

# Stressed? Having a partner present—even in your mind—may keep blood pressure down

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When faced with a stressful situation, thinking about your romantic partner may help keep your blood pressure under control just as effectively as actually having your significant other in the room with

you, according to a new study by University of Arizona psychologists.

For the study, published in the journal *Psychophysiology*, 102 participants were asked to complete a stressful task—submerging one foot into 3 inches of cold water ranging from 38 to 40 degrees Fahrenheit. Researchers measured participants' [blood pressure](#), [heart rate](#) and heart rate variability before, during and after the task.

The participants, all of whom were in committed romantic relationships, were randomly assigned to one of three conditions when completing the task. They either had their significant other sitting quietly in the room with them during the task, they were instructed to think about their [romantic partner](#) as a source of support during the task, or they were instructed to think about their day during the [task](#).

Those who had their partner physically present in the room or who thought about their partner had a lower blood pressure response to the stress of the cold water than the participants in the control group, who were instructed to think about their day. Heart rate and heart rate variability did not vary between the three groups.

The effect on blood pressure reactivity was just as powerful whether the partner was physically present or merely conjured mentally.

Although previous studies have suggested that having a partner present or visualizing a partner can help manage the body's physiological response to stress, the new study, led by UA psychology doctoral student Kyle Bourassa, suggests that the two things are equally effective—at least when it comes to blood pressure reactivity.

The findings may help explain, in part, why high-quality [romantic relationships](#) are consistently associated with positive health outcomes in the scientific literature, Bourassa said.

"This suggests that one way being in a romantic relationship might support people's health is through allowing people to better cope with stress and lower levels of cardiovascular reactivity to stress across the day," Bourassa said. "And it appears that thinking of your partner as a source of support can be just as powerful as actually having them present."

The [study participants](#) in Bourassa's research, which was funded by a grant from the UA's Graduate and Professional Student Council, were college undergraduates in committed relationships. Future studies should look at members of the general community in varying age ranges, Bourassa said.

If replicated, the findings could have implications for those facing everyday [stressful situations](#), said Bourassa, who co-authored the study with UA psychologists David Sbarra and John Ruiz.

"Life is full of stress, and one critical way we can manage this stress is through our relationships—either with our [partner](#) directly or by calling on a mental image of that person," Bourassa said. "There are many situations, including at work, with school exams or even during [medical procedures](#), where we would benefit from limiting our degree of blood pressure reactivity, and these findings suggest that a relational approach to doing so can be quite powerful."

**More information:** Kyle J. Bourassa et al, The impact of physical proximity and attachment working models on cardiovascular reactivity: Comparing mental activation and romantic partner presence, *Psychophysiology* (2019). [DOI: 10.1111/psyp.13324](https://doi.org/10.1111/psyp.13324)

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