

Supplemental Material

Table 2b. Sensitivity Analysis excluding participants with Cognitive Impairment: Multilevel Linear Regression Models for Cognitive Function, Walkable Neighborhoods, Walking Behavior, and Physical Activity: REgards, 2013-2016

	Unconditional Model	+ Individual factors	+ Objective NB features	+ Subjective NB features	+ Physical Activity	+ Physical Health Status
	Model A	Model B	Model C	Model D	Model E	Model F
Measure	β-Coefficient					
Fixed effects						
Intercept	0.39***	3.15 ***	2.61***	2.61***	2.07***	1.22***
Individual factors (Level 1)						
Age (centered at 55)		-0.11***	-0.11***	-0.11***	-0.10***	-0.10***
Female (ref=Male)		0.37***	0.40***	0.41***	0.41***	0.44***
Black (ref=White)		-1.08***	-0.96***	-0.96***	-0.97***	-0.98***
Education: (ref=College+)						
<HS		-2.13***	-1.99***	-1.93***	-1.86***	-1.78***
HS		-1.48***	-1.35***	-1.31***	-1.27***	-1.21***
Some college		-0.89***	-0.80***	-0.77***	-0.71***	-0.68***
Any Walking (ref=none)					0.10	0.07

Walking (mins/day)			-0.0003	-0.0005
Any Moderate PA (ref=none)			0.51***	0.49***
Moderate PA (mins/day)			-0.0004	-0.0004
Any Vigorous PA (ref=none)			0.17*	0.11
Vigorous PA (mins/day)			-0.002*	-0.002*
Physical Health Status (SF-12)				0.02***
Objectively Measured Neighborhood Features (Level 2)				
Socioeconomic Disadvantage (%)	-0.01***	-0.01***	-0.01***	-0.01**
Urban (ref=Rural)	0.17*	0.13	0.12	0.11
Count of open parks (natural log)	0.08*	0.06	0.05	0.05
Street connectivity (in 0.1 units)	0.13*	0.15*	0.16**	0.15*
Subjectively Perceived Neighborhood Features (Level 1)				
Heavy Traffic: (ref=Not Really a Problem)				
<i>Very Serious Problem</i>		-0.57***	-0.54***	-0.48**
<i>Somewhat Serious Problem</i>		-0.29**	-0.29**	-0.22*
<i>Minor Problem</i>		-0.12*	-0.13*	-0.12*

Lack of Parks: (ref=Not Really a
Problem)

<i>Very Serious Problem</i>				-0.37**	-0.37**	-0.29*
<i>Somewhat Serious Problem</i>				-0.36**	-0.37**	-0.32**
<i>Minor Problem</i>				-0.13*	-0.15*	-0.12

Variance Components

Intercept (tract-level)	0.444	0.042	5.65e-09	9.96e-12	1.26e-08	3.11e-14
ICC	0.078	0.010	1.40e-09	2.49e-012	3.20e-09	8.10e-15

p<0.05 = *, p<0.01=**, p<0.001***

Note: ICC=Intraclass Correlation Coefficient; HS=High School; NB=Neighborhood; Table values are β -Coefficients