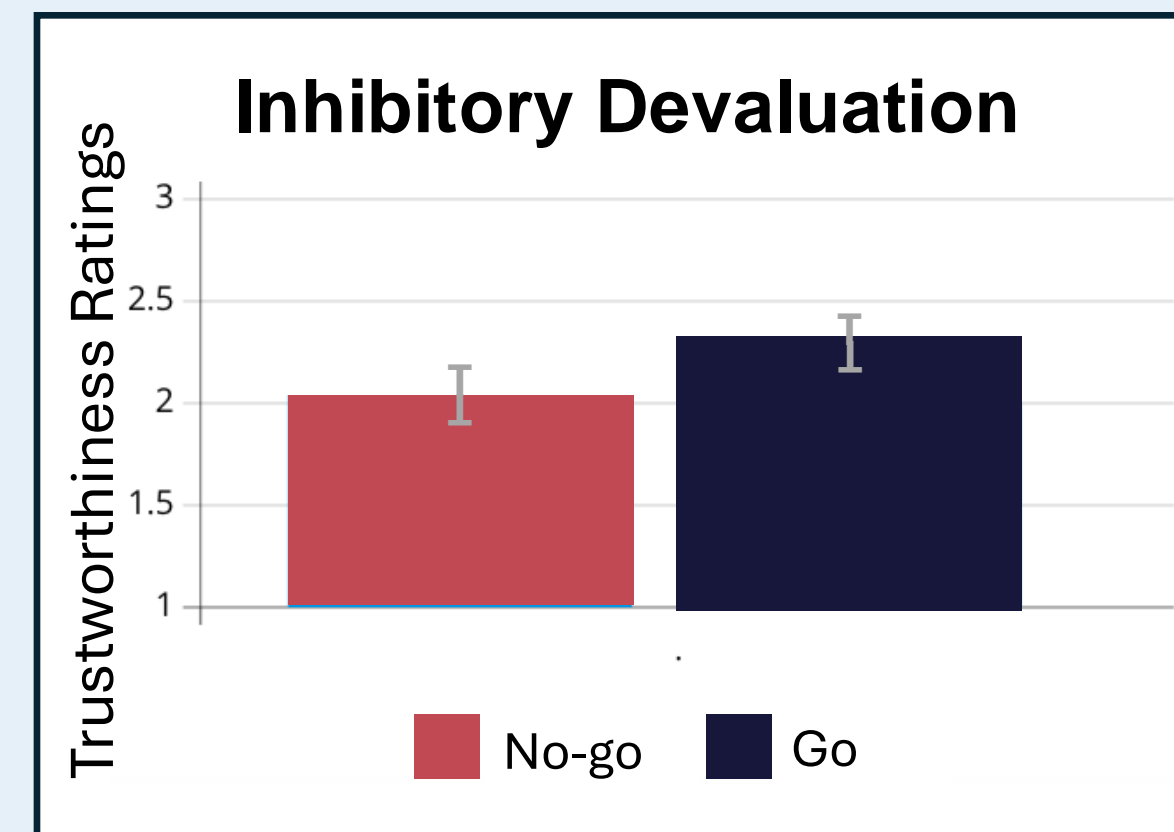
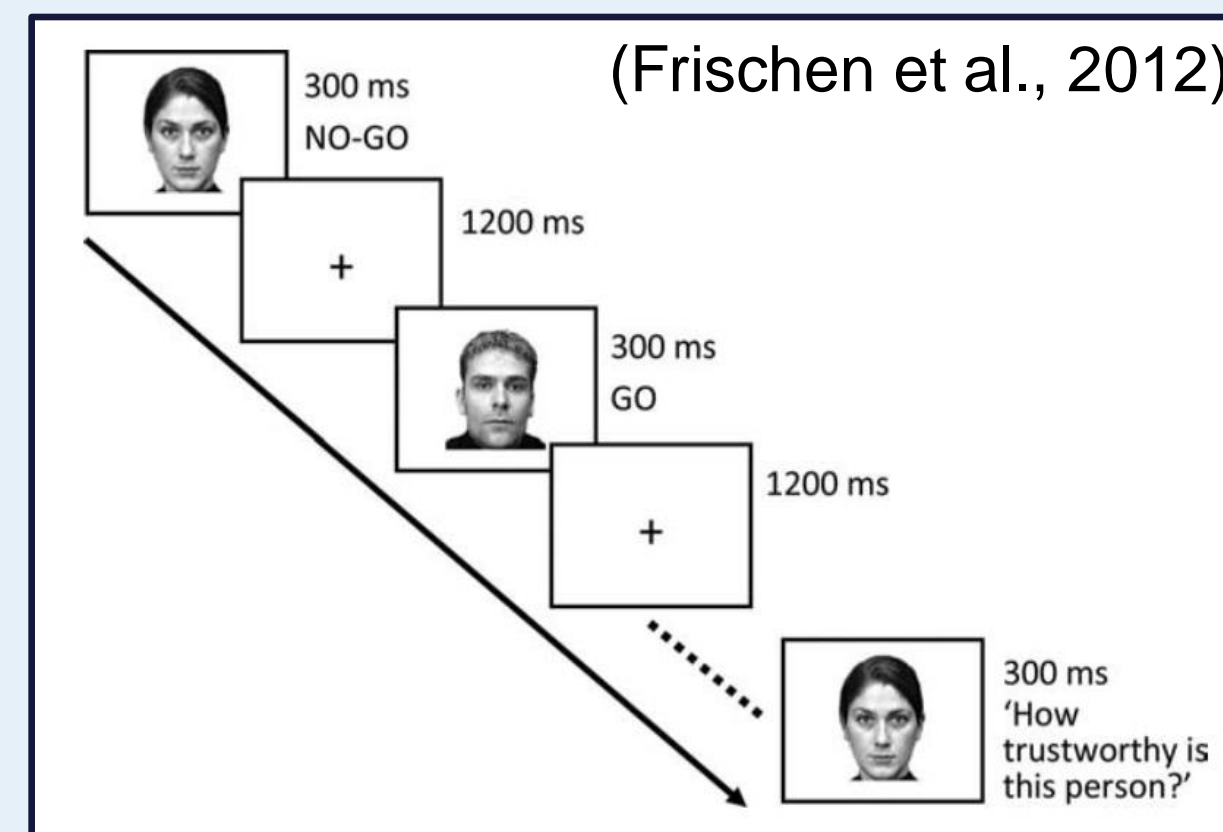


## Background

### Affective consequences of motor-response inhibition:

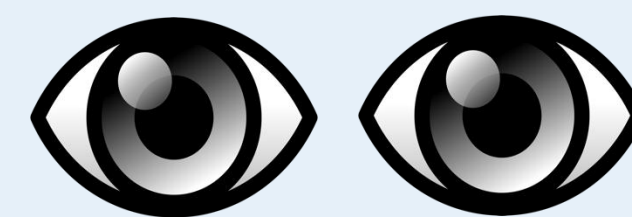


Devaluation associated with No-go stimuli is thought to be due to negative affect elicited by inhibition.

All previous research on this effect used finger-pressing.

**So, what about the eyes?**

Are oculomotor responses special? Yes!



### Research Question:

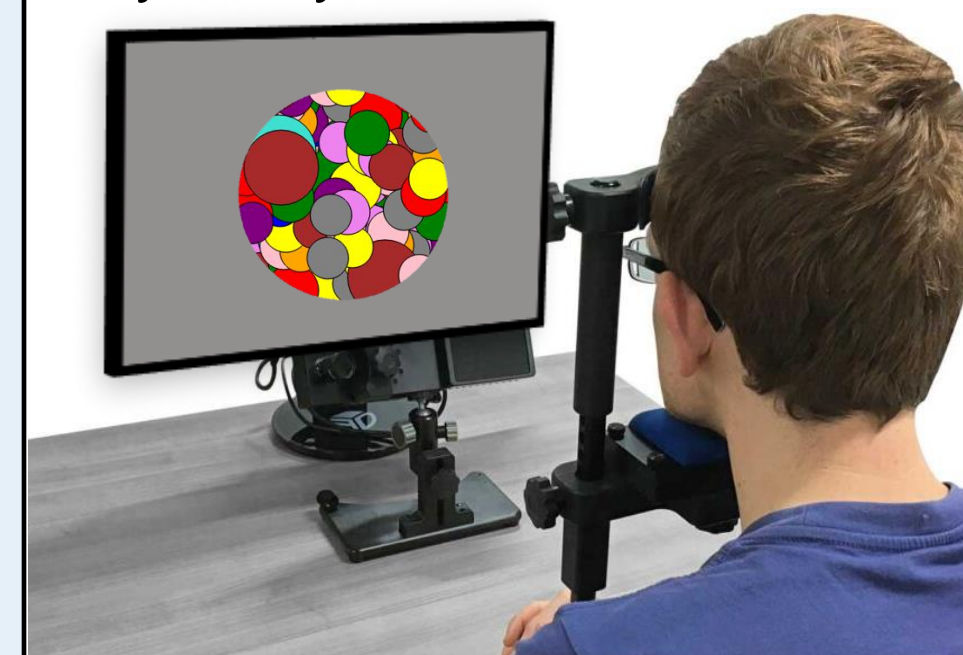
Does oculomotor inhibition have similar affective consequences as finger-press inhibition?

## Experimental Approach

**Step 1:** With an eye-tracker, use the Go/No-go task in both oculomotor and finger-press domains.

**Step 2:** Compare the affective ratings of Go and No-go stimuli to assess the affective impact of inhibition in each domain.

**Apparatus**  
EyeLink 1000 Plus  
PsychoPy and Saccade Builder



## Methods

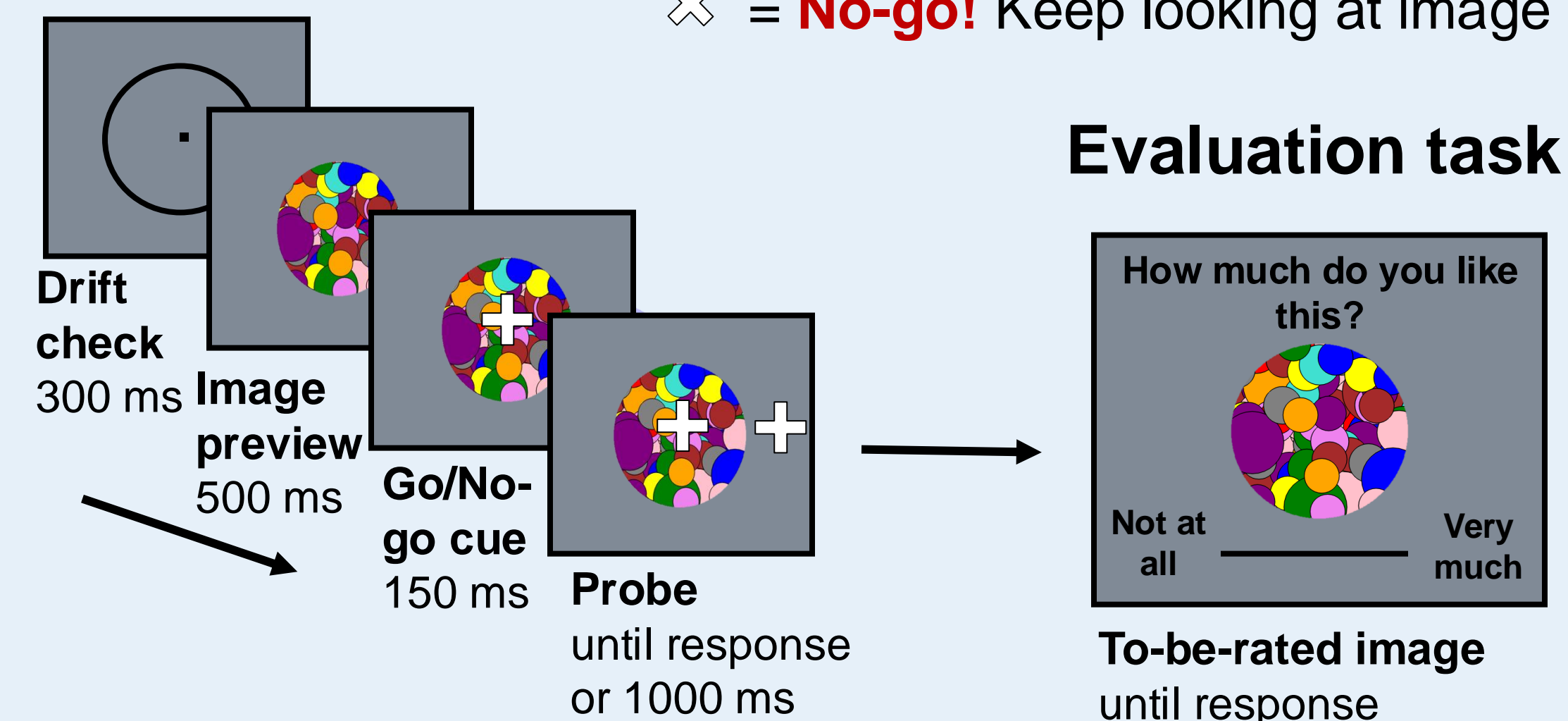
### Go/No-go task:

No-go trials require inhibition to suppress the habitual response to look at / respond to the abrupt-onset probe.

### Oculomotor:

⊕ = **Go!** Indicate probe location

⊗ = **No-go!** Keep looking at image


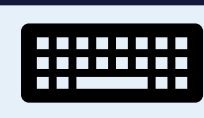


240 total 'Go/No-go + Evaluate' trials

50% prior Go/No-go images  
50% previously-unseen novel images

**Finger-press:** Same methods, except indicate probe location with finger-presses (← or → key) instead of eye-movements.

Response Condition (random within blocks)

		Go	No-go
Response Domain		look at probe	do not move eyes
		press arrow key	do not press key

(120-trial in each domain)

(Fully-within design)

**Will the No-go devaluation effect replicate, and also be seen in the oculomotor domain?**

## Results

**Are No-go items liked less than Go items? Yes!**

- Go/No-go main effect:  $p = .002$

**Does No-go devaluation magnitude depend on Response-domain? No!**

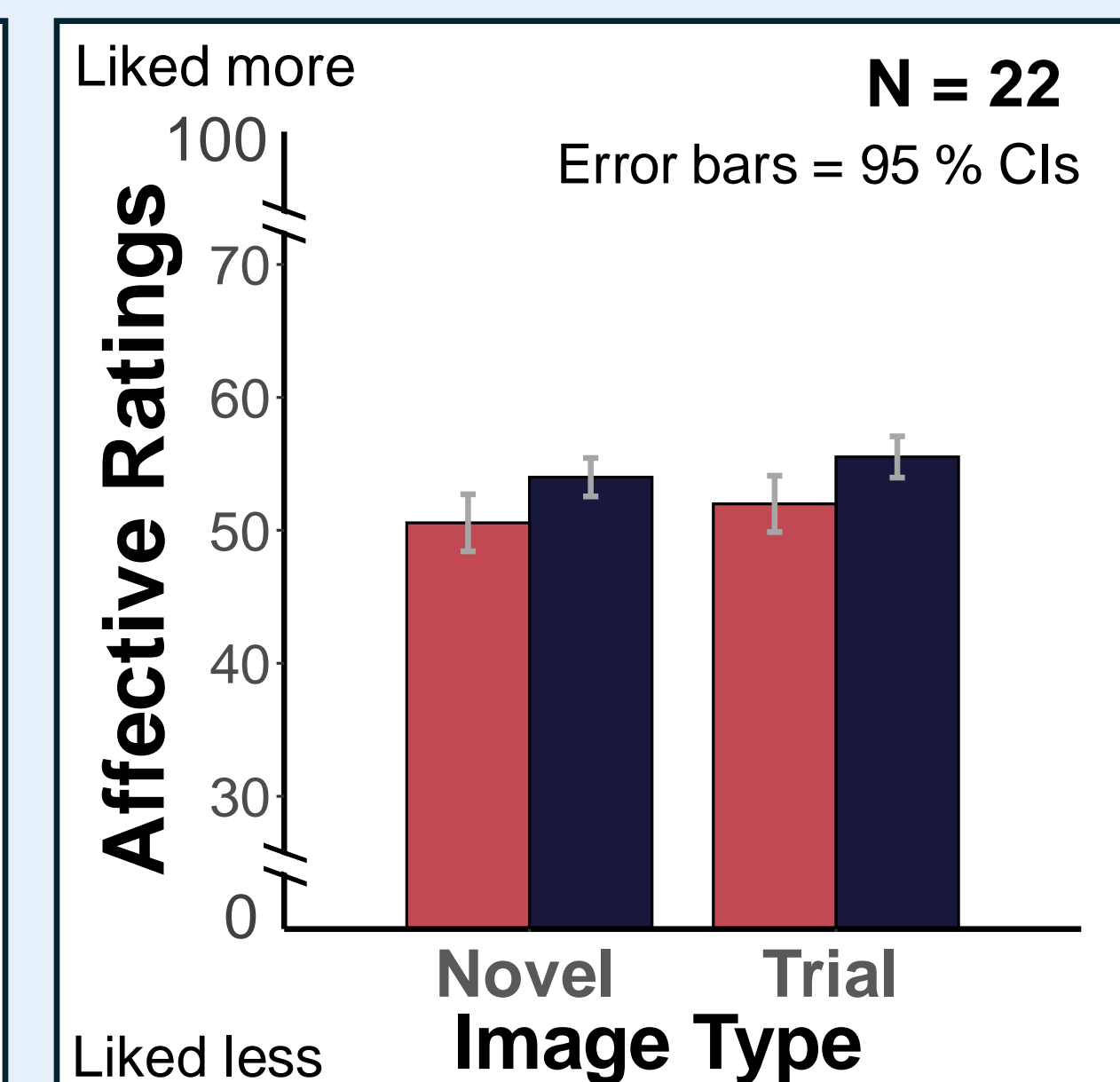
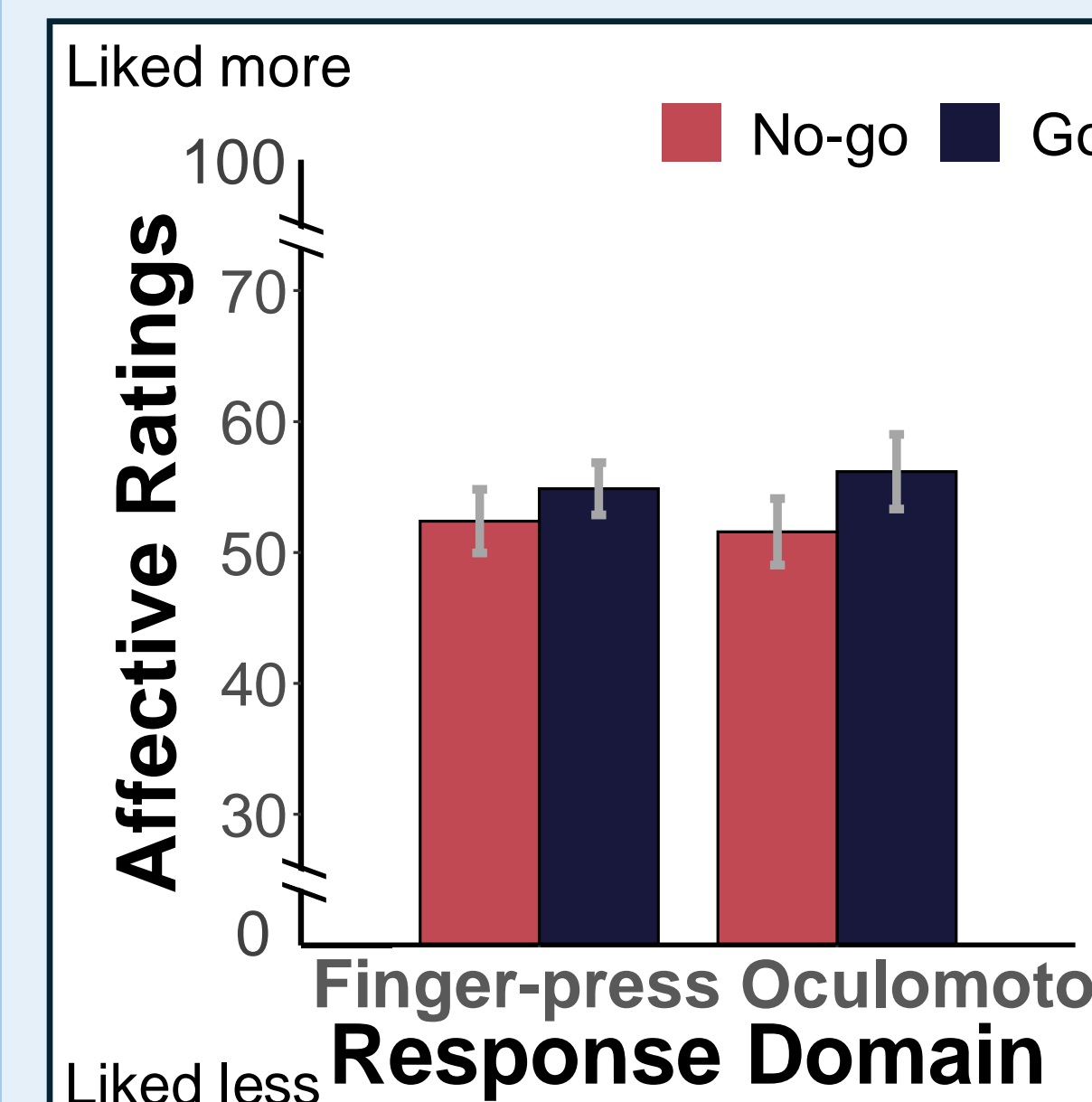
- Go/No-go X Response-domain interaction:  $p = .298$

**Are No-go items devalued relative to novels? Maybe.**

Novel images rated after Go or No-go trials show same effect as actual items seen on trials.

Go/No-go X Image-type interaction:  $p = .719$

**Lingering effects of inhibition (lasting 2-3 sec)?**



## Discussion

**Oculomotor inhibition appears to have similar affective consequences as finger-press inhibition.**

**Future steps:**

- Obtain pre-task novel-item ratings to confirm whether No-go items liked less or Go items liked more.