

## SUPPLEMENTARY METHODS

Given the critical relevance of the Consortium to Establish a Registry for Alzheimer's Disease (CERAD) word list memory task (WL) in the current study, we aimed to compare the frequency of patients in the “no SMC” and SMC groups presenting values outside of the normal range for this episodic memory test based on normative data.

To address the limitation of the lack of normative data validated in the Brazilian population for the WL task at different age ranges, we conducted a review of existing studies from other countries, searching for normative data for the cognitive tasks included in our battery. Based on this literature search, we selected the paper by Sosa et al. (2009), who reported normative values for the CERAD verbal fluency (VF) and WL tests in seven countries around the world, including Peru and Venezuela from South America. From the normative data available in this study, we selected the mean test values at different age ranges for urban populations of those two South American countries to be used as cutoff for classifying our participants' individual performances as deficient. By incorporating normative data from neighboring South American populations, we aimed to enhance the generalizability of our findings. Another important observation is that, since the CERAD battery was originally developed to evaluate the elderly population, the normative data published by Sosa et al. (2009) only covers individuals aged 65 years or older. To address this limitation, we extended the use of the mean normative value at the age range from 65 to 69 years as cutoff to classify participants in our sample who were younger than 65 years (i.e., 433 participants with ages ranging from 18.4-64.9 years).

Descriptive statistics (frequencies and percentages) and chi-square tests were computed to test for any significant difference in the frequency of subjects with deficient WL performance between the “no SMC” group and the SMC group.

## SUPPLEMENTARY RESULTS

Supplementary Table S1 presents the mean WL test scores obtained by participants in our SMC and “No SMC” groups compared to normative data based on Sosa et al., 2009.

Table S1. Mean WL test scores obtained by participants in our cohort compared to standardized norms for two urban South American populations in distinct age groups.

Cognitive Task	Cutoff for Peru – urban <sup>a</sup>	Cutoff for Venezuela – urban <sup>a</sup>	Mean cutoff (expected)	No SMC group		SMC group	
				n	Mean	n	mean
<b>WL</b>	(expected)	(expected)	(expected)				
18-64 years old*	5.7	5.6	<b>5.65</b>	262	6.94	171	6.42
65-69 years old	5.7	5.6	<b>5.65</b>	35	5.6	25	5.52
70-74 years old	5.2	5.2	<b>5.2</b>	36	5.13	13	4.11
75-79 years old	4.6	4.8	<b>4.7</b>	15	5.2	11	3.64
80+ years old	3.8	4.1	<b>3.95</b>	13	3.92	4	4.0

SMC: subjective memory complaint; WL: Word List Memory Task

<sup>a</sup> Sosa et al., 2009.

\* cutoff values based on normative data for 65-69 years old (due to the lack of normative data for younger individuals)

Supplementary Table S2 presents the frequencies of subjects in the two groups who presented values within or outside of the normal range for WL scores, using the

standardized norms for the selected South America normative data across distinct age ranges presented in Table S1.

**Table S2.** Comparisons with South America normative data (presented in Table S1).

		No SMC group	SMC group
Comparisons with normative values for WL n (%)	N (total)	361	224
	Within normative values	271 (75.1%)	146 (65.2%)
	Outside normative values	90 (24.9%)	78 (34.8%)
		$\chi^2=6.606, p=0.010$ <sup>1</sup>	

SMC: subjective memory complaint; WL: Word List Memory Task

\* Statistically significant difference (p<0.05)

<sup>1</sup> Pearson's Chi-square test

Both the “no SMC” and SMC groups had a higher proportion of individuals falling within normative values than outside (Supplementary Table S2), which is different from the findings reported in Table 4 for the TMT-A and VF tasks. This difference across tasks may have been influenced either by differences between the Peru and Venezuela study groups relative to our Brazilian population, or by the fact that there are no normative CERAD data for subjects younger than 65 years. However, when we repeated the analysis restricting the sample only to participants who were aged 65 years or older (Supplementary Table S3), there were more patients with WL performance within normative values than outside in the “no SMC” subgroup, and an approximately equal number of subjects within and outside normative values in the SMC subgroup.

**Table S3.** Comparisons of the subgroup of patients aged 65 or older with South America normative data (presented in Table S1).

		No SMC group	SMC group
Comparisons with normative values for WL n (%)	N (total)	99	53
	Within normative values	58 (58.6%)	26 (49.1%)
	Outside normative values	41 (41.4%)	27 (50.9%)
		$\chi^2=1.268, p=0.260$ <sup>1</sup>	

SMC: subjective memory complaint; WL: Word List Memory Task

<sup>1</sup> Pearson's Chi-square test

## SUPPLEMENTARY REFERENCE

Sosa AL, Albanese E, Prince M, Acosta D, Ferri CP, Guerra M, et al. Population normative data for the 10/66 Dementia Research Group cognitive test battery from Latin America, India and China: a cross-sectional survey. *BMC Neurol.* 2009 Aug 26;9:48. doi: 10.1186/1471-2377-9-48.