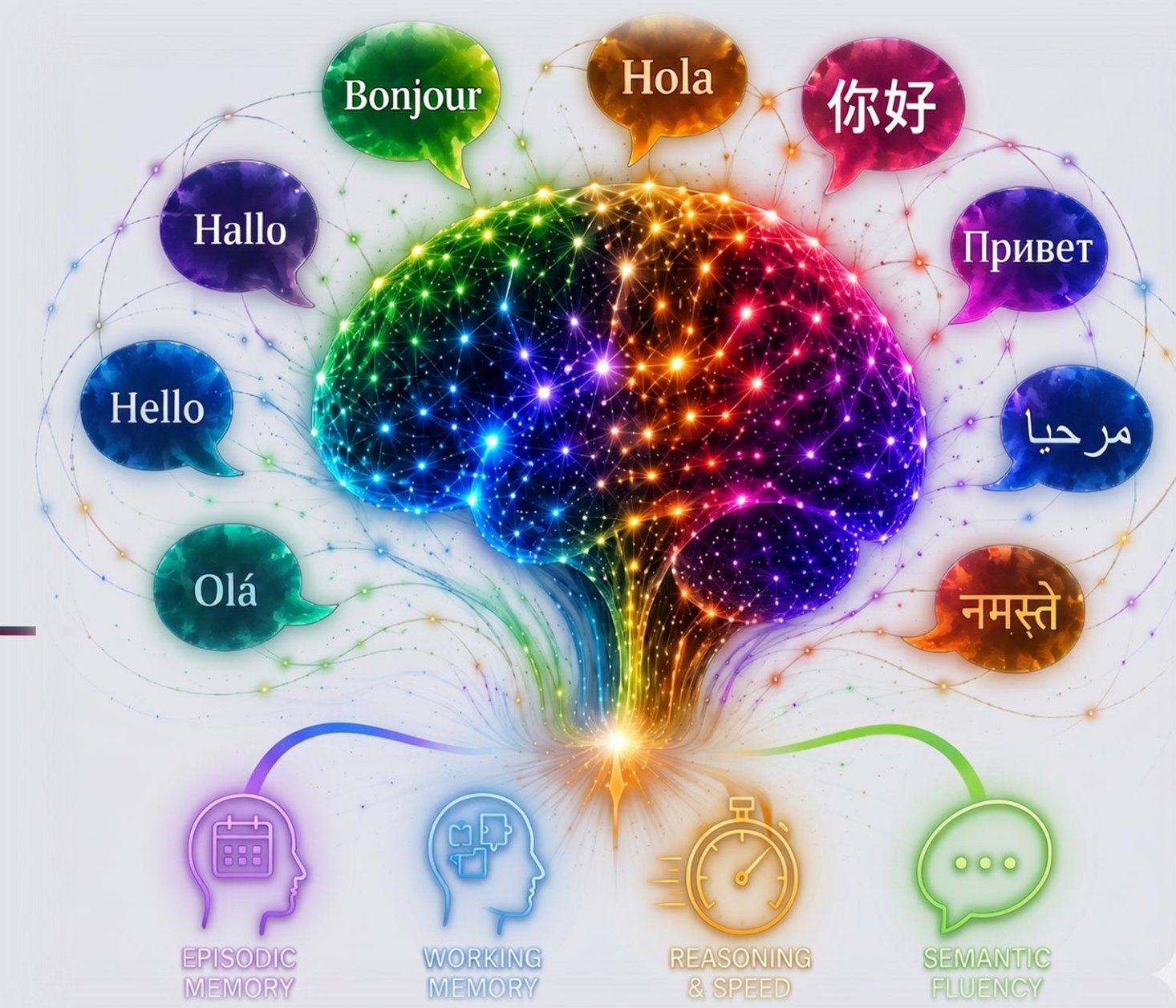


Multilingualism and Cognition in Older Adults

Decoupling the multilingual advantage from bilingualism

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INTRODUCTION

- Most research compares bilinguals with monolinguals.¹
- Studies examining multilingualism suggest cumulative benefits² that may plateau after three or four languages.³
- **Detailed multilingual language profiles are rarely considered** beyond the number of languages spoken.

PARTICIPANTS

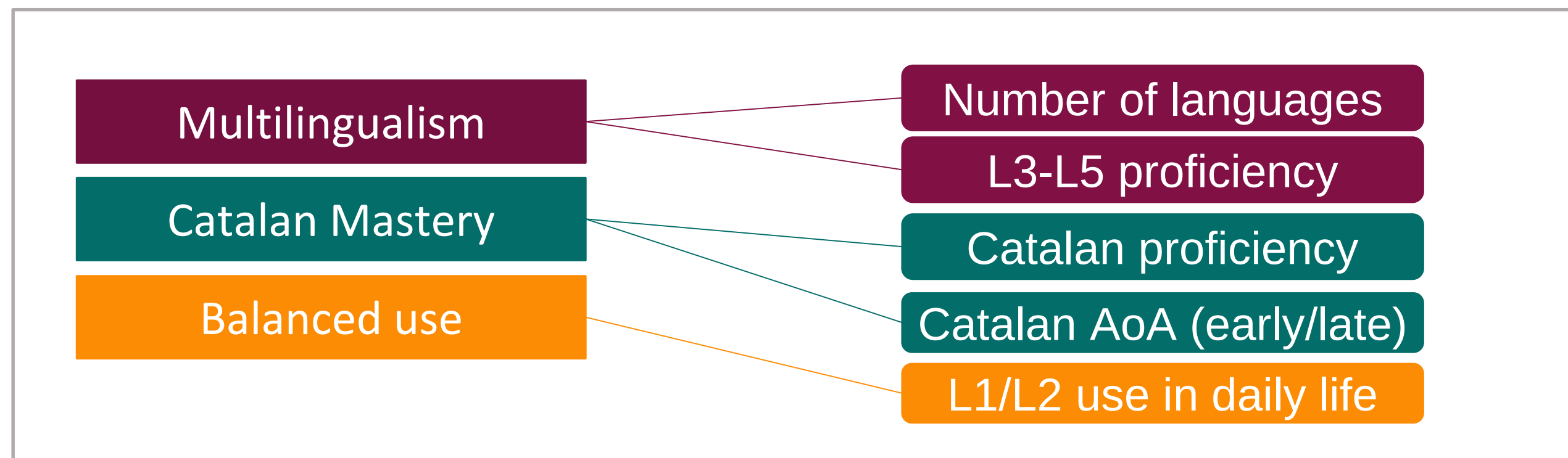
- N=2742 cognitively healthy older adults (45-72 years)
- ALFA cohort study⁴ in **Catalonia, Spain.**

Number of languages	2	3	4	5	6 or 7
N	889	857	723	200	73
Age	56.87	55.29	55.28	56.11	55.62
% female	67.83 %	63.36 %	61.83 %	53.50 %	45.21 %
MMSE	28.82	29.03	29.17	29.22	29.34

ANALYSES

Sample	Type of analysis
Full sample (N=2742)	Reduce cognitive outcomes
Included (N=2669)	Test number of languages and cognition
• Up to 5 languages	
Included (N=2552)	Reduce language predictors
• Up to 5 languages	
• Only Spanish/Catalan in childhood and daily life	Test language components and cognition
Covariates: Age, sex and cognitive reserve	

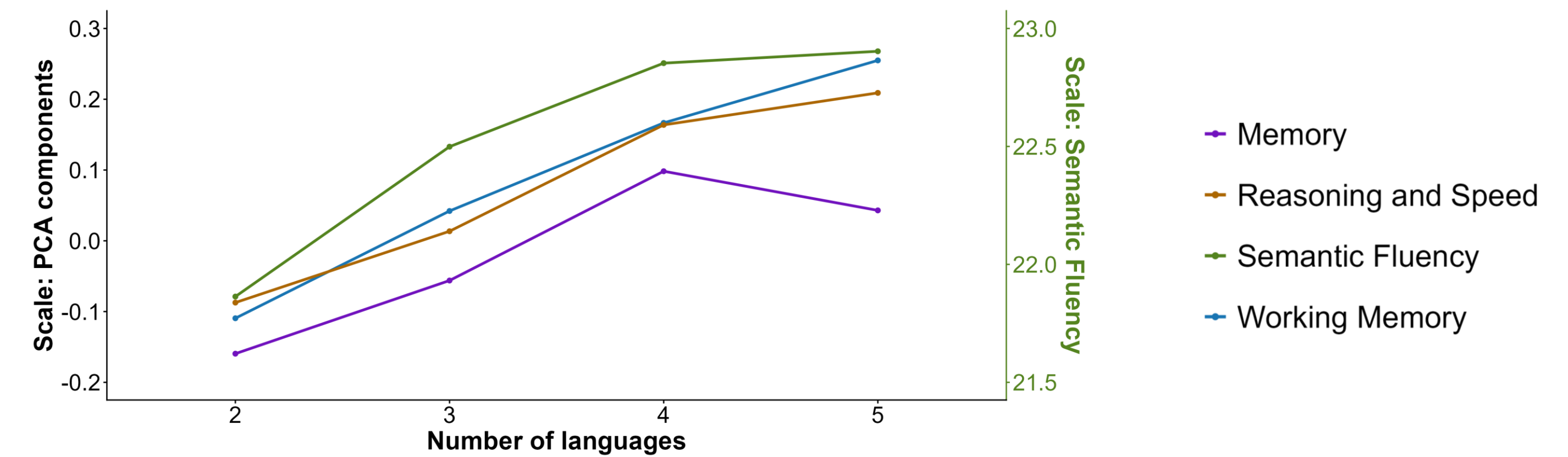
LANGUAGE DIMENSIONS



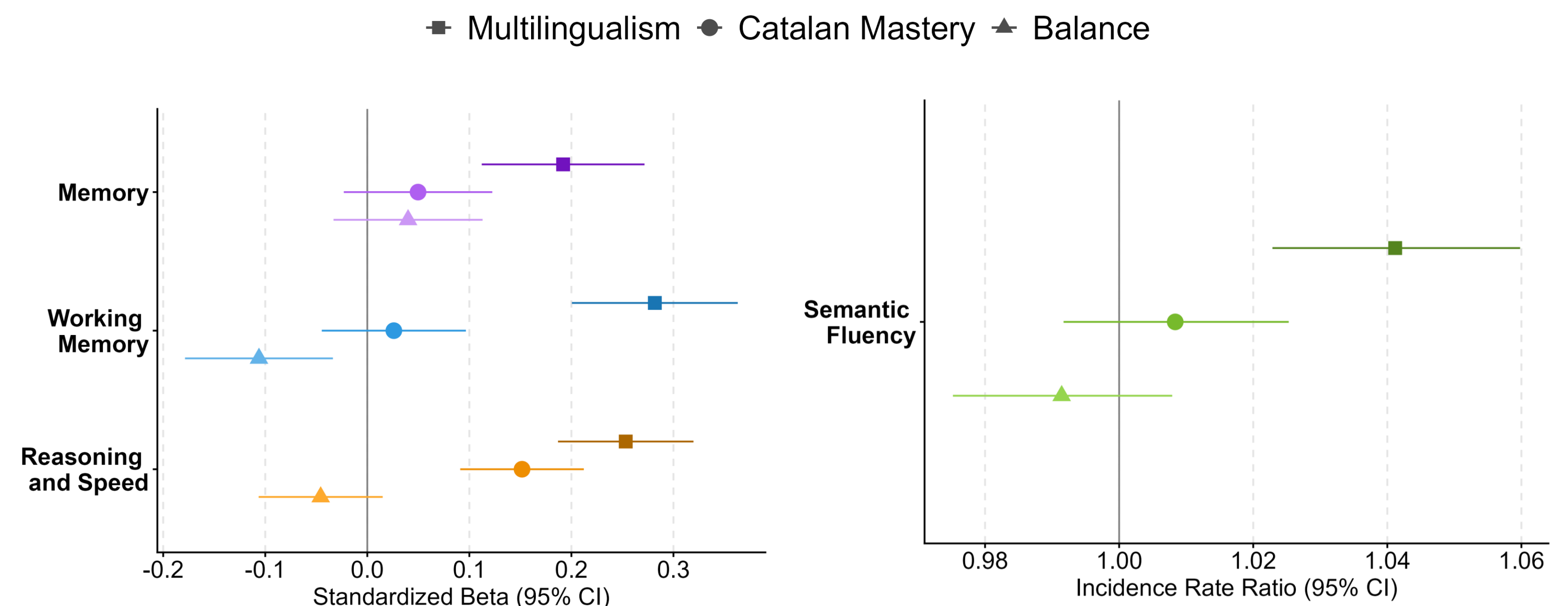
Does multilingual experience predict cognition beyond bilingual proficiency and language use?

RESULTS AND DISCUSSION

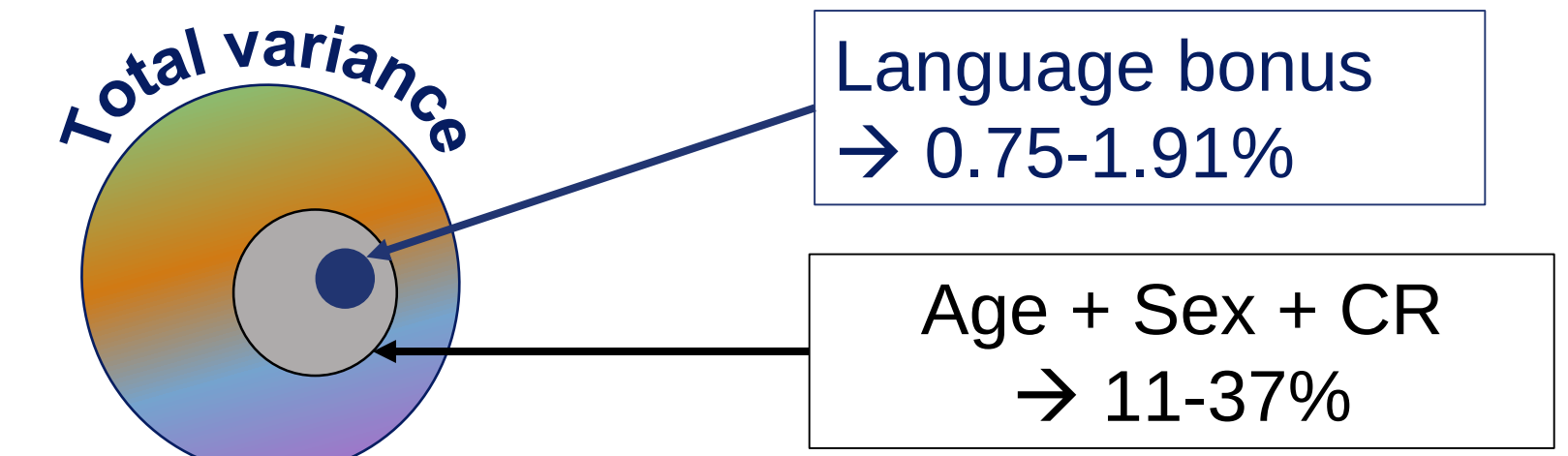
Positive linear association between language count and cognition. No plateau.



Consistent positive effect of Multilingualism after accounting for Catalan Mastery and Balanced use.



Demographics explained most variance; language added a small unique bonus.



In bilingual older adults, **degree of multilingualism** predicted cognitive performance more strongly than **bilingual proficiency** and **language use**.

Questions? atoth@uoc.edu

Poster



References

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- ⁴ Molinuevo, J. L., Gramunt, N., Gisbert, J. D., Fauria, K., Esteller, M., Mingüillon, C., ... & Camí, J. (2016). The ALFA project: a research platform to identify early pathophysiological features of Alzheimer's disease. *Alzheimer's & Dementia. Translational Research & Clinical Interventions*, 2(2), 82-92.