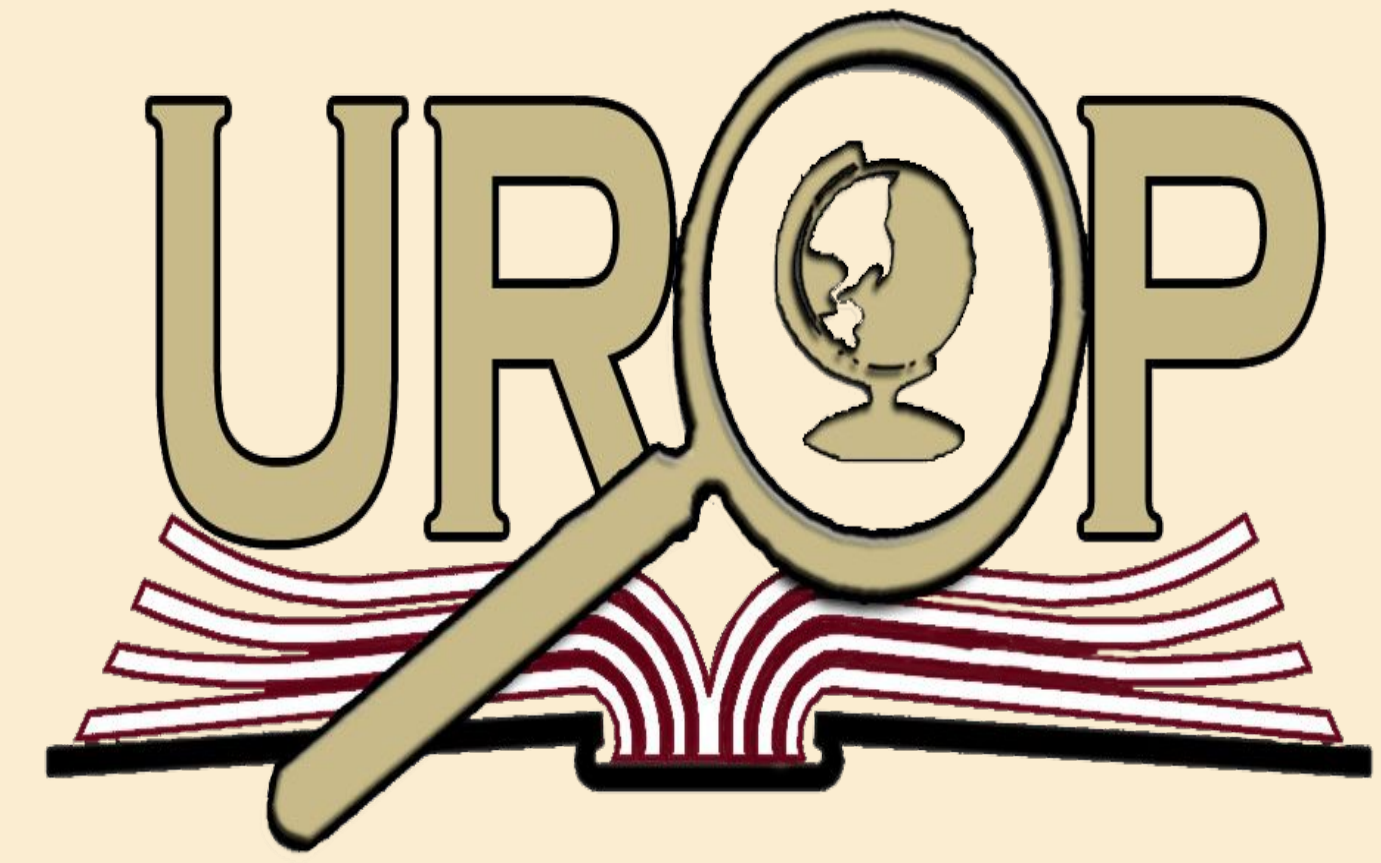




# Purpose and Engagement in Everyday Life (PEEL)



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## Abstract

The progression of cognitive decline, in connection with personality and purpose in life, has not been fully explored in current research. New evidence suggests that psychological factors, such as purpose and motivation, largely affect the rate of cognitive decline. This research focuses on finding out if a sense of purpose in life is connected to cognitive performance in adults ages 65 and older. Purpose in Life “reflects a life that is goal-oriented and driven” and it can help lead one to better physical health, mental health, and improved episodic memory. An episodic Memory can help support better cognition because the brain is better at storing and retrieving information. The study that influenced PEEL occurred during the Covid-19 Pandemic in the United States, ultimately addressing the “depressed affect” among participants and Covid related memories.

## Our Contributions

As Research Assistants we assisted in data collection by interviewing at least two participants a week over Zoom.

Interviews lasted about an hour and included:

- Obtaining participant consent by reading through the consent form with participants.
- Conducting the Interview Survey by asking participants to answer both questions assessing personality and questions testing cognition.
- Scoring participants answers during the survey.
- Introducing participants to the Mema App in which they conducted daily surveys, helping participants download the app and alter it's default settings.
- Answering participants' preliminary questions.

## Purpose

- To explore the relationship between a sense of purpose in life and cognitive performance in adults ages 65 & older.

## Results

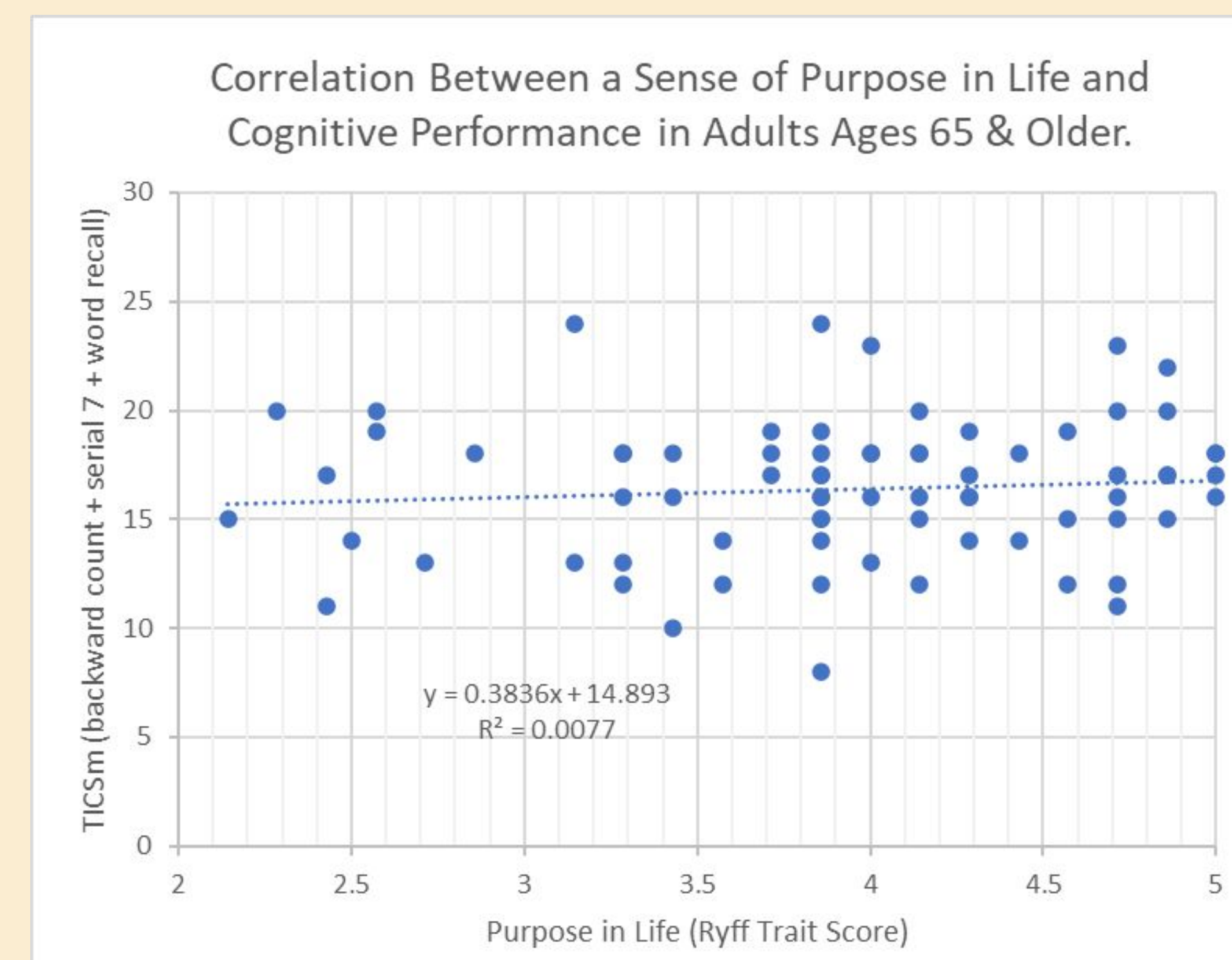


Figure 1. The correlation between purpose in life and TICSm (tested in screening interview and include counting backwards, serial 7 subtractions, and immediate and delayed recall).

- Preliminary data shows that there is no significant correlation between purpose in life and cognitive performance.

## Conclusion

- We hypothesized that there would be a positive correlation between purpose in life & cognitive performance
- **Some limitations of this data**
  - It is preliminary data from about 70 participants, we plan to recruit 2400 individuals throughout the study
  - The study is ongoing and we have a larger sample of participants that still need to be interviewed
  - Studies typically have assessed the risk of developing dementia, but this study focuses on static cognition
- **Future Applications**
  - Improving healthcare services to better suit individuals with low cognitive performance

## Methods

- Participants were recruited through targeted online advertisements on Facebook then contacted to conduct a screening interview collecting socio-demographic information and other general criteria.
- Individuals completed the Ecological Momentary Assessment (EMA) measures that include daily surveys to assess purpose, mood, and memory and processing speed for a period of 8 days.
- All of the surveys and brain games to assess cognition were facilitated through a HIPAA-compliant Ilumivu app downloaded to their smartphone.
- Each participant would also complete a baseline survey which consists of personality questions with answers ranging from strongly disagree to strongly agree.
- Baseline survey questions relate to purpose, wellbeing, neuroticism, extraversion, agreeableness, openness, conscientiousness, trait engagement, healthy behaviors, and clinical history
- Participants will be contacted in 2-3 years time to conduct a phone follow up interview.

## References

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