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Toddlers engage in ‘emotional eavesdropping’ to guide their behavior

Little children never cease to amaze. University of Washington researchers have found that 18-month-old toddlers engage in what they call “emotional eavesdropping” by listening and watching emotional reactions directed by one adult to another and then using this emotional information to shape their own behavior.

Writing in the March-April issue of the journal *Child Development*, which is being published today, Betty Repacholi and Andrew Meltzoff of the UW Institute for Learning and Brain Sciences say the research indicates infants understand other people’s emotional states at a very young age.

“This may be a precursor to ‘reading’ other people’s minds by understanding their emotional and psychological states,” said Repacholi, an assistant professor of psychology.

“Understanding other people’s emotions is a lifelong skill and is crucial for school readiness. The fascinating result of this study is how sensitive toddlers are to the emotional dynamics of the interactions around them. They don’t need to try out a behavior of their own and get rewarded or punished, they can watch what an older brother or sister does and learn from what happens to them,” said Meltzoff, who is co-director of the institute and holds the Job and Gertrud Tamaki endowed chair in psychology.

“This study helps fill in a missing piece, because it shows the children engage in ‘emotional eavesdropping.’ Children have their emotional antenna up all the time and they learn from eavesdropping on the behaviors of others.”

To test whether infants eavesdrop on adults to pick up emotional clues, the researchers set up two experiments. The first involved 96 toddlers, the second 72. In both experiments there were equal numbers of boys and girls.

The youngsters watched an adult manipulate a toy in both experiments. Then they watched while a second adult expressed anger or a neutral reaction in response to the first adult playing with

a toy. The infants then were allowed to play with the toy and imitate the first adult's actions. At this point in the first experiment the second adult either left the room or quietly sat with a neutral facial expression. In the second experiment, the second adult either turned her back on the child or silently looked toward the child with a neutral expression.

Repacholi said all of the infants were interested in what the first adult was doing, were leaning forward, making noises and wanting the toy. But that changed when the second adult expressed anger and remained in the room looking toward the child. When the second adult reacted neutrally or expressed anger and then either left the room or turned her back the youngsters grabbed the toy within one second. They also imitated the first adult's action with the toy 2.5 out of three possible times. However, when the angry adult remained present and her neutral face was visible the infants hesitated, taking an average of five seconds to take the toy. They were only successful in imitating the first adult's action half the time.

The researchers found no gender differences in how the infants reacted.

"This was a real surprise," said Repacholi. "Parents usually socialize boys and girls differently and girls are usually more compliant. It may be that differences in this area will emerge later."

The experiments are the first demonstration that infants can modify their own behavior in response to an emotional communication that does not involve them.

"There are lots of studies of how the emotions parents directly communicate to their infants have an impact on their behavior. No one before considered if infants can take in emotional information when directed toward someone else and apply it to themselves," said Repacholi. "By observing and analyzing other people's emotional behavior, infants are able to quickly learn some important lessons. It is not only an extremely efficient way of looking at the world but is also highly adaptive. Infants can use emotional eavesdropping to avoid some of the negative consequences that might arise were they to perform an action themselves. It is also a pretty adaptive way of interpreting what is important and what they can get away with."

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