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Citation	乳幼児発達臨床センター年報, 20, 43-48
Issue Date	1998-03
Doc URL	<a href="https://hdl.handle.net/2115/25329">https://hdl.handle.net/2115/25329</a>
Type	departmental bulletin paper
File Information	20_P43-48.pdf



## MASKING OF NEGATIVE EMOTIONAL EXPRESSION IN 3-YEAR-OLDS

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### Abstract

The ability to mask of negative emotional expression in 3-year-olds was examined in two different contexts. The first context was a free play session. After playing five minutes, mothers asked their children to put the toys away. The second context was a condition in which the subject received a small present not designed as being a desirable one. The disappointing present procedure of Cole (1986) was used, but some modification was made. The experimenter announced that the child would be given a present. The child was shown 5 presents. Each child rank-ordered their present. The fifth-ranked present was then given to the child. The responses of the child when mother asked to put toys away and when given the disappointing present were analyzed. The results indicated that half of the children managed to mask negative emotional expression in both sessions and that more the girls did so than the boys in the disappointing present session. There was no relation between the two sessions' responses. This suggested that masking negative emotional expression is context-sensitive. 3-year-olds may have begun to control their emotional expressions

**Key Words :** masking of emotion, emotional expression, sex difference,  
context-sensitive

### INTRODUCTION

The purpose of the study is to examine the ability to mask emotional expression in 3-year-olds. We might control or mask our expression of negative emotion if we think that demonstrating negative emotion might have undesirable consequences. Masking negative emotion often helps people maintain good social relation and avoid hurting other's feel. After infancy children enter the complicated social world. Even for young children, it is very important to be able to mask their negative emotions in order to be accepted in a social world. When will children begin to mask their negative emotions?

Sarrni (1984) designed a "disappointment procedure" in which she observed elementary school children's spontaneous behavior when they were given toys inappropri-

ate for their age. In the first session children received an age-appropriate present following the performance of an unimportant task. In the second session the present given was a baby toy. Their expressions were videorecorded and later coded as negative, positive, or transitional. 6-year-old boys showed uniformly negative expression. 6-year-old girls and both boys and girls of 8 and 9 years were frequently coded as transitional. The results Sarrni obtained suggest, like other studies (e.g., DePaulo & Jordan, 1982), that the ability to mask negative emotion emerge during middle childhood.

Cole (1986) replicated this study with several methodological changes and extended the subjects' age down to age 4 years. She found children attempted to control the display of negative emotion with positive displays and that girls did so more than boys. Cole's study is interesting to have included preschoolers who had previously not been studied for this topic, and to find that children as young as 4 years were able to mask the display of negative emotion.

There was, however, a methodological limitation in this study as Cole recognized. Disappointing presents were always administered as the second present after children received a good present. The possibility that the positive display of emotion in receiving a disappointing present carried over from the prior positive present session cannot be ruled out. The child may be polite because s/he had just received a good present. Do children who have been disappointed first behave differently?

The present study used Cole's method, but some modifications were added. First, to avoid carry over effect, children received a disappointing present not second but first. Second, the session begun after a series of tasks lasting about one hour. In the session the experimenter thanked the child for his/her effort and for participating in the experiment and announced that his/her present would be given. This procedure made certain that children establish a strong expectation to receive high valued present. This strong expectation is necessary for children to be disappointed. Third, the subjects were limited to 3-year-old children. Many developmental psychologists expect 3-year-olds to show qualitative changes in various domains. Anecdotal evidence suggests that very young children may control negative emotional expression in real-life circumstance (Maccoby 1980), but no experimental data of 3-year-olds exists to support this view.

In addition to the disappointing procedure, another observation in a different social context was conducted. Comparing children's responses in two different social contexts can reveal possible causes of individual differences in masking negative emotional expression. If masking negative emotional expression is context-sensitive, the influence of social-cognitive knowledge could be important. If not, other factors, such as the influence of temperament could be important.

## METHOD

### *Subjects*

Thirty-six subjects, 19 boys and 17 girls, between the age of 42 and 47 months (mean age=43.22 months) were observed. The subjects lived in Sapporo city and had been observed previously in the same laboratory at 18 months of age. They were from

normal families of middle class, and no cognitive or emotional disorders were known about them.

### *Procedures*

The procedures were administered by two psychology undergraduates. All children were observed individually in a laboratory in the RCCD, Faculty of Education, Hokkaido University. After a series of tasks lasting about 30 minutes a free play session was introduced. The mother and the child played with various toys in a laboratory without additional task. After five minutes, the mother was instructed to say to the child "Time is out. You must put the toys away". The subjects' responses were videotaped until the toys were completely put away. As many children resisted to stop playing with the toys, the mother was instructed to repeat the order to her child.

Other tasks were further conducted in about 30 minutes and the present session was introduced as the final task of the day. The experimenter entered the testing room with a box in which were five presents. The five were: a toy car, a small doll for baby, a piece of chewing gum, a sheet of stickers with popular TV characters, and a toy cosmetic makeup set. The experimenter said to the subjects, "You did very well. Are you tired?". Waiting children's answers, the experimenter said, "Oh really, you are a very good boy (girl). I present you a prize". The child was then shown the five items and asked to rank-ordered them by picking the best, the second best, and so on until all five were ranked. The experimenter said, "Guess which prize I will give you?". In a few seconds, the experimenter gave the fifth-ranked item to the child. The experimenter maintained a neutral expression, made eye contact until the child responded, or ended the eye contact after 30 seconds had passed. Finally the experimenter exchanged the fifth-ranked item with the first-ranked item, apologizing that a mistake was made.

### *Scoring the responses*

The scoring scheme used here was a relatively simple one. The reason for this simple scoring scheme is to increase reliability of scoring and to accommodate to the greater loss of useful data of facial expression because of children's tendency to look downward and not at the camera. The responses of the subjects were coded as follows.

Scoring of responses during the free play session :

- 0-The child did not express negative emotion at all and put toys away soon.
- 1-The child did not express negative emotion at all, nor put toys away immediately.
- 2-The child expressed negative emotion and did not put toys away immediately.
- 3-The child expressed strong negative emotion and did not put toys away immediately.

Scoring of responses during the present session :

- 1-The child did not receive the fifth-ranked present and insisted on another present.  
The child expressed negative emotions.
- 2-The child did not receive the fifth-ranked present, or did receive it but immediately

put the present back. The facial expression was neutral and not negative.

3-The child received the fifth-ranked present with neutral facial expression. Or the child did not receive the fifth-ranked present with at least partial smile.

4-The child received the fifth-ranked present with partial smile.

5-The child received the fifth-ranked present with full smile.

## RESULTS

Two coders independently scored the result by replaying the videotapes in two sessions. The first coder scored all children in two sessions. The second coder scored 20 children in the free play session and all children in the present session. The interobserver reliabilities in the free play session and the present session were 90%, 91%, respectively.

### *The free play session*

Since five children did not play in the free play session, 31 children's responses were analyzed. The result of the free play session is shown in Table 1. No significant sex difference was obtained ( $t = .09$ ,  $df = 29$ ).

Table 1 Distributions, mean and standard deviation of Scores in the free play session

	0	1	2	3	mean	SD
Boys	6	3	1	6	1.44	1.37
Girls	4	3	6	2	1.40	1.06
Total	10	6	7	8	1.42	1.20

### *The present session*

One girl was excluded from analysis because she would not rank-order the presents. The result of the present session is shown in Table 2. Significant sex difference was obtained ( $t = 2.16$ ,  $df = 33$ ,  $p < .05$ ).

Table 2 Distributions, mean and standard deviation of Scores in the present session

	1	2	3	4	5	mean	SD
Boys	8	6	3	1	1	2.00	1.16
Girls	3	1	8	4	0	2.81	1.05
Total	11	7	11	5	1	2.37	1.17

### *The relation of the free play session and the present session*

The number of children observed in the both session was 30. The correlation coefficient of the scores in the free play session and the scores of the present session was not significant ( $r = -.01$ ).

## DISCUSSION

In both experimental sessions half of children could mask the display of negative emotion or show positive emotions instead of negative emotions. The result of the present study indicated that children, even as young as 3 years, can control the expression of negative emotions in a negative situation. This was consistent with Cole's (1986) findings. The procedure of the present study was more severe for children than that of Cole's study. In Cole study, children were asked to look at pictures and to discuss them with the experimenter for several minutes before the present session. In contrast, in the present study children were asked to engage in various tasks for 1 hour before the present session. Compared with children in Cole's study, children in the present study should have a stronger expectation in for receiving a desirable present and to feel the stronger disappointment when the expectation was violated. We did not expect for 3-year-old children to be able to control their expressions of negative emotion in this situation. The result suggests that the former studies of emotional expression have underestimated the 3-year-olds' ability for emotional control.

The sex difference was found in the present session but not in the free play session. In the present session girls were more likely to receive the lowest-ranked toy and show positive expressions. This was consistent with Cole's conclusion as well as results of other studies using facial expression as evidence (Feldman & White, 1980; Lewis, Stanger, & Sullivan, 1989). These sex differences may be reflected on sex-role socialization. In Japanese society there are stronger sex-role pressures for girls to appear nice and agreeable to others, especially to unknown adults. In this case, sex differences in the need for social desirability account for sex difference in masking negative emotional expressions. The result showing a lack of sex difference in the free play session is consistent with this speculation. In stead of the experimenter, mothers ordered their children to put toys away in this session. Girls were less likely to be motivated to mask their negative emotions to their mother than to the experimenter.

The correlation coefficient between the scores in the two session was nearly zero. There was no consistent individual difference in mask negative emotional expression between two different contexts. This indicates that masking negative emotional expression is context-sensitive. It is the social context that may strongly influence emotional expressions rather than temperament.

The present study was limited, however, to the observation in the laboratory. The data of socialization processes, temperament, and parent's expressive behaviors was not available. Research looking into these variables has to be conducted in order to understand better the development of emotional expressions in young children.

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