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# Emotional Intensity Influences Prediction But Not Action in Emotion Regulation

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## Background

- The relationship between the intensity of affective experience and regulation strategy choice has been explored in lab studies.
- Our previous field studies failed to find predictive utility between affective intensity and strategy choice.
- It may be the case that affective intensity predicts forecasted choice rather than the choice one might make when in the experience.

## Methods

### Experiencers

- 54 participants attended a haunted house in 2019.
- Participants noted emotionally-salient events and reported:
  - description of event
  - emotions experienced
  - intensity of emotions
  - regulation descriptions
- Hypotheses-blind raters classified strategies according to Process Model (IRR = 0.881).
- 88 events from 34 participants used either reappraisal or distraction.

### Forecasters

- 218 participants were recruited via Prolific in 2021.
- Participants were presented with description of event, emotions experienced, and intensity of emotions.
- Participants were asked to forecast what strategy they would have used if they experienced the event.
- 152 participants responded to all 88 scenarios and met inclusion criteria.

## Strategy Examples



### Distraction

"I focused on my breathing; looked down"



### Reappraisal

"I told myself it wasn't real"

### Experiencers Sample

	N	Age Range	Mean Age	Std. Dev.
Male	19	19 - 34 yrs	24.3 yrs	4.3 yrs
Female	14	18 - 31 yrs	23.5 yrs	3.4 yrs
Non-Binary	1	-	24.0 yrs	-

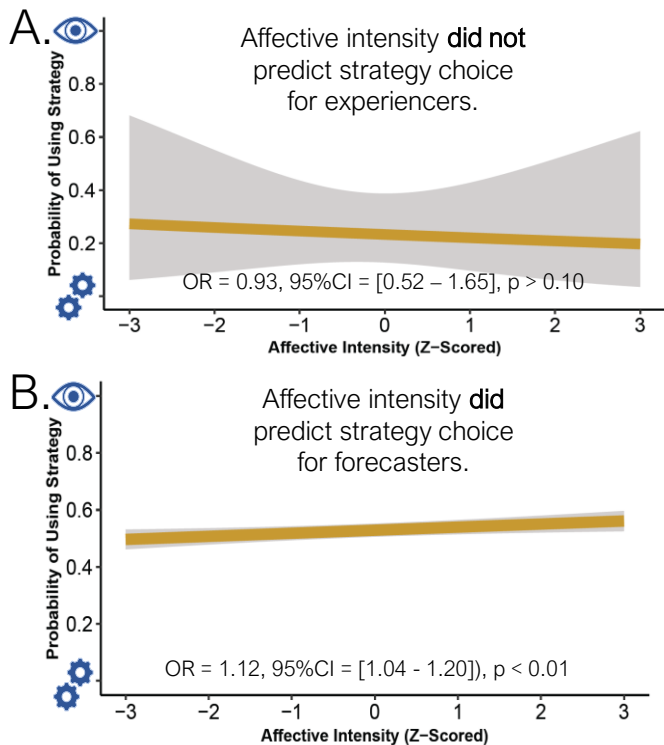
### Forecasters Sample

	N	Age Range	Mean Age	Std. Dev.
Male	65	18 - 75 yrs	32.9 yrs	13.7 yrs
Female	85	18 - 71 yrs	35.3 yrs	14.6 yrs
Non-Binary	2	24 - 29 yrs	26.5 yrs	3.5 yrs

## Hypotheses

- A. Affective intensity **will not be associated** with strategy choice selection among experiencers.
- B. Affective intensity **will be positively associated** with the likelihood of selecting disengagement strategies in forecasters.

## Results

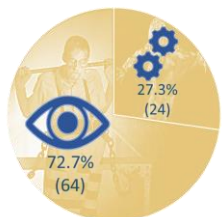


**Interpreting Plots:** Plots represent probability of selecting either strategy at a given affective intensity • Ribbons enveloping regression lines in A,B represent  $\pm 1$  sd • A value of 0 or 1 on Y-axis represents either reappraisal or disengagement strategies, respectively, as the only predicted choice at that intensity level.

## Analyses

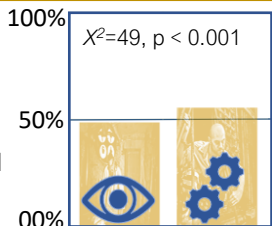
- Hypothesis A was tested using mixed effects binary logistic regression specifying reappraisal (0) and distraction (1) as outcomes, adjusting for the random intercept of experiencer (ICC=0.215).
- Hypothesis B was tested using mixed effects binary logistic regression specifying reappraisal (0) and disengagement strategies (1) as outcomes, adjusting for random intercept of forecaster (ICC= 0.083) and experiencer (ICC=0.034; ICC<sub>pooled</sub> = 0.120).

## Strategy Distribution



Distraction was overrepresented in event pool, but forecasters more accurately forecasted reappraisals

## Forecast Accuracy



## Discussion

- Our results may suggest a discrepancy between affective regulation forecasting and affective regulation action.
- Relationships are consistent after adjusting for strategy propensities, difficulties, gender, age, and depression.
- Limitations include a limited experiencers sample size, narrow choice of regulation strategies, and limited range of affective experiences.
- A follow-up haunted house study has been conducted in 2021 with a sample of 120 participants which incorporates measurements of emotional goals, cognitive load, and several other relevant variables.

## References

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