

Supplementary Table 1: Multinomial regression analysis of neighborhood LAN levels and sleep durations at baseline and follow-up

Characteristic	Baseline		Follow-up	
	Short sleep	Long sleep	Short sleep	Long sleep
	OR	OR	OR	OR
LAN	BLACK			
Q1(Lowest)	Ref	Ref	Ref	Ref
Q2	1.03 (0.94, 1.13)	1.12 (0.99, 1.27)	1.07 (0.98, 1.18)	0.96 (0.85, 1.07)
Q3	1.08 (0.98, 1.18)	1.12 (0.98, 1.27)	1.11 (1.01, 1.23)	1.05 (0.93, 1.18)
Q4	1.09 (0.99, 1.20)	1.09 (0.95, 1.24)	1.11 (1.00, 1.22)	1.03 (0.91, 1.17)
Q5(Highest)	1.03 (0.93, 1.14)	1.17 (1.01, 1.35)	1.16 (1.05, 1.29)	1.00 (0.88, 1.15)
LAN	WHITE			
Q1(Lowest)	Ref	Ref	Ref	Ref
Q2	1.05 (0.96, 1.16)	1.12 (0.97, 1.30)	1.02 (0.92, 1.13)	1.01 (0.89, 1.14)
Q3	1.02 (0.91, 1.14)	1.09 (0.92, 1.30)	0.98 (0.87, 1.11)	1.10 (0.96, 1.27)
Q4	0.98 (0.86, 1.12)	0.95 (0.77, 1.18)	1.01 (0.88, 1.17)	1.07 (0.90, 1.26)
Q5(Highest)	0.92 (0.80, 1.07)	1.23 (0.98, 1.54)	1.07 (0.91, 1.25)	1.28 (1.07, 1.55)
LAN	TOTAL			
Q1(Lowest)	Ref	Ref	Ref	Ref
Q2	1.04 (0.98, 1.11)	1.14 (1.03, 1.25)	1.06 (0.99, 1.13)	0.99 (0.91, 1.07)
Q3	1.05 (0.98, 1.13)	1.11 (1.00, 1.23)	1.07 (0.99, 1.15)	1.09 (0.99, 1.19)
Q4	1.04 (0.97, 1.12)	1.06 (0.95, 1.18)	1.06 (0.98, 1.15)	1.07 (0.97, 1.17)
Q5(Highest)	0.98 (0.90, 1.06)	1.16 (1.04, 1.31)	1.11 (1.02, 1.21)	1.08 (0.97, 1.20)

Models were adjusted for race (total sample alone) age, sex, education, household income, metropolitan status of residence, and deprivation index. Ref=Reference category; OR = Odds Ratio

Supplementary Table 2: Multinomial regression analysis of neighborhood noise levels and sleep durations at baseline and follow-up

Characteristic	Baseline		Follow-up	
	Short sleep	Long sleep	Short sleep	Long sleep
	OR	OR	OR	OR
NOISE		BLACK		
Q1(Lowest)	Ref	Ref	Ref	Ref
Q2	1.07 (0.98, 1.17)	1.12 (0.99, 1.26)	0.95 (0.87, 1.04)	0.96 (0.85, 1.07)
Q3	1.10 (1.01, 1.20)	1.13 (1.00, 1.28)	1.02 (0.94, 1.12)	1.00 (0.89, 1.12)
Q4	1.17 (1.07, 1.28)	1.11 (0.98, 1.26)	1.10 (1.00, 1.21)	1.02 (0.91, 1.15)
Q5(Highest)	1.11 (1.01, 1.22)	1.17 (1.03, 1.33)	1.16 (1.06, 1.28)	1.00 (0.89, 1.13)
NOISE		WHITE		
Q1(Lowest)	Ref	Ref	Ref	Ref
Q2	1.02 (0.93, 1.12)	1.00 (0.86, 1.16)	1.02 (0.92, 1.12)	1.10 (0.97, 1.24)
Q3	0.98 (0.88, 1.08)	1.11 (0.94, 1.30)	0.94 (0.84, 1.05)	1.05 (0.92, 1.20)
Q4	1.07 (0.95, 1.20)	1.03 (0.86, 1.24)	1.01 (0.89, 1.14)	1.04 (0.90, 1.21)
Q5(Highest)	1.02 (0.89, 1.17)	1.13 (0.92, 1.39)	1.01 (0.87, 1.17)	1.18 (1.00, 1.40)
NOISE		TOTAL		
Q1(Lowest)	Ref	Ref	Ref	Ref
Q2	1.04 (0.98, 1.11)	1.07 (0.98, 1.18)	0.98 (0.91, 1.04)	1.03 (0.95, 1.11)
Q3	1.05 (0.98, 1.12)	1.12 (1.01, 1.23)	0.99 (0.93, 1.06)	1.03 (0.95, 1.13)
Q4	1.13 (1.05, 1.21)	1.08 (0.98, 1.20)	1.08 (1.00, 1.16)	1.06 (0.96, 1.15)
Q5(Highest)	1.05 (0.98, 1.14)	1.14 (1.03, 1.27)	1.11 (1.03, 1.20)	1.06 (0.97, 1.17)

Models were adjusted for race (total sample alone) age, sex, education, household income, metropolitan status of residence, and deprivation index. Ref=Reference category; OR = Odds Ratio