In the grand scheme, who are we as human beings?

The SCIENCE of being HUMAN

by KIPRA D. HOPPER
The Little Green-Eyed Monster

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Imagine the following interaction: A mother and her 6-month-old infant lovingly face each other. The mother proceeds to ignore her infant by refraining from speaking to him or her or looking at the child. While ignoring her infant, the mother holds a life-like doll in her arms. The mother talks to the doll using soft vocal tones while she strokes the doll’s abdomen. At this point, the infant begins to show signs of negative affect, which include angry or sad facial expressions, such as a frown or a scowl. When the mother repeats this same procedure, this time holding a book instead of the doll, the infant shows significantly fewer signs of negative affect. How would researchers interpret the heightened negativity in the baby doll situation? Do the resulting reactions indicate the complex emotional state recognized in adults as jealousy?

Mainstream views of emotional development suggest that complex emotions, such as jealousy, do not emerge in the child until after the second year of life. Scholars have argued that infants lack the cognitive skills to develop the interpersonal awareness required for the occurrence of jealousy. The research of Sybil Hart, Ph.D., C.R. Hutcherson Professor of Human Development and Family Studies at Texas Tech University, suggests otherwise. According to her findings, jealousy emerges during the first year and can be identified in the facial expressions of infants as young as 6 months old. Hart’s research has focused on the relationship between jealousy and attachment, the relationship between jealousy and depression in the mother, and parental reactions to jealousy.

“Jealousy follows the loss of exclusiveness,” Hart says, offering one explanation for the early occurrence of jealousy. The child comes to expect that his or her mother will direct her attention exclusively to the child. These expectations are formed early in life through consistent contact between infant and parent. When the child perceives a threat to this exclusive relationship, he or she will experience sadness, anger and fear—emotional states that can be explained as manifestations of jealousy. Therefore, jealousy communicates the desire to restore a sense of exclusivity. Signs of jealousy make the mother feel loved and needed. “In fact,” says Hart, “when no signs of jealousy are displayed by the child, the mother often will experience feelings of insecurity, and we often wind up having to reassure the mother that her child does love her.”

Hart’s research has generated new interest in the issue of exclusiveness. “We often think of exclusivity as a good thing, and yet we need to understand it better to know when and how it is a good thing,” Hart explains. Research on exclusiveness also brings up some issues for research on parenting. “It is easy to have exclusiveness if you only have one child. However, if exclusiveness is being special, being the best, being loved, and being important, how does a mother maintain exclusiveness if she has two children?”

This research has raised interesting questions regarding biological factors involved in the occurrence of jealousy. “The reactions of young children are not easily explained by learning. Often, determining what is normal and what is abnormal is difficult in the area of jealousy and exclusivity because so much of our reactions are due to culture. The influence of culture cannot be quite so pronounced during early childhood; therefore, work with young children is provocative partly because it is hard to interpret outcomes as having something other than a biological basis,” Hart states. “This calls into question widely held accounts of the emergence of jealousy as an outcome of dethronement. Infants in our 2002 study were first-born, and this suggests that jealousy develops in the absence of competition with siblings or deteriorated interactions with mothers. It raises questions pertaining to the nature of the experience necessary to the onset of jealousy. Jealousy may rest on early dyadic, rather than triadic, interactions in which the expectation of exclusivity or preferential treatment is planted,” Hart continues.

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- Sybil Hart, Ph.D.

Hart’s line of research also has questioned previous views of jealousy as pathological. “Modern thinking on jealousy yields to the views of it being pathological, something that only happens if one is a bad parent, or if one is an inferior child, and it often is viewed as a mark of insecurity and maladaptiveness. Nevertheless, jealousy occurs even in the absence of differential treatment. Even with perfect parents, it occurs,” she says. “Thinking has turned toward viewing jealousy as a normative component of personality that emerges very early in life.” So, jealousy, a characteristic that has long been considered undesirable and detrimental, actually is a part of normal development and may be indicative of healthy parent-child relationships.

The research certainly has not been without its share of controversy. Questions have arisen regarding the inducement of negative affect in young children. “It is remarkable how the child gets upset. Yet, children react in different ways. Some get angry, some get sad, some are really upset, and some are only mildly disturbed,” Hart shares. However, she defends her methods by explaining, “In the jealousy situation, the response is almost
instantaneous. We never let the child be distressed for more than a few seconds. We use the doll because it is not as compelling as a real infant. You want a situation that is provocative enough to elicit a response, but you do not want it to be so provocative that it is stressful. It is also brief because parents do not let it go on too long; they respond very quickly to their babies' reactions. Three seconds is about all they can do."

Often, emotion research with adults involves self-reported measures. Infants and young children, however, often are not able to explicitly communicate their emotional states. The reliance on facial expressions to identify emotional states in infants also has raised some questions about Hart's research. To this, Hart replies, "Facial expressions are reliable. They are a real index for how babies are feeling. Babies are not putting on an act for the camera. They can give us indications of sadness and anger. It is difficult to create emotional situations. You don't want to expose children to adverse situations longer than you absolutely have to. We certainly don't expose them to something that is outside of normal everyday life. Most children have siblings, and mothers sometimes have to pay more attention to the other children. So, while the doll situation in the lab research is stressful, it is not at all unusual, and it is very brief," Hart expands. "We do not compare babies with each other. You may have some babies that are more expressive than others. We compare the baby's behavior at time one to time two. Every child is his own control." Hart has looked at children at the ages of 12, 9, 6, and 3 months. "This is done because, in studying development, one wants to understand a process. What we are looking for is not something that is complete or formed in personality, but something that is in the process of development. We want to see a progression. We want to understand that progression to understand what jealousy is, where jealousy comes from and, ultimately, what we can do about it," she explains. "This very complex emotion can exist in very young children. It occurs in children of highly involved and caring mothers. It is not a character flaw or a sign of pathology. It is not a product of disrupted parent-child relationships. It also does not emerge later in development, with more sophisticated cognitive functioning."

Hart's work on infant jealousy has been published in scholarly journals, such as *Infancy, Child Psychiatry and Human Development*, *Social Development*, and *Infant Behavior and Development*, and, recently, her research was featured in an article for *Newsweek* magazine as well as numerous articles in the international press. She also authored the book *Preventing Sibling Rivalry: Six Strategies to Build a Jealousy-Free Home*. Her research has been supported, in part, by a grant from the National Institute for Mental Health (NIMH) and deals with a range of topics on social, emotional, and cognitive development during infancy and early childhood as a function of infant temperament, parental characteristics and child care environments. By understanding jealousy and early emotional responses, Hart is uncovering some of the aspects of being a normal human being.