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Hal McDonald Ph.D.
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SCENT

"I Feel Your Pain" (Literally)

New research indicates that physical pain may be socially transferable.

Posted October 25, 2016



Source: "Perez the Mouse" by Luis Coloma / Flickr / Public Domain

In 1992, presidential candidate Bill Clinton famously told an activist who was heckling him at a rally, "I feel your pain," and that statement quickly entered the popular vernacular as a clichéd expression of sympathy.

Most of us have at one time or another found ourselves telling someone who is complaining to us

about something that we, like Bill Clinton, "feel" his or her

tend for it to be taken literally. No matter how empathetic we may like to imagine ourselves, we cannot actually feel someone else's physical pain. Or can we?

A recent [study](#) at Oregon Health and Science University suggests that physical pain may, indeed, be transferrable from one individual to another. In the Oregon study, one group of mice was subjected to a variety of pain-inducing stimuli (inflammation from a local injection of a noxious substance, and withdrawal from opiates and alcohol). Other "bystander" mice, not subject to the pain-inducing stimuli, were housed in different degrees of proximity to the primary mice in order to test whether or not their pain would be transferred to the bystander mice. All the mice were housed in open cages, but while one group of bystander mice was housed in the same room as the mice suffering inflammation and withdrawal, another group was housed in a separate room.

As expected, the mice that had been subjected to noxious stimuli soon developed hyperalgesia, or a measurable increase in sensitivity to pain. Interestingly, the bystander mice housed in the same room with the hyperalgesic mice exhibited a similar heightened sensitivity to pain. Even without any direct exposure to noxious stimuli, the bystander mice "felt" the pain of the primary mice who were suffering the effects of inflammation and withdrawal.

Not surprisingly, the mice housed in a separate room—cut off from visual and auditory cues related to the pain sensitivity of the other mice—showed no initial signs of hyperalgesia. When a small amount of bedding from the cages of the hyperalgesic mice was placed in the cages of the mice housed

mation from the other two groups of mice, olfactory cues from their bedding induced hyperalgesia in the physically separated group of mice. While only one group of mice was actually subjected to a noxious stimulus, all three groups ended up displaying pronounced hyperalgesia. In other words, the pain of the mice in the first group was effectively transferred to the mice in the other two groups.

This study reinforces the conclusions of other studies on the transferability of pain. It covers new ground, however, in its demonstration of olfaction as a major mechanism in the social transfer of pain. There is still a great deal to be learned about the manner in which these cues trigger the experience of hyperalgesia, but a mounting body of evidence suggests that we may, indeed, be able to feel each other's pain.

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So the next time you say to a suffering friend of yours that you feel his or her pain, you can do so with the confidence that, however sincere or otherwise your extension of sympathy might actually be, you are at least expressing a physiological possibility. Of course, given the findings of this most re-

ability to experience someone else's pain is a literal fact rather than a figurative expression.



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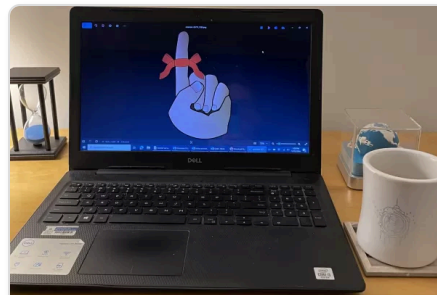
About the Author



Hal McDonald, Ph.D., a professor of literature and linguistics at Mars Hill University, is the author of the medical mystery *The Anatomists*.

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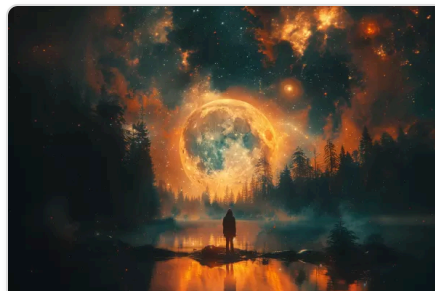
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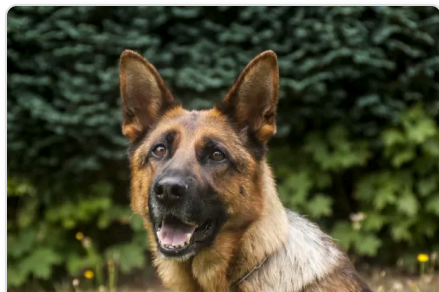
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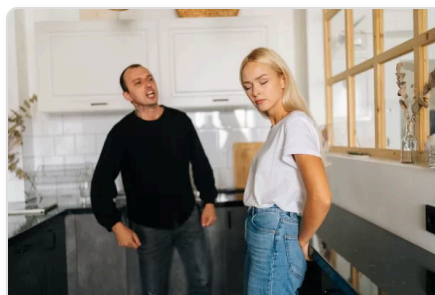


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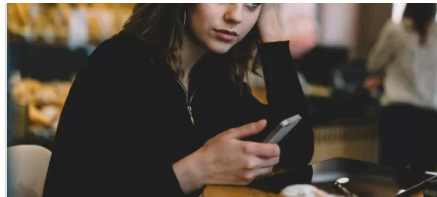


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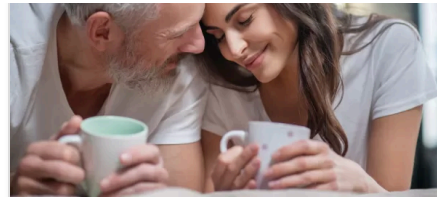


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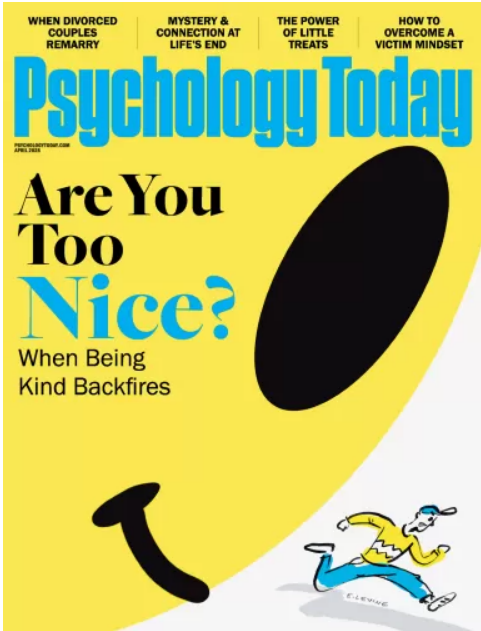
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