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WHY DO WE PRECASTINATE? THE RELATIONSHIP BETWEEN PRECASTINATION AND COGNITIVE OFFLOADING

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Precrastination & Cognitive Offloading

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Introduction

Precrastination

- Precrastination can be defined as completing a task earlier than necessary despite incurring extra cost
- Examples of precrastination include responding to emails first thing in the morning or right when they come, washing the dishes immediately after they are used, or paying bills the moment they come
- Precrastination generalizes from physical to cognitive tasks (VonderHaar et al., 2019)

Cognitive Offloading

- Cognitive-load-reduction (CLEAR) hypothesis (VonderHaar et al., 2019) suggests precrastination is a form of cognitive offloading
 - Completing a task early instead of having to remember to complete the task preserves cognitive resources for other tasks
- People use a cognitive offloading strategy to aid memory, even when the strategy costs them points earned in a task (Gilbert, 2015; Gilbert et al., 2020)
- In a computerized task participants use reminders to help them complete a task even when it is not optimal (Gilbert et al., 2020)

Current Study

Aims: Examine if precrastination and cognitive offloading are directly related as a test of the CLEAR hypothesis

Hypothesis:

H1: Precrastination and cognitive offloading are related

H2: Those who rely on cognitive offloading will precrastinate more

Participants:

- Will recruit 100 participants via SONA
- Volunteers receive 1 SONA credit

Design:

- Repeated measures design
- Precrastination: Measured in this task based on when the participant chooses to verify the math problems relative to the alphabetizing task
 - Verifying the math problems before starting the alphabetizing task or early within this task shows precrastination of math verification
- Cognitive Offloading: Use of reminders in second alphabetizing task

Method

Materials:

Precrastination in Alphabetizing Task

List the words in alphabetical order. Click on each word one at a time. If you make a mistake hit the back arrow key.

nature closer weapons beauty justice objects cancel legends adults likely ↩

308 + 17 = 375

2100 - 33 = 2133

TRUE

FALSE

TRUE

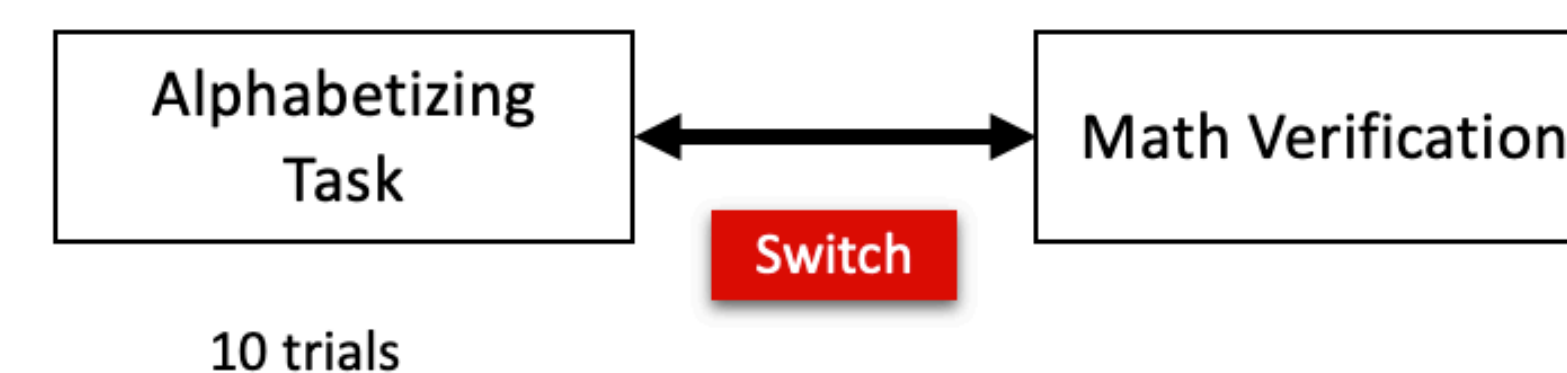
FALSE

Cognitive Offloading in Alphabetizing Task

- Complete trials of the alphabetizing task with an additional instruction “place any words that end with the letter ___ at the end of the list regardless of alphabetical order”
- Participants have to remember a new letter for each trial
- 5 trials with reminder of the letter, 5 trials without reminder of the letter, 10 trials participant choice
 - For choice trials, earn more points for correctly ordering the list without the reminder

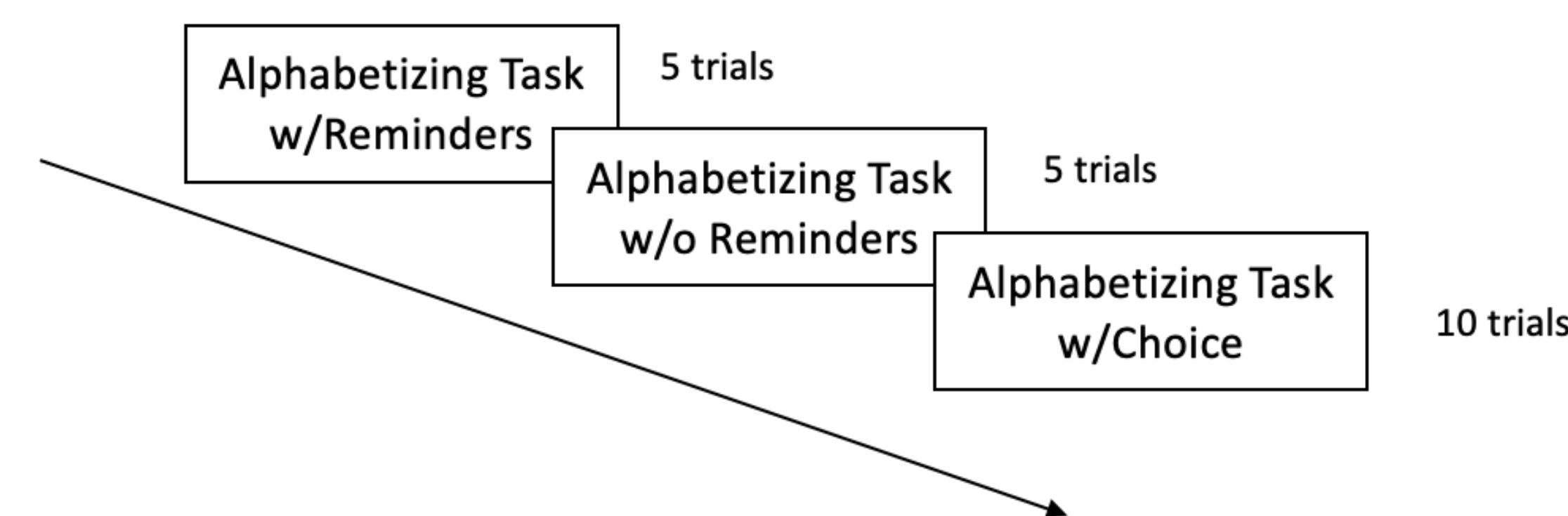
Procedure:

Part 1: Precrastination



*Participants must complete both tasks but can switch freely at anytime

Part 2: Cognitive Offloading



Results

- Results are expected to show a significant relationship between precrastination and cognitive offloading, such that those who rely on cognitive offloading will precrastinate more
- Predict we'll replicate Gilbert et al.'s (2020) results showing that people offload more than they need to do well on the task
 - People will choose to use the offloading strategy even when it costs them points earned in the task

Discussion

- Expected to further support the CLEAR hypothesis and help us better understand why some people precrastinate
- If cognitive offloading is the cause of precrastination, the group able to use cognitive offloading in the first task should precrastinate more often than the group not able to use cognitive offloading in the first task. This is because the use of the offloading strategy will prime this strategy for the precrastination task that follows
- If expected results occur it would support the idea that precrastination is a form of cognitive offloading
- Understand potential cognitive benefits of precrastination
- Relationship between cognitive offloading & precrastination would suggest offloading behaviors may be automatic

References

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- VonderHaar, R. L., McBride, D. M., & Rosenbaum, D. A. (2019). Task order choices in cognitive and perceptual-motor tasks: The cognitive-load-reduction (CLEAR) hypothesis. *Attention, Perception, & Psychophysics*, 81, 2517-2525.



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