

UAB THE UNIVERSITY OF
ALABAMA AT BIRMINGHAM.

Heersink School of Medicine

CDR Domain Scoring Variation by Race in the NACC Dataset

Giovanna Pilonieta PhD, DMD, MPH

David S. Geldmacher MD

Support from the National Institute of Aging
(P20AG068024)

NACC database is funded by NIA/NIH Grant
U24 AG072122.

Disclosures

Giovanna Pilonieta

No financial relationships or conflicts of interest

David S. Geldmacher

Consultant:

- Eisai
- Genentech/Roche
- Lilly
- Oligomerix
- Premier Applied Sciences
- TauRx
- TwoLabs, Inc.

Honorarium:

- North American Council for CME
- Medical Education Speakers Network

Introduction

- Recent studies have found differences in the association between neuropsychological performance and ratings of daily function in non-Hispanic White and non-Hispanic Black older adults¹.
- Evaluating differences in CDR domain ratings by race may be important to understanding disparities in clinical research outcomes for people with Alzheimer's disease and related disorders.

¹Graves et al.,2022

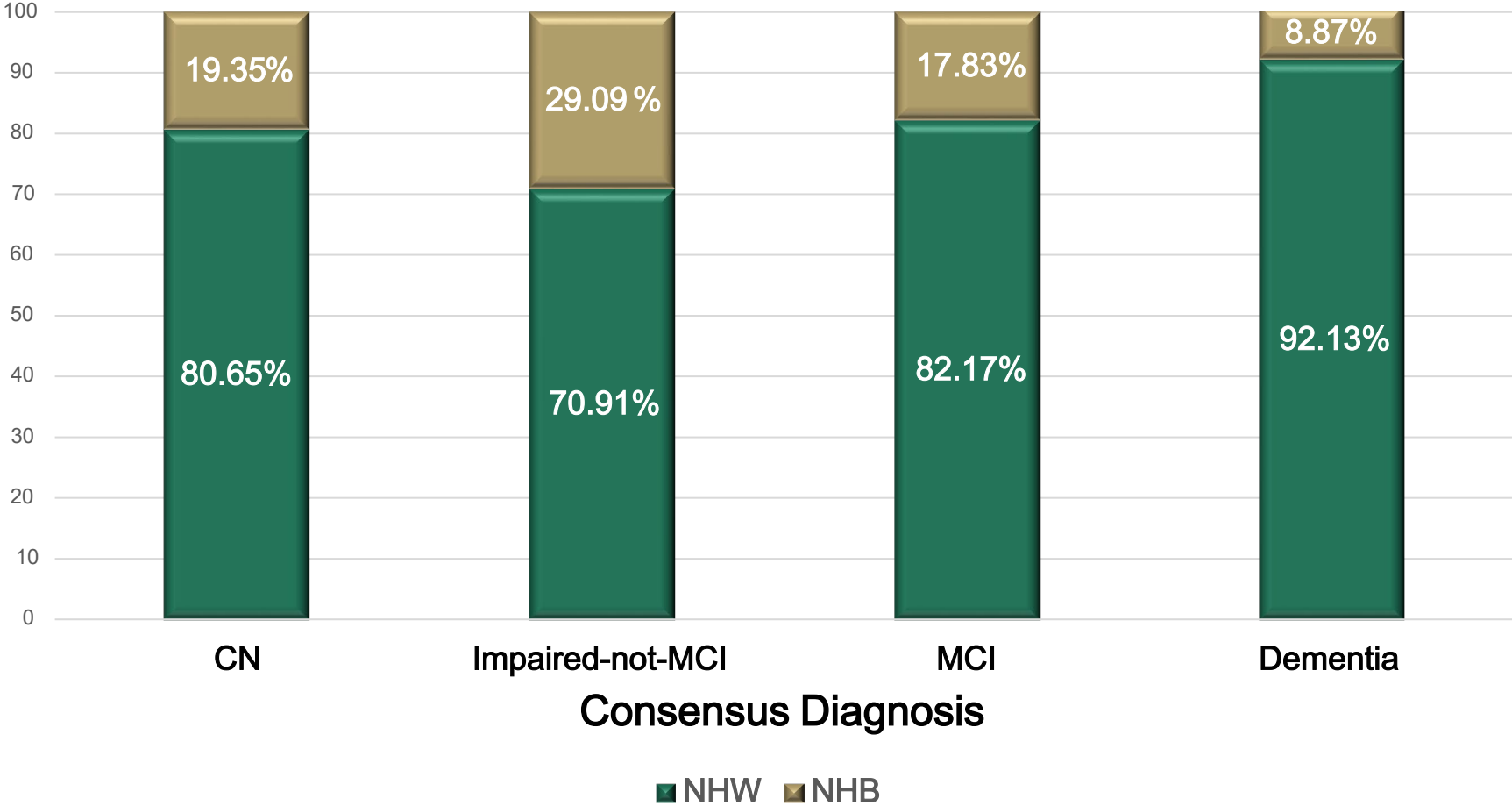
Methods

- **Data source**
 - NACC cohort
 - Baseline visits (Version 3.0 UDS)
 - 37 ADRCs
 - March 2015 to June 2022
- **Study sample**
 - non-Hispanic Black individuals (NHB) (N=1,609, 16.77%)
 - non-Hispanic White individuals (NHW) (N=7,984, 83.23%)
- **Demographic characteristics**
 - Gender and race distribution
 - Mean age at baseline
 - Average years of education
- **Measures**
 - CDR: Global, Sum of Boxes and domains
 - Geriatric Depression Scale (GDS)
- **Analytical Approach**
 - Categorical Variables:
 - Chi-square
 - Continuous variables:
 - T-test
 - MANCOVA tests
 - $P < .05$

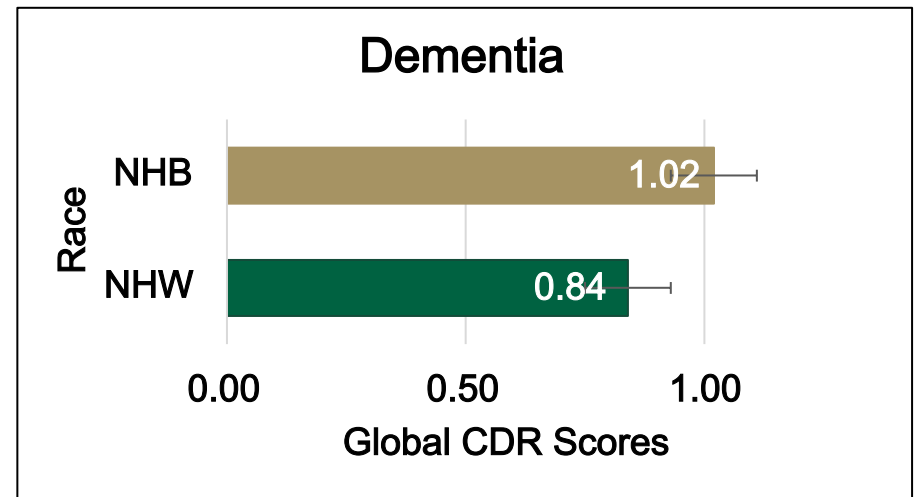
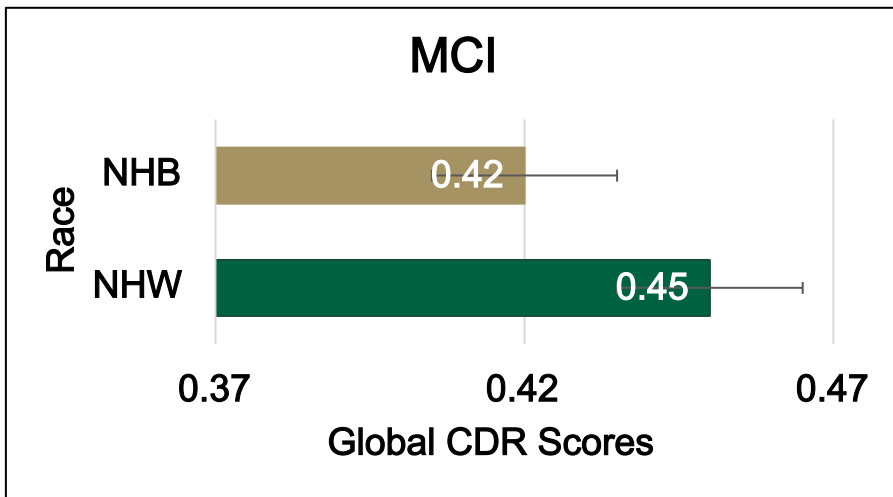
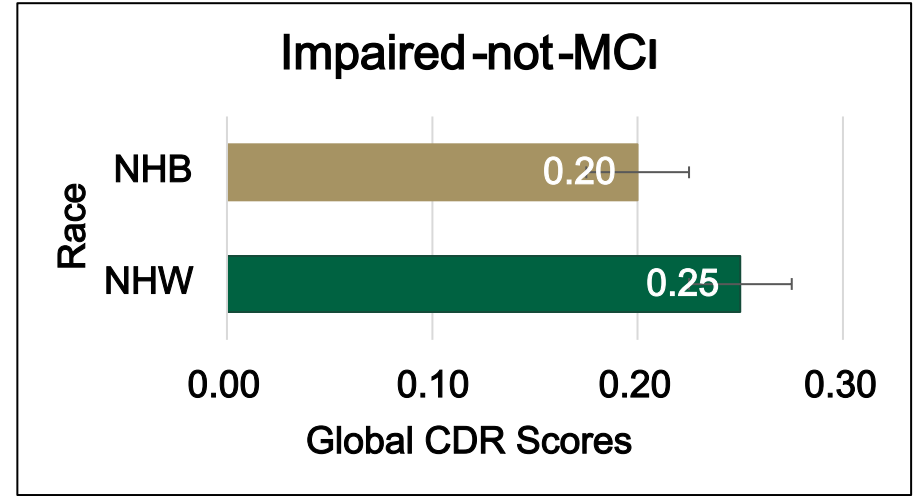
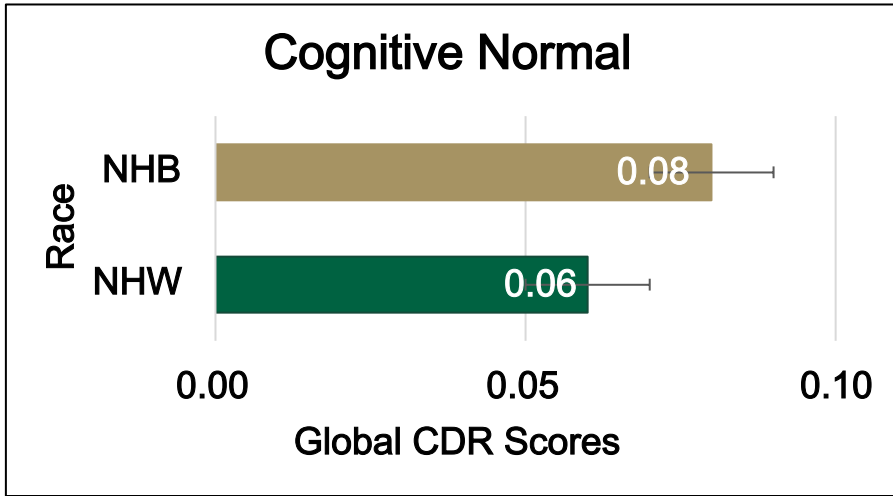
Results

- There were statistically significant differences between race groups for:
 - Gender Proportion
 - Education
 - CDR Global-Sum of Boxes and Domains
 - GDS

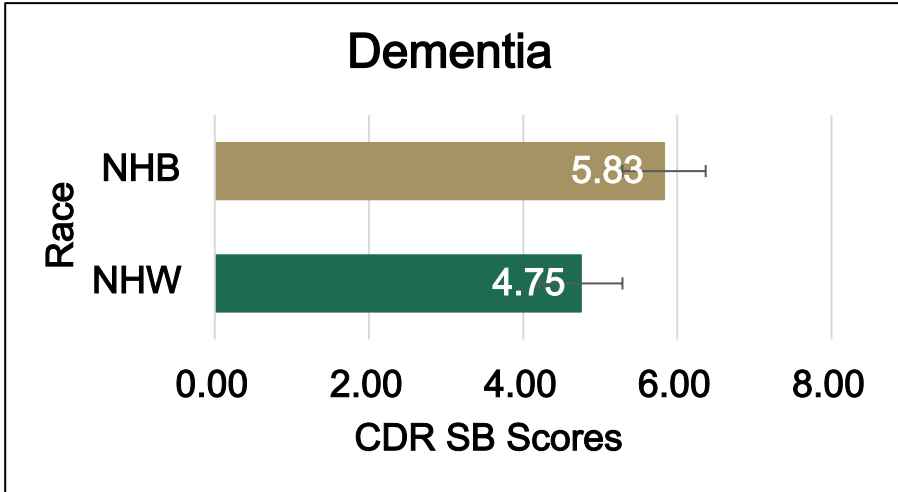
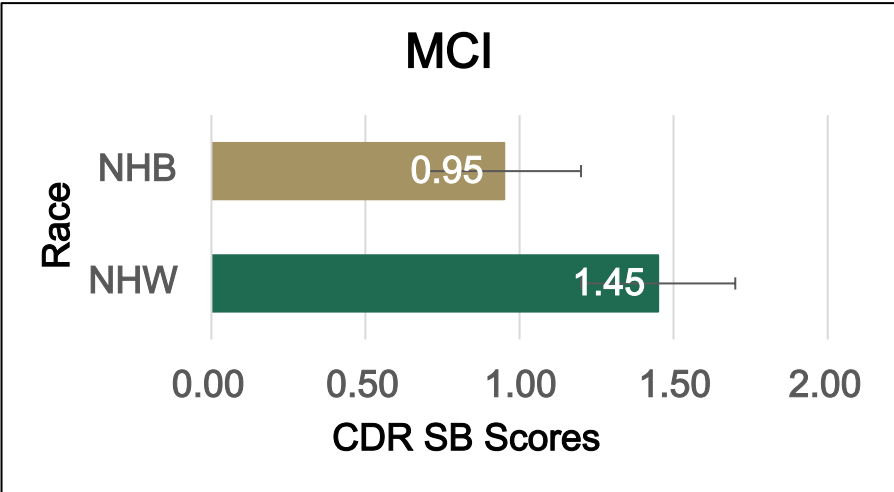
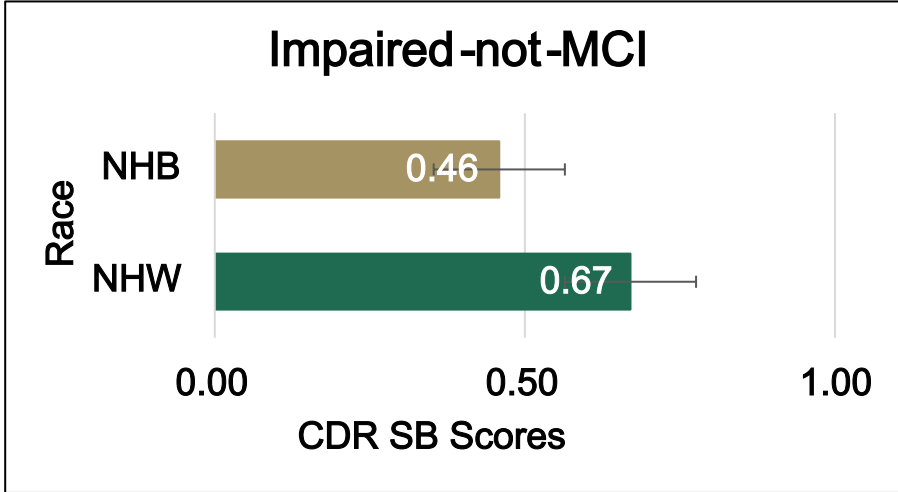
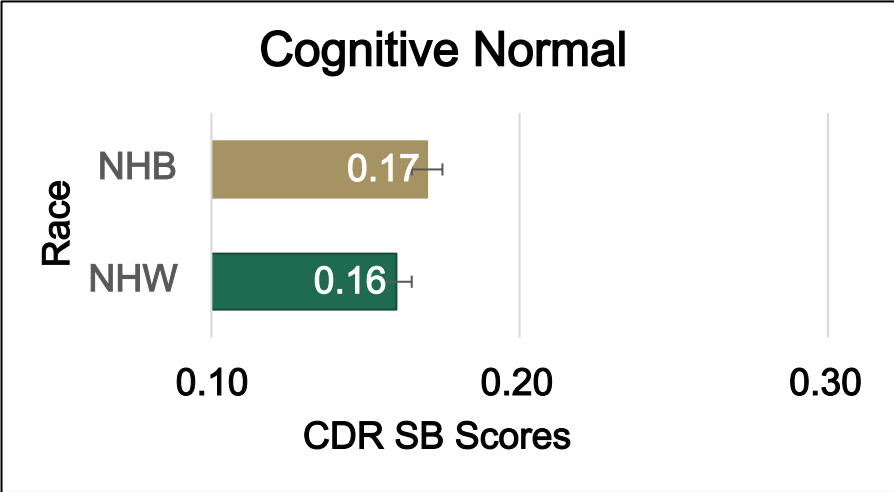
Race Distribution by Consensus Diagnostic Groups



GLOBAL CDR



CDR SUM OF BOXES



Conclusion

- There were significant differences in the rating of CDR domains by race in the NACC dataset in each diagnostic group.
- Further research is needed to understand underlying factors such as participants' knowledge, beliefs, and practices regarding ADRD and implicit/explicit interviewer bias, among others, which may play a role in differences in performance by race on CDR domains ratings contributing to racial differences in diagnostic groups.

References

- Graves, L. V., Edmonds, E. C., Thomas, K. R., Weigand, A. J., Cooper, S., Stickel, A. M., Zlatar, Z. Z., Clark, A. L., & Bondi, M. W. (2022). Diagnostic accuracy and differential associations between ratings of functioning and neuropsychological performance in non-Hispanic Black and White older adults. *The Clinical Neuropsychologist*, 36(2), 287-310.
<https://doi.org/10.1080/13854046.2021.1971766>

Contact us



 205 996 3679

 1720 7th Avenue South, Sparks Center, 640

 gpilonieta@uabmc.edu

 [Division of Memory Disorders and Behavioral Neurology - School of Medicine - Neurology | UAB](#)

UAB THE UNIVERSITY OF
ALABAMA AT BIRMINGHAM.

Heersink School of Medicine

Thank you!