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The Benefits of Supporting Others

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The benefits of supporting others

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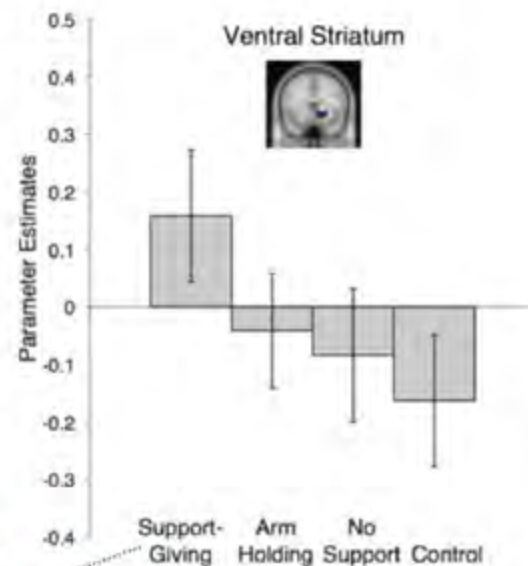
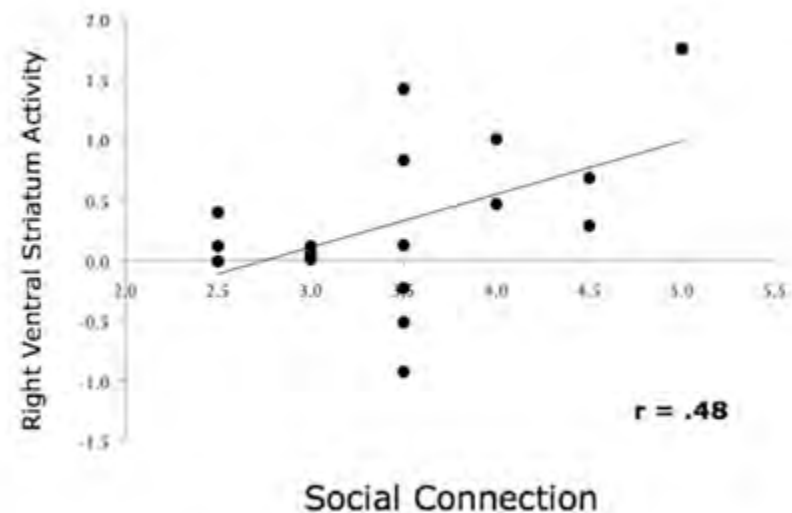
We spend a lot of time caring for and providing support to others. According to the American Time Use Survey, individuals spend hours each day providing support and care for others and typically women spend more time engaged in these activities than men (United States Department of Labor, 2010). Given the substantial amount of time we spend caring for others, one might ask “why”?

IT TURNS OUT THAT WE CAN AND DO derive benefits from giving to others. In a new study I completed in collaboration with my advisor, Dr. Naomi Eisenberger, we found that giving support to others activated brain regions associated with reward-related processing. Specifically, giving support to others activated the ventral striatum—a neural region known to be involved in responding to basic rewards like chocolate and money.

In this study we used functional magnetic resonance imaging (fMRI) to scan women as they completed four different conditions. In the first condition, each woman provided her boyfriend with support by holding his arm as he experienced painful stimuli (support-giving condition). In a second condition, each woman did not provide support to her boyfriend, but instead held a squeezeball as he went through a painful task (no support-giving condition). In the last two conditions, each woman either simply held her boyfriend's arm (arm holding condition) or held a squeezeball (control condition), this time, without any painful stimulation to him.

Not only did women recruit a reward-related neural region when they gave support, but this activity also correlated with how connected they felt to their boyfriend.

Women showed greater activity in the ventral striatum, a reward-related neural region, during support-giving compared to when they did not give support.



The more reward-related neural activity women showed while providing support, the more connected they reported feeling toward their partner.

In other words, the more reward-related neural activity these women demonstrated while providing support, the more connected they reported feeling toward their partner. This study is the first to show that providing support to loved ones in women relies on neural regions involved in reward processes and suggests that the person providing support to others may also accrue benefits simply by giving.

Research in the field of health psychology has demonstrated the importance of supportive social ties, like the ones studied above, for our overall health and well-being. In particular, relationships with spouses, friends, and family members who act as supportive contacts enhances well-being, while a lack of social support is correlated with increased mortality (Berkman & Syme, 1979). This effect of social ties on health is as strong a predictor of negative health outcomes as more traditional risk factors of long-term health, such as smoking and obesity (Holt-Lunstad, Smith, & Layton, 2010).

Typically it has been assumed that social ties contribute to health through the receipt of social support. However, our study and the work of others begins to suggest that the act of giving support to others may be just as, if not more, important than

receiving support for health. Moreover, some work has started to suggest that, for women in particular, giving support may be a stronger determinant of health than receiving support. In a recent study, giving support was a stronger predictor of longevity than receiving support; those who gave more support were less likely to die during a 5-year follow-up period (Brown, Nesse, Vinokur, Smith, 2003). In another study, giving more support than receiving was associated with fewer sick days for women, whereas for men, receiving more support than giving was associated with fewer sick days (Vaananen, Buunk, Kivimaki, Pentti, & Vahtera, 2005).

Similarly, men who received social support from their significant others during a stressful task released less cortisol, a commonly studied hormone associated with stress, compared to men who did not receive any support (Kirschbaum, Klauer, Filipp, & Hellhammer, 1995). Women, on the other hand, did not show this effect. In fact, receiving support from their boyfriend's slightly increased the release of cortisol in these women. This does not mean that women do not benefit from receiving support from others, but does suggest that looking at the effects on the provider of the support should be studied further.

Animal research on the maternal caregiving system, which supports these support-giving behaviors in humans, may help us shed light on why women show a health benefit from giving support to others. Activation of the maternal caregiving system, including the ventral striatum, supports proper care of offspring such as nest building and grooming. Additionally, built into the caregiving system is a stress-reducing component that allows for care to continue even under stress (Stack, Balakrishnan, Numan, & Numan, 2002). To the extent that women also recruit a caregiving system, providing support may have similar stress-reducing effects.

It is important to acknowledge the limits of what this kind of data can tell us about providing support. Resources and an individual's motivation to give support to others are important determinants as to whether or not supporting another is beneficial. If you are too stressed or overwhelmed with other things going on in your life at a given moment in time, providing support to someone else might actually be a burden. However, aside from the large and established literature on caregiver burnout, or the detrimental effects of caring for very ill relatives or patients (Schulz & Beach, 1999), few researchers have looked

at the effects of more everyday supportive behavior toward others.

Currently, I am extending these results into another study to further explore how giving support might reduce the stress response and lead to more long-term health benefits in women. Hopefully the results from this line of work draw attention to the inherently rewarding effects of support giving and help us better understand one of the pathways by which support may enhance health.

Tristen Inagaki is a doctoral student in the Social Affective Neuroscience Laboratory in the Department of Psychology. Her research interests include the mechanisms underlying positive social interactions and the health benefits of being socially connected with others. She is a Jacob K. Javits Fellow and a National Science Foundation Fellow and was awarded a CSW travel grant to present findings from her study on social support at the Society for Personality and Social Psychology Annual Conference in San Antonio, TX.

NOTE: Photo on page 29 from istockphoto.com

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