Introduction

- Temporal Contiguity Effect (TCE): recall of one event triggers recall of other events originally experienced nearby in time (Kahana, 1996).
- Retrieved Context Models attribute the TCE to automatic encoding of temporal information whenever new memories are formed (Healey, Long, & Kahana, 2019).
- Various experimental manipulations modulate the size of the TCE (Healey, Long, & Kahana, 2019).
- Can Retrieved Context Models account for how these manipulations change the size of the TCE?
- Here, we try to model the effect of orthographic distinctiveness.
- Lists composed of orthographically distinct items dramatically reduce the TCE (McDaniel et al., 2011).

Methods

Amazon Mturk

- *N = 313*
- Free recall paradigm
- 3 lists per participant, with 10 words per list

Conditions

- Pure lists of either control or distinct items

Computational Modeling

- Retrieved Context Model fit using genetic algorithm
- Both conditions fit simultaneously, allowing specific parameters to vary between conditions

Results

Best Fitting Model

Varying parameters by condition: $\beta_{enc}$, $Y_{fc}$, $Y_{cf}$

Which parameters have to vary?

Conclusions

- Orthographic distinctiveness attenuates, but does not eliminate, the TCE.
- The Retrieved Context framework is able to fit behavioral results by assuming distinctiveness changes context drift rate and the balance of pre-experimental vs. experimental context.