This study examined infants' reactions to new people by manipulating the social context in which infants became acquainted with new people. Infants (N=48) met someone new in the presence of another unfamiliar adult and their mothers. The new acquaintance either: (1) chatted and worked on a puzzle with the mother; (2) remained silent and worked on a puzzle with the unfamiliar adult; or (3) remained silent and worked on the puzzle alone. Mothers then left the infants alone with the new acquaintance. Infants who saw their mothers socialize with the new person interacted with that person more than did infants whose mothers did not socialize with the person. Infants in the social conditions appeared more comfortable than did infants in the silent condition. Infants in the silent condition remained closer to their mothers, played less with toys, and fussed more after their mothers left than did infants in the social conditions. A list of 14 references is included. (BC)
The Influence of the Social Context on Infants' Reactions to New People

Alison Nash
State University of New York at New Paltz

ABSTRACT

The social context in which infants became acquainted with new people was manipulated. Forty-eight infants met someone new in the presence of another unfamiliar adult and their mothers. The new acquaintance chatted and worked on a puzzle with either the mother or the other unfamiliar adult, or remained silent and worked on the puzzle alone. Mothers then left the infants alone with the new acquaintance. Infants who observed their mothers socialize interacted with the new people more, and played with the puzzle more than infants whose mothers did not socialize. Infants in the social conditions appeared more comfortable than infants in the silent condition: Infants in the silent condition remained closer to their mothers, played less with toys, and fussed more after their mothers left than infants in the social conditions. Thus the interactions among the adults appeared to guide infants' own interactions.

Author's address: Department of Psychology
State University of New York at New Paltz
New Paltz, New York, 12561

Introduction

Infants' reactions to new people have been found to be influenced by the physical context in which they meet these people. They are friendlier at home, for example, than in the laboratory (Brookhart & Hock, 1976; Takahashi & Miyake, 1986). The influence of the social context is not as clear. Dunn (1988) has recently suggested that at least in the context of the family, infanta's social understanding extends beyond dyadic interaction; that they are in fact quite sensitive to the interactions among other family members. We wished to see whether such sensitivity extends beyond the family, to new people that they meet as well.

The findings from the few studies in this area are inconsistent. Feinman & Lewis (1983) found that infants were friendlier towards someone when their mothers spoke to them positively rather than neutrally about that person, but were unaffected by their mothers' behavior towards that person. Similarly, Clarke-Stewart (1978) found infants' reactions to a stranger to be uninfluenced by their mothers' behavior with that person. In contrast, Feiring, Lewis, & Starr (1984) found that infants were friendlier with a unfamiliar person when they had observed their mothers interacting positively with her, rather than not at all. I wish to manipulate the social context in which infants meet new people in order to help clarify its effect on infants' reactions to new people.

Furthermore, in an effort to better understand the process of social referencing, I attempted to isolate the particular features of the social context that may be relevant to these reactions. Bandura (in press) has recently suggested that in order to better understand the process of social referencing, we need to distinguish between instrumental and affective referencing (see also Hornik & Gunnar, 1988). Are infants copying the behavior (instrumental referencing) or the feelings (affective referencing) of someone else? Data on this issue may help resolve the controversy over the emphasis on cognitive (Feinman, 1982) versus emotional (Campos, 1983) processes involved in social referencing. Feinman suggests that when an infant encounters an unfamiliar person, they may use information they glean from someone else to appraise this person, i.e., they construct a view of the new person based on someone else's view of this person. Campos stresses the emotional communication between the observer and the target.

The controversy over a cognitive versus an emotional emphasis on the processes underlying social referencing is related to another issue of concern to social referencing theorists, i.e., the debate about whether infants seek information (reference) only from familiar caregivers, as suggested by Campos & Stenberg (1981) and supported by the findings of Zarbatany & Lamb (1985), or from whomever is available to provide the information, whether they are familiar or not, as suggested by Feinman (1982) and supported by the findings of Klinnert, Emde, Butterfield, & Campos (1986). Feinman's cognitive emphasis is consistent with his view that the referencing target need not be someone important emotionally to the infant, i.e., a significant other, only someone who is able to provide the infant with the
information he or she seeks. Campos' emotional emphasis is consistent with his view of infants' referencing significant others in particular, as they in particular have an emotional connection with the infant.

I address the controversy over an emphasis on cognition (Feinman, 1982) versus emotions (Campos, 1983) by assessing both infants' actions towards, and feelings about a new person, and by examining whether infants are influenced more by their mothers' reactions than by someone else's reactions.

Additionally, other studies of social referencing have taken place in very controlled situations; typically, infants are exposed to an ambiguous stimulus in a situation with no other distractions. In other words, the ambiguous stimulus is quite salient, as there is not much else present. Furthermore, in the studies involving strangers, the stranger's behavior is completely standardized, as the focus is on the infant's initial response to the stranger (Boccia & Campos, 1989; Feinman & Lewis, 1983; Feiring et al., 1984). Findings from these kinds of studies indicate that children in the second year of life are capable of social referencing. I am interested in the processes involved in relating to new people in the kinds of settings in which infants typically meet new people, i.e., in an environment with other people and other interesting things to do. I am therefore exploring the importance of social referencing in coping with an ambiguous situation in a more natural setting. The infant is given a chance to get to know the new person in a situation in which a variety of interesting things are available. In such a situation, the new person and others' responses to that person may be less salient. However, if the infants' do pay attention, the importance of the social context, and infants' social understanding, will be highlighted.

Method

Forty-eight infants in the second year of life met new people under one of three conditions. In all three conditions, the infant, his or her mother, two research assistants serving as an unfamiliar adult and a "babysitter", and many interesting toys were present. The experimental manipulation took place during Trial 1: In Condition 1, the parent and "babysitter" chatted and worked on a mosaic puzzle together; in Condition 2, the unfamiliar adult and the "babysitter" chatted and worked on the puzzle together; and in Condition 3, no one chatted with the "babysitter", and she worked on the puzzle alone. In all conditions the adults were instructed not to initiate interaction with the infants, but to respond to the infants' social overtures. After 10 minutes, in Trial 2, the mother and the unfamiliar adult left the room, leaving the infant alone with the "babysitter" for 10 minutes (if an infant cried for more than 1 minute, the mother returned and sat quietly filling out a questionnaire). During Trial 3, the mother, the unfamiliar adult, and the "babysitter" were again all present and freely chatted with one another for 10 minutes.
Results

We wanted to see if infants' interactions with new acquaintances, and their degree of comfort with them, were influenced by the interactions between the adults. Single-factor ANOVAs were used to compared infants' reactions across the three conditions.

Behavior

We found that infants whose mothers socialized with the new people interacted more with the new people than infants whose mothers did not (Fig 1, p<.01). Additionally, infants whose mothers worked on the puzzle with a new acquaintance themselves played with the puzzle with new acquaintances more (M=103.7 sec) than infants whose mothers were not involved in puzzle play (M=27.6 seconds when the two unfamiliar adults socialized and M=14.0 when no one socialized, p<.01). Infants who observed others work on the puzzle together were more interested in (looked at or played with) the puzzle than infants who observed someone work on the puzzle alone (p<.01, Fig 2).

Comfort

Infants' degree of comfort in their new surroundings also appeared to be influenced by the interaction among the people present. Infants appeared most comfortable when their mothers socialized, and least comfortable when no one socialized: Infants remained near their mothers most when no one socialized, less when the two unfamiliar adults socialized, and least when their mothers socialized (p<.01, Fig 3). They remained in proximity to new acquaintances more when mothers socialized than when the unfamiliar adults socialized or when no one socialized (p<.01, Fig 3). They played with the toys in the room reliably more during the two social conditions than when all the adults were silent (p<.01, Fig 4). Additionally, the latency to play with the toys was reliably longer in the silent condition (M=247.3 sec) than in the two social conditions (M=32.5 seconds when mothers socialized, and M= 11.2 seconds when the new acquaintances socialized, p<.01). They tended to use social referencing behavior most during the silent condition (M=.9 times when mothers socialized, M=.7 times when the new acquaintances socialized, vs. M=1.8 times when no one socialized, p<.07). Finally, after mothers' departures, infants whose mothers had previously socialized tended to appear more comfortable (fussed less, engaged in activities more; M=13.5 seconds fussing or passive) than infants whose mothers had not previously socialized (M=63.1 seconds fussing or passive when the new acquaintances had socialized and M=47.0 seconds fussing or passive when no one had socialized, p<.07).

Discussion

The social context in which infants meet someone new appears to affect infants' reactions. Infants interacted with new acquaintances when their mothers interacted with them, and interacted in a similar manner as their mothers, i.e., via the
puzzle. Infants' responses to the new person were guided by their mothers' reactions in particular; they interacted with new acquaintances more when mothers had than when someone unfamiliar had. They were however, interested in unfamiliar people's interactions with one another; they paid more attention to the puzzle when two unfamiliar adults worked on it together than when someone unfamiliar worked on it alone.

Whether or not an infant appears to feel comfortable with someone new is also affected by their mothers' reactions. When mothers did not interact with the new person, infants remained nearer to their mothers, and tended to fuss and remain passive when mothers left the room. Interestingly, infants degree of comfort with the whole situation was affected by the behavior of the group as a whole, rather than by mothers' behavior in particular. As long as there was conversation, regardless of who participated, infants soon left mother's side and spent most of the time playing with the toys. In contrast, when no one talked (the silent condition), infants appeared uncomfortable; they took longer to begin playing with the toys, and spent less time playing with them. They appeared to look around the room as if searching for a clue about what one was to do in this situation.

It appears that infants' reactions to a new situation are guided by the interaction among the others present. Even in a complex situation involving several people and other interesting things to do, infants appear to monitor the reactions of those present, and use these as cues for their own reactions. Campos' (1983) view of emotions playing a central role in social referencing was supported. When mothers did not appear comfortable (did not interact with the new people), infants sought proximity (an attachment behavior which is evoked by stress or discomfort), and showed other signs of discomfort. Consistent with Campos' view that the referent is someone significant to the infant, infants' discomfort was evoked only by mothers' lack of positive cues, and not by the lack of positive cues from the unfamiliar adults. Yet Feinman's (1982) cognitive view of social referencing was also supported. Infants' reactions to the new situation as a whole appeared to be affected by their appraisal of the group; when cues were given about appropriate behavior, infants seemed to know what to do; however when no such cues were given, they appeared to seek such cues. Consistent with Feinman's view, they used information about how to act in this situation from whoever provided it. Even when a mother was silent and two unfamiliar adults interacted, infants immediately explored the room and played with toys. Yet when everyone was silent, infants did not explore or play as much.

Thus infants appear to be sensitive to several aspects of a social group. They are influenced by interactions within the group both when their mothers are included, and when they are not. Mothers' participation in the group interactions appears to facilitate infants' participation, yet even when mothers do not participate infants' reactions to the situation are affected by the interactions of the others.
References


Fig. 1. Average amount of time infants interacted with new acquaintances.

Fig. 2. Average amount of time infants showed interest in the puzzle.