

Table S1A—Adjusted associations of census tract-level neighborhood characteristics with sleep duration and sleep quality, The Jackson Heart Study, 2000-2004.

	Model 1			Model 2		
	OR of short sleep (vs. normal)	OR of long sleep (vs. normal)	Mean difference in minutes of sleep	OR of short sleep (vs. normal)	OR of long sleep (vs. normal)	Mean difference in minutes of sleep
Social cohesion						
Low	0.95 (0.81, 1.10)	0.81 (0.58, 1.14)	-2.03 (-10.06, 6.01)	0.93 (0.79, 1.09)	0.76 (0.53, 1.09)	-2.36 (-10.67, 5.94)
Middle	0.87 (0.74, 1.01) ^c	0.70 (0.50, 0.99) ^b	-0.12 (-8.24, 8.00)	0.85 (0.73, 1.00) ^b	0.70 (0.48, 1.00) ^b	0.52 (-7.81, 8.84)
High	REF	REF	REF	REF	REF	REF
P-trend	0.51	0.27	0.60	0.37	0.16	0.55
Violence						
Low	REF	REF	REF	REF	REF	REF
Middle	0.96 (0.82, 1.12)	1.17 (0.83, 1.66)	3.16 (-4.47, 10.81)	0.96 (0.81, 1.12)	1.12 (0.77, 1.61)	2.16 (-5.82, 10.15)
High	1.00 (0.85, 1.18)	0.82 (0.56, 1.19)	-4.32 (-12.07, 3.42)	0.99 (0.84, 1.18)	0.78 (0.53, 1.16)	-4.73 (-12.85, 3.38)
P-trend	0.99	0.20	0.25	0.95	0.15	0.24
Problems						
Low	REF	REF	REF	REF	REF	REF
Middle	1.05 (0.90, 1.23)	1.26 (0.88, 1.80)	-0.82 (-8.91, 7.27)	1.06 (0.90, 1.25)	1.22 (0.83, 1.78)	-1.47 (-9.87, 6.92)
High	1.01 (0.86, 1.19)	0.96 (0.66, 1.39)	-2.98 (-10.96, 4.99)	0.99 (0.84, 1.18)	0.96 (0.65, 1.41)	-2.97 (-11.32, 5.38)
P-trend	0.90	0.65	0.45	0.93	0.68	0.48

^aP ≤ 0.01, ^bP ≤ 0.05, ^cP ≤ 0.10; Model 1 adjusted for age, sex, education, and income; Model 2 adjusted for Model 1+ marital status, physical activity, body mass index, diabetes, and hypertension; Model 1 sample size = 4411; Model 2 sample size = 4053

Table S1B—Adjusted associations of census tract-level neighborhood characteristics with sleep duration and sleep quality among subsample with measures of depressive symptoms, The Jackson Heart Study, 2000-2004.

	Model 1			Model 2			Model 3		
	OR of short sleep (vs. normal)	OR of long sleep (vs. normal)	Mean difference in minutes of sleep	OR of short sleep (vs. normal)	OR of long sleep (vs. normal)	Mean difference in minutes of sleep	OR of short sleep (vs. normal)	OR of long sleep (vs. normal)	Mean difference in minutes of sleep
Social cohesion									
Low	1.08 (0.88, 1.31)	0.90 (0.59, 1.38)	-2.99 (-12.82, 6.83)	1.01 (0.83, 1.25)	0.82 (0.53, 1.29)	-2.18 (-12.38, 8.03)	1.01 (0.82, 1.24)	0.82 (0.52, 1.28)	-1.56 (-11.43, 8.31)
Middle	0.88 (0.73, 1.07)	0.67 (0.42, 1.05) ^c	-2.08 (-11.95, 7.80)	0.84 (0.69, 1.03) ^c	0.66 (0.41, 1.05) ^c	-0.16 (-10.37, 10.06)	0.85 (0.69, 1.04)	0.66 (0.41, 1.06)	-0.59 (-10.46, 9.29)
High	REF	REF	REF	REF	REF	REF	REF	REF	REF
P-trend	0.48	0.68	0.55	0.91	0.42	0.66	0.96	0.40	0.75
Violence									
Low	REF	REF	REF	REF	REF	REF	REF	REF	REF
Middle	1.04 (0.86, 1.26)	1.14 (0.74, 1.76)	0.83 (-8.58, 10.25)	1.02 (0.84, 1.25)	1.17 (0.74, 1.84)	1.13 (-8.71, 10.97)	1.00 (0.82, 1.22)	1.15 (0.73, 1.80)	2.99 (-6.46, 12.45)
High	1.09 (0.88, 1.34)	0.76 (0.47, 1.23)	-6.48 (-16.28, 3.32)	1.04 (0.84, 1.30)	0.76 (0.46, 1.27)	-4.92 (-15.14, 5.30)	1.00 (0.81, 1.25)	0.74 (0.44, 1.22)	-2.65 (-12.53, 7.24)
P-trend	0.42	0.23	0.19	0.70	0.27	0.34	0.96	0.21	0.58
Problems									
Low	REF	REF	REF	REF	REF	REF	REF	REF	REF
Middle	1.10 (0.91, 1.34)	1.30 (0.84, 2.03)	-1.57 (-11.34, 8.20)	1.07 (0.87, 1.31)	1.31 (0.82, 2.10)	0.03 (-10.09, 10.15)	1.06 (0.86, 1.30)	1.30 (0.82, 2.08)	0.89 (-8.90, 10.67)
High	1.10 (0.90, 1.35)	0.91 (0.57, 1.46)	-5.16 (-14.98, 4.65)	1.04 (0.84, 1.28)	0.93 (0.57, 1.53)	-3.36 (-13.58, 6.85)	1.00 (0.81, 1.24)	0.91 (0.55, 1.49)	-1.44 (-11.37, 8.48)
P-trend	0.34	0.62	0.30	0.73	0.70	0.51	0.96	0.62	0.77

^aP ≤ 0.01, ^bP ≤ 0.05, ^cP ≤ 0.10; Model 1 adjusted for age, sex, education and income; Model 2 adjusted for Model 1+ marital status, physical activity, body mass index, diabetes, and hypertension; Model 3 adjusted for Model 2 + depressive symptoms; Model 1 sample size=2,685; Model 2 & 3 sample size=2,491

Table S2A—Adjusted associations of census tract-level neighborhood characteristics with sleep duration and sleep quality, The Jackson Heart Study, 2000-2004.

	Mean difference in sleep quality	
	Model 1	Model 2
Social cohesion*		
Low	-0.02 (-0.10, 0.07)	-0.02 (-0.10, 0.07)
Middle	-0.02 (-0.10, 0.07)	-0.01 (-0.10, 0.07)
High	REF	REF
P-trend	0.67	0.70
Violence*		
Low	REF	REF
Middle	0.01 (-0.07, 0.09)	-0.01 (-0.09, 0.07)
High	-0.03 (-0.11, 0.06)	-0.03 (-0.12, 0.06)
P-trend	0.53	0.48
Problems*		
Low	REF	REF
Middle	-0.001 (-0.08, 0.08)	0.007 (-0.08, 0.09)
High	-0.06 (-0.14, 0.02)	-0.05 (-0.14, 0.03)
P-trend	0.15	0.23

Model 1 adjusted for age, sex, education, and income

Model 2 adjusted for Model 1+ marital status, physical activity, body mass index, diabetes, and hypertension

Model 1 sample size = 4411; Model 2 sample size = 4053; *census tract-level

Table S2B—Adjusted associations of census tract-level neighborhood characteristics with sleep duration and sleep quality among subsample with measures of depressive symptoms, The Jackson Heart Study, 2000-2004.

	Mean difference in sleep quality		
	Model 1	Model 2	Model 2
Social cohesion[^]			
Low	-0.02 (-0.13, 0.08)	-0.02 (-0.13, 0.09)	-0.01 (-0.12, 0.08)
Middle	-0.03 (-0.13, 0.08)	-0.01 (-0.12, 0.09)	-0.03 (-0.09, 0.11)
High	REF	REF	REF
P-trend	0.63	0.72	0.83
Violence[^]			
Low	REF	REF	REF
Middle	-0.01 (-0.11, 0.09)	-0.02 (-0.13, 0.08)	0.003 (-0.10, 0.10)
High	-0.02 (-0.13, 0.08)	-0.01 (-0.12, 0.10)	0.03 (-0.07, 0.14)
P-trend	0.65	0.86	0.53
Problems[^]			
Low	REF	REF	REF
Middle	0.02 (-0.08, 0.12)	0.03 (-0.07, 0.14)	0.05 (-0.06, 0.14)
High	-0.04 (-0.15, 0.07)	-0.03 (-0.14, 0.08)	0.01 (-0.10, 0.12)
P-trend	0.46	0.63	0.84

Model 1 adjusted for age, sex, education and income

Model 2 adjusted for Model 1+ marital status, physical activity, body mass index, diabetes, and hypertension

Model 3 adjusted for Model 2 + depressive symptoms

Model 1 sample size = 2,685; Model 2 & 3 sample size = 2,491; [^]census tract-level

Table S3—Adjusted associations of individual-level socioeconomic position with sleep duration among subsample with measures of depressive symptoms, The Jackson Heart Study, 2000-2004.

	Model 1			Model 2			Model 3		
	OR of short sleep (vs. normal)	OR of long sleep (vs. normal)	Mean difference in minutes of sleep	OR of short sleep (vs. normal)	OR of long sleep (vs. normal)	Mean difference in minutes of sleep	OR of short sleep (vs. normal)	OR of long sleep (vs. normal)	Mean difference in minutes of sleep
Income									
Low	1.20 (0.93, 1.56)	2.98 (1.75, 5.06) ^a	-2.17 (-13.17, 8.83)	1.09 (0.82, 1.45)	2.86 (1.59, 5.14) ^a	0.79 (-11.13, 12.71)	0.87 (0.65, 1.17)	2.32 (1.27, 4.27) ^a	11.94 (-0.21, 24.09) ^c
Lower Middle	1.20 (0.96, 1.49)	2.44 (1.50, 3.95) ^a	0.84 (-8.52, 10.21)	1.11 (0.88, 1.41)	2.50 (1.49, 4.20) ^a	3.77 (-6.23, 13.78)	0.98 (0.77, 1.25)	2.23 (1.32, 3.78) ^a	9.76 (-0.25, 19.78) ^c
Upper Middle	1.13 (0.93, 1.38)	1.19 (0.71, 2.00)	-3.41 (-11.92, 5.09)	1.08 (0.88, 1.32)	1.09 (0.63, 1.89)	-2.71 (-11.53, 6.10)	1.01 (0.82, 1.24)	1.03 (0.60, 1.79)	0.29 (-8.46, 9.04)
High	REF	REF	REF	REF	REF	REF	REF	REF	REF
P-trend	0.08	<0.01	0.91	0.41	<0.01	0.61	0.44	<0.01	0.02
Education									
<HS	1.03 (0.81, 1.33)	2.35 (1.41, 3.94) ^a	3.18 (-7.45, 13.82)	0.89 (0.68, 1.16)	2.12 (1.20, 3.75) ^a	7.32 (-3.97, 18.61)	0.74 (0.56, 0.97) ^b	1.78 (1.00, 3.18) ^b	15.90 (4.58, 27.22) ^a
HS/GED	0.89 (0.72, 1.09)	1.74 (1.07, 2.82) ^b	2.62 (-6.31, 11.55)	0.84 (0.67, 1.04)	1.99 (1.19, 3.34) ^a	5.89 (-3.49, 15.28)	0.71 (0.56, 0.89) ^a	1.71 (1.01, 2.89) ^b	13.46 (4.02, 22.89) ^a
>HS but <Bachelor Degree	0.99 (0.83, 1.19)	2.17 (1.41, 3.35) ^a	4.26 (-3.39, 11.92)	0.95 (0.79, 1.14)	2.41 (1.52, 3.82) ^a	6.65 (-1.24, 14.55) ^c	0.85 (0.71, 1.03)	2.19 (1.37, 3.48) ^a	11.52 (3.64, 19.40) ^a
College degree +	REF	REF	REF	REF	REF	REF	REF	REF	REF
P-trend	0.71	<0.01	0.47	0.16	<0.01	0.12	<0.01	0.07	<0.01

^aP ≤ 0.01, ^bP ≤ 0.05, ^cP ≤ 0.10

Model 1 adjusted for age and sex

Model 2 adjusted for Model 1+ marital status, physical activity, body mass index, diabetes, and hypertension

Model 3 adjusted for Model 2+ depressive symptoms

Model 1 sample size: income = 2,685, education = 3,121; Model 2 & 3 sample size: income = 2,491; education = 2,885

Table S4—Adjusted associations of neighborhood characteristics with sleep duration among subsample with measures of depressive symptoms, The Jackson Heart Study, 2000-2004.

	Model 1			Model 2			Model 3		
	OR of short sleep (vs. normal)	OR of long sleep (vs. normal)	Mean difference in minutes of sleep	OR of short sleep (vs. normal)	OR of long sleep (vs. normal)	Mean difference in minutes of sleep	OR of short sleep (vs. normal)	OR of long sleep (vs. normal)	Mean difference in minutes of sleep
Social cohesion*									
Low	0.88 (0.69, 1.11)	0.78 (0.46, 1.32)	-2.48 (-12.21, 7.25)	0.81 (0.63, 1.04) ^c	0.80 (0.45, 1.41)	-0.66 (-10.72, 9.40)	0.75 (0.59, 0.97) ^a	0.75 (0.43, 1.34)	2.34 (-7.65, 12.33)
Middle	0.95 (0.75, 1.21)	0.96 (0.56, 1.63)	-0.66 (-10.47, 9.16)	0.96 (0.75, 1.22)	1.09 (0.63, 1.91)	-0.79 (-10.80, 9.22)	0.95 (0.74, 1.22)	1.09 (0.62, 1.90)	-0.72 (-10.63, 9.18)
High	REF	REF	REF	REF	REF	REF	REF	REF	REF
P-trend	0.28	0.36	0.62	0.10	0.46	0.35	0.03	0.10	0.67
Violence*									
Low	REF	REF	REF	REF	REF	REF	REF	REF	REF
High	1.30 (1.06, 1.61) ^a	1.26 (0.80, 2.01)	-9.25 (-17.83, -0.67) ^b	1.28 (1.03, 1.59) ^b	1.26 (0.77, 2.05)	-9.87 (-18.71, -1.03) ^b	1.23 (0.99, 1.54) ^c	1.22 (0.75, 2.00)	-8.17 (-16.93, 0.60) ^c
P-trend	----	----	----	----	----	----	----	----	----
Problems*									
Low	REF	REF	REF	REF	REF	REF	REF	REF	REF
Middle	1.10 (0.86, 1.39)	1.30 (0.77, 2.19)	-2.08 (-11.95, 7.79)	1.12 (0.87, 1.43)	1.37 (0.79, 2.38)	-2.09 (-12.17, 7.99)	1.09 (0.85, 1.39)	1.34 (0.77, 2.33)	-0.91 (-10.89, 9.08)
High	1.11 (0.88, 1.41)	0.88 (0.50, 1.54)	-8.68 (-18.61, 1.25) ^c	1.10 (0.86, 1.41)	0.88 (0.48, 1.60)	-9.17 (-19.40, 1.07) ^c	1.03 (0.80, 1.32)	0.83 (0.46, 1.52)	-6.39 (-16.56, 3.78)
P-trend	0.36	0.67	0.09	0.44	0.71	0.08	0.80	0.58	0.22
Census-derived Neighborhood Disadvantage[^]									
Low	REF	REF	REF	REF	REF	REF	REF	REF	REF
Middle	1.06 (0.87, 1.29)	1.08 (0.68, 1.71)	-3.46 (-13.38, 6.46)	1.05 (0.86, 1.29)	1.19 (0.73, 1.96)	-2.35 (-12.58, 7.88)	1.03 (0.84, 1.27)	1.17 (0.71, 1.92)	-0.37 (-10.20, 9.46)
High	1.01 (0.82, 1.23)	1.21 (0.77, 1.89)	1.15 (-8.84, 11.15)	1.00 (0.81, 1.23)	1.42 (0.88, 2.29)	2.26 (-8.13, 12.66)	0.98 (0.80, 1.22)	1.40 (0.87, 2.26) ^c	3.48 (-6.51, 13.48)
P-trend	0.93	0.38	0.80	0.98	0.14	0.65	0.89	0.15	0.48

^aP<0.01, ^bP≤0.05, ^cP≤0.10; Model 1 adjusted for age, sex, education, income; Model 2 adjusted for Model 1+ marital status, physical activity, body mass index, diabetes, and hypertension; Model 3 adjusted for Model 2 + depressive symptoms; Model 1 sample size = 1,754 except: neighborhood disadvantage = 2,685; Model 2 & 3 sample size = 1,639 except: neighborhood disadvantage = 2,491; *Self-reported neighborhood characteristic, ^Census tract-level neighborhood

Table S5—Adjusted associations of individual socioeconomic position, neighborhood characteristics with sleep quality among subsample with measures of depressive symptoms, The Jackson Heart Study, 2000-2004.

	Mean difference in sleep quality		
	Model 1	Model 2	Model 3
Individual SEP			
Income			
Low	-0.43 (-0.56, -0.29) ^a	-0.34 (-0.49, -0.20) ^a	-0.06 (-0.21, 0.08)
Lower-Middle	-0.25 (-0.36, -0.14) ^a	-0.19 (-0.32, -0.07) ^a	-0.04 (-0.16, 0.07)
Upper- Middle	-0.20 (-0.31, -0.10) ^a	-0.17 (-0.28, -0.07) ^a	-0.10 (-0.20, 0.00)
High	REF	REF	REF
P-trend	<0.01	<0.01	0.06
Education			
<HS	-0.27 (-0.41, -0.14) ^a	-0.20 (-0.34, -0.06) ^a	0.01 (-0.12, 0.14)
HS/GED	-0.25 (-0.36, -0.14) ^a	-0.20 (-0.31, -0.08) ^a	-0.01 (-0.13, 0.10)
>HS but <Bachelor degree	-0.18 (-0.27, -0.08) ^a	-0.14 (-0.24, -0.04) ^a	-0.02 (-0.12, 0.07)
College degree +	REF	REF	REF
P-trend	<0.01	<0.01	0.98
Neighborhood Factors			
Social cohesion*			
Low	-0.04 (-0.17, 0.08)	-0.03 (-0.16, 0.10)	0.05 (-0.07, 0.18)
Middle	-0.05 (-0.18, 0.07)	-0.08 (-0.21, 0.05)	-0.08 (-0.20, 0.04)
High	REF	REF	REF
P-trend	0.46	0.61	0.46
Violence*			
Low	REF	REF	REF
High	-0.14 (-0.25, -0.03) ^a	-0.15 (-0.27, -0.04) ^a	-0.10 (-0.21, 0.00) ^b
P-trend	----	----	----
Problems*			
Low	REF	REF	REF
Middle	-0.07 (-0.19, 0.06)	-0.08 (-0.21, 0.05)	-0.05 (-0.17, 0.08)
High	-0.12 (-0.24, 0.01) ^c	-0.11 (-0.24, 0.02)	-0.03 (-0.15, 0.10)
P-trend	0.07	0.10	0.66
Census-derived Neighborhood Disadvantage[^]			
Low	REF	REF	REF
Middle	0.03 (-0.07, 0.13)	0.03 (-0.08, 0.13)	0.05 (-0.05, 0.16)
High	0.05 (-0.06, 0.15)	0.05 (-0.06, 0.16)	0.07 (-0.03, 0.17)
P-trend	0.36	0.38	0.19

^aP ≤ 0.01, ^bP < 0.05, ^cP < 0.05; Model 1 adjusted for age, sex, education and income (neighborhood characteristic models); Model 2 adjusted for Model 1 + marital status, physical activity, body mass index, diabetes, and hypertension; Model 3 adjusted for Model 2 + depressive symptoms; *Self-reported neighborhood characteristic, [^]Census tract-level neighborhood characteristic; Model 1 sample size = 3,121 except: income status = 2,685; self-reported neighborhood characteristics = 1,754, neighborhood disadvantage = 2,685; Model 2 & 3 sample size = 2,885 except: income status = 2,491; self-reported neighborhood characteristics = 1,639, neighborhood disadvantage = 2,491.