Study finds link between cortisol and social support in couples

April 4 2024, by Shawn Ammann

Credit: Vera Arsic from Pexels

Couples feel more understood and cared for when their partners show positive support skills—and it's evidenced by levels of the stress hormone cortisol in the body—according to new research from
A team of Binghamton researchers including Professor of Psychology Richard Mattson conducted a study of 191 heterosexual married couples to find out whether better communication skills while giving and receiving social support led to lower cortisol levels—a hormone associated with stress reactions.

The work is published in the Journal of Social and Personal Relationships.

Over two 10-minute sessions, the couples discussed personal issues unrelated to their marriages. The researchers analyzed their communication for instances of both positive and negative social support given and received, evaluated how the participants perceived the support they received and gathered samples of saliva to assess cortisol levels.

"We found that wives who received support more negatively (e.g., rejecting help) felt less understood, validated and cared for by a partner, which had a 'stress-amplifying' effect, meaning cortisol increased across the interaction," said Mattson. "Couples felt more understood, validated and cared for when their partners showed positive support skills, and less so when they showed negative communication skills."

Unexpectedly, the researchers found that biological stress levels prior to the interaction appeared to accurately predict how couples would act and perceive the interactions. Another predictor of couples' behavior and perception was their overall perceived partner responsiveness, which is an assessment of feeling understood, valued and cared for.

Hayley Fivecoat, the lead author of the paper, developed this study during her time as a graduate student at Binghamton. She is now a clinical research psychologist at The Family Institute at Northwestern
"Our research more strongly showed how perceptions of support interactions shape our experience," Fivecoat said. "How each partner perceived the interaction was highly associated with how supportive and responsive they believed the partner to be more generally. One possibility is that perceptions of how supportive a partner is can build over time and across several interactions; and the more general picture shapes how particular behaviors—good or bad—might be viewed in the moment."

"Alternatively, it is possible that different types of support behaviors are needed for different people experiencing different kinds of problems, and so looking at specific behaviors across couples becomes less relevant. In either case, those who perceived themselves as having a supportive partner in general tended to have the lowest levels of cortisol at baseline and following the interaction."

The authors believe understanding how couples navigate and support each other in stressful situations can offer valuable insights into strengthening relationships and overall well-being.

Future studies will employ different strategies to assess support behavior and how it is communicated. The authors have a reason to believe that the tone of what was said was more relevant than the content matter. Essentially, it might matter how you say it, more than what you say.

Additionally, further research will examine different couples with diverse backgrounds, as this study only covered heterosexual relationships. Researchers will also use a standardized stressor before the support communication exercise takes place.

"Lastly, we are also considering looking at alternative ways of measuring
stress at the biological level to understand what effective partner support looks like, as cortisol is one of many indicators of our body's stress response system," Mattson said.

Binghamton psychology faculty Nicole Cameron and Matthew Johnson also contributed to the paper.


Provided by Binghamton University

Citation: Study finds link between cortisol and social support in couples (2024, April 4) retrieved 5 April 2024 from https://medicalxpress.com/news/2024-04-link-cortisol-social-couples.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.