



Infant JEALOUSY

THEY CAN'T SAY "GREEN" YET, BUT ARE BABIES TOO YOUNG FOR JEALOUSY? NO WAY.

"Mom! What about me!" One look says it all as this tyke's mother coos to another "baby."

The images are haunting: Chubby-cheeked infants—some flashing still-toothless gums—thrashing in agitation. Their eyes are wide, some almost in tears. Briefly, but quite clearly, these babies are distressed.

What's shocking is how quickly the transformation occurred. Only moments before, these same babies were bubbling with laughter, poking fingers at the ceiling, maybe

making stabs at conversation. Mommy was hanging over them, rubbing noses, kissing their forehead. Life was good.

Then the other baby appeared. Even worse, it was promptly hoisted into Mommy's arms. The situation went south fast. The rival is just a lifelike doll with a voicebox. But to these infants, that bundle is competition for Mom and they aren't happy.

Some try to play it cool, maybe take another look around the room. Others hone their eyes to laser points on their mother's face. All show curiosity. It doesn't take long for that curiosity to curdle, though. Soon most are twitching and kicking. Their faces turn red. Some cough. Some cry. Some try to climb into their mothers' laps.

Though quickly rescued by Sybil Hart as she sweeps the doll from mother's lap, most infants are upset by their mom's redirected affection. And even at six months old, many have ways of letting Mom know.

There is just one hitch: Jealousy is a complex emotion and the human face doesn't have a corresponding expression to fit it.

"There isn't a facial expression with 'jealousy' written on it," says Hart, an associate professor in the Department of Human Development and Family Studies and associate dean of research for Texas Tech's College of Human Sciences. "The expressions can be subtle and it is hard to attribute them to jealousy. If you were looking for jealousy, what would you be looking for?"

Understandably, many parents have trouble reading the signs. How do you communicate the hurt, the anger, the resentment that comes with jealousy when you can't speak? Hart is trying to pin down the vocabulary.

Thus the striking experiments. The children, all six to eighteen months old, are videotaped as their mothers coo over the lifelike doll.

In this way, jealousy is explored by seeing whether infants find loss of exclusiveness more disturbing than other types of situations where mothers briefly ignore their infants.

Finding that even six-month-olds feel and express jealousy departs from old views. Before, it was seen as a character flaw that emerges later, as the brain grows more sophisticated and only if mother-child relationships are disrupted.

Instead, deviating from the baby's emerging set of expectations may bring on the feeling. If the infant is used to getting undivided attention from its parents, especially highly involved ones, then losing that exclusive link can be disturbing. This is why jealousy often rears its ugly head when a new sibling arrives in a warm and loving home.

Hart finds that babies do typically show a unique pattern of responses to jealousy. Most often it's a look of sadness or distress, coupled with physical agitation.

"The little feet are flailing and their hands are waving and they're saying 'look at me, look at

me,'" she says. "They're yelling and calling, trying to get the mother's attention. It is a very agitated, physical and sometimes frantic response."

Hart finds little difference in the data she collects on only children compared with those who have brothers and sisters. She thinks jealousy happens when a person's expectations aren't met—in this case, the loss of a caregiver's exclusive attention.

People often try to find ways to control it, but Hart wants to know how the green-eyed monster gets inside people in the first place. Are they genetically programmed? Are there social as well as physiological reasons? As a mother of three daughters, she says these questions were often on her mind when they themselves were infants.

Jealousy is considered a vile emotion. Yet child researchers know little about it, including what level of jealousy is normal for children and what strays into the abnormal.

"Emotional development is truly the most difficult and yet perhaps most fundamental capacity that we have, and if we can learn to understand the markers and recognize them early in life, surely we will be able to solve a lot of problems," Hart says.

In the next stage of research, Hart and others from her college and the Texas Tech Health Sciences Center will probe the physiology of jealousy.

Barbara Sawyer, a professor in the School of Allied Health, will measure cortisol levels in infants' saliva. Cortisol, a stress hormone produced by the adrenal glands, reflects an infant's level of distress. It could also pin down differences between children who appear angry, sad or unresponsive during those experiments that prompt jealousy.

Owatha "Tootie" Tatum, an assistant professor in the Department of Molecular Pathology, will search for genetic markers that match the differing ways of expressing jealousy.

Such research could provide huge clues to the origins and causes of jealousy. It may also explain a baby's emotions as he or she watches Mom cuddle another child.

Sad? Possibly. Or perhaps the hurt look is just to grab Mommy's attention.

"Their little eyes open up and your heart melts," Hart says. "Maybe that is why sadness is the expression they use. It works on Mom. It certainly works on me."

— CORY CHANDLER



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