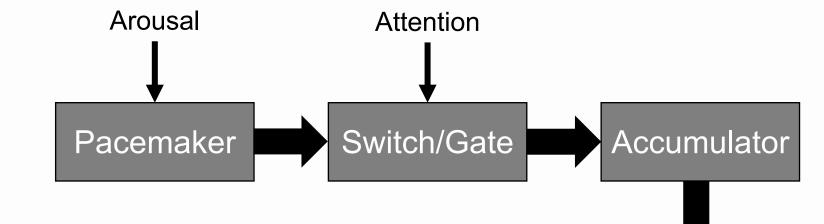


Introduction

The impact of emotion on time perception can be due to $\| \cdot \|$ Participants: 19 (13 Female, 4 Male, 2 Undisclosed; Age M= 21.25) arousal, attention, or bias in the decision process

emotion increases • Arousal: pacemaker rate (Droit-Volet et al., 2004)



- Attention: emotion causes attentional effects on the switch/gate (Lui et al.,

Method

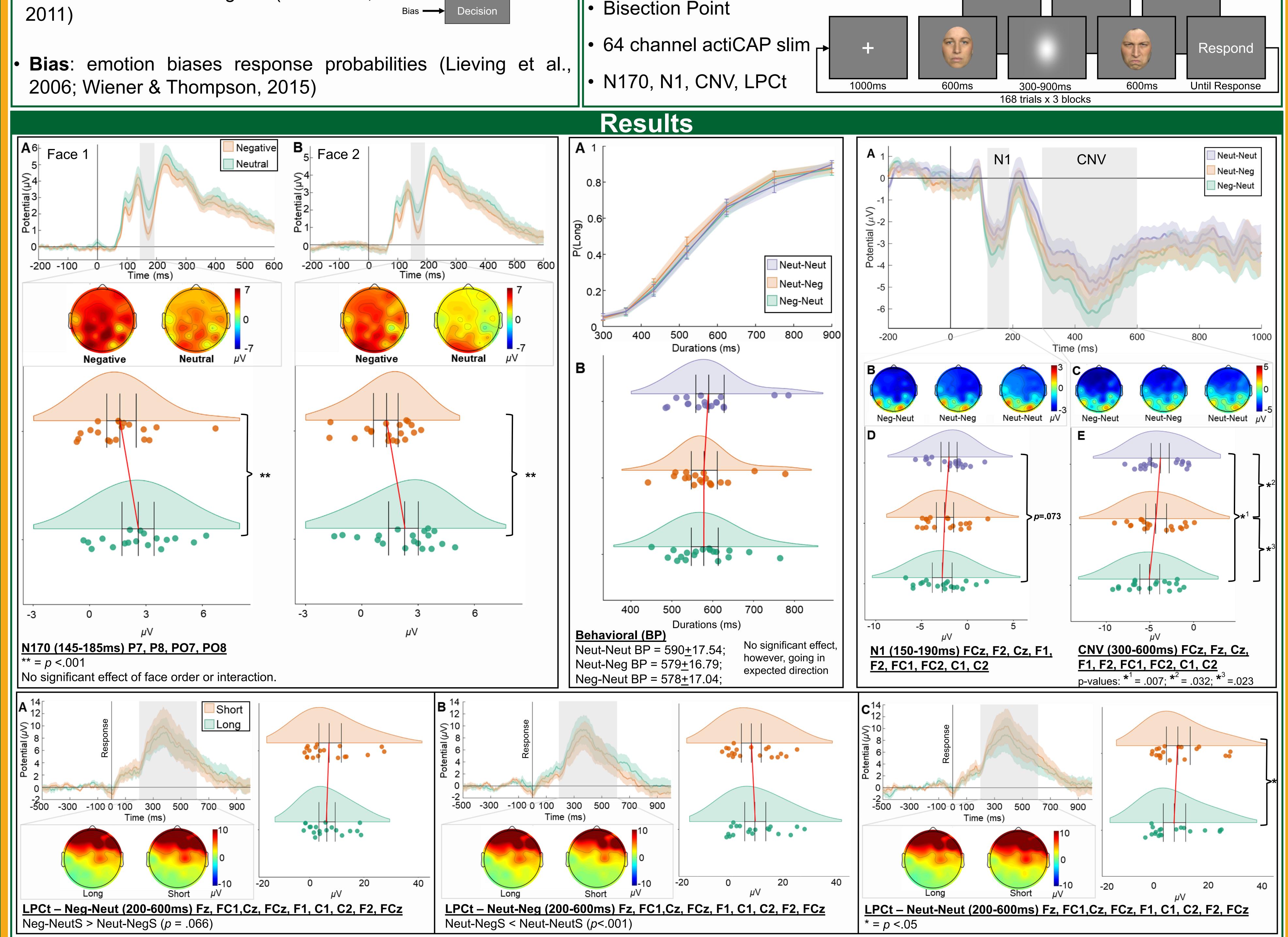
Stimuli: four males and four females each with a negative and neutral expression from FACES data set (Ebner et al., 2010); Gaussian blur

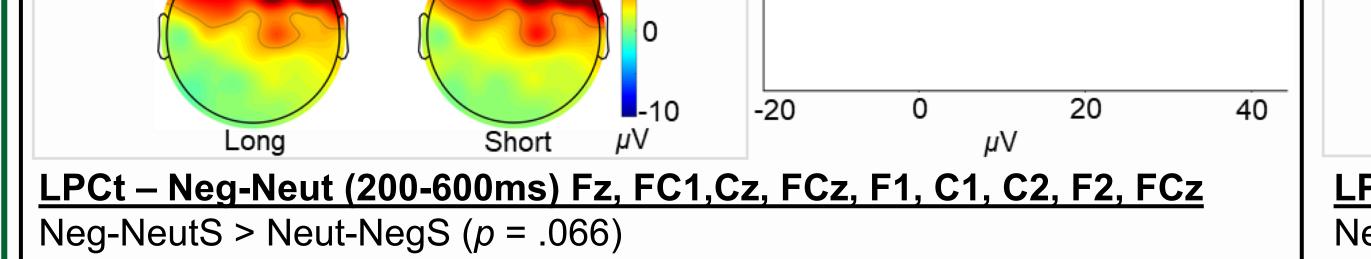
Conditions: Negative first, Neutral second (Neg-Neut); Neutral first, Negative second (Neut-Neg); Neutral first, Neutral second (Neut-Neut)

500ms

500ms

Durations: 300, 360, 433, 520, 624, 749, 900ms 500ms





Conclusion

- N170 = larger for negative faces than neutral faces, indicates negative face is more arousing and should lead to time overestimation
- BP = not significantly different but slight changes in expected direction across condition. P(Long) increased in Neg-Neut and Neut-Neg
- N1 = Neg-Neut marginally different from Neut-Neut suggests that attention is increased after seeing a negative face
- CNV = significantly different across conditions, suggests participants perceived the duration as lasting longer in Neg-Neut and Neut-Neg
- LPCt = significantly different between short and long for Neut-Neut; significantly different for short between Neut-Neg and Neg-Neut and almost significantly for Neg-Neut and Neut-Neg
- Negative face before temporal stimulus increases time perception as evidenced by the CNV magnitude and slightly supported by BP data
- N170 suggests effect could be due to arousal and N1 suggests attention is increased after seeing a negative face, could be either
- Negative face before a response causes decision making bias

Contact	Keri Gladhill George Mason University Email: kgladhil@gmu.edu	Giovanna Mioni University of Padova Email: giovanna.mioni@unipd.it	George Mason University	 Droit-Volet, S., Brunot, S., & Niedenthal, P. (2004). Perception of the duration of emotional events. Cognition & Emotion, 18(6), 849–858. https://doi.org/10.1111/j.1749-6632.1984.tb234 Ebner, N., Riediger, M., & Lindenberger, U. (2010). FACES—A database of facial expressions in young, middle-aged, and older women and men: Develor. Gibbon, J., Church, R.M., Meck, W.H., 1984. Scalar timing in memory. Ann. N.Y.Acad. Sci. 423, 52–77, http://dx.doi.org/10.1111/j.1749-6632.1984.tb234 Lake, J., Labar, K., & Meck, W. (2016). Emotional modulation of interval timing and time perception. Neuroscience and Biobehavioral Reviews, 64, 403– Lieving, L., Lane, S., Cherek, D., & Tcheremissine, O. (2006). Effects of delays on human performance on a temporal discrimination procedure: Evidence Lui, M., Penney, T., & Schirmer, A. (2011). Emotion Effects on Timing: Attention versus Pacemaker Accounts. (Research Article). PLoS ONE, 6(7), e2182 Treisman, M. (1963). Temporal discrimination and the indifference interval. Implications for a model of the "internal clock." Psychological Monographs, 77 	17.x 420 tps://doi.org/10.1016/j.neubiorev.2016.03.003 e of a choose-short effect. Behavioural Processes, 71(2-3), 135–143. 9. https://doi.org/10.1371/journal.pone.0021829 7(13), 1–31. https://doi.org/10.1037/h0093864
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