

The impact of modality on the self-reference effect and positivity bias

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BACKGROUND

- **Self-reference effect (SRE)** - Information about the self is better encoded relative to information about others.¹
- **Positivity bias** - Positive information is more likely to be endorsed than negative information.²
- **Self-positivity bias** - Self positive information is better encoded relative to all other types of information.³
- The SRE has not been investigated in the auditory modality.

RESEARCH QUESTIONS

- Does modality impact the self-reference effect?
- Does modality impact the positivity bias?

METHODS

Sample

- $n_{\text{Auditory}} = 67$ ($n_{\text{Female}} = 56$, $n_{\text{Male}} = 11$)
- $n_{\text{Visual}} = 59$ ($n_{\text{Female}} = 51$, $n_{\text{Male}} = 7$, $n_{\text{Non-Binary}} = 1$)

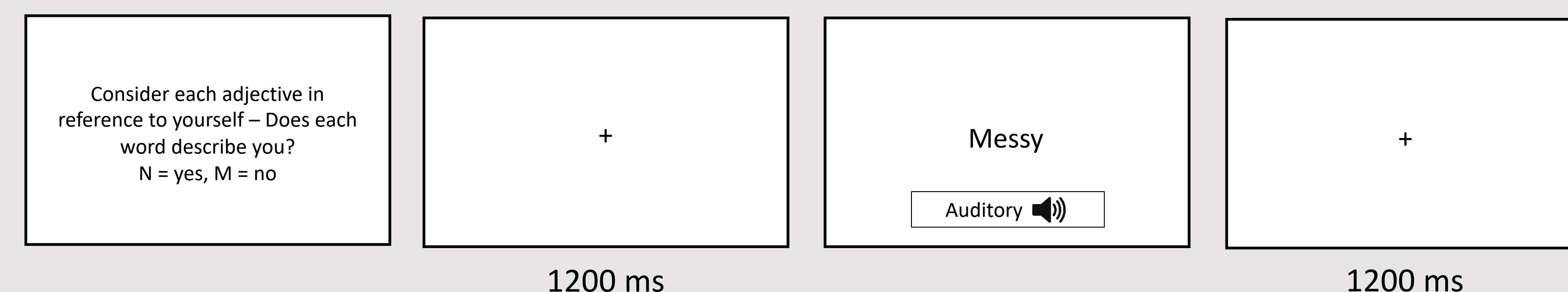
Stimuli

- **120 Total Adjectives**
 - 60 positive, 60 negative
- **Between Subjects - 2 Groups**
 - Auditory, Visual
- **Within Subjects - 4 Conditions**
 - Negative Other, Negative Self, Positive Other, Positive Self
- **Other Character - Harry Potter**

Paradigm

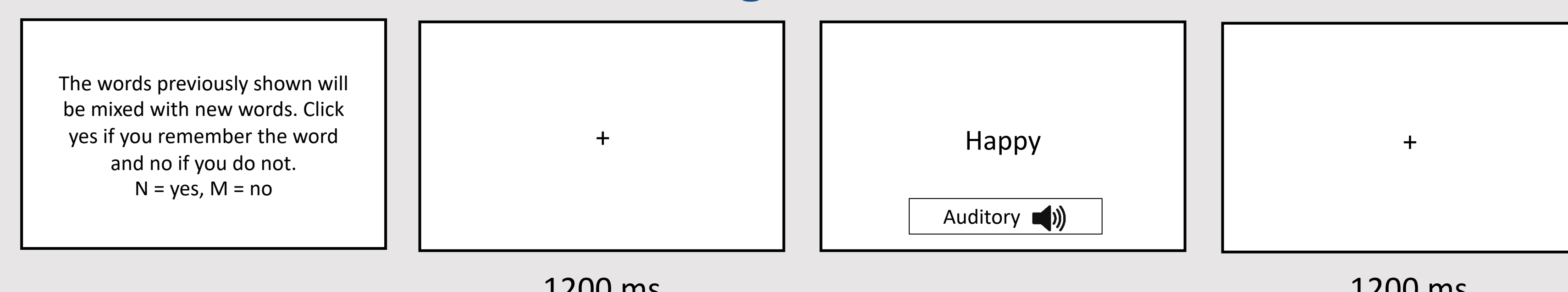
Self-Referential Encoding task (2 tasks):

1. Endorsement Task

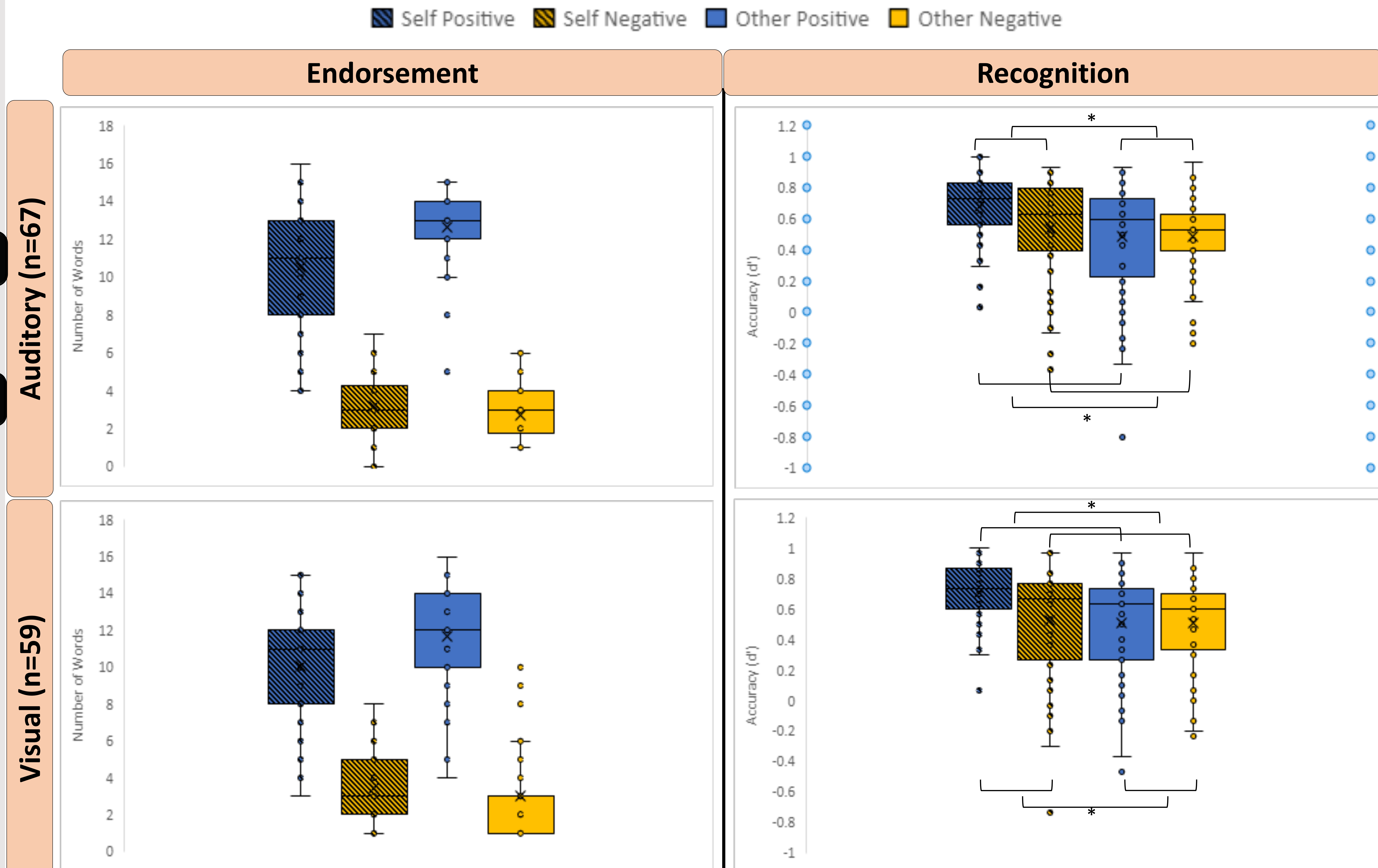


Distractor Task – Count Back From 50

2. Recognition Task



RESULTS



CONCLUSION

- The bias to endorse positive information is similar across modalities
- Information about the self (particularly self positive information) is remembered better in both modalities
- Findings allow for the auditory assessment of these effects in other populations (e.g., visually impaired individuals and young children)

REFERENCES

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2. Matlin, M. W., & Stang, D. J. (1978). *The Pollyanna principle: Selectivity in language, memory, and thought*. Schenman Publishing Company.
3. Fields, E. C., & Kuperberg, G. R. (2015). Loving yourself more than your neighbor: Erps reveal online effects of a self-positivity bias. *Social Cognitive and Affective Neuroscience*, 10(9), 1202–1209. <https://doi.org/10.1093/scan/nsv004>