

# Meaning vs Engagement: Lingering of Non-Narrative Content

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## 1. Motivation

What makes an experience stick in your mind? Previous research has argued that **meaningfulness** predicts the extent to which content lingers in subsequent thoughts<sup>1,2</sup>. However, is accessing semantic meaning the only route to lingering? Alternatively, **can one's level of engagement or immersion in a task drive lingering?**

Previous studies on lingering have primarily used narratives for testing. In stories, meaning and engagement are confounded. Thus, we created a word game where meaning and engagement are disentangled to test the effects of engagement alone.

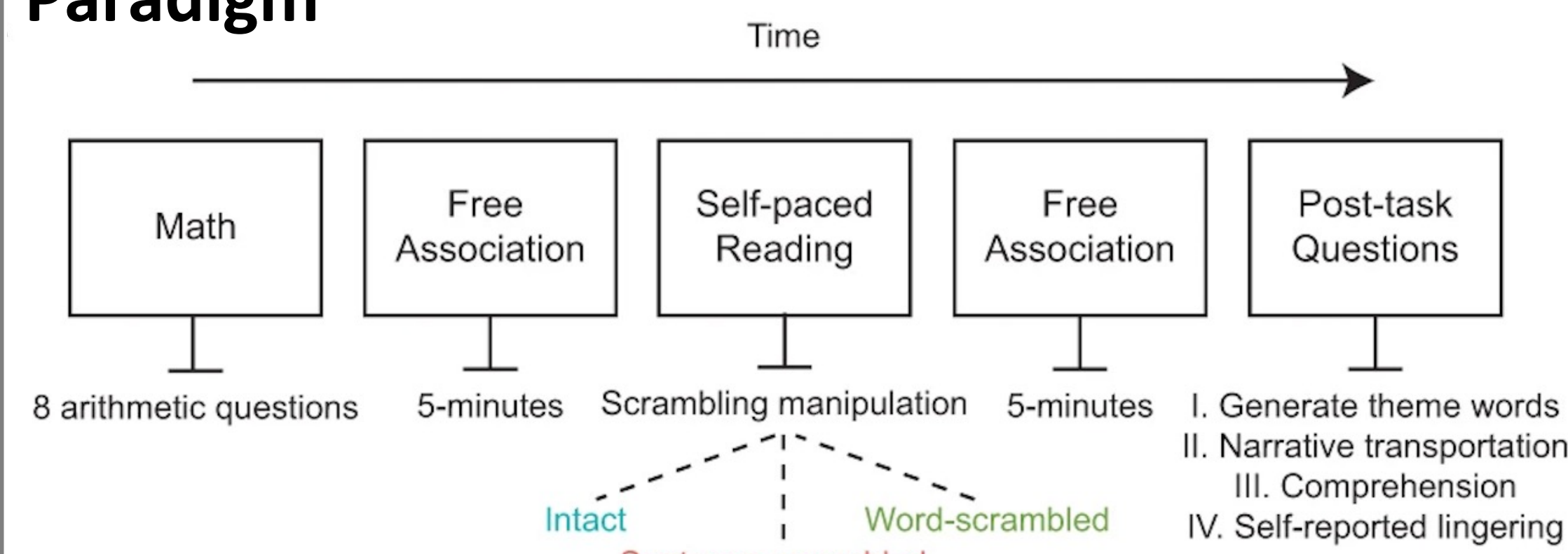
We ask, **can engaging intensely in a non-narrative task also produce lingering in spontaneous thought?**

## 2. Past Findings (Bellana et al., 2022)<sup>2</sup>

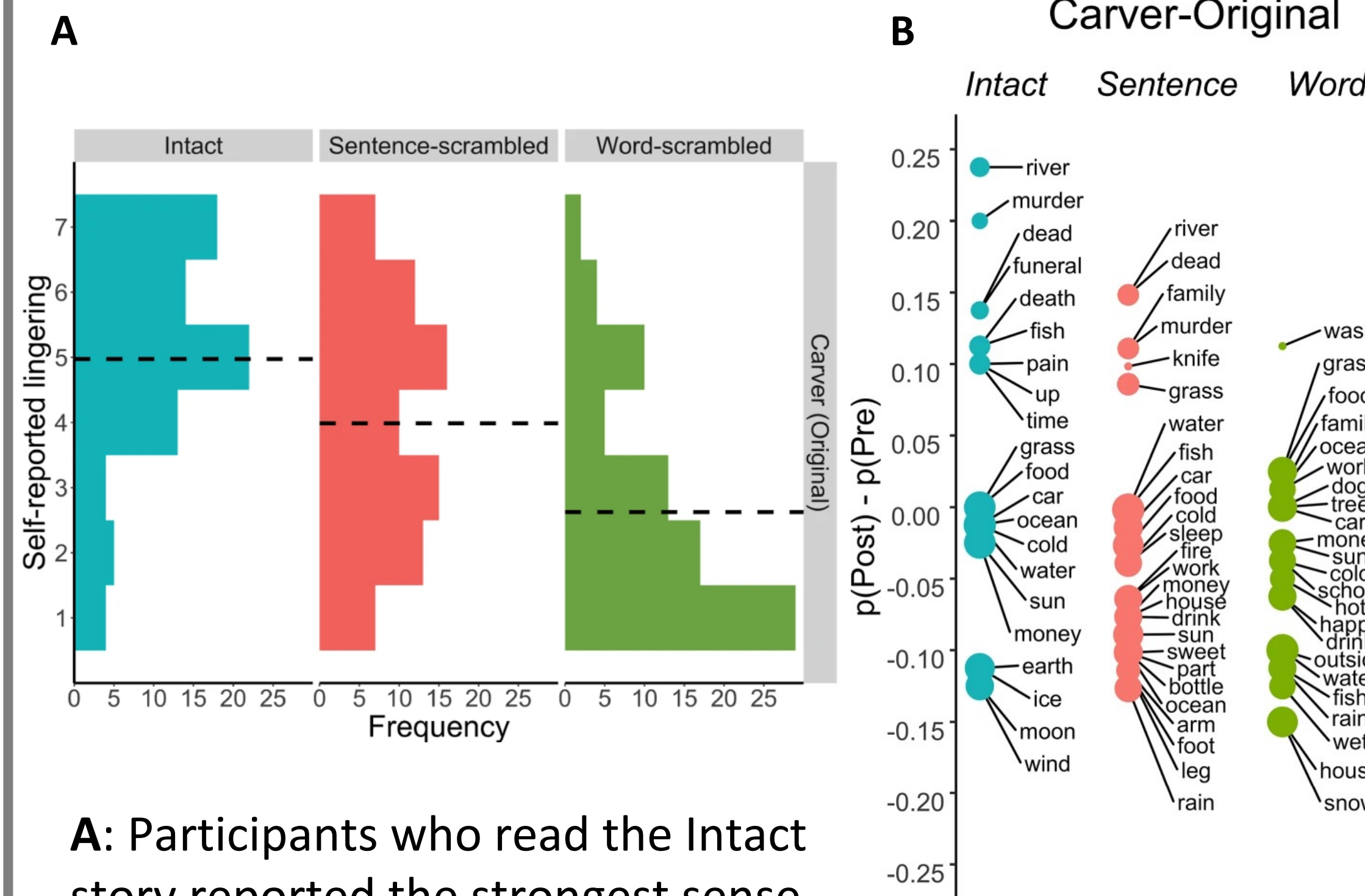
### Principle question

- Do stories linger in our minds and shape our spontaneous thoughts, more than the words and sentences that make them up?

### Paradigm



**Sample:** N=240, tested via Prolific; n = 80 per condition  
**Story:** *So Much Water So Close To Home* by Raymond Carver  
**Summary:** A group of friends experience a moral dilemma when they discover a woman's body during a fishing trip and decide to continue fishing before reporting it.



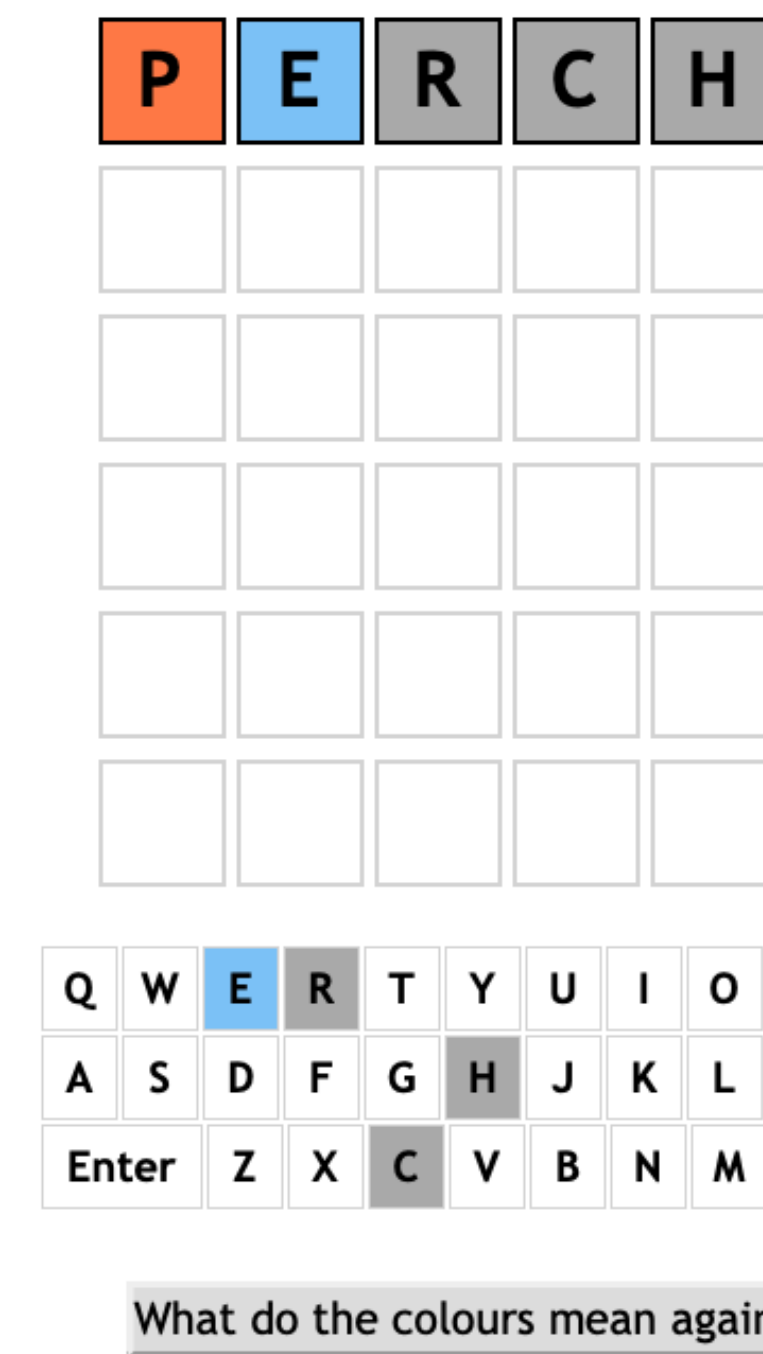
**A:** Participants who read the Intact story reported the strongest sense of lingering (i.e., 7—pt Likert scale, 1= “Not at all” and 7= “Very much”; objective index of lingering)

**B:** Words that occurred more often in post-story free association, across-participants, reflected story content.

## 3. Current Task

### Guessing Game

Guess the Word: Round 1/5!



Based off the New York Times' game *Wordle*.

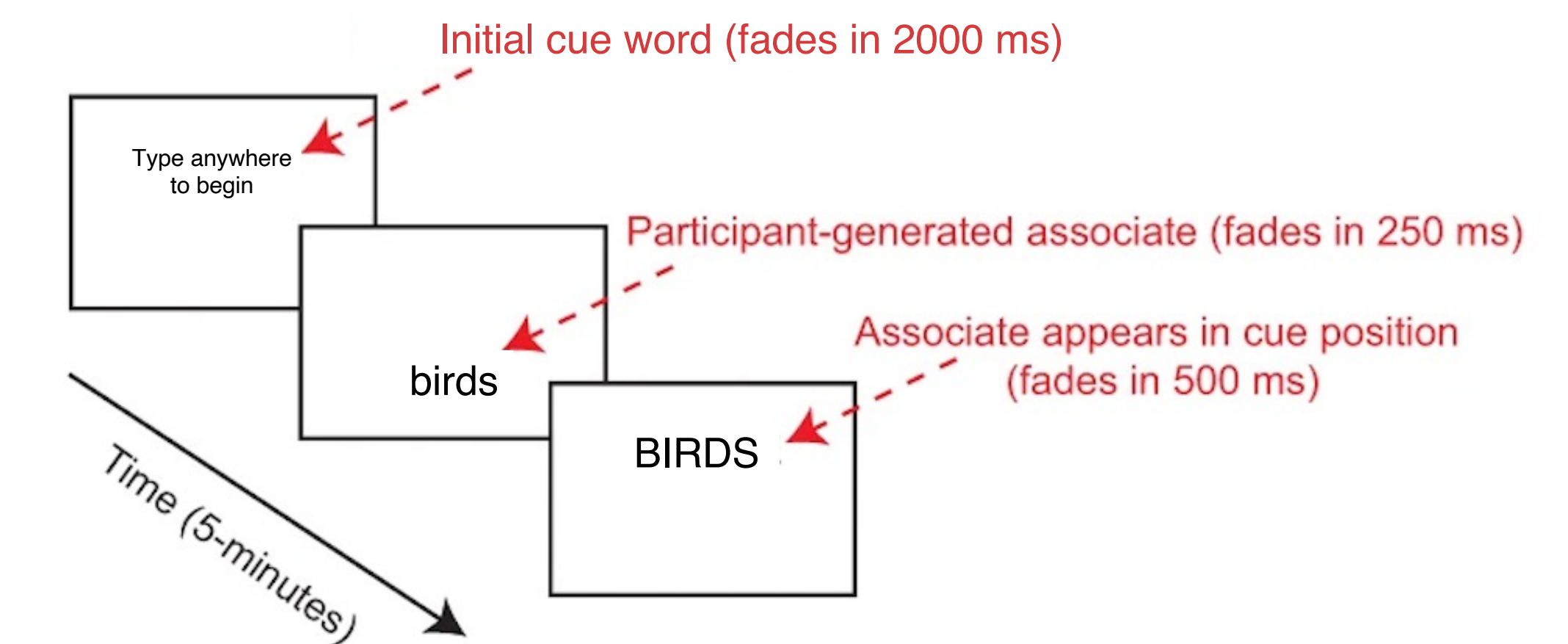
Encourages players to immerse themselves in the puzzle solving process rather than fixating on the meaning of each individual word.

Participants will play a **3-letter**, **5-letter** or **7-letter** version of the task.

There are 5 rounds with novel words in each condition.

Word frequency scales were utilized to choose similarly challenging words.

### Free Association



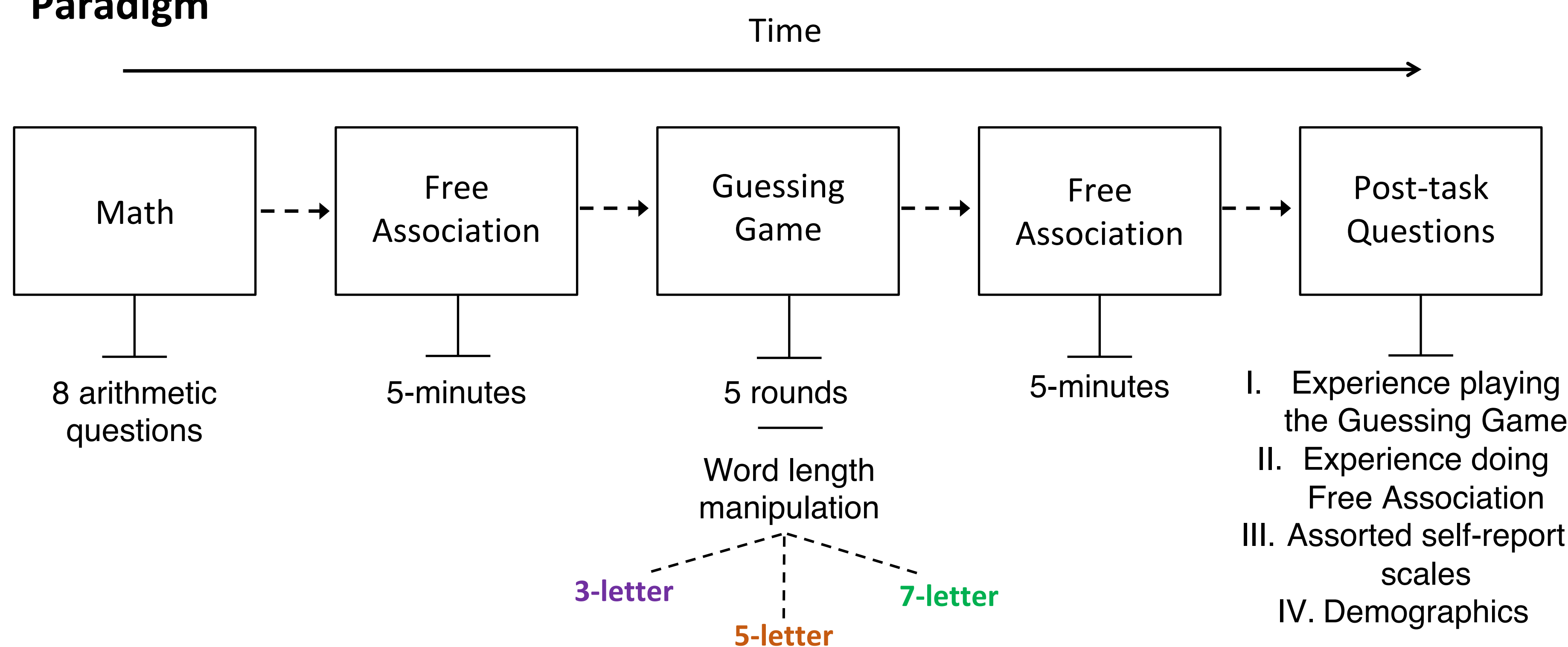
Pre & post free association data will be analyzed for condition based lingering effects (e.g., will there be more 5 letter words after playing the **5-letter** condition?)

## 4. Experimental Design

### Principle questions

- Can engaging intensely in a non-narrative task produce lingering in spontaneous thought?
- Can lingering be non-semantic in nature?

### Paradigm



## 5. Next steps

We are pending ethics approval. Pilot data is being analyzed.

**Projected sample:** N= 240, tested via Prolific; n = 80 per condition (e.g., **5-letter**)

**Data analysis plan:** 3x2 Mixed ANOVA (conditions x pre&post)

**Expected results:** condition based lingering effects

- e.g., participants who play the **5-letter** game will free associate with more 5 letter words *after* playing the game than *before* playing.

## 6. Implications

There is **currently a gap in the research** regarding the role engagement plays on lingering, particularly **separated from meaning** due to narratives being the primary testing material.

Studying lingering via engagement can tell us about the characteristics of an experience that make it prone to persist in our spontaneous thoughts. This would **add to our existing models of memorability in humans**<sup>1</sup>. It would provide additional **insights into how our thoughts are connected, how one thought influences the next, and how they shape our decision-making behaviors.**

This knowledge also **applies to bettering various industries**. In mental health care, we can develop **better interventions to manage unwanted lingering thoughts**. It further applies to industries such as advertising, entertainment, the development of AI, etc.

## References

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