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THE RELATIONS OF CHILDREN'S NARRATIVES ABOUT HYPOTHETICAL SITUATIONS TO THE CONTEMPORANEOUS EMPATHY-RELATED RESPONSES AND THE FUTURE MORAL DEVELOPMENT

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Abstract

The purpose of the present study was to examine the relationships of children's responses in hypothetical moral situations to the contemporaneous prosocial and empathy-related responses in the laboratory and future moral development. Prosocial and empathy-related responses (verbal response to person in distress, and facial expressions of disgust and concern) were observed in the three situations (an adult simulating distress and viewing two video clips involving a crying baby and a cartoon character in distress respectively). 5- 8months later, moral development was assessed with mother's-reports. Contemporaneously, the narrative measure of prosocial behavior was significantly associated with the facial expression of concern to the distressed adult, but not with the verbal response and the facial expression of disgust. The narrative measures of prosocial behaviors and guilt were associated with each relevant scale of maternal report across the two ages.

Key Words : moral development, narrative story stem technique

INTRODUCTION

There have been many approaches in the field of moral development, in which cognitive-developmental paradigm has been prevalent for more than thirty years. In cognitive-developmental theory, it is assumed that moral action is mediated by such cognitive process as moral definitions, moral beliefs, and moral reasoning, and that the young child's self is a-moral in nature (Blasi, 1980). Research based primarily on the cognitive theory, for the most part, begins with the school-age children and often involves verbal responses obtained from children using a standard set of moral dilemma

items.

Recent research in developmental psychology, however, has revealed that by 3 years of age, under normal conditions, the child's self is a moral one (Barrett, Zahn-Waxler, & Cole, 1993; Dunn, 1987; Emde, Biringen, Clyman, & Oppenheim, 1991; Emde, Johnson, & Easterbrooks, 1987; Kochanska, Casey, & Fukumoto, 1995). Children as young as 2 years have already acquired an appreciation of moral standards, that is, internalized coherent rules about what to do and what not to do in a variety of situations. Such ideas of good and bad for the child appear to originate in feelings linked to acts or the contemplation of acts, that cause distress to another or provoke adult disapproval (Kagan, 1987). According to one formulation, early emotional distress following other's distress evolves into guilt feelings and becomes closely interwoven with empathetic and prosocial feelings (Zahn-Waxler & Kochanska, 1990). In other words, the moral development in early childhood has not only a cognitive aspect but is an intensely emotional process.

In addition, according to Emde and his associate, early moral development is based on knowledge that is organized procedurally (Emde, *et al.*, 1991). Infants (like adults) come to act in accordance with a variety of moral rules about what to do in various contexts, but need not explicitly recall these rules in order to follow them. Similarly, in another view by Mize and Ladd (1988), much of the children's social behavior is based on scripts, which are often translated into action without conscious reflection or awareness. Thus, the cognitive paradigm is considered inappropriate for assessing young children's procedural knowledge and scripted base for action. While pure cognitive approach could be applied to older children and adults, such a position would fail when applied to young children. It is necessary to explore the child's moral development using the different paradigm than those used in cognitive approach.

Recently, Buchsbaum and Emde (1990) have devised a play narrative technique, which is informed by recent developmental and psycholinguistic research, and by technique originated from play therapy. This technique aims to elicit children's narrative by providing children with "story stems" or the beginning sections of stories using doll plays, and the children are then asked to continue the stories. According to their report, this play narrative technique is useful in eliciting children's representations of affective themes as related to moral conflict. Children as young as 36 months were able to produce a considerable amount of verbal and behavioral responses concerning moral development in narrative form. By encouraging children to enact, this technique can elicit more emotional responses than do verbal procedures, with the result that the children's responses thus obtained are more realistic (Eisenberg, Fabes, Minore, Mathy, Hanish, & Brown, 1994). Additionally, since enacted procedure provides a way to address the child's behavioral style, or procedural knowledge (Buchsbaum, Toth, Clyman, Cicchetti, & Emde, 1992), it is suggested that play enactment technique can tap the child's procedural knowledge which in turn may reflect the nonconsciousness underlying children's responses (Clyman, 1991). From the point of view of the script, enactive assessment also reveals more of the scripted base of children's actions in routine social situations, due to its ability in promoting active rather than reflective responding (Mize & Ladd, 1988). Regarding the stability of the narrative measures, it was

shown that there was continuity across one-year period (Oppenheim, Nir, Warren, & Emde, 1997). In addition, this paradigm avoids some of the problems of behavioral and contextual specificity that have plagued observational paradigms (Buchsbaum *et al.*, 1992). Thus, play narrative technique seems to offer a promising opportunity for learning more about early moral development.

Although there is no doubt in that children's responses to story stem are the expressions of internal representations, it is not clear as to the extent to which the response reflects real-life behaviors. We agree with the view of Kochanska and her associates that the relation between children's thought and feelings about moral issues as revealed in response to hypothetical situations and their actual conduct remains one of the fundamental thorny issues in research on moral development (Kochanska, Padavich, & Koenig, 1996). While children's responses to stories are often treated as the reflections of moral development or moral sensibility (Buchsbaum & Emde, 1990 ; Buchsbaum, *et al.*, 1992 ; Dunn, Brown, & Maguire, 1995 ; Zahn-Waxler, Kochanska, Krupnick, & McKnew, 1990), there is little evidence regarding the relation between children's responses to the story and their real behaviors in life. Although Buchsbaum and Emde (1990) described that their data were promising in discovering linkages between affective themes presented in the narrative and the actual behavior in life, it should be pointed out that their expectation is based on one single case. There was only moderate contemporaneous relation of children's objective conscience measures to some theme in narrative measures, but not to other themes (Kochanska *et al.*, 1996). It is necessary to clarify the relation between children's response to the story and the actual behavior in order to further use the narrative measures as reflecting the actual behaviors.

Thus, one purpose of this study is to explore the relation by examining the degree to which the narrative measures contemporaneously reflect the actual behaviors. As a first attempt, we focus on prosocial behavior. Prosocial and Empathy-related behaviors in the laboratory were measured in three situations (an adult distress simulation and viewing two video clips involving a crying baby and a cartoon character in distress respectively). Three kinds of prosocial and empathy-related responses were observed : verbal responses towards or about the distressed person, and facial expressions of disgust and concern. Concern and disgust are indexes of sympathy and personal distress, respectively. According to Eisenberg and her associates, personal distress is a self-focused, aversive reaction to the experience of the other's emotional state, and empathic arousal results in sympathy or personal distress depending on the level of empathic arousal. Sympathy have been conceptually linked with altruistic motivation and empirically associated with prosocial behavior (Eisenberg & Miller, 1987 ; Miller, Eisenberg, Fabes, & Shell, 1996), whereas personal distress has been linked with egoistic motives and low levels of altruism (Eisenberg & Fabes, 1990). It is hypothesized that children who display prosocial verbal response or the facial expression of concern have higher level of prosocial narrative measures, whereas those with facial expression of disgust, lower level of prosocial narrative measure.

Another objective of this study is to explore the predictability of children's responses using narrative technique for future moral behavior. The differences in the

children's real life behaviors might produce the differences in representations of their experiences, which in turn become expressed in their responses to story narratives. Conversely, children's representation about moral issues might regulate their conduct (Kochanska *et al.*, 1996). Although the links between representation and behavior need to be treated in the two-directional way, its relationship has always been supposed in one-direction: from behavioral experience to internal representation. In clinical therapy, it is widely known that children's verbal representations control their actual behavior (Slade, 1994). In order to study this possibility, we examined the relation of the narrative measures to future actual behaviors. Moral conduct was assessed by using maternal report for child's conscience, " My Child " (Kochanska, DeVet, Goldman, Murray, & Putnam, 1994). This questionnaire was designed to measure multiple aspects of conscience, with good psychometric qualities and was predictive of children's behaviors in laboratory.

METHOD
Subjects

Subjects in this study consisted of two groups. One group (16 boys and 14 girls) had children who visited the health centers in Sapporo City for physical check-up at 18 months and their mothers who were agreed to participate in a longitudinal study involving laboratory observation. Another group (6 boys and 4 girls) had children who were going to enter an experimental kindergarten affiliated to the Research and Clinical Center for Child Development in the Faculty of Education, Hokkaido University. At the time of laboratory assessment, children's ages of the first group ranged from 41 months to 45 months (mean=42.7 months) and those of the second group ranged from 45 months to 53 months (mean=48.8 months). When their mothers completed the questionnaire of conscience, the range of children's age for the former was from 49 months to 52 months (mean=50.4 months), and for the latter, the range was from 50 months to 58 months (mean=53.7 months). All subjects were psychologically and family-wise normal children. The relation of narrative measures to laboratory measures was examined only for the former group, and the relation of narrative measures to future moral development was examined for both groups.

Children's Narrative Measures of Moral Development

Procedure.   During the narrative session, with a few exceptions, the experimenter and the child sat at a small table facing each other without the child's mother's presence. If the child insisted the mother's presence, she stayed in the laboratory but was kept out of view. In each narrative assessment, the experimenter began a story stem using doll plays, and encouraged the child to complete the story (i. e. saying " show and tell me what happens next "). The set of dolls used included a rabbit family (Sylvanian family) which had a mother, a father, and two children (one younger and one older). Two children doll was chosen whose gender was the same as the child being tested. When a peer (a squirrel doll) was involved in the story stem, she or he was also designated the same gender as the subject. The child's spontaneous verbal and/or behavioral responses were followed up by nondirective prompts by the experi-

menter. The Experimenter typically repeated the child's utterance and/or articulated what was enacted behaviorally for the purpose of clarification. This often led to further enactments and/or verbalizations. Standard probes were used when the child did not want to continue the stories. The first more general probe (e. g., " what do they do ?") was followed by a more concrete one (e. g., " what do A (the protagonist's name) do when B (a peer's name) knocks down his block building ?").

Before the actual test, a " warm-up " story stem concerning a birthday party was demonstrated to make sure the child understood the game and was sufficiently motivated. We presented the following story stems to children who had exhibited more than three of the following four criteria by the end of the warm-up session ; (a) talking to the experimenter, (b) manipulating the dolls, (c) talking through the character, (d) saying something that relates to the birthday party story. Two boys who did not meet these criteria, and one boy who refused to respond to all stories in spite of having met these criteria, were excluded from the study.

The story stems.   Nine story stems were used. Some of them were adapted from past work (e. g., MacArthur Story-Stem Battery (MSSB), Oppenheim, *et al*, 1997 ; Buchsbaum & Emde, 1990 ; Mize & Ladd, 1988), and others were developed by us. These story stems were selected in order to investigate three themes in moral development : Empathetic or prosocial theme, rule abidance theme, and guilt theme.

Three moral stems for eliciting empathic or prosocial responses were as follows. (1) Bicycle (Buchsbaum & Emde, 1990) : a peer was in distress after falling off a bicycle and getting hurt. (2) Crying Baby : a baby was crying in the crib while the mother was absent. (3) Dropping A Candy ; a peer was in distress because of having dropped a candy.

Other three story stems were selected to probe the child's representation of rule abidance in the face of a temptation to violation. (4) Nap (Buchsbaum & Emde, 1990) : mother told the protagonist to go and take a nap in a bed right next to a toy box. (5) Bike Dispute (adapted from Buchsbaum & Emde (1990), with the modification of substituting a bicycle for a horse) : a peer pushed the protagonist off a new bicycle. (6) Block Building (Mize & Ladd, 1988) : a peer prevented the protagonist from playing with his/her blocks because he or she had been playing first, and knocked down the protagonist's blocks. The last two stories focused on the theme of restraining aggression in the face of conflict.

Other three story stems probed the child's guilt response. (7) Wet Pants (Buchsbaum & Emde, 1990) : the protagonist had an accident of wetting his or her underpants. (8) Spilled Juice (MSSB) : the protagonist spilt the juice. (9) A Stuffed Bear : the protagonist broke a peer's new stuffed bear.

Coding.   The data was coded from the videotapes. For each story, we coded whether or not the subject/protagonist exhibited a verbal and/or enactive response related to the story. For example, we coded only empathic/prosocial response in Bicycle, Crying Baby, and Dropping A Candy story, and did not code these responses expressed in other stories. When the subject/protagonist expressed the response related to the story, the subject received a score of one for each story, and when otherwise, the subject received a score of zero. The Nap story was excluded from the coding,

because in this story almost all subjects exhibited compliance to the mother, that is, a protagonist immediately went to take a nap as told. The empathy/prosocial responses included such as behaviors or utterance as showing helping (applying a Band-Aid), sharing (giving a candy to the peer), and soothing (holding the baby in the arms).

For Bike Dispute and Block Building story, we coded the presence of aggression of the subject/protagonist, such as hitting, punching, and kicking, enacted or verbalized (1=present, 0=absent). For these two stories, we also coded whether or not the subject recognized that to have a quarrel with peer was bad. For example, when the subject/protagonist expressed a sense of affiliation to the peer (playing together), or a mother scolded the peer, the subject was judged to have recognized that quarrelling was bad.

For three guilt stories, we coded whether or not the subject/protagonist felt guilty. For example, when the subject became quiet and subdued, the mother scolded the protagonist, or the protagonist made amend or apologized, the subject was judged to have felt the guilt. For each subject, scores for prosocial, aggression, recognition of dispute, and guilt were summed across stories. As a result, these scores indicated the number of narrative stems in which subject/protagonist exhibited relevant responses. For prosocial and guilt stories, we also coded whether or not all figures (containing the protagonist) express relevant responses. There seems to be a possibility that the subject have another person help or repair because the protagonist is incapable of doing by his- or herself. Hence, there were two kinds of scores for prosocial behavior and guilt.

Children's Prosocial Responses in the Laboratory

Procedure for assessing children's prosocial and empathy-related responses in the laboratory is described in another paper in this volume (Hoshi, Kusanagi, Chen, & Takahashi, in press). Children's verbal prosocial responses (for example, " Are you all right ? "), and facial expressions of disgust and concern in each situation were coded form the video tapes. We gave a score of one to the child when he or she expressed each response.

Maternal Reports of Children's Conscience

Thirty-four mothers filled out " My Child ", a 100-item questionnaire with multiple conscience scales. The response format was a Likert-type scale, with score 1 for " extremely untrue, not at all characteristic " of my child and score 7 for " extremely true, very characteristic " of my child. These scales were as follows (our alpha in parentheses) : (1) guilt, remorse/other emotional reactions after transgression, mishap, wrongdoing (.67), (2) concern over good feelings with parent after wrongdoing (.89), (3) confession (.76), (4) apology and/or promise not to do it anymore (.89), (5) reparation/amends (.81), (6) concern/corrections occasioned by others' transgressions (.73), (7) internalized conduct (spontaneous self-correction/self-regulation/compliance without surveillance) (.89), (8) empathic, prosocial response to another's distress (.90), (9) symbolic reproduction of /dealing with wrongdoing (.79), (10) sensitivity to flawed or damaged objects, themes of wrongdoing (.55).

RESULTS

Children's Responses to the Narrative Story Stems

Table 1. shows the percentages of subjects that exhibited prosocial, guilt, aggression, or recognition of dispute being bad for each story stem. In all guilt/reparation stories, more than seventy percent of the subjects constructed stories in which at least one figure expressed guilt feelings or reparative responses. In all prosocial stories, more than fifty percent of the subjects constructed stories in which at least one figure behaved prosocially. In both conflict with peer stories, however, only about thirty percent of the subjects acknowledged that quarrelling with a peer was bad. No gender differences were found for all narrative measures.

Correspondence between the Narrative and Laboratory Measures for Prosocial Behavior

Because of the absence of gender differences in both scales of My Child and the narrative measures, we combined all subjects in the analysis. Fisher's exact tests were carried out to evaluate the association between narrative prosocial measures, and prosocial and empathy-related responses in the laboratory. Subjects were divided into two groups based either on the median of each of the narrative prosocial score or on the presence/absence of each response in each laboratory situation. There was a significant association only between the narrative prosocial measure for subject/protagonist and the facial expression of concern in the adult's pain situation ($p<.05$, one-tailed test). However, the association between the narrative prosocial measure for all figures and the facial expression of concern to the adult was not significant. The facial expressions of concern observed when viewing the video clips yielded no significant association with the narrative prosocial measures. Subject's disgust and verbal responses of concern in each of the three situations were found to have no significant association with narrative prosocial measures.

Table 1 Percent of Subject Expressing Response

	Protagonist/Subject	All Figures
Prosocial		
Bicycle	37.8	62.2
Crying Baby	51.4	56.8
Dropping A Candy	21.6	56.8
Guilt/Reparation		
Wet Pants	37.8	73.0
Spilled Juice	70.3	81.1
A Stuffed Bear	56.8	78.4
Aggression		
Bike Dispute	32.4	
Block Building	29.7	
Acknowledging quarreling being bad		
Bike Dispute	35.1	
Block Building	32.4	

The Predictability of Narrative Measures for Maternal Report of Children's Conscience

We divided subjects into two groups based on the median of each of the narrative score, and examined the associations between the narrative and the maternal report of children's conscience measures by t-test. The result was presented in table 2. (When we conducted Wilcoxon 2-sample test with continuity correction of .50 to confirm the result, the same results as that by t-test were obtained.) Children with higher score for the narrative prosocial measure for the subject/protagonist had significantly higher score than those with lower score on the following conscience scales : guilt ; concern about good feelings with parent after wrongdoing ; empathic prosocial response. In addition, as was expected, children with higher score in the narrative sessions for guilt for all figures showed significantly higher score on the guilt scale of the questionnaire than those with lower score. No significant association between the other narrative measures and the subsequent children's conscience measures was found.

DISCUSSION

The results of this study provided some support for the view that the narrative technique has potential as a tool for obtaining data from young children about their moral behaviors in real lives. The responses to the story stems appear to have both contemporaneous and predictive validity to some extent.

Contemporaneously, children's facial expression of concern in the simulated experimental situation showed significant association with the amount of prosocial response to the story stems. As mentioned in the introduction, sympathy for the other has been theoretically linked with altruistic motivation and empirically associated with prosocial behavior. Our result has confirmed this linkage, and has provided evidence indicating the existence of correspondence between narrative measures and objective behavior measures. However, our result did not show a significant association between the children's prosocial narrative measures and prosocial verbal responses of concern in each of the three situations. In addition, our result did not support the view that the subject's personal distress is connected more with egoistic motives and low levels of altruism as argued by Eisenberg and Fabes (1990), for no relation between narrative

Table 2   Relations of Narrative Measures to Scales of Conscience

Scale of My Child	Narrative Measures		
	Higher M (SD)	Lower M (SD)	t
	Prosocial response of the subject/protagonist		
Guilt	4.95(.41)	4.44(.59)	−2.67*
Concern about good feeling with parent	5.26(.79)	4.19(1.34)	−2.71*
Empathic prosocial Response	5.48(.60)	4.95(.69)	−2.05*
	Guilt/reparation of all figures		
Guilt	5.01(.38)	4.59(.56)	−2.46*

* p < .05.

prosocial measures and disgust expression to the person in pain or a distressed others in the video clips was obtained. These unexpected results concerning the verbal response and disgust in the adult distress in simulated situation appear to be due in part to the low frequency of these responses in this situation: only five children displayed each of the responses. In addition, the contents of video clips and/or film viewing might be inappropriate for measuring the empathy-related response, because narrative prosocial measures were associated with children's facial expression of concern in simulated adult distress, whereas not with those in film viewing. According to the Eisenberg and Miller's (1987) meta-analysis of literatures concerning the relation between empathy and prosocial behavior, the method of assessing empathy did influence the strength of the relations obtained. While children believed that an adult in pain in experimental situation were real, they probably knew that crying baby in the video clip was not here and now, and the animation character was only fictional.

Across time, the prosocial behavior and the sense of guilt as displayed in the hypothetical situations showed relation with the empathic and the prosocial response and guilt feeling, respectively, in actual life. This result implies important possibility that the internal representation and/or procedural knowledge of the child at one time can influence his/her behavior later on. In addition, it is surprising that children's responses to only three stories predicted the future behaviors. For the result of Weidman and Strayhorn (1992) showed that it was necessary to administer "twenty-six" stories in order to provide some validation for the prosocial choice measure in the hypothetical situations. Our result seems to indicate the effectiveness of the play narrative technique in predicting the children's moral development. This effectiveness appears to be due to coding not only the verbal response but also the enactive responses. In fact, there are evidences that the enactive response, or both the enactive and the verbal responses using puppets had more predictive power than only verbal response (Kobayashi, 1993 ; Mize & Ladd, 1988).

Prosocial responses to narrative story stems have also indicated the cross-time associations with the scales of guilt and concern over good feelings with parent. According to Hoffman (1988), empathic distress occasioned by pain or distress in others that is caused by the observer will be transformed by self-blame into a feeling of guilt. In fact, there are evidences to support the association between the feeling of guilt and empathy (Zahn-Waxler, Kochanska, Krupnick, *et al.*, 1990 ; Thompson & Hoffman, 1980). Based on this view, the association between the prosocial responses to story stems and guilt in future actual life can be expected, because both have a common origin, that is, empathy. It is not surprising that the prosocial narrative measure and the scale of concern over good feeling with parent after wrongdoing were associated, given that guilt is theoretically related to the former as described above, and is empirically related to the latter (Zahn-Waxler, Kochanska, Krupnick, *et al.*, 1990). It is suggested that guilt is mediated by empathy and concern about interpersonal relationships.

The responses to the story stems about conflict with peer were found to have no association with the future moral development. This result is likely due to the fact that subjects in this study had not sufficiently internalized the standard concerning peer

relationships, because most of them did not have the experience of living in group, that is, they did not go to kindergarten or to nursery school. Maybe, they are on the way to internalizing the rule for interacting with peers.

In this study, we explored the contemporaneous relation between the narrative measures and the objective measures only concerning the prosocial behavior. In future study, the correspondence between other narrative measures and other moral behaviors (guilt and reparation behavior, and aggression) should be addressed. In addition, the predictive validity of the narrative measure needs to be studied observing behavior in real life, instead of relying on maternal report. Although in this study we coded the responses without making distinction between the verbal and the enactive response, it might be better to code these responses separately. For, these responses might be different in nature, that is, verbal responses are expressions of declarative knowledge and the enacted responses are expression of procedural knowledge. If procedural knowledge is in deep unconsciousness, it is expected to be developmentally more invariable and more predictable of actual behaviors than declarative knowledge. In addition, to examine the relation between verbal response and enactive response is associated with very interesting issue. Some theorists argued that declarative knowledge domain is susceptible to persuasive distortion and is more distant from a core self built up from prior sensorimotor experience or procedural knowledge (Stern, 1985 ; Winnicott, 1965). In contrast to this view, Emde's theory of the affective core of self (1983) has emphasized continuity of self. We think the narrative story stem technique might be useful to address this issue. We believe that future work using the narrative technique will lead to greater understanding of the child's internal world.

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