## CAUTION: EMOTIONS AT PLAY

Researchers are looking at how emotions affect the ways in which children think and interact with others



By BRUCE BOWER

Five-year-old Vera has a lot going for her. She is a strikingly beautiful child with strong intellectual potential and IQ points to burn. But Vera is tragically unhappy and angry. Many days she punctuates aggressive outbursts at her preschool peers and teachers with shouts of "Shut up! You shut up or I'm gonna smash you." When social interaction is required, her intellectual gifts wither under the force of her tremendous anger.

Unlike Vera, her classmate John is not physically attractive and has a below-average IQ and intellectual potential. But he is so emotionally strong that he squeezes everything he can out of each available IQ point. Few of the children in the preschool enjoy his level of social success, because he is uniformly kind and caring to others while never allowing himself to be bullied or abused.

Although Vera and John are extreme examples, they are drawn from a study of 39 preschool students that illuminates several important connections between styles of emotional expression and social behavior. The investigation, known as the Minnesota Preschool Project, goes against the grain of much recent psychological research that focuses primarily on cognition — how adults and children organize their thoughts, process information and understand their surroundings.

"It sometimes seems as though affect [the expression of emotion] is considered almost superfluous," says project director L. Alan Sroufe of the University of Minnesota in Minneapolis. Several decades ago, before the psychoanalytic theory of Sigmund Freud lost favor among psychologists, emotions were considered to be motivators and organizers of behavior. In the past few years, several investigators have again emphasized that emotions play a major role in shaping the way people think and perceive events in the world. The Minnesota project is described in a book that reflects this growing research trend, Emotions, Cognition & Behavior (eds.: Izard, Kagan, Zajonc, Cambridge University Press, 1984). Still, empirical studies of "affect in action," to use Sroufe's terminology, are few and far between.

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**S** roufe and his colleagues have developed observational measures for general types of positive, negative and inappropriate emotional expression in preschool children. In two consecutive preschool classes, one spanning 10 weeks, the other 20 weeks, children were observed daily in the classroom, in the van that took them to and from school, on the playground, in large and small groups and in structured and unstructured activities. Most of the children came from poor, inner-city families. For each child the researchers completed a checklist that includes items describing displays of positive and negative emotions, involvement with others and reactions to conflict and frustration.

Over the two school terms, the frequency of a child's positive emotional expressions in social interactions minus the frequency of negative emotional expressions was highly related to his or her "social competence." This was assessed by the four preschool teachers, who ranked children according to their social and emotional skills. Also, each child was ranked by the rest of the youngsters according to whether they especially liked, disliked or felt neutral about him or her.

The researchers find that the tendency to initiate a social encounter with positive emotional signals, such as a smile and a friendly greeting, and to respond positively to the overtures of others was strongly related to teacher and peer rankings of social competence. They also note that the control and regulation of emotion, an area of particular weakness for Vera, is related to teacher and classmate ratings.

weekly videotapes of classroom activities provide even more compelling evidence for the critical role of emotion in each child's social competence, says



Sroufe. Highly ranked children, such as John, consistently share their good feelings and ideas with others and reward those who approach them with a positive response. A middle-ranked child may have an exuberant, expressive personality but lapse into periodic fits of anger and hostility over minor incidents. Low-ranked children encompass several emotional styles. Dirk, for instance, is unpredictable; he plays quietly for a while, then becomes overexcited by the activity of others and starts to shout and run around haphazardly. Jerry, on the other hand, is "alone in the crowd," rarely showing emotion or making a facial expression; positive or negative responses to other children are beyond him. And Arnold is a chronic whiner, always complaining to someone about the behavior of others and garnering the dislike of nearly everyone.

In an additional finding, Sroufe's coworker Peter LaFreniere reports that a § child's emotional expressiveness may significantly affect teacher perceptions of his or her physical attractiveness. LaFreniere finds that teachers' ratings of students' physical attractiveness (using photographs) closely matched teachers' assessments of one aspect of social competence, the amount of attention peers paid to each child. The more a child was seen as someone other children gravitated toward, the higher that child's physical appearance was ranked. But when college students unfamiliar with the children ranked them on physical attractiveness using the same photographs, the link with teacher-ranked peer attention disappeared.

"This indicates that physical attractiveness is not such a straightforward variable," says LaFreniere. "Teachers' rankings of attractiveness were positively biased toward kids who displayed attractive behavior at school. When strangers ranked attractiveness, they only used physical attributes."

The Minnesota Preschool Project has not shown conclusively that expressing positive emotions inevitably causes social competence to climb or alters others' perceptions of a child's physical attractiveness, cautions Sroufe. But the connections it uncovers fit in well with four years' worth of previous data on the same children.

In that work, based on a theory developed by British psychoanalyst John Bowlby, Sroufe and his co-workers examined the link between early "attachments" to a primary caregiver and later adaptation in school. The first intimate, or attachment, relationship—usually with the mother—sets the stage for the way a child later deals with other intimate relationships and people in general, according to Bowlby. Infants who gain ready access to a caregiver and receive prompt and reliable responses to their signals of need or dis-



tress develop secure attachments, Bowlby holds.

Sroufe and colleagues measured the attachment styles of future preschoolers during infancy by observing reactions to a brief separation from the mother in a laboratory play area. Some infants were readily comforted by an experimenter and were able to explore the available toys, a mark of secure attachment. Others, however, withdrew or became agitated. One group showed little preference between mother and experimenter; upon reunion with mother, these infants ignored her.

Infants with secure attachments later go on to score consistently well on measures of social competence at the preschool level, says Sroufe. Preschool teachers rate these children significantly higher on positive emotions and lower on negative emotions than their classmates. Teachers also rank securely attached children as more emotionally healthy, less dependent on others and more popular with peers.

Once teachers grasp the nature of a child's early relationships and relate these attachments to behavior at school, they can teach more effectively, argues Sroufe. For example, one malicious, bullying 4-year-old in the study group often had to be separated from other children. His teachers, however, were aware of his desperate need for intimacy with an adult. After pulling him out of a fight, one teacher would stay with him and discourage his feelings of rejection. Eventually, this child formed a strong attachment to a male teacher and made remarkable progress in his social skills, says Sroufe.

"Our findings give teachers a way to extend their own intuition about preschool kids, which is often quite accurate." he observes. "This kind of work [on emotional expressiveness] isn't being pushed these days, but the cycle of research will come back around."

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