

# Fear and Loathing in Eastern State Penitentiary

## Emotion Regulation in a Quasi-Naturalistic Setting

William Mitchell\*, David Gregory,  
Joanne Stasiak, Sam Reisman,  
Vishnu Murty, Chelsea Helion

\*Contact: Billy.Mitchell@temple.edu

### Background

- Research suggests low intensity affective experiences prompt cognitive reappraisal strategies and high intensity experiences prompt disengagement techniques, such as distraction or suppression<sup>1-3</sup>.
- However, lab studies and EMA studies may not reflect the nuances of emotion regulation choices in a strategy-naïve, real-world population.
- Measuring affective responses in a controlled quasi-naturalistic environment using strategy-naïve participants may better approximate strategy selection in real-world circumstances.

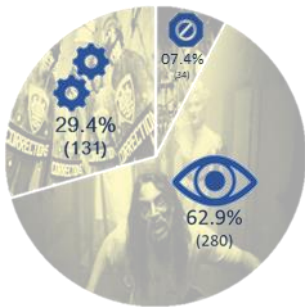
### Methods

- 54 participants progressed through a haunted house ( $\bar{x}_{\text{exposure}} = 55.20$  mins.) in groups of 3 to 5 people.
- After exposure, participants returned to the lab after a delay ( $\bar{x} = 5.98$  days,  $sd = 0.79$ ) to complete questionnaires noting 1.) ten emotionally-salient events, 2.) the emotions felt during each event, 3.) the intensity of each emotion, 4.) the extent to which it was regulated, and 5.) describing their regulation strategy.
- Events were organized chronologically.
- Participants were not trained in emotion regulation strategies prior to exposure.
- 13 participants were excluded from analyses for some form of missing data.
- Two hypotheses-blind trained raters classified strategy descriptions into one or more strategy categories (IRR Agreement = 0.881).

### Strategy Examples



### Strategy Frequency



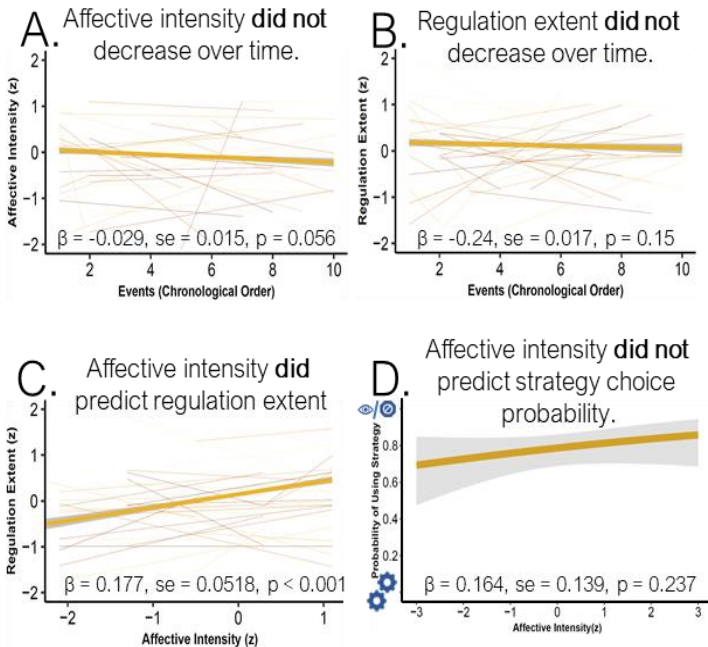
### Sample

	N	Age Range	Mean Age	Std. Dev.
Female	19	18 - 31 yrs	24.2 yrs	4.22 yrs
Male	21	19 - 34 yrs	24.2 yrs	3.73 yrs
Non-Binary	1	-	24.0 yrs	-

### Hypotheses

- A. Affective intensity **will decrease** over time.
- B. Regulation extent **will decrease** over time.
- C. Affective intensity **will predict** regulation extent.
- D. As affective intensity **increases**, there is a **greater probability** of events being regulated via suppression or distraction, as opposed to reappraisal.

### Results

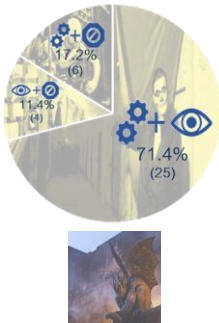


**Interpreting Plots:** Ribbons enveloping regression lines in A,B,C,D represent  $\pm 1$  sd • Thinner regression lines in A,B,C represent the *observed* relationship between variables within individual participants • Thicker regression lines in A,B,C represent *predicted* variable relationships based on group observations • A value of 0 or 1 on D's Y-axis represents either reappraisal or disengagement strategies, respectively, as the only predicted choice at that intensity level.

### Analyses

- Events lacking categorical strategies or indications of downregulation were excluded ( $n_{\text{obs.}} = 1574$ ), resulting in a dataset of 445 observations from 144 events.
- 35 events (24.3%) were categorized within two strategies. Analyses were performed including and excluding these events with no significant differences. Results presented represent the *inclusion* of multi-strategy events.
- Hypotheses A, B, and C were tested using mixed effects linear regression modeling allowing intercepts to vary randomly by participant and, for Hypothesis C, treating time as a fixed effect ( $ICC_A = 0.286$ ;  $ICC_{B\&C} = 0.352$ ).
- Hypothesis D was tested using mixed effects binary logistic regression specifying reappraisal (0) and disengagement strategies (1) as outcomes, adjusting for random intercepts of participant and treating time as a fixed effect ( $ICC_D = 0.620$ ).

### Multi - Strategy Frequency



### Discussion

- Our results suggest affective intensity predicts regulation extent, but fails to demonstrate predictive utility towards regulation strategy choice.
- When resources are not strained, strategy selection may be better predicted by personal differences, like expectations, goals, and preferences, than fit<sup>4</sup>.
- Limitations include a limited intensity range, end-point measurement of affective processing, and preponderance of multi-strategy events.
- Future analyses will attempt to identify individual difference measurements which might better predict strategy choice in naturalistic settings.

### References

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