

A mile in their shoes: understanding empathy

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Credit: AI-generated image (disclaimer)

The human brain evolved to ensure our survival. One example of that survival instinct is our sense of competition – historically, it's part of what drives us to wage wars over power and resources. But an equally powerful survival tactic is our ability to love and cooperate with others.

"A lot of times, that story never gets told," says Karen Gerdes, a social worker at ASU. She is interested in empathy, which is the ability to



perceive the world from other people's points of view and to feel what they are feeling. Empathy is a complex emotion because it involves both unconscious, involuntary responses and conscious, cognitive processes. For example, suppose you've had a traumatic experience, like losing a loved one.

"You see someone else who is going through that experience, and your brain automatically starts firing as if it's happening to you. That helps you to understand a little bit better about what that person is going through," Gerdes says.

People who are very empathic tend to be more understanding and have stronger relationships. For a social worker, empathy is also an essential part of the job.

"Social work is all about improving quality of life for people," Gerdes says. "We do that by helping them to be their better self, and by creating a society that is more supportive. Empathy is at the core of both of those things."

Gerdes is an associate professor in the School of Social Work in the College of Public Programs. She began studying empathy in 2006 after learning about new research from the field of social cognitive neuroscience.

"They've confirmed that our brain is set up to process information in a way that helps us to be more empathic and cooperative," Gerdes said.

Using functional magnetic resonance imaging (FMRI), neuroscientists can watch empathy in action in a person's brain through the interaction of four neural networks – groups of neurons that perform specific functions. When all four of these neural networks are engaged, that person is expressing empathy.



Have you ever felt yourself smiling after seeing a stranger laugh, or feeling sad after watching someone else cry?

This emotional "mirroring" phenomenon is called affective sharing, and it's one of the observable neural networks that define empathy.

"People that are especially sensitive could find themselves feeling angry or irritable or annoyed and not even know why, and it's because they're picking up on the emotion of another person who is actually feeling those things," Gerdes says.

Affective sharing is an automatic, unconscious phenomenon, but there's more to empathy than just mirroring another person's emotions. You also must be able to put yourself in their shoes. This is the function of another neural network, called perspective taking. It's that cognitive ability to understand a situation from the perspective of someone else that separates empathy from sympathy, which is just an expression of concern or sorrow.

The third neural network that defines empathy is self-awareness, or the ability to differentiate between your own experience and that of the person with whom you are empathizing. In the example of losing a loved one, it may be helpful for the brain to remind you of those feelings so you can empathize with a friend, but you also must recognize that your experience is separate from theirs.

"You're there with them, but you're open to listening, because their experience is not going to be exactly the same as yours. You need to be able to differentiate that so you're not imposing things on them that worked for you," Gerdes says.

Additionally, empathy requires emotion regulation – the fourth neural network. Emotion regulation allows a person to tone down the mirroring



emotions that result from affective sharing. Social workers often work with people who lack emotion regulation.

"If you put it in the context of a man that abuses his wife, he understands when his wife gets frustrated, the affect sharing is working, but the emotion regulation piece isn't," Gerdes says. "He may be feeding off his own anxiety as well as the people around him, and because he can't control that, he takes it out on the people closest to him."

Once you understand how these neural networks function, you can actually cultivate empathy. For example, to improve emotion regulation, Gerdes suggests using mindfulness techniques, such as meditation or focused breathing.

"It helps people to cope better with the emotions they're picking up on from others, to function better at a higher level," Gerdes says.

It can also be helpful to simply bring the emotional contagion aspect of empathy to consciousness, Gerdes says. Next time you start feeling anxious or irritated for no reason, take note of your surroundings. Are other people in the room angry or sad? Being aware of the contagious quality of emotion can help you determine whether someone's bad mood is rubbing off on you.

To build your capacity for perspective taking, Gerdes suggests watching movies or reading books about the specific group of people you want to understand. The more you know about the context of a person's life, the more empathic you can be.

Since empathy is at the core of social work, it's important to be able to measure it. Gerdes says one of the most accurate measures is the multi-faceted empathy test (MET), which is based on social cognitive neuroscience research. It asks participants to look at 23 sets of



photographs of people in emotionally charged situations and then try to determine each person's emotional state, perspective and intentions.

While MET is an effective test, it is also relatively expensive and requires some training to administer. Most researches tend to rely on selfreport measures because they are inexpensive. The most widely used selfreport measure is the interpersonal reactivity index (IRI), which was developed in the '80s. The problem with IRI is that it ends up assessing a person's level of sympathy rather than empathy.

"Sympathy and empathy are completely different constructs. They're probably correlated with each other, but they're not the same thing," Gerdes says.

Gerdes is developing a new self-report measure called the empathy assessment index (EAI), which is based on the latest neuroscience research. In a recent study, she tested the measure by comparing data from a group of offenders with a group of social workers. The offenders included men who had been charged with domestic violence or sexual molestation, and at-risk parents struggling with anger management issues.

"We wanted to compare the offenders' scores on our instrument, the assessment index, to the social workers' scores. If it's a valid measure, there should be a significantly significant difference in their scores, and thank goodness there was," Gerdes says. She hopes to see a shift from the outdated IRI self-report measure to the new, research-based EAI measure, which will be more accurate but just as inexpensive to use.

Empathy is a relatively new word, only having come about in the 20th century. While most social work classes discuss empathy to some extent, few schools have incorporated the latest research into the curriculum. But Gerdes believes they soon will, because empathy is an important



concept for both social workers and the general public.

"When you have an empathy deficit, like Hitler did, you have genocide," Gerdes says. "When you have appropriate <u>empathy</u>, those things don't happen because you'll interfere with them happening. You'll do everything you can, because it's at the core of our human interaction that I try to understand you and you try to understand me."

Provided by Arizona State University

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