Does a Mother’s Praise Foster Her Child’s Social Competence?

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Abstract
We aimed to clarify the effects of mothers’ praise—when their children were 18 months—on the trajectory of their children’s social competence from 18 months to 30 months. The participants were 194 mother-child dyads whose interaction was observed when the children were 18 months and 30 months. The features of mother-child interaction were examined using the Interaction Rating Scale (IRS) as an aspect of social competence. Logistic regression analysis was performed with the trajectory of social competence from 18 months to 30 months as the dependent variable and the actual behaviors of caregivers’ praise as independent variables while controlling for the children’s gender and the mothers’ age and educational background. It was found that the mothers’ actual praise-related behavior influenced the trajectory of their children’s social competence from 18 months to 30 months.

Keywords:
Child development, Praise, Social competence, Caregiver-child interaction, Longitudinal study

1. Introduction
Many studies have suggested that positive parenting behavior is associated with the development of children’s social competence. The security of the parent-child attachment relationship, which is partly attributed to the sensitivity and responsiveness of the caregiver, provides children with resources such as emotional security and a sense of autonomy. Consequently, these resources empower children to explore peer relationships1-5). Children derive working models from parent-child attachment relationships, that is, they internalize an enduring blueprint or set of expectations about how interpersonal relationships work4,5).

Parental warmth and engagement are associated with children’s prosocial behavior toward their peers6,7). Mothers who are positive and agreeable tend to have children who exhibit similar forms of behavior and affect with their peers8). Further, inductive disciplinary styles, in which parents emphasize reasoning, are predictive of children’s use of prosocial behavior5,10).

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Thus, in the process through which the positive relationship of caregivers with their children leads to the development of the latter’s social skills, praise is considered to be one of the most important factors.

Previous studies on praise have shown that parents’ positive verbal feedback in the early stages of development is related to children’s achievement incentive\(^{11,12}\), and a high frequency of praise is also related to the development of high self-esteem in children\(^{12-14}\). However, these reports have focused on 14-year-old children who were studied and followed up from the age of 2, and few studies on toddlers of less than 2 years have been conducted.

With the increase in the antisocial behavior and aggression of school-aged children, researchers have begun taking a keen interest in the development of children’s social competence. There is an urgent need for health care and welfare specialists to develop an evaluation method for assessing the development of children’s social competence and to apply this method when administering child care. However, in Japan, there are few evaluation methods to assess the development of children’s social competence. Therefore, we developed a Japanese version of the Interaction Rating Scale (IRS), which can be used to assess several aspects of children’s social competence easily and accurately. The reliability and validity of the IRS has been reported in another paper and has been found to be satisfactory\(^{15}\).

We conducted a longitudinal study to examine the relationship between the trajectory of children’s social competence from 18 months to 30 months and actual behaviors of caregivers’ praise after controlling for confounding factors. We laid particular emphasis on actual behaviors of caregivers’ praise in a situation involving mother-child interactions when the children were 18 months.

2. Methods

2.1. Participants and Overview

The participants were parents and children who were enrolled in a longitudinal study of social development (which was conducted as part of a project initiated by the Japan Science and Technology Agency [JST]). The children and their mothers were recruited from two Japanese cities. Finally, 194 mother-child dyads were selected for the study, and the same dyads were observed at 18 months and 30 months.

The laboratory observations were performed when the children were 18 and 30 months, and the mother-child interactions were videotaped. Before the research commenced, the participating families were required to sign an informed consent form, and were made aware of their right to withdraw from the study at anytime. Both the content and procedure of this research were approved by the ethics committee of the JST.

2.2. Measures

Structured questionnaire survey was administered to collect information on the mothers’ parenting styles and the children’s rearing environment when they the children were 18 and 30 months old; the questionnaire also elicited information about the children’s gender and the mothers’ age and educational background.

The children’s social competence and the mothers’ competence with regard to child rearing were assessed using the IRS when the infants were 18 and 30 months. The IRS consists of 10 subscales: 5 subscales measure child-related factors, and 5 subscales measure caregiver-related factors. The child-related subscales are (1) Autonomy: Child initiates interaction with caregiver; (2) Responsiveness: Child is responsive to caregiver’s behavioral cues; (3) Empathy: Child behaves in accord with caregiver’s affective expression; (4) Motor regulation: Child’s behavior is clearly directed toward the task and he/she is not overactive/underactive; and (5) Emotional regulation: Child adjusts his/her emotional state to a comfortable level.

The caregiver-related subscales are (1) Respect for autonomy development: Partner encourages child’s autonomy; (2) Respect for responsiveness development: Partner encourages child’s responsiveness; (3) Respect
for empathy development: Partner encourages child’s empathy development; (4) Respect for cognitive development: Caregiver encourages child’s cognitive development; and (5) Respect for social-emotional development: Caregiver encourages child’s social-emotional development.

The 36 items of the IRS were based on the items of the Nursing Child Assessment Satellite Training (NCAST) teaching scales, and we also referred to the Home Observation for Measurement of the Environment (HOME) and the Social Skills Rating Systems (SSRS).

The items of the IRS were coded through observations of mother-child interactions. Mother-child interactions were videotaped from five different angles in a laboratory, in which five video cameras with microphones were fixed. Mother-child interactions were observed to evaluate the children’s social competence and the mothers’ competence with regard to child rearing. Details regarding the experimental setting and how the observations were conducted are as follows. The mothers were told to play with their children as they normally would at home. Such a setting was used to assess the mother-child interaction style because it permitted us to observe spontaneous interaction in a relatively natural setting while, at the same time, allowing for a certain degree of experimental control and standardization. The entire process of the mother-child interactions was videotaped to yield three-dimensional recordings. The room in which the interactions were observed had four video cameras fixed at the four corners of the room and one fixed on the ceiling. The dyads were escorted to a playroom furnished with a small table, a small-sized chair meant for children and toys (small dolls, mini cars, and plastic toys).

The free play activity was standardized for all the mother-child dyads: all the children were made to play with building blocks with their mothers; this activity was age-appropriate for the children and is also an activity that is popular in Japan. The free play lasted for 5 to 10 min, and began when the parent was given the toys by the staff. The entire process included the following: the children taking out the toys from the box, then playing with the toys along with their respective mothers, and then putting the toys back into the box. During this process, the mothers gave their children necessary instructions or help, just as they normally did in their daily lives. Three continued interactions constituted one task, and a child was made to perform only one task if he/she managed to successfully complete it at the first go.

2.3. Coding

The coders were required to be sensitive to the cues of both child and parent during the synchronous interaction, because the cues of young children are often ambiguous, confusing, and transitory. To maintain the same standards and quality of data collection, research assistants who were doctoral or master’s students were trained for over one month to code the videotapes of parent-child interaction. Each coder was trained until an interrater agreement of a minimum of 80% was obtained on the pilot tapes. To assess the reliability of the coding, two coders examined and recoded 25% of the tapes, and the consistency was found to be more than 87%.

2.4. Analysis

The Statistical Analysis System (SAS) statistical package (Ver. 9.1) was used for the analysis. A score of 1 was given when the answer to an item of the child-related subscales was “yes,” and a score of 0 was given if the answer to an item was “no”; the total score on all five subscales constituted the child total score (maximum score: 25). The child total scores at 18 months were classified into the following two groups.

- Low score group: ≤ first quartile (25%)
- High score group: > first quartile (25%)

The child total scores at 30 months were classified in the same manner as the scores at 18 months were classified. This was done because we needed to examine the changes in children’s social competence between
when they were 18 months and 30 months.

The trajectory of children's social competence from 18 months to 30 months was classified into two groups (Figure1). One group is the high score stability transition group. It contains the children with the high score in both 18 months old and 30 months old (the variable was given a value of 1). The children who did not keep the high score in both 18 months old and 30 months old were regarded as other group (the variable was given a value of 0). The two items measuring praise were (1) caregiver praises child's efforts at least once during the episode (yes = 1, no = 0) and (2) caregiver verbally praises child more than once during the episode (yes = 1 no = 0).

A chi-square test was used to examine the relationship between the trajectory of children's social competence from 18 months to 30 months and the children's gender, mothers' age, mothers' educational background (see Table 1), and the actual behaviors of caregivers' praise (see Table 2). Then, logistic regression analysis controlling for the children's gender, mothers' age, and mothers' educational background was performed, with the trajectory of children's social competence (High score stability transition group vs. Other group) as the dependent variable and the scores on the two items measuring the actual behaviors of caregivers' praise as independent variables. All the results were analyzed at the 0.05 significance level.

3. Results

The demographic details of the 194 mother-child dyads who participated in this study were as follows (see Table 1). Ninety-six (49.5%) of these children were male and 98 (50.5%) were female. The mothers were between 20 and 40 years, and more than half of them were between 30 and 39 years (136, 70.1%).

The data on the mothers' educational background indicated that the range of education of the mothers was relatively broad: 3.1% of the mothers had completed middle school, 27.2% of them had completed high school, 19.1% of them had completed some sort of vocational school education, 22.7% of them had completed a short-term college program, 26.3% of them had a bachelor's degree, and 1.6% of the mothers had a graduate degree.

With respect to the relationship between the trajectory of children's social competence (High score stability transition group vs. Other group) and the demographic data of the children at 18 months, children's gender (p = 0.0082) was significantly related to the change in their social competence; however, mothers' age and educational background were not significantly related to the trajectory of their children's social competence (see Table 1).

With respect to the relationship between the trajectory of children's social competence (High score stability transition group vs. Other group) and the two items measuring the actual behaviors of caregivers' praise, namely, (1) caregiver praises the child's efforts at least once during the episode (18M-(1)-Praise; p = 0.0324) and (2) caregiver verbally praises the child during the episode (18M-(2)-Praise; p = 0.0659), when the child was 18 months old were significantly related to the change in the children's social competence (see Table 2).

The multiple logistic regression analysis results showed that after controlling for the effects of the demographic data, the group of parents who praised their children's efforts (see Table 3) at least once during the episode (18M-(1)-Praise) when they the children were 18 months raised the level of the trajectory of their children's social competence (odds = 2.08, p < 0.05). On the other hand, verbally praising a child during the episode (18M-(2)-Praise [odds = 1.85, p=0.0549]) was not significantly related to the trajectory of children's social competence (see Table 4).
4. Discussion

In this study, we examined the longitudinal relationship between the trajectory of children's social competence from 18 months to 30 months and the actual behaviors of caregivers' praise when the children were 18 months, after controlling for confounding factors; we laid particular emphasis on the behaviors of caregivers' praise in a situation involving actual parent-child interactions when the children were 18 months.

The results of this study indicated that, after adjusting for the effects of the demographic data, the actual behaviors of caregivers' praise when their children were 18 months was very important in fostering a high level of social competence in their children. These findings suggested that the parents' positive behavior when the children were 18 months played an important role in the development of their children's social competence.

The children were active and had more potential than we expected, although they could not have managed without their mothers' help and support. White explained the rich potential of the development of competence in ensuring the healthy development of a child. Competence is defined as "abilities that the person is effectively related with the environment." In the development of a child's competence, his/her mother's response to him/her is important; that is, the accumulation of quick and appropriate responses of the mother to her child's needs (the baby's cries, calls for help, etc.) leads to the development of the child's self-esteem. It is considered that an infant's positive response to the environment as the infant's self-esteem develops affects the development of his/her social competence later on in life.

On the other hand, regarding the parent-child interaction after infancy, many studies have shown that the more positive the parent-child interaction, the higher will be the child's level of social competence later in life. Mothers with high levels of social competence and their children display more positive behavior and emotions, and the extent to which mothers give their children autonomy during play and while teaching them things has been found to predict positive assertiveness in preschoolers. This is because such mothers often respond to their children's emotions in constructive ways, and the children imitate their mother's social and emotional behavioral patterns.

In a recent neuroscience study, 19 college students participated in functional magnetic resonance imaging (fMRI) experiments involving monetary and social rewards. Izuma et al. reported that the acquisition of a good reputation robustly activated reward-related brain areas, notably the striatum, and these overlapped with the areas activated by monetary rewards.

The results of this research also suggested that parents' attitudes concerning positive parent-child interaction through the use of praise has a very significant effect on the development of their children's social competence later in life, as was determined by both single analysis and multiple analyses after controlling for demographic information variables. The other extremely interesting finding is that the actual behaviors of caregivers' praise—when their children were 18 months—in a situation involving actual parent-child interactions influenced the trajectory of children's social competence from 18 to 30 months. A follow-up study should be conducted to further clarify the mechanism underlying the effect of interactions involving praise by considering not just the mother's praise-related behaviors but also those of the fathers.

5. Conclusions

In this study, we examined the longitudinal relationship between the trajectory of children's social competence from 18 months to 30 months and the actual behaviors of caregivers' praise after controlling for confounding factors; we laid particular emphasis on actual behaviors of caregivers' praise in a situation involving parent-child interactions when the child was 18 months. The results of this study indicated that
actual behaviors of caregivers' praise when the child is 18 months is very important in promoting a high-level trajectory of children's social competence from 18 months to 30 months. It is hoped that caregivers and health care professionals will use these findings appropriately when providing parenting support to parents.

Acknowledgements

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Appendix

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6. References


Figure 1 The classification of the trajectory of children's social competence from 18 months to 30 months

Table 1 Demographic Information

<table>
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Table 2  The relationship between the trajectory of children's social competence and the actual behaviors of caregivers' praise

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<td>n    %</td>
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Note 18M-(1)-Praise: caregiver praises the child's efforts at least once during the episode
18M-(2)-Praise: caregiver verbally praises the child during the episode

Table 3  The relationship between the trajectory of children's social and the actual behaviors of caregivers' praise

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<th>Multiple model</th>
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<td>odds 95%CI</td>
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Note  **  0.001  *  0.01  *  0.01  p  0.05
18M-(1)-Praise: caregiver praises the child's efforts at least once during the episode

Table 4  The relationship between the trajectory of children's social and the actual behaviors of caregivers' praise

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Note  **  0.001  *  0.01  *  0.01  p  0.05
18M-(2)-Praise: caregiver verbally praises the child during the episode