Effects of Depressive Symptoms and Inflammation on Social Behavior



Sarah E. Barnes, Tatum A. Jolink, Natalie M. Antenucci, Megan N. Cardenas, Keely A. Muscatell Department of Psychology & Neuroscience, University of North Carolina at Chapel Hill

Introduction

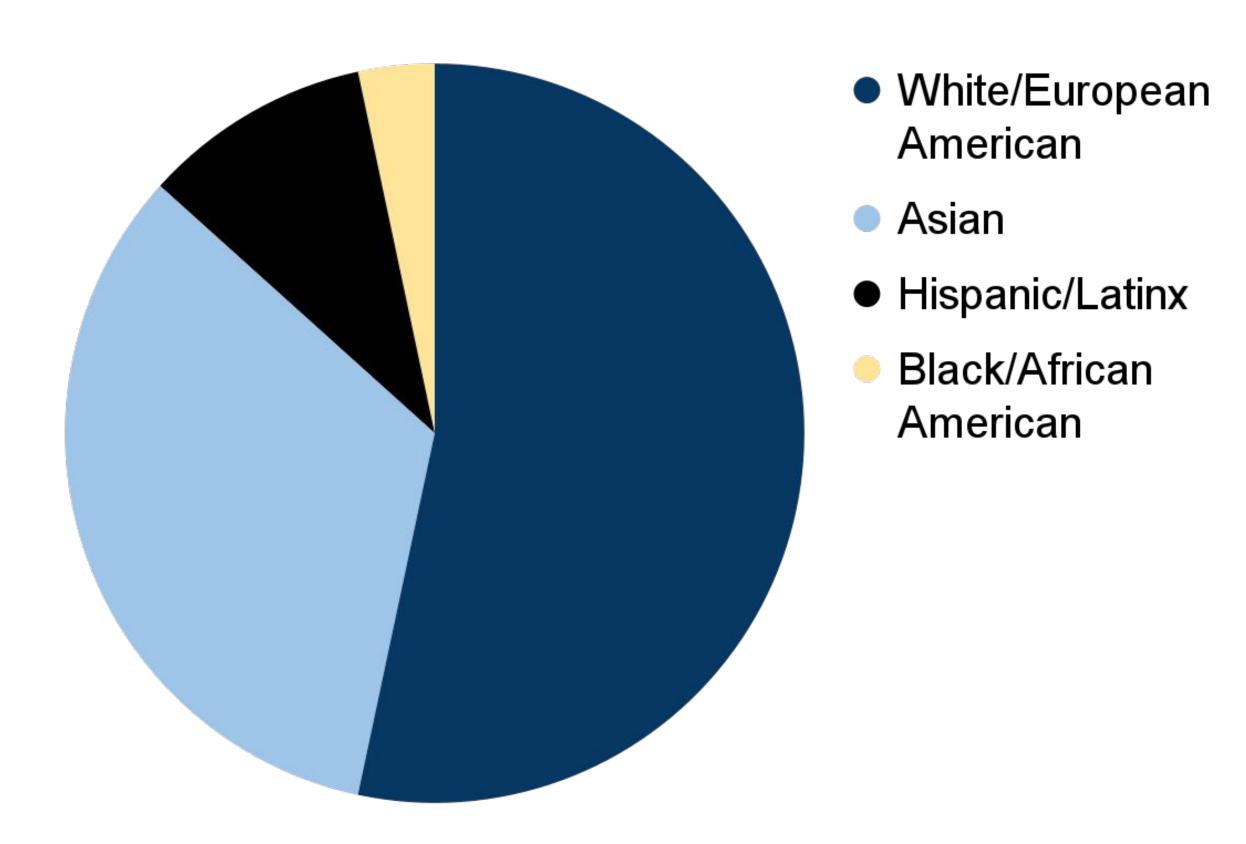
- Depression, inflammation, and social behavior are highly interconnected
- Higher depressive symptoms are associated with less rewarding and fewer social interactions
- Depressed individuals have higher levels of inflammation compared to healthy controls
- Emerging research has shown that inflammation differentially facilitates different social behavior depending on social target (e.g., social approach toward close others; social withdrawal from strangers)

Research question: How do depressive symptoms moderate the relationship between inflammation and social behavior?

Hypothesis: Participants with low levels of depressive symptoms interacting with a friend (v. stranger) would experience the greatest enjoyment and connection from those interactions when in the vaccine condition compared to the sham condition.

Methods

N=28 undergraduate students, (71.4% female)



Procedure

Consent/Scheduling

Participant consents and is scheduled via Zoom.

Friend/Stranger Recruitment

Participant identifies a close friend and is matched with a stranger.

Session 1

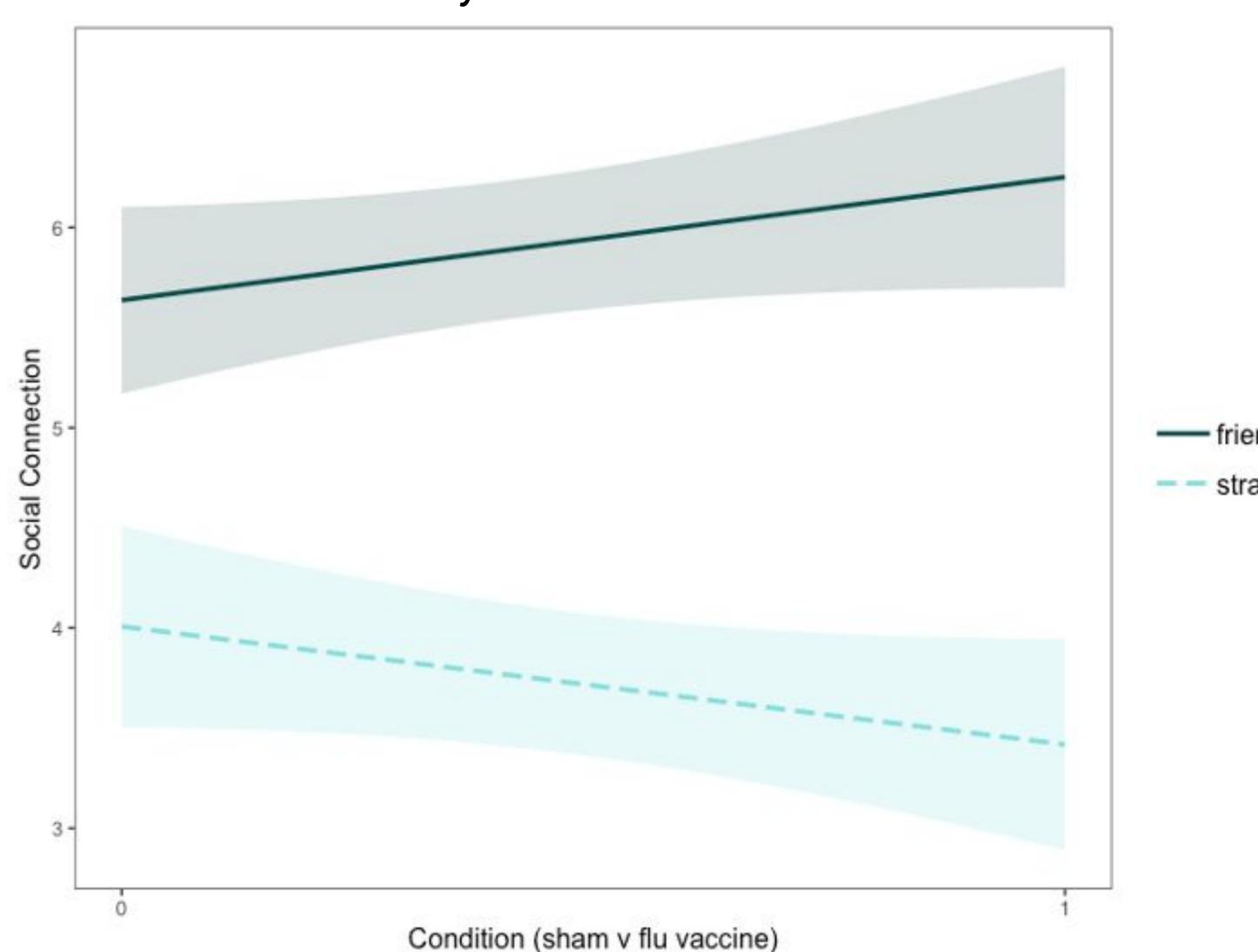
- . Baseline survey
- Blood Draw 1
- Randomly assigned to receive either the influenza or sham vaccine

Session 2-24 hours later

- l. Blood Draw 2
- Pre-interaction survey
- Fast friends task: 15 minute structured "get to know" conversation
- Post-interaction survey
- 5. Repeat 2-4 with stranger or close other
- Paid and debriefed
- Depression Measure (baseline)
 - Patient Health Questionnaire-9 (PHQ-9)
- Post-Interaction Measure
- Enjoyment/Liking
- Social Connection

Results

- Main effect of relationship type on post-interaction feelings - greater enjoyment and connection during interaction with close friend
- Depressive symptoms were not a significant moderator in any interaction



Relationship type interacted with condition to predict post-interaction feelings

Discussion

- The present study explored the effects of depressive symptoms and inflammation on social behavior toward different social targets (friend vs. stranger)
- Despite the link between depression, inflammation, and social behavior, depressive symptoms were not a moderator
- The study should be replicated in a clinical sample to increase variance

References available upon request. Contact Sarah Barnes, seb0321@live.unc.edu for more information