

Ashlie Dao  
Dr. Janet Tomiyama  
PSYCH 189H, 150  
October 26, 2022

Reaction Paper: "Partner Photographs Reduce Experimentally Induced Pain"

In this experimental study, social psychologists, Sarah L. Master, et al. (2009), examined whether "the same pain-attenuating effects of social support [can] be observed by merely activating the mental representation of a supportive other" (pp. 1316). Previous experimental studies have examined participants' reported pain levels with either interactive support or with a mental representation of support during the administration of a controlled pain stimulation. These studies suggest that social support is associated with experiencing reduced pain. Master, et al. wanted to expand the hypothesis from Fitzsimons & Bargh (2003) and Mikulincer & Shaver (2001) because their work showed that activating mental representations of important others can produce effects similar to those created by the actual presence of these individuals.

Thus, Master, et al. posed the question: does viewing a photograph of one's romantic partner can reduce the participants' physical pain level? The participants were 28 right-handed women who were in long-term relationships that have lasted at least 6 months or more. The thermal stimulation was administered under 7 task conditions with each participant receiving a total of 84 thermal stimulations. I think that there were effective conditions put in place to account for validity purposes—the conditions cleverly countered the independent variables. For example, when asking the participant to hold something for the "interactive support," besides the loved one's hand, they included holding the hand of a male stranger, an a squeeze ball, or when viewing the partner's photographs, they also looked at a photograph of a chair, photograph of a male stranger that was ethnicity-matched to the participant's partner, as well as by viewing a fixation crosshair. I appreciate the attention to details in designing this experiment.

The findings confirm the notion that simply viewing a loved one's picture can reduce the experience of pain because the picture "prime[s] the associated mental representation of being loved and supported" (Master, S. L., et al., 2009, pp.1317). Furthermore, the findings suggest that bringing loved ones' photographs to painful procedures may not only be beneficial, but also because loved ones vary in their ability to provide support, photographs may, in some cases, be more effective than in-person support. There were no questions left unanswered. Based on this study, I want to learn more about the effects of viewing photographs of a family member or a friend (>6 months) in lieu of a romantic partner. The reason for this differentiation is because of the effects of high dopamine levels in romantic relationships that primary estrogen individuals may be more affected by than familial and/or platonic relationships.

## References

- Fitzsimons, G.M., & Bargh, J.A. (2003). Thinking of you: Nonconscious pursuit of interpersonal goals associated with relationship partners. *Journal of Personality and Social Psychology*, 84, 148– 164.
- Master, S. L., Eisenberger, N. I., Taylor, S. E., Naliboff, B. D., Shirinyan, D., & Lieberman, M. D. (2009). A picture's worth partner photographs reduce experimentally induced pain. *Psychological Science*, 20(11), 1316–1318.  
<https://doi.org/10.1111/j.1467-9280.2009.02444.x>
- Mikulincer, M., & Shaver, P.R. (2001). Attachment theory and inter-group bias: Evidence that priming the secure base schema attenuates negative reactions to out-groups. *Journal of Personality and Social Psychology*, 81, 97–115.