I GET HIGH (AROUSAL) WITH A LITTLE HELP FROM MY FRIENDS: THE EFFECT OF SOCIAL CONTEXT ON SELF-REPORTED AFFECT

Nielson, C.[1], Feldman, M.[2], Hoemann, K.[1], Khan, Z.[3], Devlin, M.[1], Dy, J.[3], Barrett, L. F.[1,4,5], Wormwood, J. B.[6], & Quigley, K.[1,7]

[1]Department of Psychology, Northeastern University, Boston, MA; [2]Department of Psychology, University of North Carolina, Chapel Hill, NC; [3]Department of Electrical and Computer Engineering, Northeastern University, Boston, MA; [4]Department of Psychiatry, Harvard University, Cambridge, MA; [5]Department of Radiology, Massachusetts General Hospital, Boston, MA; [6]Department of Psychology, University of New Hampshire, Durham, NH ; [7]Edith Nourse Rogers Memorial VA Medical Center, Bedford, MA

Introduction

- Context is a critical ingredient for constructing affective experience in everyday life. [1,2]
- For example, in a social context, other people can increase both attendance toward, and clarity for, affect and emotion. [3,4]
- However, scientists have rarely examined how social context influences experiences of valence (pleasantness) and arousal (activation) in daily life. [4]
- In the present study, we measured self-reported valence, arousal and social context during daily life.

Hypothesis

We predicted that individuals would report higher arousal and greater pleasantness in social contexts compared to when alone.

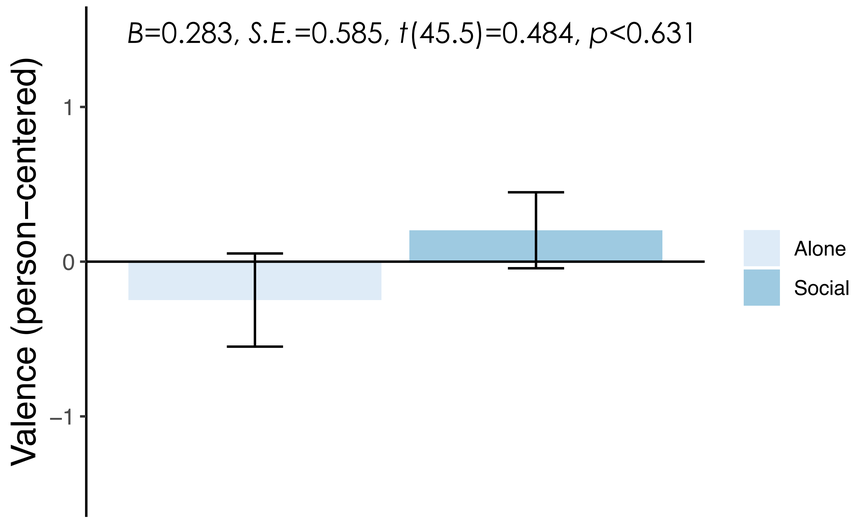
Methods

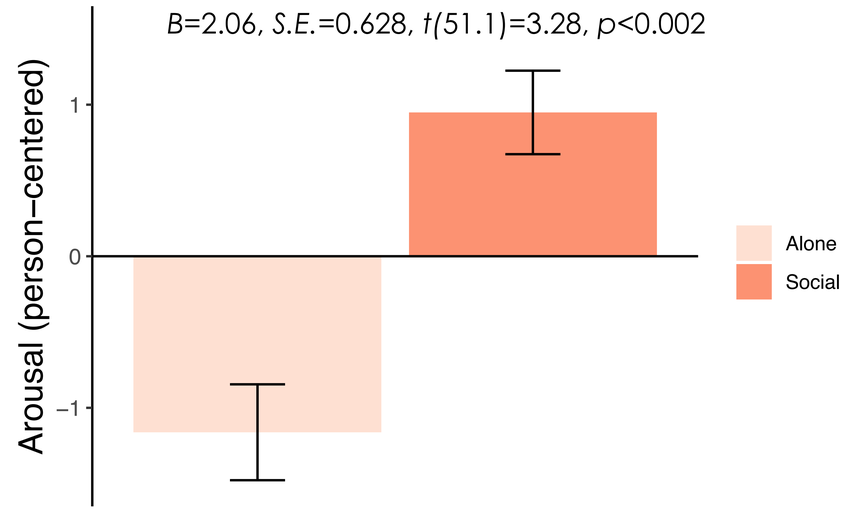
- Participants (N=50; 52% female; age= 22.35 yrs ± 4.45) received prompts on a smartphone triggered by significant changes in heart rate (in the absence of posture change or movement), as part of a larger study.
- At each prompt, participants provided their current self-reported valence, arousal, and social context (alone or with others, i.e., social).
- Participants completed an average of 126.14 prompts (alone = 56.7; social = 69.44).

Results

- Analyses were conducted with two general linear mixed models, with experience sampling prompts nested within participants (lme4 package, R version 3.4.1, [5]). Outcomes were within-person centered valence and arousal; social context was a level-1 predictor (0=Alone, 1=Social) with random slopes and intercepts.

We found that **social context significantly predicted self-reported arousal** (but not valence) with relatively higher arousal reported around social others compared to when alone.





Conclusions

- These findings are consistent with the idea that affective experience is highly situated [1,2,6] and demonstrate the importance of social context for affect in daily life.
- They also highlight the need for more idiographic and naturalistic work in affective science, particularly focusing on measuring felt arousal, in addition to valence and intensity.

References and Acknowledgments

1. Barrett, L. F. (2017). The theory of constructed emotion: an active inference account of interoception and categorization. Social cognitive and affective neuroscience, 12(1), 1-23.
2. Barrett, L. F. (2017). How emotions are made: The secret life of the brain. Houghton Mifflin Harcourt.
3. Atzil, S., & Barrett, L. F. (2017). Social regulation of allostasis: Commentary on "Mentalizing homeostasis: The social origins of interoceptive inference" by Fotopoulou and Tsakiris. Neuropsychoanalysis, 19(1), 29-33.
4. Thompson, R. J., & Boden, M. T. (2019). State emotional clarity and attention to emotion: a naturalistic examination of their associations with each other, affect, and context. Cognition and Emotion, 33(7), 1514-1522.
5. R Core Team, (2017). R: A Language for Statistical and Environment for Statistical Computing. *R Foundation for Statistical Computing.* Vienna, Austria. https://www.R-project.org.
6. Averill, J. R. (1985). The social construction of emotion: With special reference to love. In The social construction of the person (pp. 89-109). Springer, New York, NY.

This research was supported by the U.S. Army Research Institute for the Behavioral and Social Sciences (W911N-16-1-0191 to K.S.Q. and J.B.W.). The views, opinions, and/or findings contained in this paper are those of the authors and shall not be construed as an official Department of the Army position, policy, or decision, unless so designated by other documents.