

Introduction

- •Delayed free recall (FR) and categorized delayed free recall (catFR) tasks have been used extensively to study memory in laboratory settings.
- Clinicians use standardized and normalized neuropsychological tests to measure memory in their patients, such as the Rey-Auditory Verbal Learning Test (RAVLT) and the California Verbal Learning Test (CVLT).
- •This study was done to elucidate the relationship between these laboratory and neuropsychological memory tests.

Hypotheses

validity. clustering. RAVLT.

Both tasks will capture memory deterioration due to age or neurological disorder (epilepsy).





Clinical Validation of Laboratory Memory Tasks Ricardo T. Adrogue, Noa Herz, David Halpern, and Michael J. Kahana

University of Pennsylvania

1. FR and RAVLT recall rate will be highly correlated, reflecting good convergent

2. Both tasks will show the typical recall dynamics seen in free recall tasks, such as primacy, recency, and temporal

3. FR will exhibit a strong test-retest reliability, similar to the one found for

Methods

- •Participants (ages 20-69) completed four alternating sessions of FR and RAVLT, counterbalanced for order on Amazon's MTurk.
- 766 participants completed the first session and 87 participants completed all four sessions.





- RAVLT shows weaker recall dynamics due to fixed order of items (Fig. 2).
- •FR and catFR recall show significant negative correlations with age, while CVLT and RAVLT recall show **nonsignificant negative** correlations (Fig. 3A).
- •FR tests reflect memory impairment in epileptic patients, RAVLT does not (Fig. 3B).
- Recall probability on FR and catFR tests showed **positive correlations** with RAVLT and CVLT total recall probability (Fig. 3C), suggesting good convergent validity.
- •RAVLT and FR1 both showed strong, significant test-retest correlations (Fig. 3D), suggesting strong reliability for both.
- You can find a copy of my poster here: If you have any questions my email is radrogue@sas.upenn.edu

