

WHEN EMOTIONS CLASH FAST:

PICTURE- PICTURE PRIMING TASK

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Emotional conflict reflects difficulty shifting between opposing emotions. Affective priming offers a way to examine this process by showing how prior emotional stimuli affect responses. Findings indicate that negative emotions tend to dominate and linger—evidence of a negativity bias (Nadav et al., under review; Rozin & Royzman, 2001).

OBJECTIVE

We aimed to replicate previous findings (Nadav et al., under review) showing a negative bias and a congruency effect only for positive targets. The key modification—presenting both prime and target for 100 ms—was introduced to rule out alternative explanations related to processing time.

METHODOLOGY

Participants: 41 with normal/corrected vision; response keys counterbalanced.

Task Design: Within-subject (Fig. 1).

- Prime valence: positive, negative, neutral
- Target valence: positive or negative
- Conditions: congruent, incongruent, neutral

Stimuli:

Pictures from CAP-D (Moyal et al., 2018): fear, sadness, happiness, peacefulness, neutral.

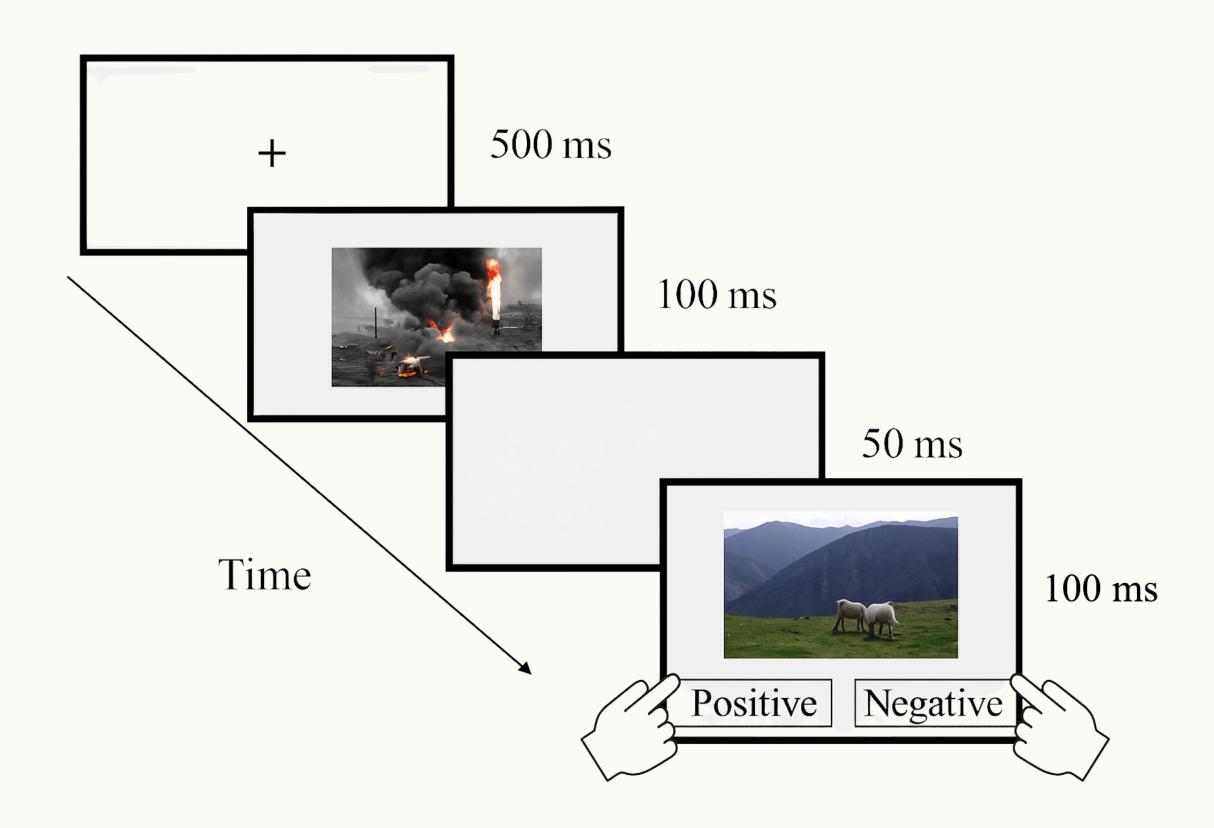


Figure 1. Experimental Trial.

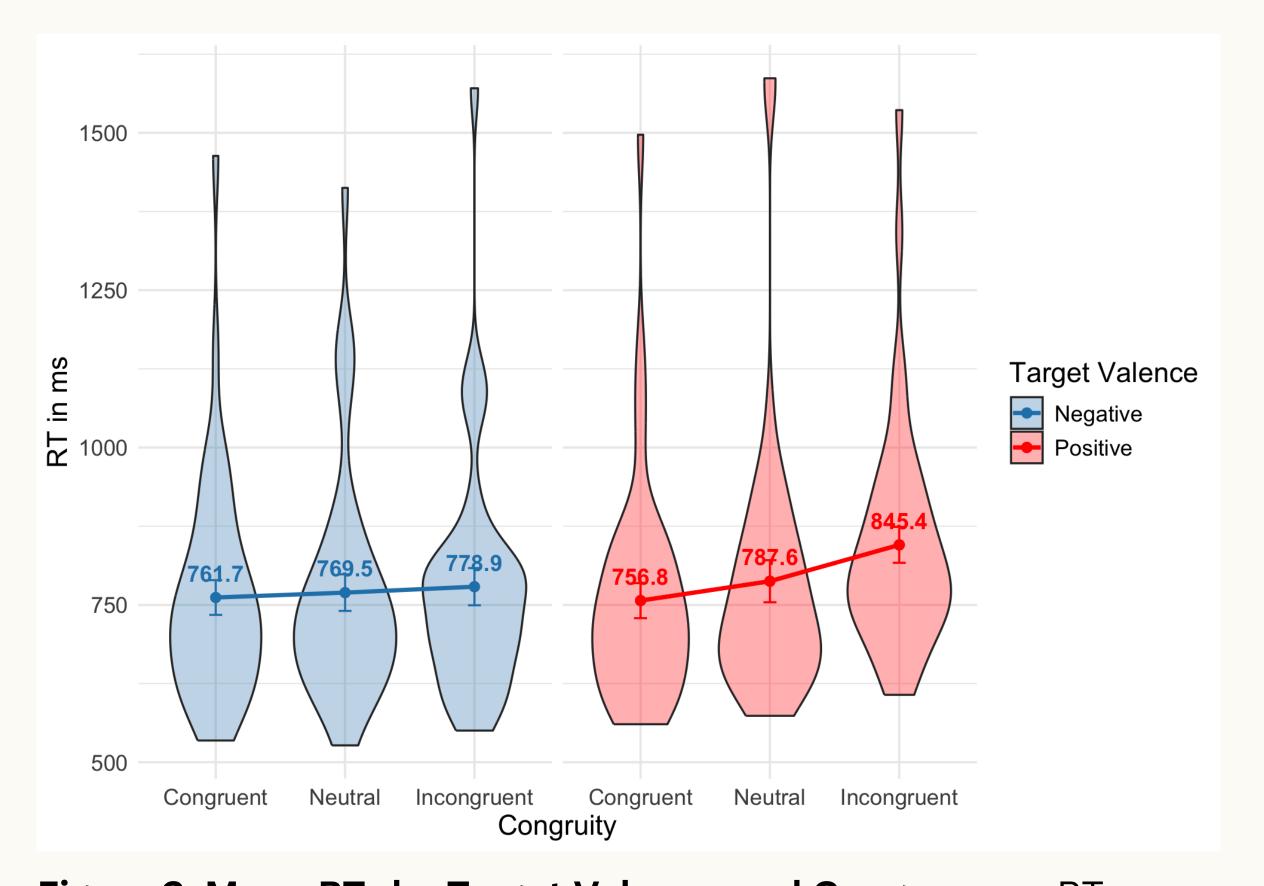


Figure 2. Mean RTs by Target Valence and Congruency. RTs were slower for positive targets (red) in the incongruent condition; no such effect appeared for negative targets (blue).

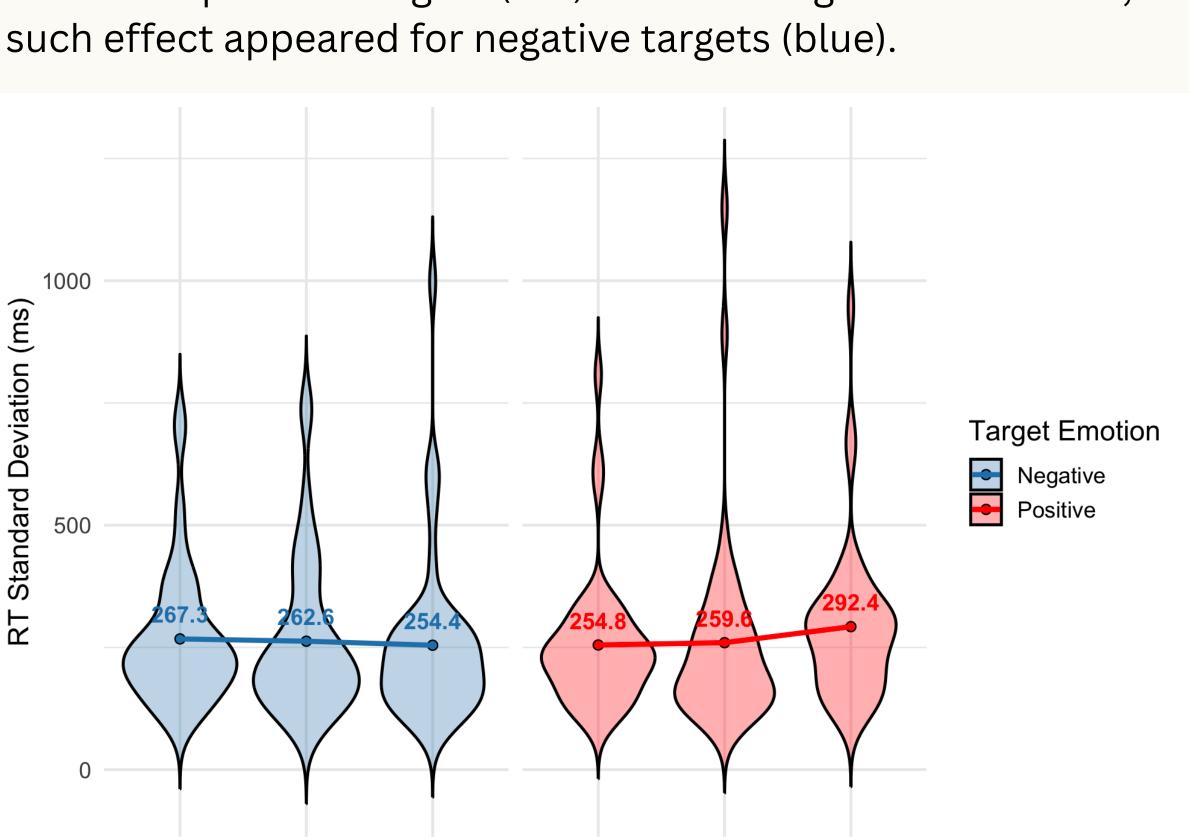


Figure 3. RT Variability by Target Valence and Congruency. RT variability increased for positive targets (red) in the incongruent condition, but remained stable for negative targets (blue).

Congruency Condition

RESULTS

Mean RT (Fig. 2):

- Target: F(1, 40) = 4.914, p < .05, $\eta^2_p = .109$
- Congruency: F(2, 80) = 15.796, p < .001, $\eta^2_p = .285$
- Target × Congruency: F(2, 80) = 8.933, p < .001, $\eta^2_p = .182$

RT Variability (Fig. 3):

• Valence × Congruency interaction: F(2, 80) = 4.281, p = 0.017, $\eta^2_p = 0.097$

CONCLUSION

Emotional conflict was observed even with brief (100 ms) exposure, as congruency effects appeared only for positive targets—replicating previous findings. By equalizing primetarget durations, the current study rules out processing-time explanations, strengthening evidence for a negativity bias.

References:

- Moyal, N., Henik, A., & Anholt, G. E. (2018). Categorized affective pictures database (CAP-D). *Journal of Cognition*, 1(1), Article 41.
- Nadav, T., Azani, R., Shiri Hakshiri, I., & Henik, A. (under review). Navigating emotional conflict: Insights from a picture-picture priming study. Department of Psychology, Ben-Gurion University of the Negev.
- Rozin, P., & Royzman, E. B. (2001). Negativity bias, negativity dominance, and contagion. *Personality and Social Psychology Review*, 5(4), 296–320.