

# The 'Rocky' in Relationships

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In 2008, a massive earthquake shook the Chinese province of Sichuan. Measuring 8.0, the quake killed more than 69,000, injured countless more, and left 4.8 million homeless. The Chinese government has spent billions on the region's recovery, which even now is incomplete.

The immediate devastation in Sichuan was also followed by a dramatic spike in the divorce rate, a phenomenon that captured international attention—and sparked widespread speculation—at the time. Did the deadly earthquake actually cause the jump in marital breakups?

The spike might have been a coincidence, though that's unlikely. It could also have been that severe emotional and financial stress took a toll on the relationships. That's certainly plausible. But it might also have been something much more basic. It could be that the turbulence itself—the shaking and crumbling of the physical environment in Sichuan—triggered cognitive and emotional turbulence, undermining personal commitment in the process.

That is the provocative idea that University of Pittsburgh psychological scientist Amanda Forest, with colleagues at the University of Waterloo, has been exploring in a series of studies. Though it sounds a bit wild, the hypothesis has a solid grounding in theory, specifically one called “embodied cognition.” This is the idea that abstract concepts are scaffolded on top of actual physical sensations, beginning with early caregiving experiences. Just as experiencing actual warmth activates feelings of personal warmth, perhaps actual shaking and crumbling can trigger thoughts of personal instability. Indeed, this cognitive link may be the basis of the metaphor “rocky relationships.”

The scientists tested this idea in three experiments, all involving people in committed relationships. In all of the studies, only some of the subjects experienced subtle forms of instability in the laboratory—standing on one leg, sitting on a wobbly chair or cushion. While experiencing this instability (or not in the case of controls), the subjects answered questions about their relationships: How confident are you that your partner and you will be together in six months? In a year? Three years? For a lifetime? How satisfied are you in your romantic relationship? How committed are you? And so forth. Some of the studies required the subjects to write notes to their partners, which were then analyzed by independent raters for signs of affection.

When they crunched the data, all of the studies supported the notion of embodied shakiness. As reported in a forthcoming issue of the journal *Psychological Science*, actual physical instability led people to perceive their relationships as less likely to last. But more important, these perceptions were associated with less satisfaction and less relationship commitment. It's known that people who experience less satisfaction and commitment are more likely to break up down the road.

Even in the most established relationships—defined in these studies as one and a half years together—people's perceptions of relationship stability were remarkably malleable, shifting in accord

with very subtle physical experiences. What's more, physical rockiness triggered responses associated with known relationship risks: People who reported romantic instability were more likely to be withdrawn and less affectionate. Since emotional expression is key to satisfying relationships, shifts are not inconsequential.

Why would physical instability trigger such damaging responses? It's not entirely clear, but it could be the wobbliness makes people uncertain of their own commitment. Or it could be people become more insecure about their partner's commitment, and withdraw as a form of self-protection, distancing themselves to diminish the possible pain of rejection. Or both. Whatever the dynamic, it appears that powerful turbulence, as in Sichuan, can result in both a natural and social disaster.

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