

Can Young Children Help Others by Deception? Active and Passive Deception.

Haruo Kikuno and Yuichiro Kikuno

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I. Introduction

Many studies have reported children's deception as one of theory of mind studies (Avis & Harrid, 1991; Gopnik & Astingto, 1988; Mitchell, 1996, 1997; Perner, 1991; Perner, Leekman, & Wimmer, 1987; Wimmer & Hartl, 1991). It is considered that deception and lie are asocial and immoral behavior as we tell the things that is a different from a fact to another person. However, these acts are effective to protect oneself and others. For example, lie plays an important role for children to protect themselves from the crimes such as kidnappings. Studies of mechanism on deception and lie is very important. How many old child can do deception? How does children's deception develop? It is important to clarify the mechanism of deception.

One of approach of these studies is that children's deception is examined as developmental study of theory of mind (Chandler, Fritz and Hala, 1989; Chandler and Hala, 1994; Chandler and Hala, 1994; Keating & Heltman, 1994; Sodian, Taylor, Harris & Perner, 1991; Ruffman, Olson, Ash & Keenan, 1993). Keating & Heltman (1994) examined the relationship between children's leadership and deception. Result reported that children become better at telling a lie so as to have the leadership.

When can children deceive others? It is assumed that children can deceive others when

they acquire theory of mind. Some studies reported that children can get theory of mind at 4 years old (Avis & Harrid, 1991; Gopnik & Astingto, 1988; Mitchell, 1996, 1997; Perner, 1991; Perner et al., 1987; Wimmer & Hartl, 1991). If children can deceive others when they got theory of mind, they can deceive others at 4 years old. This assumption was supported by some studies (Sodian, Taylor, Harris & Perner, 1991; Ruffman, Olson, Ash & Keenan, 1993). Sodian, Taylor, Harris and Perner (1991) shows that children four years or older can tell a lie to protect other although children younger than four years could not tell a lie. Ruffman, Olson, Ash and Keenan (1993) examined whether child can understand deception of a character in a story. The result shows that children four years or older can understand the deception although children younger than four years could not do it. These results suggest that children can deceive other and understand the deception when they acquire theory of mind.

However, there are results in conflict with above assumption. Chandler, Fritz and Hala (1989) examined whether children younger than two years old deceive. The results that they could do it in the story of dolls. Chandler and Hala (1994) shows that children younger than two years old deceive on communication with human. These result suggest that even two years old children understand and use deception.

The first purpose of this study was to examine when child deceive others for protecting them. In this study 3 years old 4 years old and 5 years old children were presented a story in the puppet play. In the story a monkey and a fox appear. The monkey told child that he is run after by a fox. The fox will torment the monkey, if the fox catch the monkey. And the monkey asked children to help the monkey. The monkey hid in the red house. Then the fox appeared and told them that the fox was looking for the monkey. The fox asked them to tell where the monkey was. Some studies indicate that Japanese children acquire theory of mind at 5 years old (Naito & Koyama, 2006; Wellman, Cross, & Watson, 2001). If the assumption that deception can do when they get theory of mind is correct, then Japanese children can deceive a fox to protect the monkey at five years old.

The second purpose of this study was to examine the assumption that 4 years old children acquire theory of mind but they do not respond at the false belief task correctly as the false belief task does not fit Japanese young children. This assumption was examined on the deception task. There are two types of deception. One of them is active deception and other is passive deception. Active deception is deception including telling lie. Passive deception is deception including ignoring, taciturn, and so on. If the assumption is correct, it was expected that 4 year old children passively but not actively. However, if the assumption is not correct and Japanese children do not have theory of mind, it was expected that they cannot deceive others actively and passively.

II. Method

Participants: Participants were thirty children including 10 three years-old, 10 four year-old and 10 four years-old children in nursery school.

Experimental materials: Participants were shown a puppet play in the experiment. The puppet play were played on the desk. There were two houses

made with corrugated cardboard. One house was red and other was blue. Two puppets including a monkey and a fox were prepared. The puppets were Hand Puppet and were made of cloth

Procedure: The experiment was performed a room in a nursery school. We got permission of the experiment to a director of the nursery school and parents.

The experiment was performed individually. The experiment consists of two session including the Presentation and the Test session. In the Presentation session, participants were showed a puppet play of a fox and a monkey. Firstly, a monkey appeared and said to a participant as follows. “Hi, I am a monkey. I am run after by a fox. He will torment me, if he catch me. Will you help me? Now I will hide in the red house. Will you promise to help me? It is a promise. Ok?” Then the monkey hid in the red house.

Secondly, a fox appeared and said participant as follows. “Hi, I am a fox. Now I am looking for a monkey. I will catch him and teach him a lesson. Do you know where he is?” In the test session, participants were asked by the fox, “Would you tell me where he is if you know the place to stay?” The response of participants were recorded.

III. Results

Children’s behaviors were classified in three of Deception, Active deception and Passive deception. Table 1 shows three type of behavior at a function of age.

Table 1
The Number of Children based on each Type of Support to Other

		Age		
		3	4	5
Response Type	All	2	1	7
	Active Support	0	0	7
	Passive Support	2	1	0

The Number of “Deception”

“Deception” is a child’s behavior including pointing a red house where a monkey is not, telling the fox that a monkey is not in the red house, or telling that a monkey is in a blue house and a child’s response to a fox at all or said that he/she did not know. Figure 1 shows total help behavior at a function of age.

χ^2 test was significant ($\chi^2(2)=9.33, p<.01$). The residual analysis indicates that the difference between 5 years old and 4 years old children was significant ($r=3.01, p<.01$) and the difference between 5 years old and 3 years old children was significant if significant level is 10% ($r=1.92, p<.10$) although the difference between 3 years old and 4 years old children was not significant ($r=1.10$).

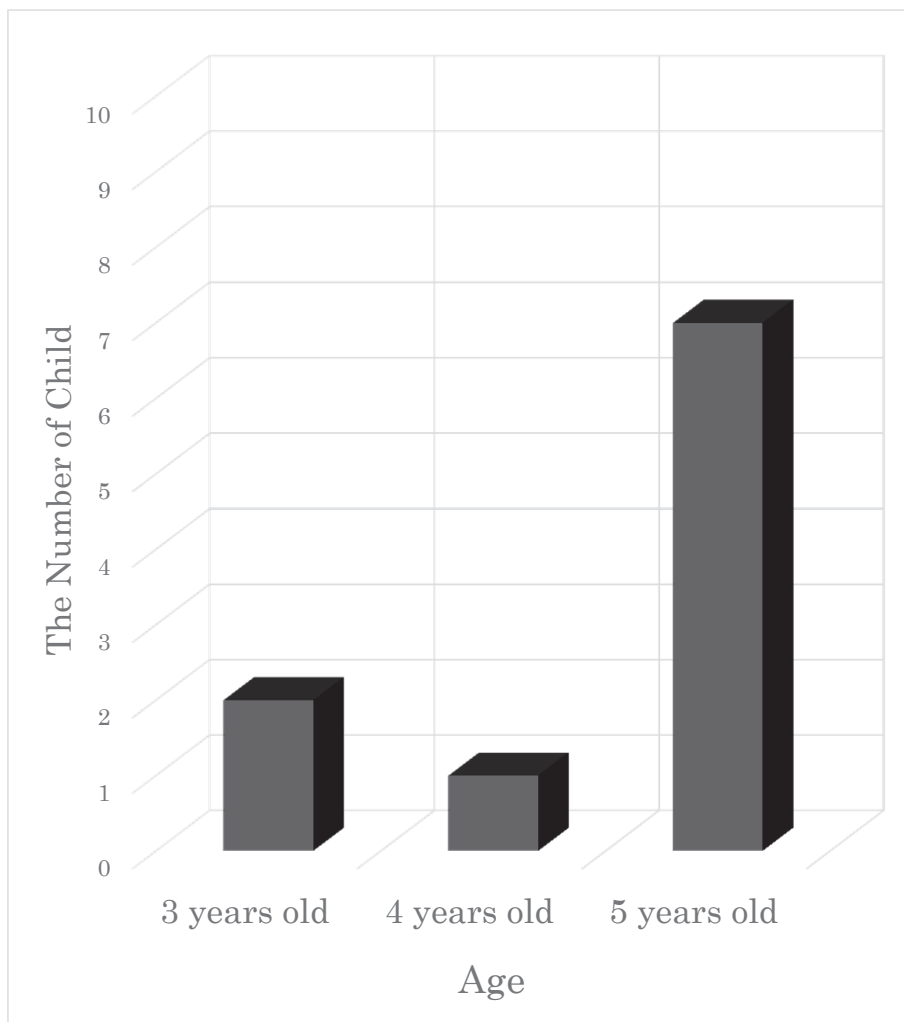


Figure 1

Deception: The number of children who deceive a fox to help a monkey on the puppet play.

The Number of “Active Deception”

“Active deception” is a child’s behavior including pointing a red house where a monkey is not or child or telling the fox that a monkey is not in the red house or telling that a monkey is in a blue house. Figure 2 shows the number of “Active deception”.

χ^2 test was significant ($\chi^2(2)=18.26, p<.01$). The residual analysis indicates that the difference between 5 years old and 4 years old children was significant ($r=4.27, p<.01$) and the difference between 5 years old and 3 years old children was also significant ($r=4.27, p<.01$) although the difference between 3 years old and 4 years old children was not significant.

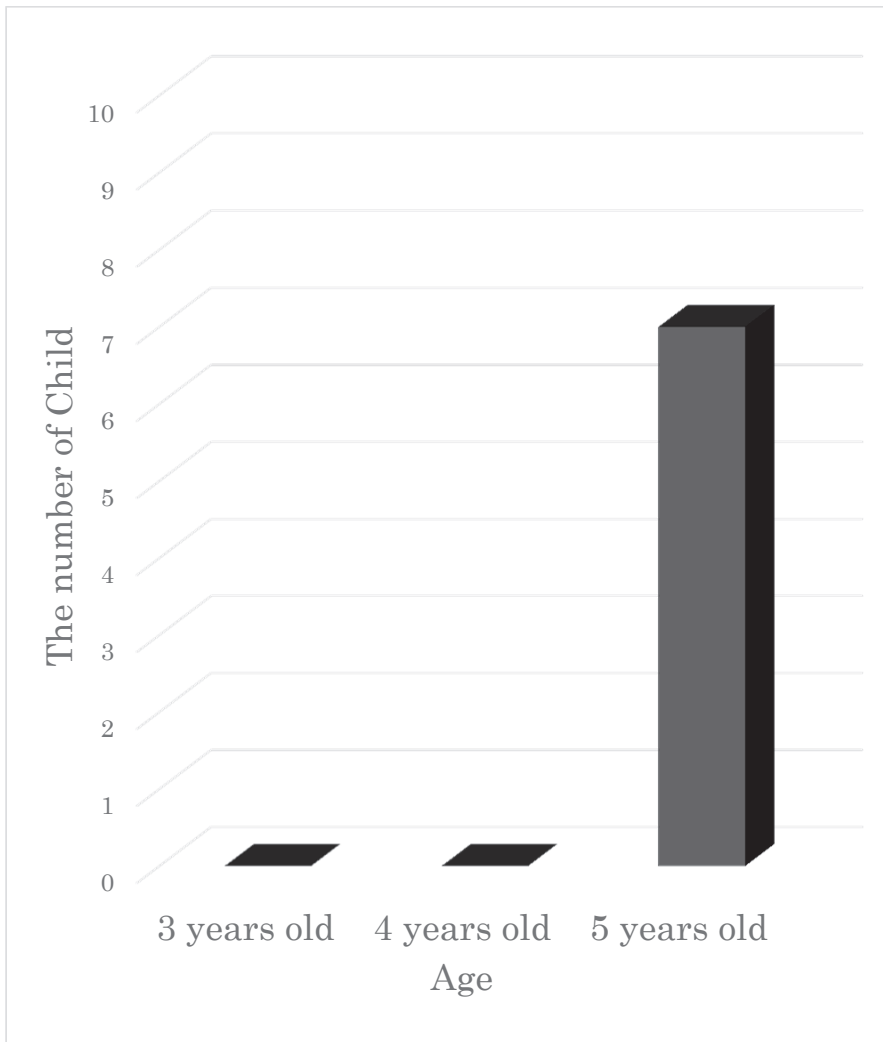


Figure 2

Active Deception: The number of children who tell a lie to a fox to help a monkey on the puppet play.

The Number of “Passive Deception”

“Passive deception” is child’s response to a fox at all or said that he/she did not know. Figure 3 shows the number of “Passive deception”. χ^2 test was not significant ($\chi^2(2)=2.22$)

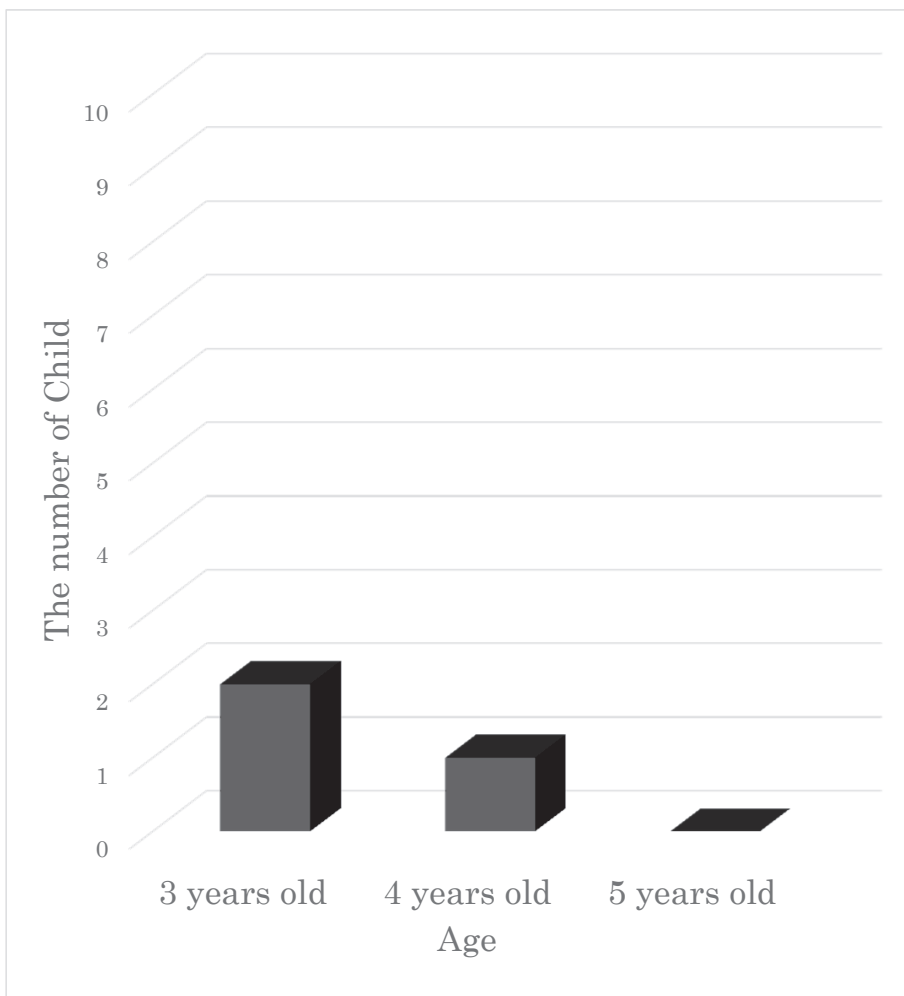


Figure 3

Active Deception: The number of children who tell a lie to a fox to help a monkey on the puppet play.

IV. Discussion

The main results of this experiment are as follows. (1) On “Deception” the difference between 5 and 4 years old children was significant and the difference between 5 and 3 years old children was marginally significant although the difference between 3 and 4 years old children was not significant. (2) On “Active deception,” the difference between 5 and 4 years old children and the difference between 5 and 3 years old children were significant although the difference between 3 and 4 years old children was not significant. (3) On the “Passive deception” there was not significant. These results are discussed in following according to the purpose of this study.

The first purpose of this study was to examine when child deceive others for protecting them. The results of “Deception” shows that the difference between 5 and 4 years old children was significant and the difference between 5 and 3 years old children was marginally significant although the difference between 3 and 4 years old children was not significant. These results suggest that children younger than five years old cannot deceive other to protect someone but 5 year old children can do.

The second purpose of this study was to examine the assumption that 4 years old children acquire theory of mind but they respond at the false belief task correctly because the false belief task does not fit Japanese young children. The result of “Active deception” shows that the number on 5 years old children is more than 3 and 4 years old children. And the results of “Passive deception” shows that there are no significant among three ages. These results indicate that children less than 5 years old did not deceive neither actively and passively although 5 year old children deceive both actively and passively. These results suggest that Japanese children do not acquire theory of mind until 5 years old. Children younger than 5 years old do not acquire theory of mind so that they cannot deceive others.

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VI. Summary

The purpose of this study was to examine when child deceive others for protecting them. The second purpose of this study was to examine the assumption that 4 years old children have theory of mind but they respond at the false belief task correctly as the false belief task does not fit Japanese young children. In this study 3 years old 4 years old and 5 years old children were presented a story in the puppet play. In the story a monkey and a fox appear. The monkey told child that he is run after by a fox. The fox will torment the monkey, if the fox catch the monkey. And the monkey asks children to help the monkey. The monkey hide in the red house. Then the fox appeared and told them that the fox am looking for the monkey. The fox asked them to tell where the monkey is. The results of deception show that he difference between 5 years old and 4 years old children was significant and the difference between 5 years old and 3 years old children was marginally significant although the difference between 3 years old and 4 years old children was not significant. The result suggests that children younger than five years old cannot deceive other to protect someone.

