20 5 4

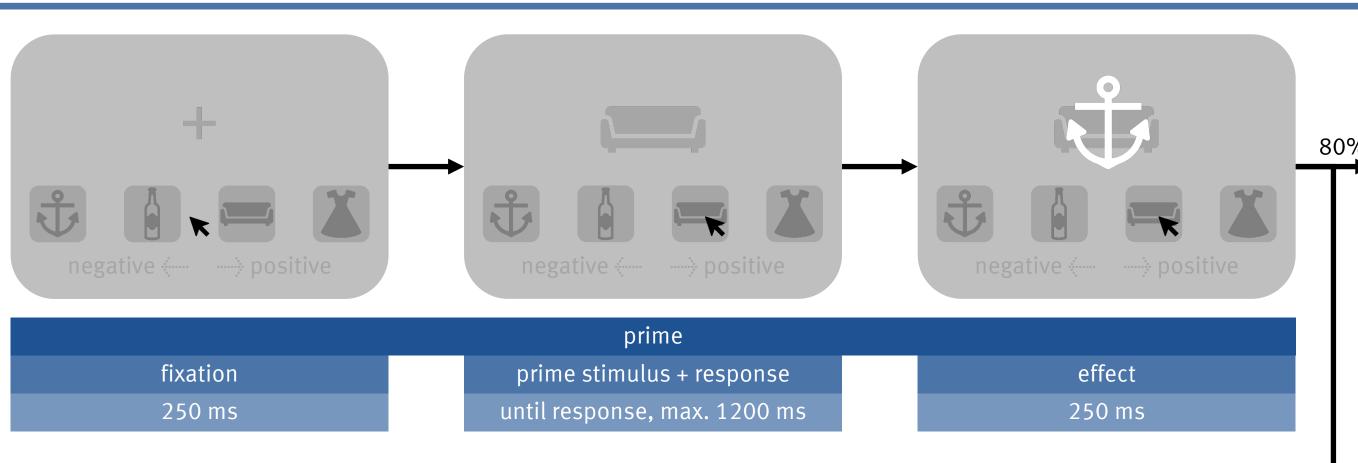
AFFECTIVE EVALUATION OF SELF-PRODUCED ACTION-EFFECT EPISODES

humans typically move their body to cause changes (effects) in their environment¹

humans prefer to act (rather than not act), even if the effects are negative²

we prefer to do something over nothing, and produce something over nothing humans show better performance with predictable vs. unpredictable effects³

how can we measure the affective experience when being in control?



prime: produce the symbol (prime stimulus) via mouse click IV1: expected (50%) vs. unexpected effect (each 16%)

probe: classify the word (probe stimulus) via mouse movement

IV2: positive vs. negative probe word

DV1: probe response time

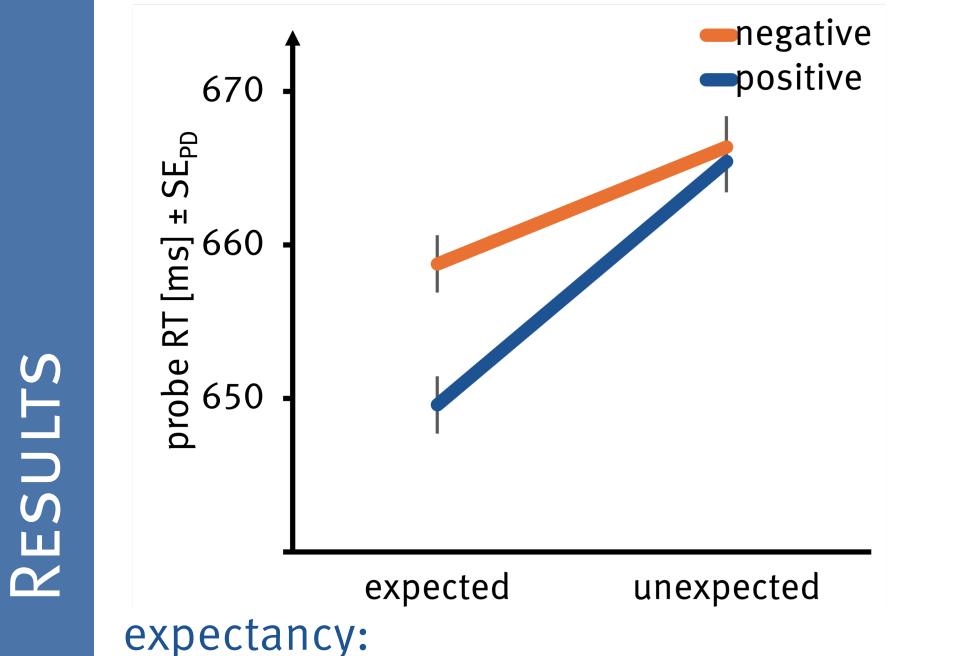
probe stimulus + response until response, max. 1000 ms How would you rate the last DISCUSSION symbol that you produced?

sickness

rating rating scale + response until response

rating: rate the previous prime episode on a scale from 1(negative) to 10(positive)

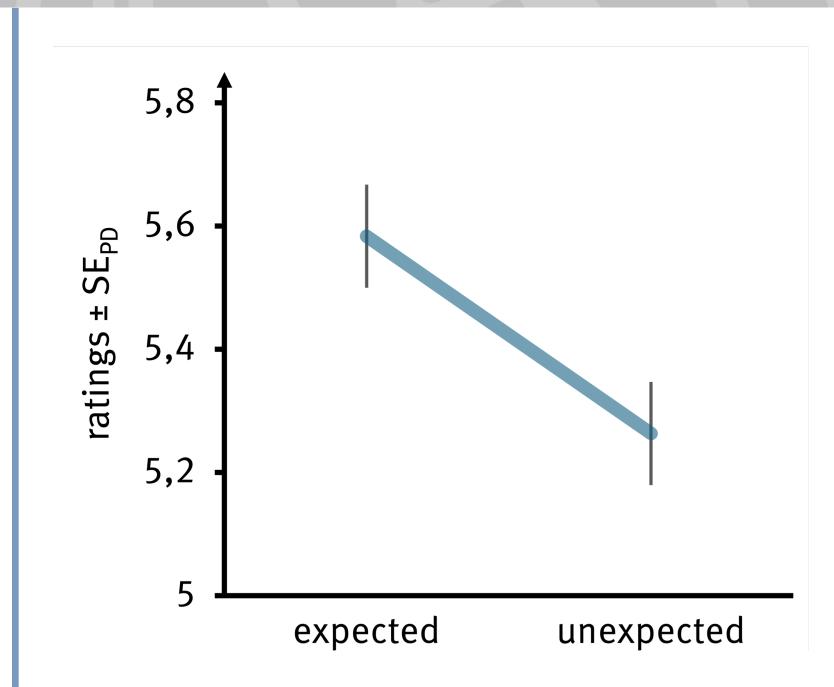
DV2: explicit rating of the prime episode



 $F(1,201)=126.34, p < .001, \eta_p^2=.39$ valence:

 $F(1,201)=8.60, p=.004, \eta_p^2=.04$ interaction:

$$F(1,201)=20.01, p < .001, \eta_p^2=.09$$



expectancy:

 $F(1,201)=14.53, p < .001, \eta_p^2=.07$

faster responses after expected than after unexpected effects^{4, 5} negative events grab more attention and deteriorate performance⁶ experiencing control (i.e., in expected episodes) is associated with positive affect

- *** faster responses for positive words after expected prime episode
- more positive ratings after expected prime episode affective experience likely shapes motivation for future actions



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