

Influence of Socioeconomic Status on Health Messaging Perception

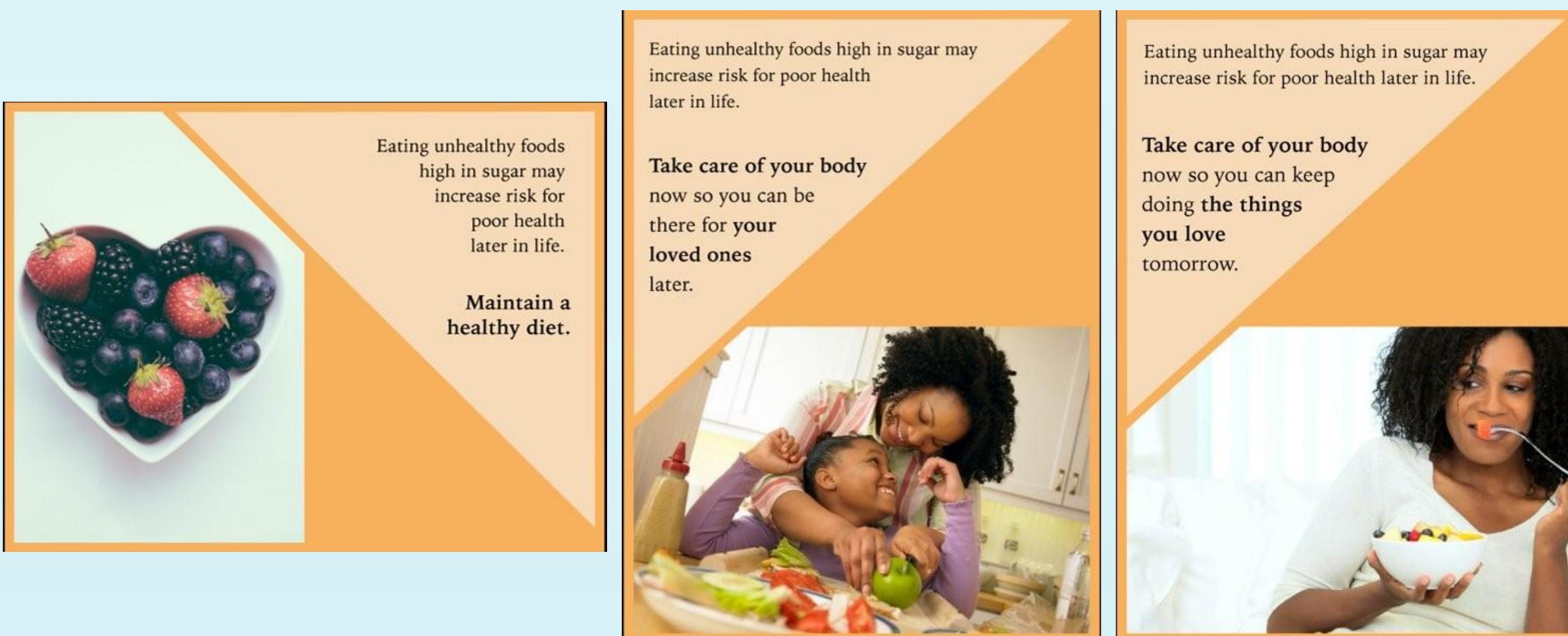
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Introduction

- Lower SES individuals are disproportionately affected by chronic diseases such as cancer compared to their higher SES counterparts. This is in part because of disparities in preventative behaviors (e.g., eating a healthy diet, exercising, attending screenings).
- Current health messaging efforts are also less effective for motivating behavior change among lower SES individuals, perhaps because they are mainly focused on how living a healthy lifestyle can benefit the self.
- Incongruent with these individualistic ideals, lower SES individuals have been shown to be more social-focused and interdependent.
- This study aims to develop and assess the effectiveness of more social-focused health messages, highlighting how living a healthy lifestyle can benefit close others, to help reduce SES disparities in health.

Methods

- Sampled 127 participants (77 females) from Qualtrics survey pool of varying levels of SES, ranging from age 40 to 60 ($M = 49.60, SD = 6.99$).
- Within-Subjects design: On a Likert scale from 1 to 5, participants rated the effectiveness of 40 health messages, which were either social-focused, self-focused, or a control message.



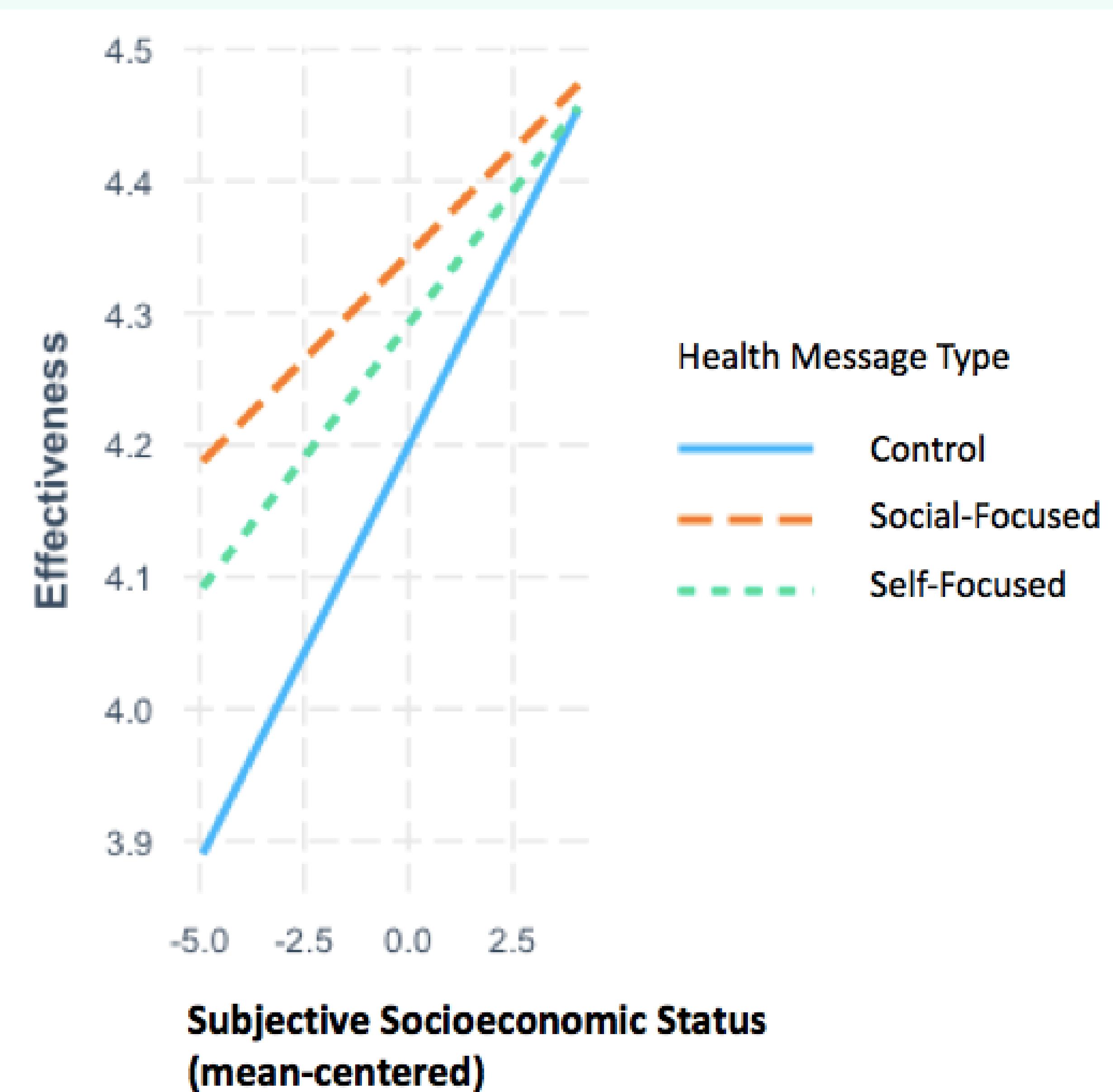
Control

Social-Focused

Self-Focused

- We used Multilevel Modeling in R to analyze relationships between participant SES and the types of messages they rated as most effective.

Results



This interaction plot demonstrates how the relationship between subjective SES and ratings of message effectiveness depends on the type of health message.

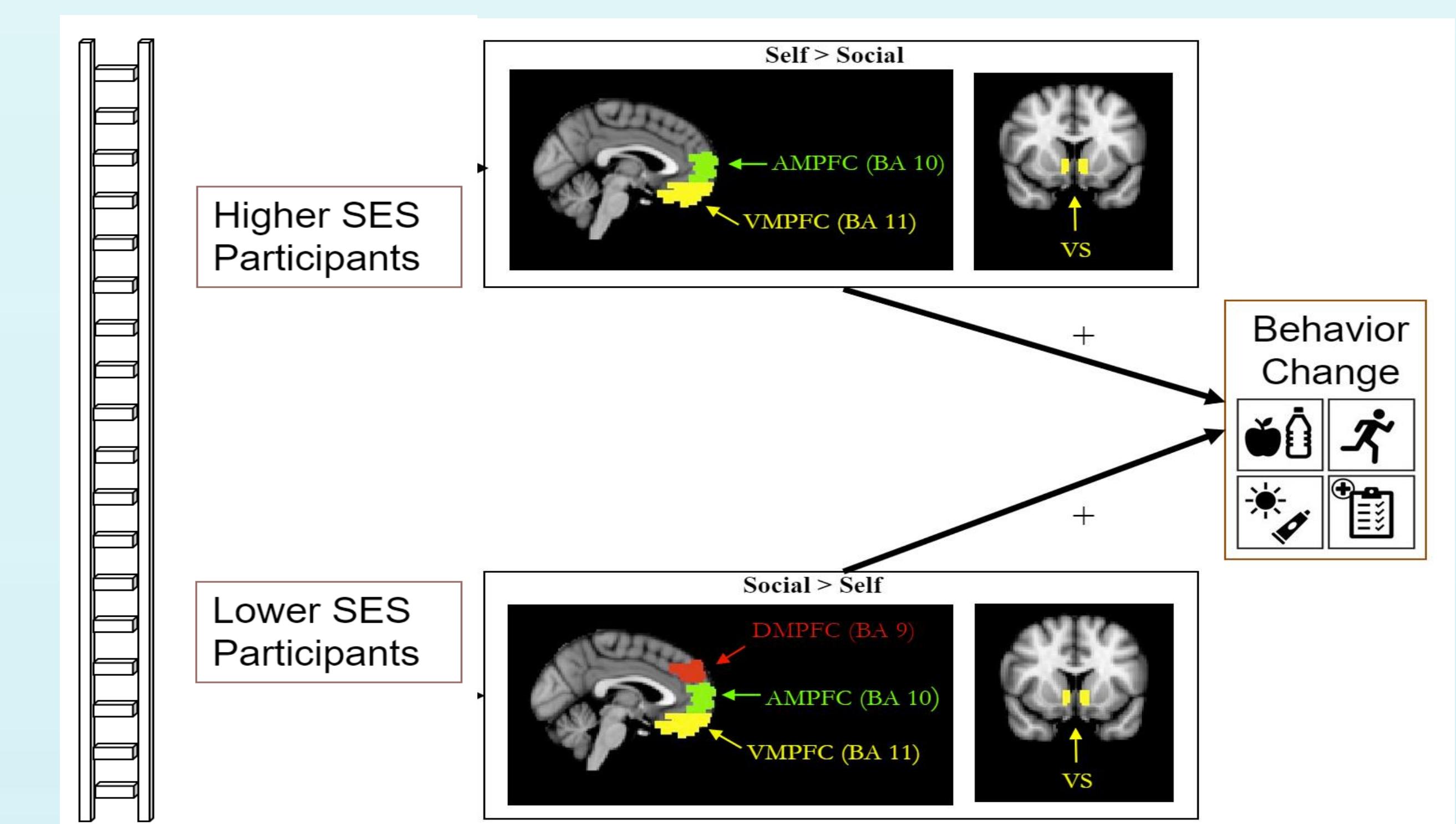
- We found a significant fixed effect of health message type, such that participants rated the social-focused and self-focused messages as more effective than the control messages (.14 units higher, $p < .001$; .09 units higher, $p < .001$).
- We also found a significant fixed effect of SES, such that lower SES participants tended to rate the health messages as less effective (fixed effect = .06, $p < .05$).
- We found a significant interaction between SES and health message type.** The magnitude of the regression between SES and effectiveness ratings was .03 units less for social-focused health messages compared to control health messages ($p < .05$). No significant differences were found between the simple slopes for self-focused and control.
- Altogether, these results indicate that making messages more personal increases their perceived effectiveness, especially for lower SES individuals.

Discussion & Future Directions

- For lower SES participants, the type of health message had a greater influence on perceived effectiveness than for higher SES participants.
- Our results suggest that culturally tailoring health messages and emphasizing how living a healthy lifestyle can benefit both the self and close others might be more effective for lower SES populations.
- Findings from this study will help pave the way for creating more effective health messaging that can help to reduce SES disparities in health behaviors and downstream health.

Future Directions:

- Next, we plan to run an fMRI study to investigate the neural mechanisms involved in processing the different types of health messages and health behavior change.
- We will specifically explore neural activity in the ventral striatum and medial prefrontal cortex. Neural activity in these regions, in response to health messages, has been shown to predict downstream behavior change.



References

For more information, visit the Social Neuroscience and Health Lab website at <https://carolinashnlab.com/>

