

Sensitivity of Time-Pressured Naming to Aging in Asymptomatic and Symptomatic Alzheimer's Disease

Tamar H. Gollan, Jessie Quinn, Alena Stasenko, Douglas Galasko, David P. Salmon

University of California, San Diego

P13-002

KEY TAKE-AWAYS: (A) Time-pressured picture naming is more sensitive to the effects of AD than traditional naming tests in both the earliest stages of AD (before diagnosis), and after diagnosis for detecting decline in naming scores. (B) In older adults who were negative for AD biomarkers, naming scores remained stable well into advanced older age.

INTRODUCTION

- Word finding problems are a common complaint in earliest stages of Alzheimer's Disease (AD)
- BUT traditional naming tests are often at ceiling at this stage
- MINT Sprint 2.0 speeded naming test shows signs of sensitivity even in preclinical AD Gollan, et al., (2024).
- n=80 pictures administered in about 2 minutes in cognitively normal participants
- Adds time pressure, increases the number of items that can be administered in a short amount of time, adds more difficult items, & combines speed and accuracy to maximize sensitivity

Aim1: Examine change in performance over 1 year time

Aim2: Compare to standard untimed naming test

Aim3: Re-examine aging effects on picture naming ability

METHODS

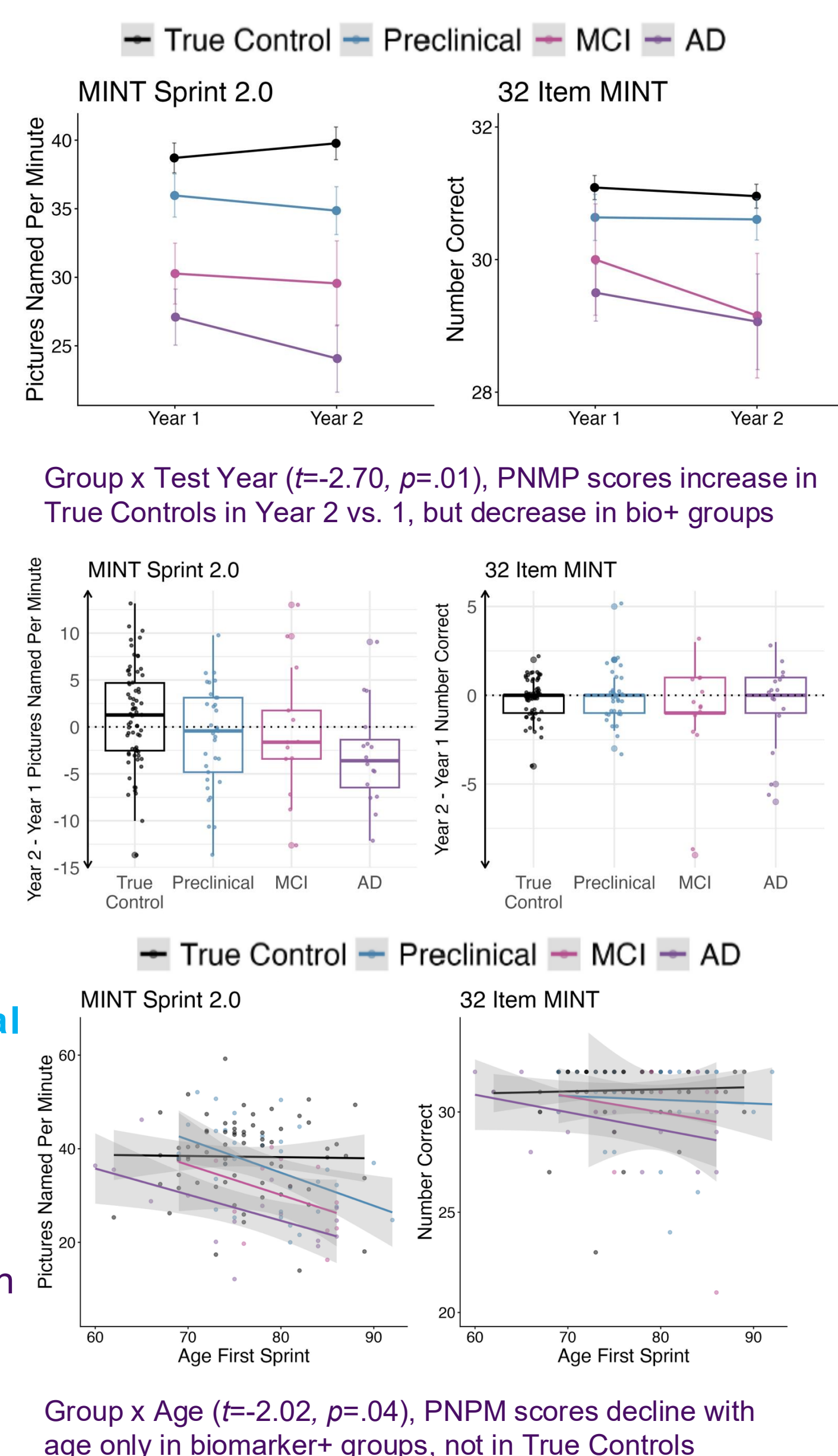
Participants completed the time-pressured Multilingual Naming Test or **MINT Sprint 2.0**. Participants are told “You have 3 minutes to name as many pictures as quickly as you can”



Cognitively normal **True Controls** ($n=69$) were CSF **biomarker negative**. **Preclinical AD** ($n=33$) were cognitively normal and **biomarker positive**. **MCI** ($n=13$), and **AD** ($n=18$) were also **biomarker positive**.

Participants completed the test twice – with about one year between administrations. Used composite measure of speed & accuracy: PNPM → Pictures Named Per Minute

RESULTS



CONCLUSIONS

- **Picture naming abilities decline in the earliest stages of AD**, with subtle changes likely occurring preclinically
 - Need more sensitive naming tests to see this decline
 - More items, more difficult items, time pressure
 - Change over time may increase sensitivity
- **Even after AD diagnosis, the Sprint test is more sensitive to decline**, in 1 year's time than the 32-item short version of the MINT (Ivanova et al., 2013) used by UDS-3 (Weintraub et al., 2018)
- **No aging-related decline in object naming in cognitively healthy aging**
 - Greater decline in pictures named per minute in older-old than in younger-old may reflect longer period of biomarker positivity in the symptomatic AD groups (Petersen et al., 2026)

REFERENCES

1. Gollan, T. H., Garcia, D. L., Murillo, M., Vargas, J., Pulido, B., & Salmon, D. P. (2024). Sprinting in two languages: Picture naming performance of older Spanish–English bilinguals on the Multilingual Naming Test Sprint 2.0. *Neuropsychology*, 38(7), 653–664. <https://doi.org/10.1037/neu0000958>
2. Ivanova, I., Salmon, D. P., & Gollan, T. H. (2013). The multilingual naming test in Alzheimer's disease: clues to the origin of naming impairments. *Journal of the International Neuropsychological Society : JINS*, 19(3), 272–283. <https://doi.org/10.1017/S1355617712001282>
3. Weintraub S, Besser L, Dodge HH, et al. Version 3 of the Alzheimer disease centers' neuropsychological test battery in the uniform data set (UDS). *Alzheimer Dis Assoc Disord*. 2018;32(1):10-17.
4. Petersen KK, Milà-Alomà M, Li Y, et al. Predicting onset of symptomatic Alzheimer's disease with plasma p-tau217 clocks. *Nature Medicine*. 2026;32(3):1085-1094. doi:10.1038/s41591-026-04206-y

CONTACT Information & Acknowledgements

tgollan@ucsd.edu

NIH grants P30-AG062429,
AG076415, K23NS142707,
NSF-BSF grant 2316909,
Alzheimer's Association/NACC
New Investigator Award
NIAP25-1438957