

Supplemental methods: The following script was used by staff members to facilitate selection of test language: “We’re going to ask some questions looking at your memory and thinking. We can ask you the questions in English or in Spanish. Which language would be best for you? You can always answer in either language.” After implementation of the procedure for offering test language recommendations when obvious language dominance was observed in the bilingualism questionnaire, the following script was used: “Based on the way you answered the language questions that I asked you earlier, my recommendation would be that you do the MoCA screening in _____(English/Spanish). Which language would be best for you? You can always answer in either language.”

Approximately half-way through the data collection period, interviewers began reviewing the self-rated bilingualism scale and made recommendations regarding test language when obvious language dominance was observed. This adjustment was made in an effort to facilitate optimal selection of MoCA assessment language. There were no differences in patterns of selection of test language for bilinguals before and after this procedural change (Supplemental Table S1), so these groups were collapsed for all analyses.

Supplemental Table S1. Test language selection for bilinguals before and after procedure change.

	English MoCA	Spanish MoCA	Bilingual MoCA
Prior to procedure change (n = 227)	N = 190 (83.7%)	N = 23 (10.1%)	N = 14 (6.2%)
Following procedure change (n = 212)	N = 182 (85.9%)	N = 26 (12.3%)	N = 4 (1.9%)

Note: $\chi^2(2) = 5.4, p = 0.07$. Analysis completed with all participants classified as bilingual (i.e.,

English-dominant bilingual, Spanish-dominant bilingual, balanced bilingual; $N = 439$).

Monolingual participants were not included in this analysis due to no variance in test language selection in these groups.

Supplemental Table S2. Bilingualism questionnaire. Mean rating score and standard deviation by language proficiency item

	Full bilingual sample (n = 439)		Balanced bilinguals (n = 316)	
	English language Mean (SD)	Spanish language Mean (SD)	English language Mean (SD)	Spanish language Mean (SD)
Speaking	5.4 (1.5)	5.4 (1.4)	5.5 (1.4)	5.6 (1.1)
Understanding	5.5 (1.4)	5.5 (1.2)	5.6 (1.2)	5.7 (1.1)
Reading	5.2 (1.7)	4.1 (2.0)	5.3 (1.5)	4.4 (1.9)
Writing	4.9 (1.8)	3.6 (2.1)	5.0 (1.7)	4.0 (2.0)
Mean overall rating	5.2 (1.5)	4.7 (1.4)	5.3 (1.3)	4.9 (1.2)

Note: n = 439 for Speaking and Understanding; n = 438 for Reading and Writing. The questionnaire was not completed by n = 108, who reported that they did not speak another language and thus did not complete the bilingualism questionnaire items. SD = standard deviation. Range for each item was 1 (“almost none”) to 7 (“like native speaker”).

Supplemental Table S3. Test language choice by bilingualism classification

Bilingualism Classification	MoCA Test Language			
	n	Frequency (Row Percent)		
		English MoCA	Spanish MoCA	Bilingual MoCA
Total sample	547	412 (75.3%)	117 (21.4%)	18 (3.3%)
Monolingual English	40	40 (100%)	0 (0.0%)	0 (0.0%)
Bilingual-English dominant	88	86 (97.7%)	1 (1.1%)	1 (1.1%)
Bilingual- Balanced	316	280 (88.6%)	19 (6.0%)	17 (5.4%)
Bilingual-Spanish dominant	35	6 (17.1%)	29 (82.9%)	0 (0%)
Monolingual Spanish	68	0 (0.0%)	68 (100%)	0 (0%)

Note. χ^2 (full sample)= 412.2, $p < .0001$; χ^2 (excluding monolingual) 202.4, $p < .0001$

Supplemental Table S4: Regression coefficients for MoCA sub-scores on test language and demographics in balanced bilinguals

(n=316)

Variable	Linear regression models*				Ordinal regression models		
	Visuospatial/Executive	Attention	Delayed Recall	Orientation	Naming	Language	Abstraction
Intercept	1.9***	2.4***	1.7***	5.1***	-	-	-
Test language (Both) ^a	-0.4	-1.1**	-0.7	-0.3	-0.2	-1.4**	0.2
Test language (Spanish) ^a	-0.4	-1.1*	-0.3	.09	-0.1	0.8*	0.3
Education, years	0.1***	0.2***	0.1**	0.04**	0.1***	0.2***	0.2***
Country of education (outside of US) ^b	0.2	0.5	0.1	0.3	0.6	0.2	0.4
Age, years (centered)	-0.04***	-0.03*	-0.09***	-0.02 [^]	-0.08**	0.06**	-0.03

Age, years (centered, squared)	-0.001	-0.002	-0.001	-0.002	0.001	0.003	-0.002
Sex (male) [°]	-0.1	0.05	-0.5	-0.15	0.2 [^]	-0.1	-0.1
R ²	.21 ^{***}	.29 ^{***}	.20 ^{***}	.08 ^{**}	-	-	-

*** $p < .001$; ** $p < .01$; * $p < .05$; [^] $p < .10$ ^aReference category: English. ^bReference category: Education in USA. [°]Reference

category: Female.