



Subjective Memory and Perceived Risk of Alzheimer's Disease Among Older Black Adults



¹ Lilcelia A. Williams, PhD; ² Jennifer Lingler, PhD; ² Lisa K. Tamres; ⁴ Renā AS Robinson, PhD; ² Dianxu Ren; ² Melita Terry; ² Melissa Knox; ³ Ishan C. Williams, PhD
¹ University of Pittsburgh Department of Occupational Therapy; ² University of Pittsburgh School of Nursing; ³ University of Virginia School of Nursing; ⁴ Vanderbilt University Department of Chemistry

Study Objectives

- Given the disparities in access to diagnoses and treatment in cognitive decline, there is more reason to take note of subjective memory complaints among Black adults.
- The objective was to investigate the associations among subjective memory complaints and perceived risk of AD among older African American adults

Methods

- Secondary data analysis included 341 Black adults aged 45 and older.
- Web-based survey data from a community sample
- Subjective memory complaints (SMC) measured with the Frequency of Forgetting Scale.
- Multiple linear regression models used to examine the relationship between perceived AD risk and total score of SMC after controlling for demographics.
- The interaction between SMC with sex and education were also investigated.

Conclusion

- Results indicate that perceptions of AD risk were strongly associated with sex and SMC or potential presence of cognitive symptoms.
- Future research should be expanded to include race-based cognitive ability, as well as gender-based cognitive ability.

Results

Bivariate association between Subjective Memory Assessment and demographics:

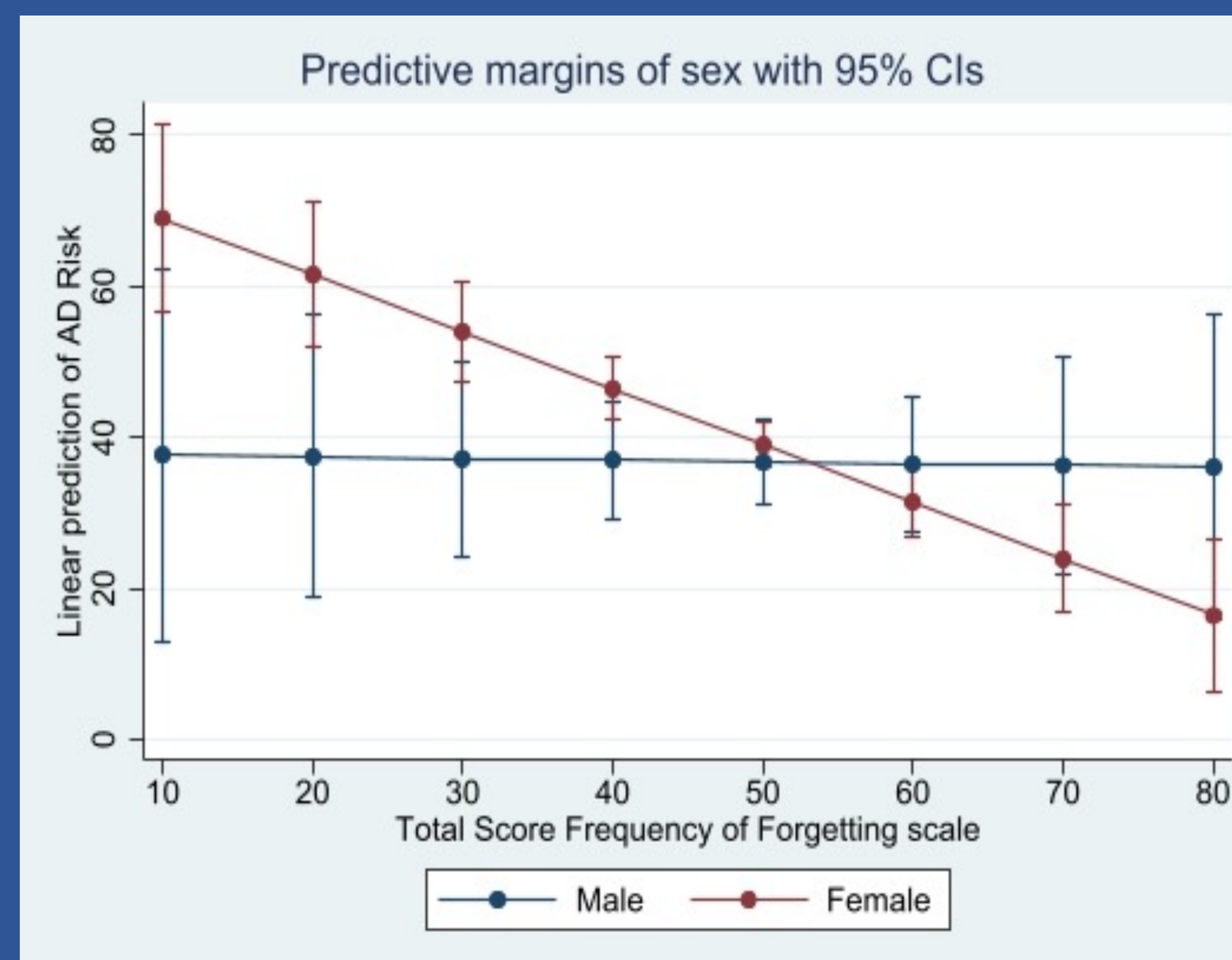
	Perceived AD risk	P-value
Age (correlation coefficient)	0.11	0.047
Subjective Memory Assessment (Total Score of forgetting scale) (correlation coefficient)	-0.26	<0.0001
Education (Mean±SD)		0.29
<=High School	39.6±26.6	
Some college/technical school	40.0±27.1	
>=Bachelor	35.5±25.5	
Sex (Mean±SD)		0.48
Male	36.1±27.8	
Female	38.5±25.9	
Income (Mean±SD)		0.12
Meet basic needs	37.2±26.5	
Not meet basic needs	44.7±25.1	

Multiple linear regression model between perceived AD risk and subjective memory controlling for demographics:

	Coefficient	P-value
Age	0.29	0.068
Education		0.68
<=High School	Reference	
Some college/technical school	-2.09	0.69
>=Bachelor	-4.44	0.46
Sex		0.022
Male	Reference	
Female	38.7	
Income		0.56
Meet basic needs	Reference	
Not meet basic needs	2.78	
Subjective Memory Assessment (Total Score of Forgetting Scale: TSFS)	-0.023	0.94
TSFS*Sex(Female)	-0.73	0.035
Male: slope of TSFS	-0.023	0.94
Female: slope of TSFS	-0.75	<0.001

Results

Mean age of participants was 60, male participants reported better subjective memory performance than female participants, and females reported a slightly higher chance of developing AD in the next 10 years than male participants. Analyses showed female sex as a negative moderator of the relationship between perceived AD risk and SMC.



Participant Demographics by Gender (Age>=45)

	All sample (N=341)	Male (n=82)	Female (n=259)	P-value
Age (Mean±SD)	60.5±9.71	59.0±9.66	60.9±9.70	0.11
Education (n, %)				0.95
<=High School	31 (9.10%)	7 (8.54%)	24 (9.27%)	
Some college/technical school	155 (45.45%)	36 (43.90%)	119 (45.95%)	
>=Bachelor	155 (45.45%)	39 (47.56%)	116 (44.79%)	
Income (n,%)				0.21
Meet basic needs	307 (90.0%)	77 (93.9%)	230 (88.8%)	
Not meet basic needs	34 (10.0%)	5 (6.10%)	29 (11.2%)	
Perceived AD risk (Mean±SD)	37.9±26.4	36.1±27.8	38.5±25.9	0.48
Subjective Memory Assessment (Total Score of forgetting scale) (Mean±SD)	51.5±10.6	53.2±9.95	50.9±10.8	0.08

Limitations

- Absence of data on health or objective memory performance of participants.
- Cross-sectional design.
- Data collected assessed 10-year AD risk among participants.

Acknowledgments & Grant Funding

This research was supported by National Institute on Aging NIA/NINR R01AG054518

Corresponding Author Contact Information

Ishan C. Williams, PhD
 Associate Professor
icw8t@virginia.edu

Citation*

Manuscript is currently under review

*Frequency of Forgetting Scale citation available upon request.