

PRESCHOOL CHILDREN'S PERFORMANCE ON TWO  
MEASURES OF EMOTIONAL EXPRESSIVENESS  
COMPARED TO TEACHER RATINGS\*<sup>1,2</sup>

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A number of studies have shown that preschool children are capable of recognizing and producing facial expressions (see Izard for a review).<sup>3</sup> Results of a cross-cultural study by Izard showed a substantial growth curve for age across cultures in both recognition and labeling tasks. Fifth-graders did considerably better than kindergarteners on both tasks. Additionally, Odom and Lemond<sup>4</sup> found that the ability to produce a facial expression is acquired after the ability to recognize the expression; there was no reduction on this "developmental lag" with increasing age. The present study compared the performance of children on emotion recognition and production tasks to teachers' judgments of the children's emotional expressiveness (defined as the ability to understand and generate facial expressions). It was hypothesized that there would be positive relationships between age and scores on both tasks. Age was considered to be the independent variable. Dependent variables were teacher ratings, scores for emotion recognition, and emotion production.

Ss were 10 3-year-old, 10 4-year-old, and 10 5-year-old boys and girls who attended nursery schools in Tennessee. Three graduate students were trained and then asked to judge the production task. Teachers of the Ss were given a rating sheet consisting of five questions regarding the degree of emotional expressiveness of the children. In the recognition task children were asked to select a keyed emotion photograph from pictorial triads which were used by

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<sup>2</sup> The authors thank Dr. Carroll E. Izard for the use of his materials.

<sup>3</sup> Izard, C. E. *The Face of Emotion*. New York: Appleton-Century-Crofts, 1971.

<sup>4</sup> Odom, R. D., & Lemond, C. M. Developmental differences in the perception and production of facial expressions. *Child Devel.*, 1972, **43**, 359-369.

Izard. In the production task faces of the children were videotaped while they were attempting to show each emotion. The same seven emotions were used in both tasks: joy, fear, disgust, distress, surprise, interest, and anger. Judges were given 10 choices of emotional classifications: the seven emotions actually used plus two shams and "unidentified." For each child a score was calculated for teacher rating, emotion recognition, and emotion production.

Chi-square tests showed that judges identified the attempted facial expressions correctly at levels far exceeding chance ( $p < .01$ ). Agreement among judges was .40. Results reflected increases across the ages of the children, both in their ability to recognize emotions from photographs [recognition ( $p < .05$ )] and in the ability of judges to determine produced expressions correctly [production ( $p < .01$ )]. The findings were consistent with previous studies, with results of the recognition task remarkably similar to findings by Izard. Age and teacher rating were found to be negatively correlated ( $p < .05$ ). Thus, teachers tended to rate older children as less emotionally expressive than younger children. This may be due to a tendency of children to repress facial expressions of their emotion as maturation occurs.<sup>5</sup> There was not a significant relationship between teacher ratings and the performance of children in recognition and production tasks. Perhaps these variables are unrelated, or the teachers are unskilled at judging expressiveness, or the scale is insensitive to emotional expressiveness.

Three-year-old children were unsuccessful in producing facial expressions indicating the emotion anger (6.6% correctly identified by judges). Four- and 5-year-olds did much better (50% and 56.6%, respectively). This seems to be an instance of the developmental lag reported by Odom and Lemond.

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<sup>5</sup> Ekman, P., & Friesen, W. V. *Unmasking the Face*. Englewood Cliffs, N. J.: Prentice-Hall, 1975.