

Unshakable Humanity: Altruism and Disaster

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In May of 2008, a massive earthquake hit China's Sichuan province. The earthquake measured 8.0 and could be felt as far away as Pakistan, Vietnam and Russia. The shaking lasted a full two minutes and was followed by some 40,000 aftershocks, triggering hundreds of landslides. By the time the earth stopped moving, almost 70,000 were left dead, with another 18,000 missing and more than 300,000 injured. It was one of the deadliest earthquakes ever recorded.

These facts are staggering—incomprehensible really. Even people who have experienced some of nature's wrath must find such fury and human loss unimaginable. It would seem that such a disaster would trigger people's rawest self-preservation instincts. Surely with the sight of whole towns crumbling and friends and family being swallowed up, civility and generosity of spirit must take a back seat to basic survival.

But is this what happened in fact? Normally, we would have no way of knowing about the psychological changes taking place in the victims of such natural disasters. But serendipitously, a team of psychological scientists had just begun a study not far from the Sichuan earthquake's epicenter. The University of Toronto's Kang Lee and the University of Chicago's Jean Decety, working with colleagues at three Chinese universities, had just begun a study of empathy and altruism in children. They had gathered baseline data on young children's altruistic giving for a study of normal emotional development, but when the earthquake hit a month later, the scientists changed their research focus. Instead of studying normal childhood generosity, they decided to explore what happens to our noblest impulses under severe environmental insult.

Altruism is considered a hallmark of the human species' success, and it's a well-documented developmental milestone. Kids start off highly selfish and remain that way through preschool, but at about age six they start to become a bit more generous. This pattern, however, has only been studied in relatively affluent kids living in relatively peaceful circumstances. It's entirely unknown if children would continue to act altruistically in the face of adversity. Will the precocious altruism of childhood survive severe tribulation, or will kids revert back to their earlier self-centeredness? The Sichuan earthquake provided a natural "stress test" to examine the strength of youthful generosity.

Before the earthquake hit, the scientists had given 6- and 9-year-olds a version of what's called the Dictator Game—considered the gold standard for measuring altruism in the lab. Working individually with a researcher, each child is allowed to select stickers to keep. But then afterward, they are asked if they would like to give some of their own stickers to an anonymous classmate who is not playing the game—and therefore has no stickers. The children make their donations in a sealed envelope, so they believe that nobody knows how much, if anything, they are giving away.

But the scientists do know, and this group of kids fit the normal pattern. That is, 6- and 9-year-olds were not significantly different in their altruistic giving in the time before the earthquake. Then, one month

after the earthquake, the scientists gave the same test to another, similar group of 6- and 9-year-olds. (They couldn't follow up with the same children, because they could not locate many of them.) They wanted to see if the normal development of altruism was affected by the disaster experience, in either age group.

And it was, in an interesting way. The 9-year-olds actually gave much more—they were more generous—after the earthquake than before. The experience appeared to solidify and indeed enhance their altruism. But the younger kids gave significantly less than before the quake. The immediate effect of the disaster was to make the 6-year-olds more selfish. Put another way, their new-found altruism did not survive the earthquake.

The scientists wanted to see if these effects were long-lasting, or just a temporary reaction to such a severe environmental insult. So they ran a second experiment three years after the earthquake, studying another group of 6- and 9-year-olds from the same devastated area of Sichuan, as well as a control group from a more fortunate region of the province. In this study, they prompted some of the children with photographs of the devastation and suffering, and then administered the Dictator Game along with a standard measure of empathy. They wanted to see if the children's generosity was the same or different, and also what role empathy played in their generosity.

The results were clear and provocative, as described in a paper to be published in the journal *Psychological Science*. Three years after the earthquake, the kids' altruistic giving returned to pre-quake levels, suggesting that the earlier changes were an acute response to the immediate aftermath of the disaster. In other words, the younger children opted for self-preservation in a crisis, suggesting that their emerging generosity is still fragile—but this reaction was not long-lasting. The altruism of the older children was apparently robust enough to withstand the challenge of adversity. Importantly, empathy for other victims was the pathway to generous action.

Three years after the earthquake, three out of four of the kids in the study were still homeless, and many of their parents were still out of work. One in six had a family member injured in the disaster, and more than one in twenty had an immediate family member who had died in the earthquake. It's remarkable that these children could muster any measure of empathy and altruism while still living in the rubble of such a disruptive life experience.

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