

Do you see what I see? Do you hear what I hear?

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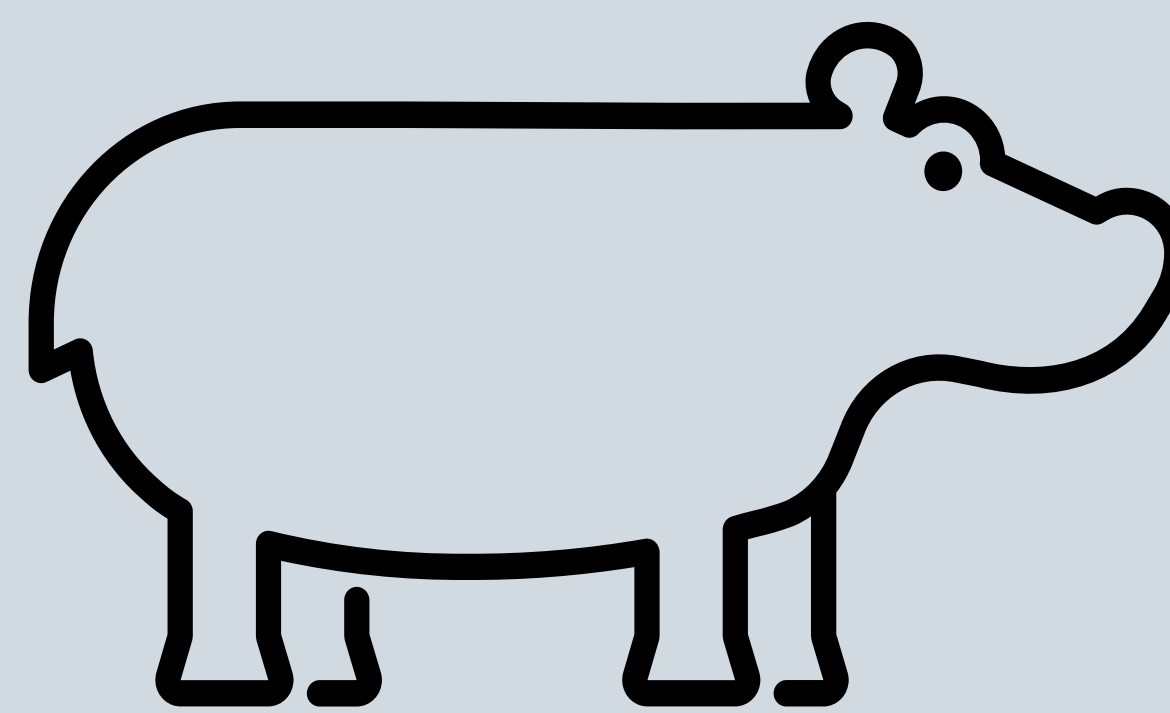


Proposed Study

- When someone thinks about their 'inner experience', they may think of their mind, their memories, their sensations, their perception, or how these all work together to form who they are (i.e., identity).
- This is a proposal for a research study to investigate how people vary on their inner experiences in different sensory modalities. We will evaluate people's capability to have mental imagery and inner speech through questionnaires.
- We also intend to assess how people use mental imagery and inner speech by having them read a self-developed concrete 'children's' story and ask how well they could visualize the concepts or hear the dialogue between characters.

Participants

- *N* = Approximately 150 people 18 years of age or older.
- Recruiting through the Lindenwood Participant Pool (LPP), as well as the following social media platforms of Snapchat, Facebook, Instagram, and Reddit.

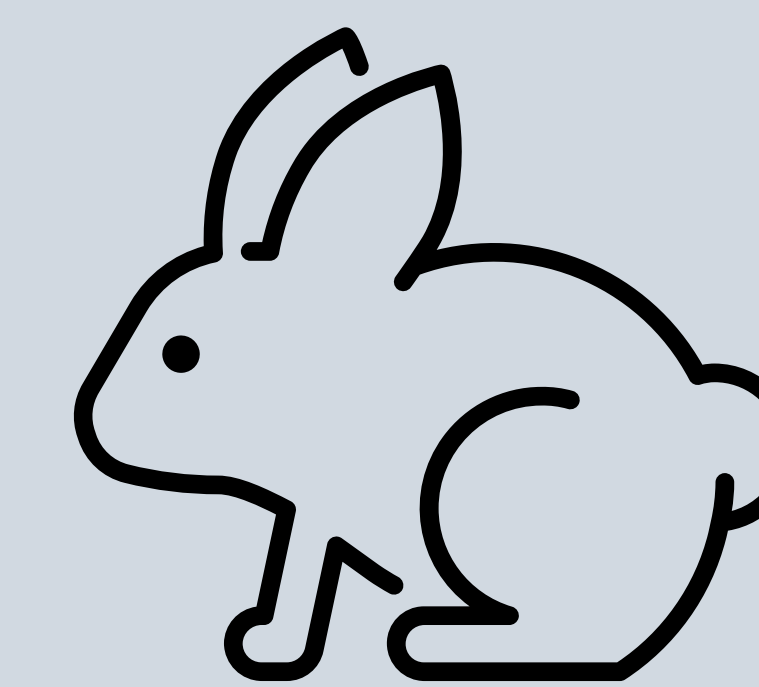


Materials

- A Qualtrics survey will be distributed people to self-select participation.
- Mental imagery will be assessed by the Vividness of Visual Imagery Questionnaire (VVIQ; Marks, 1973).
- Other sensory modalities including Inner Speech will be assessed by subscales from the Plymouth Sensory Imagery Questionnaire (Psi-Q, Andrade et al., 2013).
- Using the model of continuing a story from Alderson-Day et al. (2016), we will have participants:
 - read our created story
 - asked them how it would continue
 - asked them about their inner experiences

Our Created Story

"STOP IT!" cried Bunny while hearing Blue Hippo splash in the puddles outside.
 "It's so fun, Bunny. You should come and play with me!"
 "I don't want to get muddy. That's for babies!"
 responded Bunny while flipping through a book about clouds.
 Hearing the noise Blue Hippo was making outside, Bunny quickly shut the book and saw that Blue Hippo was trying to catch a butterfly.
 "Art. I'll do some painting," Bunny said quietly.
 After a couple brushstrokes, Bunny thought painting butterflies was very grown-up. Bunny continued to paint but would also stare out the window.
 Bunny said, "I feel like something is missing..."



Expected Findings

- We expect a positive correlation between mental imagery and inner speech, meaning people reporting using more mental imagery will also report using more inner speech and people not using mental imagery will also not be using inner speech.
- Our hypotheses regarding the application of these construct with our story is open-ended. We plan to conduct group analyses based on trait levels of mental imagery (high, low), as well as inner speech (high, low), to see how they differ on their usage in this applied situation.

Discussion

- The understanding of these inner experiences can contribute to basic knowledge of the connection between multiple mental modalities and individual differences in utilizing them.
- Participants may become aware of their own capabilities regarding mental processes. This can lead to understanding of uniqueness and varied experiences.

References

- Alderson-Day, B., et al. (2016). The brain's conversation with itself: Neural substrates of dialogic inner speech. *Social Cognitive and Affective Neuroscience*, 11(1), 110-120. <https://doi.org/10.1093/scan/nsv094>
- Andrade, J., et al. (2013). Assessing vividness of mental imagery: The Plymouth Sensory Imagery Questionnaire. *British Journal of Psychology*, 105(4), 547-563. <https://doi.org/10.1111/bjop.12050>
- Marks, F. M. (1973). Visual imagery differences in the recall of pictures. *British Journal of Psychology*, 64, 17-24. <https://doi.org/10.1111/j.2044-8295.1973.tb01322.x>