Babies Can Be More Altruistic Than Adults

A new study shows that most toddlers will help a stranger, even if it means giving up a delicious treat.

Toddlers are innocent and sweet, but are they good? Pint-sized autocrats who wake up at dawn, expect food and drink on demand, say no to everything, and who can kick, scream and bite if they don’t get their way are called Terrible Twos for a reason.

A new study tells a different story. Published recently in the journal Nature’s Scientific Reports, it shows that toddlers will offer up food they really want to a needy stranger. Most adults don’t show that kind of altruism.

The researchers, led by University of Washington post-doctoral scholar Rodolfo Cortes Barragan, made that discovery by testing 96 toddlers. In the first experiment, the child met an adult who was sitting behind a desk. (The desk was gated and the toddler stayed on the other side with a parent nearby, so they wouldn’t feel threatened.) The adult selected a piece of freshly cut strawberry, banana, blueberry or grape, which then suddenly slipped out of his hand and landed on a tray on the child’s side of the desk.
In the “begging experimenter” group, the adult acted dismayed, grasping the air impotently to get at the fruit. “He reaches for the yummy fruit, expresses the desire for it, but can’t get to it,” explained Andrew Meltzoff, one of the authors of the paper and the co-director of the University of Washington’s Institute for Learning & Brain Sciences. In contrast, the control-group adult nonchalantly tossed the fruit onto the tray.

There was a clear difference in the toddlers’ reactions. In the begging experimenter group, almost 60% of them retrieved the fruit and promptly offered it to the experimenter. In the control group only 4% did the same.

The second experiment raised the stakes by asking parents to bring their children to the lab when they were hungry. In this case, though more of the toddlers in the “begging experimenter” group gave in to their urges and ate the fruit, about 38% of them still handed it over to the stranger. “They would pick up the banana, look at the banana and hover over it. Some hungry children would even bring it to their mouths,” said Prof. Meltzoff. “Though there’s a biological push to act selfishly, there’s a social motivation to give it to the begging stranger,” he said. That social motivation evaporated when the hungry toddlers in the control group saw the experimenter intentionally toss the fruit away: 0% of those babies gave it back.

The knack for reading others’ needs and being motivated to help fulfill them is a distinctly human trait. “Chimpanzees don’t give up food to a stranger,” said Dr. Cortes Barragan. Mother chimps won’t even offer prized bits of fruit to their own toddlers, according to a 2004 study. They eat the best morsels themselves and leave the stems and seeds for the babies. (For their part, toddler chimps just grab a dropped chunk of fruit and run with it.)

There are evolutionary reasons why human babies behave altruistically. By sharing food with strangers, they help to cement bonds with non-family members that hold the group together. But altruistic instincts can also be enhanced by experience, said Prof. Meltzoff. In this study, for instance, the fruit-sharers were slightly more likely to have siblings, and Asian and Latino babies shared more often than those from other backgrounds. “The value of interdependence is picked up by prelinguistic babies,” he said.
Prof. Meltzoff has now spent decades studying how infants grasp others’ intentions. But discovering that hungry babies will give up treats to a stranger still astonishes him. “These are young human beings, not even speaking in sentences. Yet they care about others and act altruistically toward them. We think babies are selfish, egocentric and a slave to their biological needs. But this study shows they’re not selfish. They’re social!”