

BONEKA PERASAAN (BOPER): FACILITATING EMOTION COMPREHENSION IN EARLY CHILDHOOD

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Abstract

A unique doll, named BonekaPerasaan (Boper), which had a number of emotional symbols, was designated to be displayed in some storytelling sessions. The use of Boper in storytelling was specifically aimed to introduce several basic emotions for children in early childhood and further facilitate their emotion comprehension. The study involved 65 kindergarten students aged 5-6 years old and used quasi-experimental design, one group pretest-posttest. A modified TEC (Test of Emotion Comprehension) of Pons, Harris, and de Rosnay (2004), which measure nine components (i.e., recognition, external cause, desire, belief, reminder, regulation, hiding, mixed, and morality), then was used to identify children's emotion comprehension. By using paired sample t-test, it was found that there was significant enhancement in children's emotion comprehension after being served 5 times storytelling session ($p > 0.001$). The further analysis also indicated that there was a significant enhancement in several components, namely recognition ($p < 0.001$), external cause ($p < 0.001$) and reminder ($p < 0.049$).

Key words: doll, storytelling, emotion comprehension, early children.

INTRODUCTION

Golden age is a period in which children are able to comprehend all information that is given quickly. As what Peterson (Agustina, 2013) states, golden age is a period when the brains have the ability to accept the information really well. The beginning of children's life is the golden age (Agustina, 2013).

From the explanation above, we can understand that golden age is the peak period of the children's development, which means that those ages are the best ages to give basic development aspects, such as physique, language, emotional social, self concept, arts, moral, and religion values. According to Monks (Desmita, 2009), development is a process which aims a betterment and it cannot be repeated.

Development refers to permanent and irreversible changes. Development can also be defined as a permanent and stagnant process towards an enhanced organisation in a higher integration level, based on the growth, maturity, and study (Desmita,

2009). All of the children's potential should be developed in order to achieve the optimal growth and development of the children themselves (Jawati, 2013). All of the children's potentials should be developed, especially their emotion, since emotion is an important aspect in life. Hurlock (2000) says that all forms of emotion do not only the emotion that is related to happiness. Every form of emotion affects the individual's way to adapt and social of a children.

Emotion per se is a complex phenomena which involves several aspects, both biological and cognitive aspects. There is no theory which can explain emotional experience phenomena comprehensively. Emotion, in a wide scope definition, is the feeling which can influence the behaviour and generally has physiologic and cognitive components. The function of the emotion is to prepare oneself to act, form behaviours in the future by studying, and helping interacting effectively with others (Feldman, 2012).

The emotion development that

happens in children, especially aged 2 until 4 years old, includes the amazingly rapid ability to add the vocabulary bank about emotion, starting to talk about emotion in the past, present, and in the future (Santrock, 2007). Sometimes, toddlers under 1 year old are not able yet to identify different kinds of emotion, so that as what has been stated by Havighrust, Harley & Prior (Santrock, 2007) that parents, teachers, and other adults in their surroundings can help them to comprehend, recognise, express, and control their emotion. A research conducted by Martani (2012) shows that teachers (who act as a guide at school) have not had any adequate comprehension about how to give stimulation on children's emotion development. Teachers usually emphasise more to the cognitive skills of the children and tend to ignore the emotion development of them. However, in fact, emotion is an important aspect in life, so that it is also important to look after the children's emotion skills.

A research conducted by Pons, Harris, and De Rosnay (2004) which aims to understand the children's skill to comprehend 9 components included in TEC (*recognition, external cause, desire, belief, reminder, regulation, hiding, mixed, and morality*) finds that the age of a child affects their skill to comprehend those 9 components above. We can take a conclusion from that research that since 3 years old, children can be introduced to emotion skills.

One of the instruments to help the children in identifying, recognising, understanding, and expressing their emotion in a fun and convenient way is *Kimochis*® doll. Term *Kimochis*® originates from Japanese which means feeling. That doll has many emoticons which represents emotions, such as anger, sadness, courage, inconvenience, jealousy, and so on and so forth. Those emoticons can be used by putting them inside a doll basket. The purpose is so that the children are expressive in conveying the emotion felt. Besides, this doll can also be used as a

tool to identify the emotion that they have. When the children choose which emoticon that they feel, they are able to recognise feeling (Dodge dan Grimm, 2013).

Kimochis® is believed that they can help the children to express emotion, and recognise different kinds of emotion. *Kimochis*® can be an approachment tool for children so that they want to express what is actually felt by themselves. Furthermore, the children will perceive they are playing, so they will not be burdened and afraid to express their feeling.

As what have been mentioned earlier, in order to help children recognising, comprehending, expressing, and controlling their emotion, we can use several instruments, one of which is *Kimochis*®. *Kimochis*®, which most of its users are in Australia, uses English. *Emoticon* which appears in *Kimochis*® has two sides. The front side is an emotion expression and the back side is the description of the emotion using English, which results in the difficulty of using it in Indonesia, especially to children. The doll that the researcher's designs is Boneka Perasaan (Boper) which is similar to *Kimochis*®, but the back side of the *emoticon* uses Indonesian so that it is easier to be understood by the children. This doll can be used by using story telling. The art of using language, vocalisation, and/or physical movements or signs to reveal the elements and illustration of a story to something specific, the audiences' lives (Nugraha, Marhaeni & Tika, 2014). Supporting media are needed in doing a story telling, as stated by Anita (Nugraha, Marhaeni & Tika, 2014) that media are used as an agent or connector between two parties, which are the message sender and the message receiver. In this research, the media used is Boneka Perasaan (Boper).

The research was conducted in a kindergarten, especially in B study groups, for the students of those B groups are still eligible as the golden age, which means that they are able to absorb the information quickly and accurately to put the basics of

development, such as physical, language, social emotion, self concept, arts, morality, and religion values (Agustina, 2013). Moreover, the B study groups' students are able to communicate orally and writtenly better than those who are in other study groups (A study groups).

The hypothesis of this research is that there are effects of the usage of Boneka Perasaan (Boper) through *story telling* towards the understanding of the children's emotion.

RESEARCH METHOD

Research Design

The research design is using quasi-experiment research. Quasi-experiment research design used is *one-grup Pretest-Posttest*. According to Christensen (Wardani, 2012), *one-grup Pretest-Posttest* design is also known as *before-after design*. There is a measuring process of the subject at the beginning of the research. After giving treatment, the measuring is done once again with the same instruments.

Research Participants

Based on the calculation result using G*Power software version 3.1 with *medium effect* ($d=0.50$), *statistical power* values 0.95 and $\alpha=0.05$, it is found that the sample needed is minimumly 45 participants. The researcher gathered 65 students of B study groups, which have the age range from 5-6 years old, with the consideration that they have been able to recognise several emotion components stated by Pons, Harris dan de Rosnay (2004).

Data

1. TEC (*Test of Emotion Comprehension*)
TEC (*Test of Emotion Comprehension*) was founded by Pons, Harris dan de Rosnay (2000). *Test of Emotion Comprehension* (TEC) consists of 9 points, which each its first and second points has 5 sub-points. Those points represent 9 components mentioned in the earlier chapter, which is component I (Recognition), component II (*External Cause*), component III (*Desire*) component IV (*Belief*), component V (*Reminder*),

component VI (*Regulation*), component VII (*Hiding*), component VIII (*Mixed*) dan component IX (*Morality*). This is the *blueprint Test of Emotion Comprehension* (TEC) table. The scale reliability uses Reliabilitas *Cronbach's Alpha* reliability analysis. *Source credibility* scale has reliability coefficient (r_{xx}) as big as 0.505.

Data Analysis

Data analysis used comparison technique by using *t-test*. *T-test* was used in order to find the effects of independent variables towards the dependent variables. Data analysis test was done by using *SPSS 20 for Windows* to test the hypothesis.

RESULTS AND DISCUSSION

Descriptive Data

The number of the participants of this research is 65 students, aged 5-6 years old. The male participants were 33 students and the female participants were 32 students. This is the participants statistics based on their age: 5 years old (46.15%), 6 years old (53.85%)

Based on the calculation of Hypothetic emotion comprehension values, Mean= 11.5, SD= 1.166, Min= 8, Max= 15. After doing the hypothetic score calculation, the researcher categorised the participants' emotion comprehension level based on the results before. In this research, the emotion comprehension levels of the participants are divided into three, which are low, middle, and high.

The categorising norm was based on what was found by Azwar (2012). According to that norm, the participants of this research can be categorised into this table:

Table 1. Subject Categorisation

Category	Subject Number	
	<i>Pretest</i>	<i>Posttest</i>
Low	19	9
Middle	39	35
High	7	21

Based on table 1, it is known that in the emotion comprehension scale, the lowest score was answered by 19

participants for the pretest and participants for the posttest. The highest item score was answered by 7 participants in the pretest and 21 participants in the posttest. Most of the participants answered with the results of middle score category with 39 participants for the pretest and 35 participants for the posttest.

Assumption Test

1. Normality Test

The result of the normality test shows that the significance value is 0.105 for the pretest and 0.011 for the *posttest*. We can see that the significance value for the pretest is 0.105 ($p > 0.05$). This shows us that the data in pretest was distributed normally. Thenceforth, the *posttest* significance value is 0.011 ($p > 0.05$), which means that the data in *posttest* was not distributed normally.

2. Homogeneity Test

The result of the homogeneity test shows that the significance vale is 0.210 ($p < 0.05$). This shows us that the data was homogene, so that we can conclude that pretest and *posttest* groups have the same variance.

Hypothesys Test

Table 2. T-test paired sample Test Results

The test analysis result using paired sample t-test shows that t was -5.248 with p was 0.000 ($p > 0.05$). Based on the result, we can make a conclusion that there is an evidence to support the hypothesis.

There is an addition analysis in order to understand the comparison between two groups, which are, pretest and *posttest* of each component in TEC (*Test of Emotion Comprehension*) that was founded by Pons, Harris dan de Rosnay (2000).

Table 2. Components Test Results

Components	Mean		T	Significance
	Pretest	Posttest		
Komponent I	4.22	4.68	-4.290	.000 ($p < 0.05$)
Komponent II	3.54	4.17	-4.757	.000 ($p < 0.05$)
Komponent III	1.15	1.22	-0.728	.469 ($p > 0.05$)

Komponent IV	0.12	0.11	-0.444	.658 ($p > 0.05$)
Komponent V	0.48	0.63	-2.006	.049 ($p < 0.05$)
Komponent VI	0.09	0.15	-1.271	.208 ($p > 0.05$)
Komponent VII	0.28	0.40	-1.655	.103 ($p > 0.05$)
Komponent VIII	0.12	0.09	-0.630	.531 ($p > 0.05$)
Komponent IX	0,38	0,28	-1.544	.128 ($p > 0.05$)

Discussion

The hypothesis of this research is that there is an effect of using Boneka Perasaan (Boper) through *story telling* towards the emotion comprehension of a child. From the whole paired sample t-test result, we can see that the significance value is less than 0.05 ($p < 0.05$), which is 0.000 with *mean pretest* value lower than *posttest*. This shows that there is an effec of the usage of Boneka Perasaan (Boper) through *story telling* towards the children’s emotion comprehension.

Dodge dan Grimm (2013) also supported by saying that introduction to emotion can be done since a young age, because at a young age, 85% of the brains is undergoing a development period so that there can be an act to prevent bad results of

	Mean	T	Significance
Pretest	10.38	-5.248	.000 ($p < 0.05$)
Posttest	11.72		

negative emotion acts. The process of introducing emotion should use a fun, monolingual, and joyful instrument to make the children easy to understand. A method that is assumed to be fun is by using a doll such as *Kimochis®* doll that is mentioned in Dodge dan Grimm’s (2013) writings.

The result of this research can be divided into 3 categories. The first category, which achieved a significant value and supported by Pons, Harris dan de Rosnay (2004), are component I, II and V. In the component I (*recognition*), the paired sample t-test result shows that the significance value is 0.000 ($p < 0.05$) with *mean pretest* value is lower than *posttest*. In

component I, the result was significant and suits with what is mentioned by Pons, Harris, and de Rosnay (2004) that 3-4-year-old children can recognise basic emotions based on expressions, which are happiness, sadness, fear, and anger when a picture is shown.

Component II is external cause. The paired sample t-test result shows that the significance value is 0.000 ($p < 0.05$) with *mean pretest* value is lower than *posttest*. In component II, the significant result shows that 3-4-year-old children start to understand that external causes can affect one's emotion.

Component V is reminder. The paired sample t-test result shows that the significance value is 0.049 ($p < 0.05$) with *mean pretest* value is lower than *posttest*. Component V has a significant value which shows that 3-6-year-old children start to understand the correlation between memory and emotion.

The second category is the category where the values achieved are not significant and that is supported by the statement of Pons, Harris dan de Rosnay (2004). Those are component VI, VIII, and IX. In component VI, which is regulation, the paired sample t-test shows that the significance value is 0.208 ($p > 0.05$) with *mean pretest* value is lower than *posttest*. Component VI has insignificant results because, based on Pons, Harris dan de Rosnay (2004), a child can accept that psychological strategies such as denial, distraction, and so on can effectively control the emotion when they are older than 8 years old. Even though they are given some treatments, there will be no change in the basic skill of the 5-6-year-old participants.

Component VIII is mixed. The paired sample t-test result shows that the significance value is 0.531 ($p > 0.05$) with *mean pretest* value is higher than *posttest*. The insignificant value means that the participants, which mostly consist of 5-6-year-old participants, do not have the ability to understand yet that people might feel some emotions directly or even the

opposite at the same time. Based on the research conducted by Pons, Harris dan de Rosnay (2004), an 8-year-old child should start to understand the mixed emotion.

Component IX is morality. The paired sample t-test shows that the significance value is 0.128 ($p > 0.05$) with *mean pretest* value is higher than *posttest*. The insignificant result means that the participants, which mostly consist of 5-6-year-old participants, do not have the ability to understand yet that negative feelings can be caused by bad deeds, such as lying, stealing, hiding the truth, and breaking the rules. Also they do not understand yet that positive feelings can be caused by good deeds, such as sacrificing, counterreacting temptation, and admitting fault. As what Pons, Harris, and de Rosnay (2004) have stated that a child will not start to understand morality before they reach 8 years old.

The third category is where the result achieved is insignificant while, according to Pons, Harris, and de Rosnay (2004), the result should be significant. Those components are component III, IV, dan VII. Component III is desire. The paired sample t-test shows that the significance value is 0.469 ($p > 0.05$). A 3-5-year-old child should have started to understand that people can feel emotions that are different from the situation, and it depends on the desire of each person. However, the result of this research does not show that. The result achieved is insignificant, but the research conducted by Pons, Harris, and de Rosnay (2004) shows a result where only 55% of 5-year-old children can understand component III.

Component IV is belief. The paired sample t-test result shows that the significance value is 0.658 ($p > 0.05$). A child aged 4-6 years old should start to understand that someone's trust, whether its right or wrong, can influence the emotion felt in facing something, but the result is insignificant. The insignificant result is supported by the research conducted by Pons, Harris, and de Rosnay (2004) where

from 5-year-old participants, only 40% can understand component IV.

Component VII is hiding. The paired sample-t-test result shows that the significance value is 0.103 ($p > 0.05$) with *mean pretest* value is lower than *posttest*. The result above shows that the value is insignificant so that there is not improvement in values between *pretest* and *posttest*. The children aged 4-6 years old should start to realise that there might be an inappropriateness between expressions shown and the emotion felt, but the research conducted by Pons, Harris, and de Rosnay (2004) showed that 50% of the subjects, which consist of 5-year-old participants, can understand component VII.

The next research should have more observers so that the data taking process for the pretest and the posttest will be easier, more controlled, and the pretest, posttest, and the treatment will be more focused. The usage of Boneka Perasaan (Boper) should be through a method other than *story telling*. The teaching about emotion to the students of B study groups that mostly consist of 5-6-year-old children with the story telling method by using Boneka Perasaan (Boper) as a media can be done by parents and teachers.

CONCLUSION AND SUGGESTION

The goal of this research is to know the effects of using Boneka Perasaan (Boper) through story telling method towards the children's emotion comprehension. The result was that there is a significant result between pretest and posttest, so that this shows that Boneka Perasaan (Boper) can help children in comprehending emotion through story telling method. The result per component shows that in component I, II, and V, the paired sample t-test results in significant values, which means that there is an effect of using Boneka Perasaan (Boper) through story telling towards the children's emotion comprehension for the component I, II, and V. The analysis result of the component III, IV, VI, VII, VIII, and IX using paired

sample t-test is insignificant, which means that there is no effects of using Boneka Perasaan (Boper) through story telling towards the children's emotion comprehension for component III, IV, VI, VII, VIII, and IX.

This research still has limitedness. There are variables that might have affected the experiment process. Those variables might be noises from several students, the sound system which had some technical errors (echoes, on/off error), which made the subject not focused. *Manipulation check* in this research was done classically and all at once so that the result of the participants were biased.

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