**Introduction**

- **Prospective memory (PM):** remembering to fulfill planned intentions in the future (e.g., taking medication).
- **Cognitive Offloading:** offloading cognitive demand onto environment (e.g., Google calendar).
- Older adults show PM declines, which have implications for daily activities of daily living.
- Cognitive load increases as the number of cues goes up (Marsh et al., 2003; Wesslein et al., 2014).
- Reminders reduce cognitive load by minimizing working memory demands (Risko & Gilbert, 2016).
- Older adults overestimate their ability to remember tasks and do not efficiently utilize offloading strategies (Scarampi & Gilbert, 2021).
- **Hypothesis:** Reminders would improve PM for older adults, particularly under high load.

**Methods**

**General Paradigm**

**Ongoing Syllable Judgment Task:**
- Press "F" when you see a one syllable word
- Press "J" when you see a two syllable word

**Intention Encoding:**
- Press "spacebar" when you see learned word(s)

Event-based PM
- **Ongoing task:** syllable judgments
- **PM intention:** special response to certain target words

**Design:** 2 (Age: Young vs. Old) x 2 (Load: low vs. high) x 2 (Reminders: yes vs. no)

**Procedure:** 4 Blocks, 80 trials each, targets appeared every 20 trials
- 4 cues (High load condition) x No reminder
- 1 cue (low load condition) x Reminder
- 4 cues (High load condition) x Reminder
- 1 cue (low load condition) x No Reminder

Eye tracker was used to track the movement of the pupil.

**Results**

**Main effect of load:**
- Higher JOLs under low load

**Load x reminder interaction:**
- Reminder checking frequency increased under high load
- Reminders more beneficial for target detection under high load

**Conclusions**
- **No age differences in performance**
- Participants aware of load difficulty, but not potential benefits from reminders
- Greater checking under high load
- Reminders improved target detection, but only under high load
- May be beneficial for people with PM deficits

**Future Direction**
- Previous research did not show same benefits of older adults utilizing reminders, further study to recognize the cause–forget the intention before offloading vs misapplication of compensatory strategy
- Study strategic monitoring vs spontaneous retrieval to understand what affects decision to offload
- Design technology that ensures optimal use of external memory aid for older adults for behavioral independence

**References**

