eTable 1. Population characteristics of participants without olfaction assessed, ARIC visit 5 (2011-2013, n=440)

eTable 2. Prevalence of MCI across the continuous smell test scores, ARIC visit 5 (2011-2013, n=5,021)

eFigure 1. Adjusted mean memory factor score (95% confidence interval), across continuous smell test scores, ARIC visit 5 (2011-2013, n=5,021)

eFigure 2. Adjusted mean language factor score (95% confidence interval), across continuous smell test scores, ARIC visit 5 (2011-2013, n=5,021)

eFigure 3. Adjusted mean executive function/processing speed factor score (95% confidence interval), across continuous smell test scores, ARIC visit 5 (2011-2013, n=5,021)

eFigure 4. Adjusted prevalence ratio of MCI (95% confidence interval), across continuous smell test scores, ARIC visit 5 (2011-2013, n=5,021)
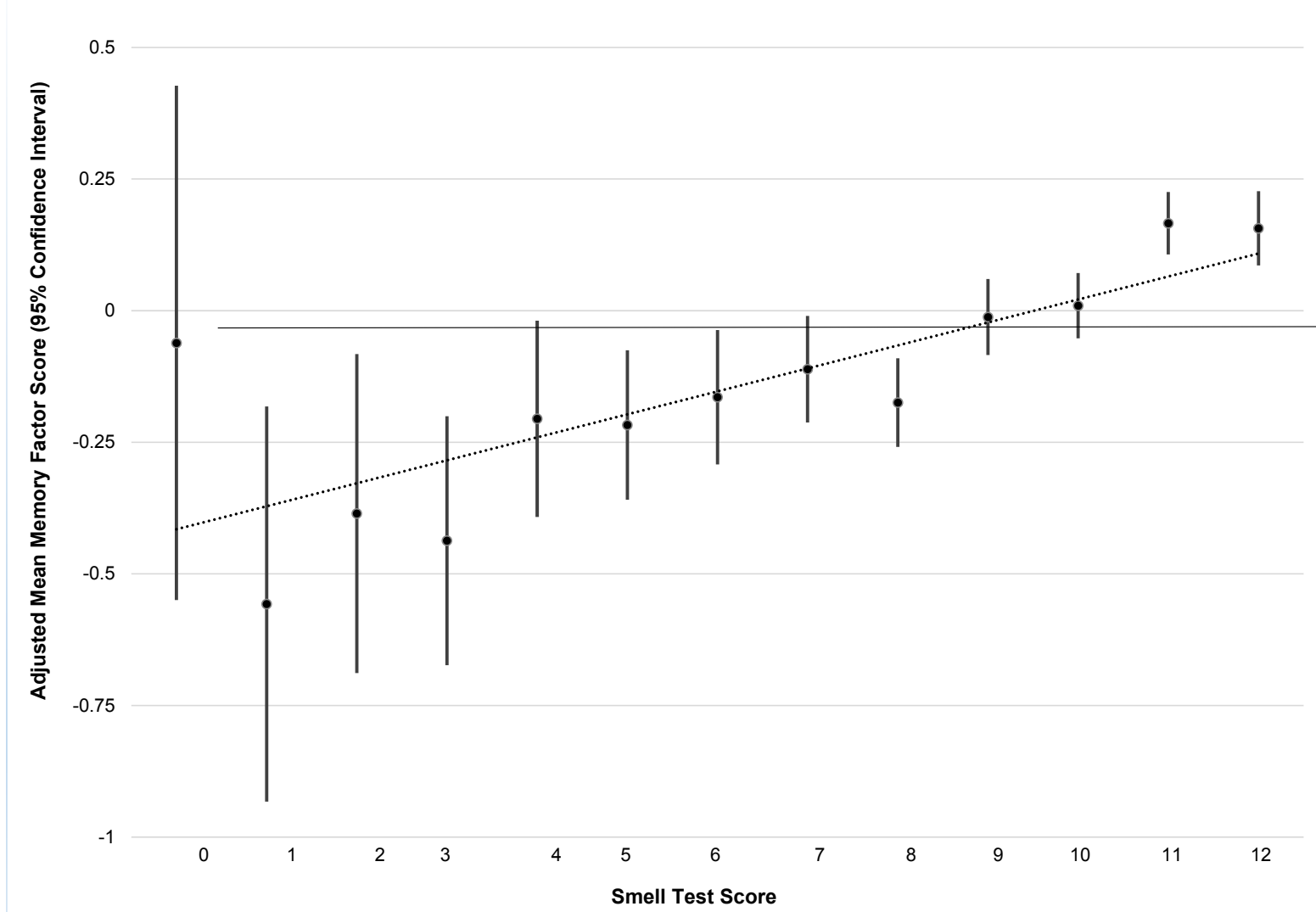
Supplemental Table 1. Population Characteristics of participants without olfaction assessed, ARIC visit 5 (2011-2013, n=440)

Characteristics	Olfaction not assessed
Age, years, mean (SD)	78.6 (5.6)
Female sex, n (%)	272 (61.8)
Black Race, n (%)	144 (32.7)
< High School Education, n (%)	104 (23.6)
Diabetes, n (%)	104 (30.7)
Hypertension, n (%)	327 (81.3)
Prevalent stroke, n (%)	37 (8.4)
Ever smoker, n (%)	161 (58.1)
ApoE4 allele $\geq$ 1, n (%)	171 (38.9)
Memory factor score, mean (SD)	-2.38 (0.81)
Language factor score, mean (SD)	-0.50 (0.80)
Executive functioning/processing speed factor score, mean (SD)	-0.65 (0.34)
Global cognitive function factor score, mean (SD)	-1.16 (0.83)

Supplemental Table 2. Prevalence of MCI across the continuous smell test scores, ARIC visit 5 (2011-2013, n=5,021)
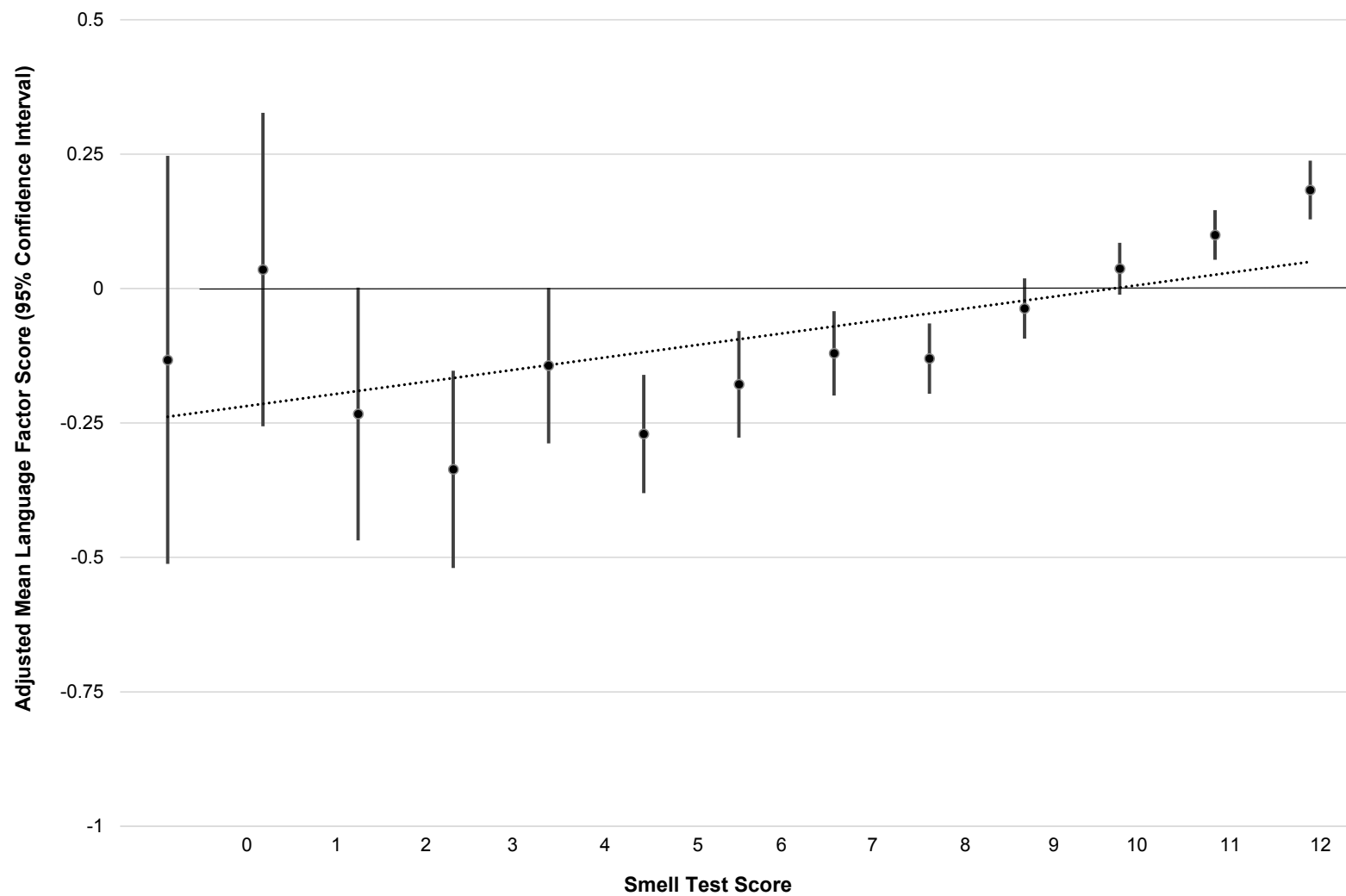
Smell Test Score	Sample Size	# MCI Cases (%)
0	13	7 (53.8)
1	22	13 (59.1)
2	34	14 (41.2)
3	56	24 (42.9)
4	91	24 (26.4)
5	159	58 (36.5)
6	199	64 (32.2)
7	331	96 (29.0)
8	486	156 (32.1)
9	695	160 (23.0)
10	1014	199 (19.6)
11	1163	183 (15.7)
12	758	94 (12.4)
Analytic sample	5,021	1,092 (21.7)

Supplemental Figure 1. Adjusted mean memory factor score (95% confidence interval), across continuous smell test scores, ARIC visit 5 (2011-2013, n=5,021)
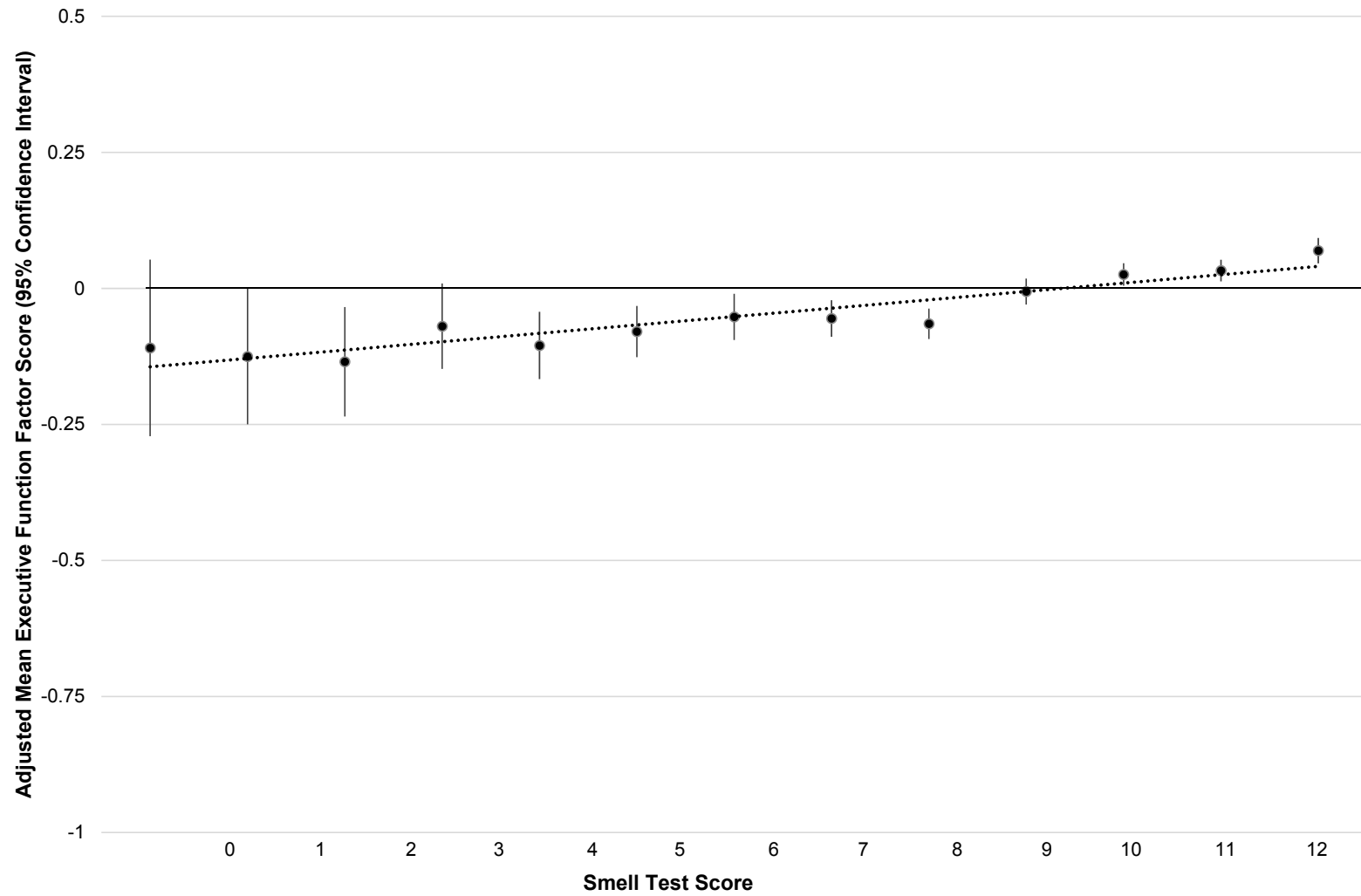

Adjusted for age, sex, education, race-field center, ApoE4, ever smoker status

Supplemental Figure 2. Adjusted mean language factor score (95% confidence interval), across continuous smell test scores, ARIC visit 5 (2011-2013, n=5,021)
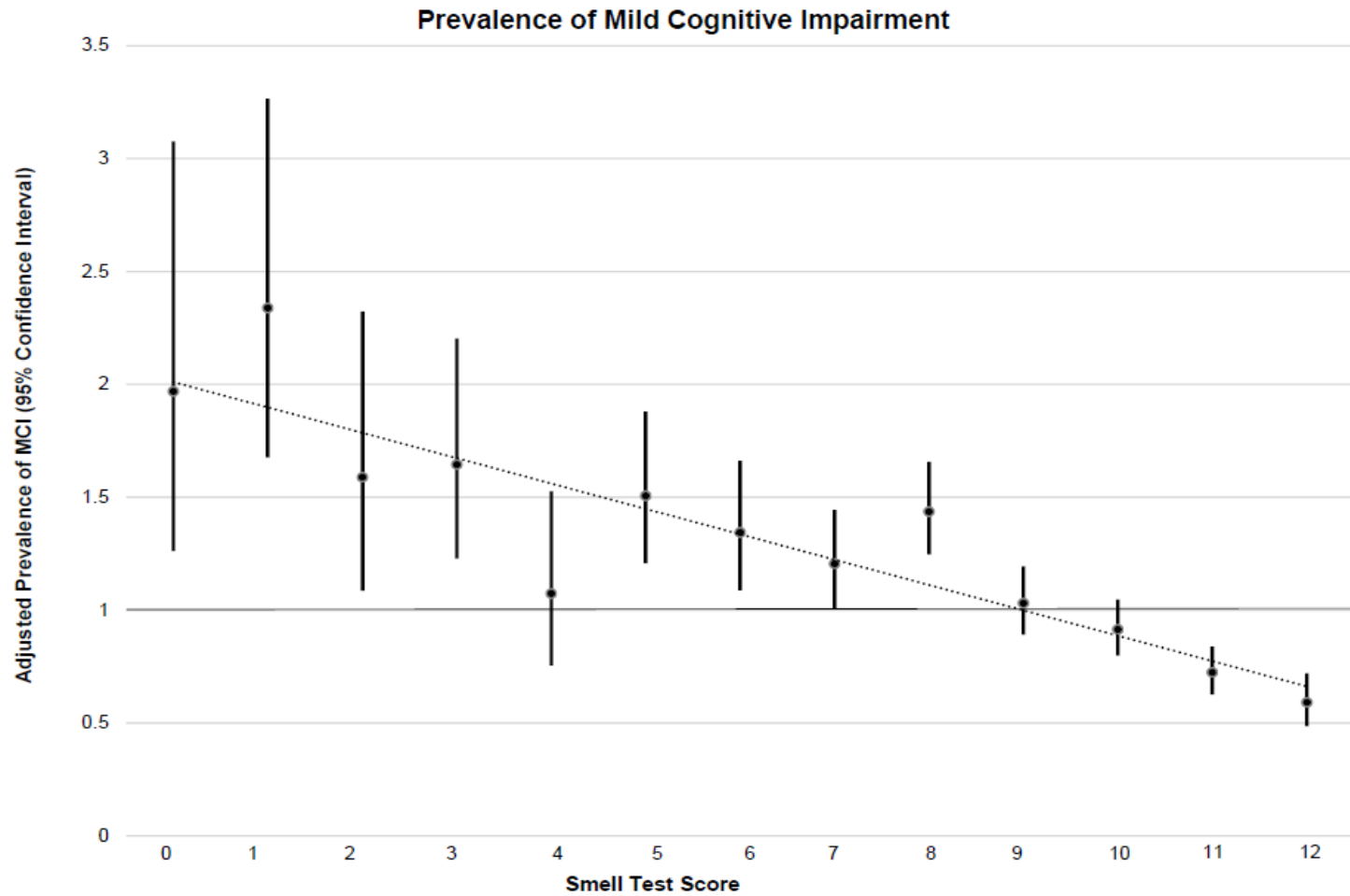
Adjusted for age, sex, education, race-field center, ApoE4, ever smoker status

Supplemental Figure 3. Adjusted mean executive function/processing speed factor score (95% confidence interval), across continuous smell test scores, ARIC visit 5 (2011-2013, n=5,021)

Adjusted for age, sex, education, race-field center, ApoE4, ever smoker status

Supplemental Figure 4. Adjusted prevalence ratio of MCI (95% confidence interval), across smell test scores (0-12), ARIC visit 5 (2011-2013, n=5,021)

Prevalence of Mild Cognitive Impairment

Adjusted for age, sex, education, race-field center, APOE ε4, ever smoker status

p-trend<0.05