) Cooperation: the cooperation among group members is needed to create a successful team. The leader in a group will coordinate his or her members, based on their character and ability. A player who cannot run fast will be located in the fortress, whereas a player who can run fast will be ordered to attack the enemy fortress. (5) Understanding of others: a player who was caught by an enemy player will be helped by his or her friend to get out the enemy fortress, and a player who was caught by an enemy player will not force his or her friends to help him or her. Each player has to understand the condition of the other. (6) Struggle: to be strong, a team must be highly motivated to defeat the enemy team. It can be seen when a player falls, and he or she will stand up and start running again. Sickness and fatigue are not felt by the player.

Values in the *gobag sodor* game are as follows: (1) Solidarity/helpfulness: This is visible when keeper players (*dadi*) surround an enemy player (*mentas*), and one of the other enemy players tries to tease the keeper players to let free his or her friend. (2) Sensitivity: just like in the *betengan* game, players have the responsibility to help their friend from the enemy's threat. (3) Sportivity: Values of sportivity are found when a *mentas* player is touched by a *dadi* player. The *mentas* player must then confess that he or she has been touched by the *dadi* player. (4) Cooperation: As in the

betengan game, values of cooperation appear when the leader in a group coordinates his or her members based on their character and ability. A player who can not run fast will be located in the back side, whereas a player who can run fast will be located in the front side. (5) Understanding of others: a player who is caught by an enemy player will be helped by his or her friend. A tired player can rest a minute and his or her function will be taken over by his or her friend. (6) Togetherness: To defeat the enemy team, all players must attack the enemy together, because when one attacks alone, he or she will be easily defeated by enemy players.

The researcher re-examined the reliability of the Scale of Ethnocultural Empathy (SEE). In the past, three studies were done to quantitatively measure the construct of SEE, and the results of each study showed that the scale has internal reliability, discrimination validity, content validity, and criterion-related validity (Wang et al, 2003). Nevertheless, the researcher felt that there was a characteristic difference in culture between the previous participants and the current participants, justifying a retest. The reliability test was done on 230 students from two Junior High Schools in Surakarta.

The research (for all groups) was conducted in the sports building in Surakarta for about two months. Each group needed five days to complete the work. The research processes are described on Figure 2.

1. On the first day, all participants were instructed to complete the five items of demographic questionnaire in which they were asked to identify their age, gender, ethnic, religious affiliation, perception of the other ethnic, and their experience with ethnic interaction. They were grouped into four experimental groups and four control groups¹¹, which were: OG, IG, CMG, and JMG. Researcher and four research assistances introduced their self, and asked to all participants (in every group) to self introduce to their group members¹². Subsequently, they were given the Scale of Ethnocultural Empathy (SEE), to indicate how well each item described to them, by choosing the appropriate letter corresponding to a Lykert-type scale. The SEE was completed by the majority of participants in approximately 20 minutes.
2. Two days later, participants were treated. Each treatment was given for approximately 60 minutes, namely: 15 minutes for training, 20 minutes playing

¹¹ The group means: Opposite Group (OG), Interaction Group (IG), Chinese Majority Group (CMG), and Javanese Majority Group (JMG)

¹² OG: 5 of Javanese introduces to 5 of Javanese, 5 of Chinese introduces to 5 of Chinese only; IG: 5 of Javanese introduce to 5 of Chinese, 5 of Chinese introduce to 5 of Javanese; CMG: 5 of Chinese introduce to 5 of Chinese, 5 of Javanese introduce to 5 of Chinese;

and JMG: 5 of Javanese introduce to 5 of Javanese, 5 Chinese

introduce to 5 Javanese.

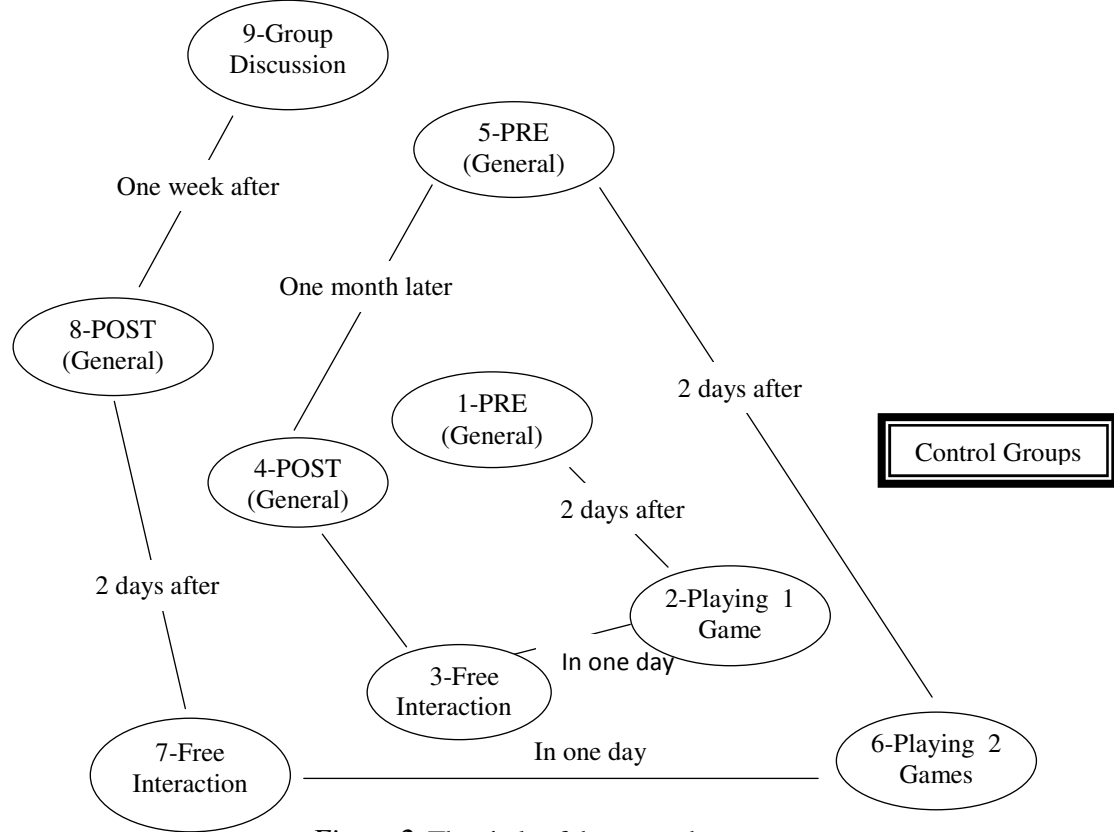


Figure 2. The circle of the research processes

the game (side 1), 5 minutes for break (drink and snack), and 20 minutes playing the game (side 2). After playing the game, they were given the chance to make free interaction with their group, like talking about their hobby, study experiences, etc. In other places, participants of control groups were assigned to read books, magazines, or newspapers in library, and two research assistances kept them in order that they did not interact one another.

3. Two days after the treatment, participants were given the SEE once again (posttest). In this second round, the SEE was completed faster than the first time by the majority of the participants, in around 15 minutes. These procedures were done by each group, the OG, the IG, the CMG, and the JMG, or in other words four times.
4. The data was then analyzed.
5. The following month, the researcher returned to the field to examine the effects of two treatments on increasing of EE-level. It was done because in the first study only part of effects were satisfying (not all hypotheses were confirmed). The procedures of the second experiment were the same as those in the previous one, except that, in this experiment, the

researcher added a game as a treatment that is *gobag sodor* game. Thus, in the present experiment, the participants were given two treatments, namely the *betengan* and the *gobag sodor*.

6. One week later, the researcher and the assistants chose four participants for every group to join the discussion (total participants are 16 people). They were chosen based on some unique characters: extreme scores, attitudes, and behaviours. The discussion was conducted per group, for about 60 minutes in each group.

Results

The data was analyzed using the Statistical Product and Service Solution (SPSS) version 15.0. The result from these analyses was discussed in this section with relevant findings for each research questions presented. Significance of this study was set at the .05 level. The hypothesis was tested with paired sample t-test and independent sample t-test.

According to hypothesis 1, the traditional games could increase ethnocultural empathy. This hypothesis

was subdivided into two subdivisions (one treatment and two treatments). To investigate the effect of the treatment (*Betengan* game) on increasing ethnocultural empathy, paired sample t-test was used to compare between two inter-correlation variables or EE scores between pre-test to post-test (see Table 3).

Based on the findings above, in IG and CMG are found significant in increasing ethnocultural empathy. In the first group (IG) notes scores MD (-6.10), t (-3.86), and $p < .01$, and the second group (CMG) shows scores MD (-3.35), t (-2.38), and $p < .05$. It means that the game can increase EE of the groups. In other groups (OG and JMG) EE does not increase shown by scores of $p > .05$.

As before, to investigate the effects of two treatments (*betengan* and *gobag Sodor game*) on EE Paired Sample T Test was used. Increase in EE happens only on two groups (IG and CMG), whereas on other groups are not (OG and JMG). On the following experiment, the researcher examined effects of two games toward increasing EE. The second experiment was conducted toward other participant group (different participants

with experiments before), and researcher added one game (*gobag sodor* game) as a treatment. Thus, participants were given two treatments (*betengan* and *gobag sodor game*). Complete data analyses were shown on Table 4.

Results indicated that there is no significant effects for pairs of pretest-posttest, t (-1.23) on OG, Mean of paired differences is -2.95, $p > .05$. On IG, significant effects are found on pretest to posttest with t (-3.929), Mean of paired differences is -5.65, $p < .01$. Significant effects are found on CMG, t (-3.01), Mean of paired differences is -4.75, $p < .01$. It means that on the group there is increase of EE from pre-test to post-test. In addition, on the fourth group significant effects are found on pair of pre-test to posttest t (-5.67), Mean of paired differences is -7.75, $p < .01$. There is a pretest-posttest significant difference on IG, CMG, and JMG. Meanwhile, on control groups no one shows significant difference between pre-test and post-test.

Participants who take part in two treatments will show greater ethnocultural empathy compared to those participants who receiving one treatment, and the participants who take part in one treatment will show greater ethnocultural empathy compared to those participants who receiving no treatment.

To test the second hypothesis, two x independent sample t-test was performed with treatments (one game and two games) as fixed factor, and pretest-posttest as dependent variables. Complete data analyses are shown on Table 5.

On OG, it is indicated that participants who took part in two treatments show greater EE than participants who took part in one treatment which is showed by post-test

Table 3

Paired Sample T Test: Effects of a Treatment on EE

Groups	Pairs	Paired Differ		t	df	Sig
		M	SD			
OG	Pre-Post	-.45	10.43	-.19	19	.85
Control	Pre-post	2.45	8.82	1.24	19	.23
IG	Pre-Post	-6.10*	7.06	-3.87	19	.00
Control	Pre-post	.55	7.96	.31	19	.76
CMG	Pre-Post	-3.35**	6.29	-2.38	19	.03
Control	Pre-post	1.75	9.27	.85	19	.41
JMG	Pre-Post	-1.80	10.17	-.79	19	.44
Control	Pre-Post	3.00	8.78	1.53	19	.14

Note:

* The mean difference is significant at the .01 level

** The mean difference is significant at the .05 level

Table 4

Paired Sample T Test: Effects of Two Treatments Toward EE

Groups	Pairs	Paired Differ		t	df	Sig
		M	SD			
OG	Pre-Post	-2.95	10.72	-1.23	19	.23
	Pre-post	2.45	8.82	1.24	19	.23
IG	Pre-Post	-5.65*	6.44	-3.92	19	.00
	Pre-post	.55	7.96	.31	19	.76
CMG	Pre-Post	-4.75**	7.06	-3.01	19	.01
	Pre-post	1.75	9.27	.85	19	.41
JMG	Pre-Post	-7.75*	6.11	-5.67	19	.00
	Pre-post	3.00	8.78	1.53	19	.14

Note:

* The mean difference is significant at the .01 level

** The mean difference is significant at the .05 level

Table 5

Independent Sample T Test: The Difference Level of EE among Groups Who Take Part in Two Treatments and One Treatment

Group	Dependent Variable	Mean Diff.	Std. Error	Sig
OG	Pre-test	-3.25	2.93	.28
	Post-test	-5.75*	1.65	.00
IG	Pre-test	-.60	2.54	.82
	Post-test	-.15	2.87	.96
CMG	Pre-test	1.70	2.56	.51
	Post-test	.30	2.69	.91
JMG	Pre-test	-.55	2.76	.84
	Post-test	-6.50	3.18	.05

Note:

* The mean is significant at the .01 level

** The mean is significant at the .05 level

(-) Score of 2 treatments is higher than 1 treatment

(+) Score of 1 treatment is higher than 2 treatments

scores, $MD = -5.75$, $p < .01$. It shows that (on post test) there is significant difference between two games and one game, where the two games show greater EE level than one game. Meanwhile, IG, CMG and JMG results indicated that there is not significant difference of EE between participants who took part in two treatments and one treatment, $p > .05$.

Subsequently, researcher compared the effects of a game and no game toward increasing EE. The complete results are shown on Table 6.

Vice versa, the significant difference is found in IG, CMG, and JMG. On IG, shown by scores of MD (post test = 5.55), $p < .05$. On CMG there is significant difference signed with scores MD (post test = 7.65, $p < .05$). Additionally, it is found the significant difference on JMG signed with scores MD (post test = 8.25), $p < .05$, where the findings from the three groups indicated that the participants who part in one treatment have higher scores of EE than those who took part in no treatment. On OG, there is no significant difference between one treatment and two treatments.

Results of paired sample t-test partially support the first hypothesis which states that the traditional games can increase EE level. The significant difference is found on groups of IG, CMG, and JMG. Especially, the IG and the CMG are significant in both experiments (one and two treatments), whereas the JMG is significant in one experiment treatment. These findings also are supported by scores of control groups which are lower than the experiment groups. Nevertheless, the OG is not significant in the both experiments.

Table 6
Independent Sample t-Test: The Difference Level of EE among Groups Who Take Part in One Treatments and No Treatment

Group	Dependent Variable	Mean Diff.	Std. Error	Sig
OG	Pretest	.25	2.75	.25
	Posttest	.87	2.06	.87
IG	Pretest	-1.10	1.63	.51
	Posttest	5.55**	2.26	.02
CMG	Pretest	2.55	2.99	.39
	Posttest	7.65**	2.80	.01
JMG	Pretest	3.45	2.47	.17
	Posttest	8.25**	3.43	.02

Note:

* The mean is significant at the .01 level

** The mean is significant at the .05 level

(-) Score of no treatment is higher than one treatment

(+) Score of one treatment is higher than no treatment

On the second hypothesis, independent sample t-test is performed with treatments (one treatment and two treatments) as fixed factor, and Pre test-Post test as dependent variable. The analyses are performed to determine significant difference between pre-test and post-test scores of four groups which are given treatments and those receiving no treatment.

The findings are partially related with the hypothesis which stated that participants who took part in two treatments will show greater EE compared to those participants who received one treatment, and participants who took part in one treatment would show greater EE compared to with those participants who received no treatment. Comparison between participants who took part in two treatments and one treatment, the independent sample t-test found significant difference in groups of OG and IG. There is a no significant difference between CMG and JMG's two treatments and one treatment. Whereas, teen participants who took part in one treatment and those who received no treatment, the significant difference is found in: IG, CMG, and JMG. There is no significant difference in OG.

From the above findings, especially on one treatment, there are significant differences between post-test scores of IG, CMG, and JMG and their control groups, post-test scores of IG, CMG, and JMG are higher than one. Meanwhile, there is no significant difference between post-test scores of OG and his control group. Subsequently, comparison between the one treatment and the two treatments mean to increase EE level of IG, CMG, and JMG can be assessed with the traditional game, but to increase EE level of OG must be assessed with the two traditional games. The findings of these second sub hypothesis support the findings of the first sub hypothesis where the traditional games can increase EE level of three groups (IG, CMG, and JMG).

These results are in line with previous research findings about role of game as a treatment, like findings from Einon (1980); Watson (1984); Quintana (1994); Quintana, Castaneda-English, & Ybarra (1999), and Monighan-Nourot, Scales, Van Hoorn, & Almy (1987). They stated that playing activities develop social as well as the affective domains of the children. Einon (1980) experience during the play benefits both the individuals by increasing their capacity to learn the society by increasing the flexibility of the individual's interaction with its environment and social group. Watson (1984) argued in his research findings, that there were three central components of game attraction, intrinsic reward interpretations, social reciprocity, and goal attainment. Intrinsic reward interpretations included

a player's concern for process aspects of the game and encompass playing well and socializing with others. Social reciprocity included mutual agreement through the interchange in of rule interpretations which enable the play to continue. Goal attainment included the fulfilment of a personal goal through the performance of an appropriate role in conformity with game requirement.

Specifically, Quintana (1994), and Quintana, Castaneda-English, & Ybarra, (1999) has developed a model for the level in ethnic perspective-taking ability (EPTA), that synthesizes a number of cognitive and affective trends found in the research on children's responses to race and culture. Quintana's concept of ethnic perspective-taking ability was derived from Selman's theory of social perspective-taking. Quintana defined ethnic perspective-taking as a cognitive-developmental ability that contained associated levels. Each level of perspective-taking reached as an individual proceeded through developmental life stages. The Ethnic perspective-taking ability consisted of five levels, namely: physical perspective of ethnicity, literal perspective of ethnicity, non literal and social perspective of ethnicity, group perspective of ethnicity, and multicultural perspective of ethnicity. Participants of this research were children those age range from 13 to 16 years, with a mean age of 14.67. Based on the model of EPTA above, the empathy development of these participants have entered to the fourth (group perspective of ethnicity, 10-15 years) and fifth level (multicultural perspective of ethnicity, 14 years-adulthood), with characteristics: Awareness of the impact of pervasive experiential influences associated with ethnicity (e.g. ethnic socialization patterns), ethnic group consciousness (e.g. ethnic socialization patterns), enhanced ability to take perspective of other ethnic groups (e.g. awareness of similarities of oppressed groups) and sub-groups within ethnic groups, and formation of bicultural or multicultural ethnic identity (e.g. multicultural person).

To explain how a game can increase ethnocultural empathy, Moningham-Nourat et al. (1987) argued that a game promoted the children's cognitive development. The children learned problem solving skills and critical-thinking skills as she or he played. This means that games provide the child with a holistic kind of education which can be summarized as using "triple H". These are "head" (mind, cognition), "hands" (active participation, involvement), and "heart" (socialization, attitudes, affection). The combination was regarded by Moningham-Nourat et al. as the best combination to increase attitudes and skills of children. Bonwell & Eison (cited by Smart & Csapo, 2007) called it as

experiential learning, or active learning, or learning by doing. It means, anything that involves the individual in doing things and thinking about the things they are doing. As reported before, based on the pilot study conducted, the *betengan* and *gobag sodor* contain empathy aspects (values), when children playing both of games, actually they are developing "the triple H" of empathic values. According to Smart & Csapo the game would be effective to increase individual's performance when: individual involved directly in the activities, individual developed higher order of thinking skills (analysis, synthesis, evaluation), instruction emphasizes the development of individuals' skill more than just transmitting information, individual is engaged in activities, and individual explored their own attitudes and values.

Findings of the present study provide further evidence for the effects of the traditional game toward ethnocultural empathy as stated implicitly by some: that the traditional games (*betengan* and *gobag sodor*) have function as refreshing or recreation, honesty training, loyalty, solidarity, and sensitivity, keeping unity between players, educating children to be helpful (Marsono, 1999). Part of aspects above was considered by Colley (1998) as affective empathy aspects. He revealed that affective empathy encompasses sympathy, sensitivity, and shares the suffering of others such as feeling so close to another person's difficulties that they seem as if they are one's own. In other word, the game is a representation of empathy manipulation. Regarding to the traditional game, Arikunto (1996) asserted that the traditional game has significant roles to children socialization, and as well as to increase cognitive, affective and psychomotor abilities. Dharmamulya (1996) added that the traditional games contain certain values which can be planted to children, these are: happy feeling, feel to need and be needed, democratic roles, responsibility, and empathy.

References

- Allport, G.W. (1979). *The nature of prejudice* (25th Anniversary Ed.). Massachusetts: Perseus Books.
- Arikunto, S. (1996). *Kurikulum muatan lokal, lahan strategis bagi pelestarian permainan anak*. Paper presented at a discussion on Diskusi Permainan Anak DIY, Yogyakarta: Jarahnitra.
- Batson, C. D., Polycarpu, M. P., Harmon-Jones, E., Imhoff, H. J., Mitchener, E. C., Bednar, L. L., Klein, T. R., & Highberger, L. (1997). Empathy and attitudes: Can

- feeling for a member of a stigmatized group improve feelings toward the group? *Journal of Personality and Social Psychology*, 72, 105-118.
- Bierhoff, H. W. (2002). *Prosocial behaviour*. New York: Psychology Press.
- Colley, C. H. (1998). *On self and social organization*. Chicago: University of Chicago Press.
- Deaux, K., Dane, F.C., & Sigelman, C. K. (1993). *Social psychology in the '90* (6th ed.). California: Brooks/Cole Publishing Company.
- Dharmamulya. (1996). *Pelestarian permainan anak perlu diupayakan*. Paper presented at a discussion on Diskusi Permainan Anak DIY, Yogyakarta: Jarahmitra.
- Dutton, D. G. (2007). *The psychology of genocide, massacres, and extreme violence: Why normal people come to commit atrocities*. Westport, CT: Praeger.
- Einon, D. (1980). The purpose of play. In J. Chertoff & R. Lewin (Eds.), *Not work alone*. Beverly Hills: Sage
- Hughes, D., & Chen, L. (1997). When and what parents tell children about race: An examination of race-related socialization among African American families. *Applied Developmental Science*, 1, 200-214.
- Hughes, D., & Johnson, D. (2001). Correlates in children's experiences of parents' racial socialization behaviours. *Journal of Marriage and Family*, 63, 981-995.
- Hughes, D., Rodriguez, J., Smith, E. P., Johnson, D. J., Stevenson, H.C., & Spicer, P. (2006). Parents' ethnic-racial socialization practices: A review of research and directions for future study. *Developmental Psychology*, 42, 747-770.
- Maoz, I. (2000). Power relation in intergroup encounters: A case study of Jewish-Arab encounters in Israel. *International Journal of Intercultural Relations*, 24, 259-277.
- Mark, M. M., & Reichardt, C. S. (2004). Quasi-experimental and correlational designs: Methods for the real world when random assignment isn't feasible. In C. Sansone, C.C. Morf, & A.T. Panter (Eds.). *The Sage handbook of methods in social psychology* (pp. 265-286). California: Thousand Oaks.
- Marsono, H., Suwandi, & Listyorini, M. (1999). *Berbagai permainan tradisional masyarakat Jawa*. Yogyakarta: Institute of Javanese Studies in collaboration with Plan Internasional Indonesia
- Monighan-Nourot, P., Scales, B., Van Hoon, J., & Almy, M. C. (1987). *Looking at children's play: A bridge between theory and practice*. New York: Teacher College Press.
- Poerwadarminta, W.J.S. 1939. *Baoesastra djawa*. Batavia: J.B. Wolter's Uitgevers Maatschappij N.V.
- Quintana, S. M. (1994). A model of ethnic perspective-taking ability applied to Mexican-American children and youth. *International Journal of Intercultural Relations*, 18, 419-448.
- Quintana, S. M., Castaneda-English, P., & Ybarra, V.C. (1999). Role of perspective-taking abilities and ethnic socialization in development of adolescent ethnic identity. *Journal of Research on Adolescence*, 9, 161-184.
- Rahardjo, T. (2005). *Menghargai perbedaan kultural, mindfulness dalam komunikasi antar-etnis*. Yogyakarta: Pustaka pelajar.
- Ridley, C. R., & Lingle, D. W. (1996). Cultural empathy in multicultural counseling: A multidimensional process model. In P. B. Pedersen & J. G. Draguns (Eds.), *Counseling across cultures* (4th ed., pp. 21-46). Thousand Oaks, CA: Sage.
- Selman, R. L. (1980). *The growth of interpersonal understanding*. New York: Academic Press
- Smart, K. L., & Csapo, N. (2007). Learning by doing: Engaging students through learner-centered activities. *Business Communication Quarterly*, 70, 451-457.
- Stephan, W. G., & Finlay, K. (1999). The role of empathy in improving intergroup relations. *Journal of Social Issues*, 55, 729-743.
- Tajfel, H., & Turner, J.C. (1986). The social identity theory of intergroup behaviour. In S. Worchel & G. A. Williams (Eds.), *Psychology of intergroup relations*. Chicago: Nelson-Hall.
- Taufik (2006). Problem sosial hubungan antar-etnis pada masyarakat pluralis. *Journal Humaniora*, 8, 134 - 147
- Taufik. (2007). *Bersama dalam keragaman: Pola-pola interaksi sosial antara etnis Jawa-Cina di Surakarta*. Research Report. Surakarta: Muhammadiyah University of Surakarta
- Wang, Y., Davidson, M. M., Yakushko, O. F., Savoy, H. B., Tan, J. A., Bleier, J. K. (2003). The scale of ethnocultural empathy: Development, validation, reliability. *Journal of Counseling Psychology*, 50(2), 221-234.
- Watson, N. (1984). The empirical status of Roger's hypotheses of the necessary and sufficient conditions for affective psychotherapy. In R. F. Levant & J.M. Shlein (Eds.), *Client centered therapy and the person centered approach: New directions in theory, research, and practice* (pp. 17-40). New York: Praeger.
- Yunus, A. (1981). *Permainan rakyat DIY*. Jakarta: Departemen P dan K.