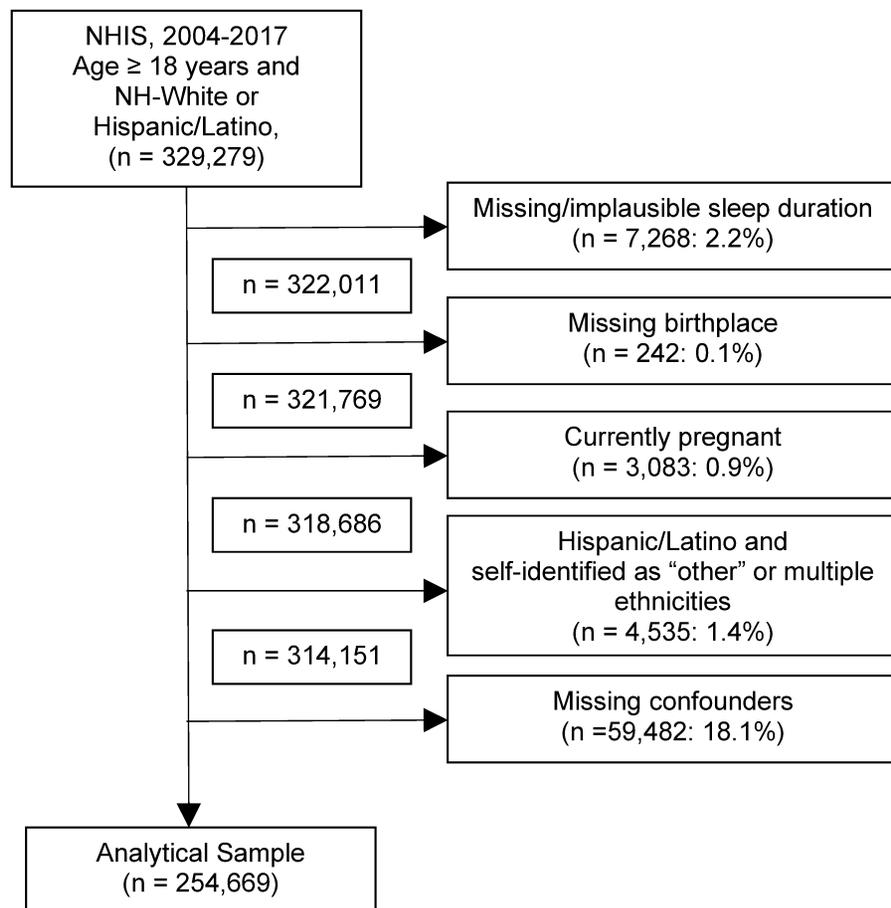
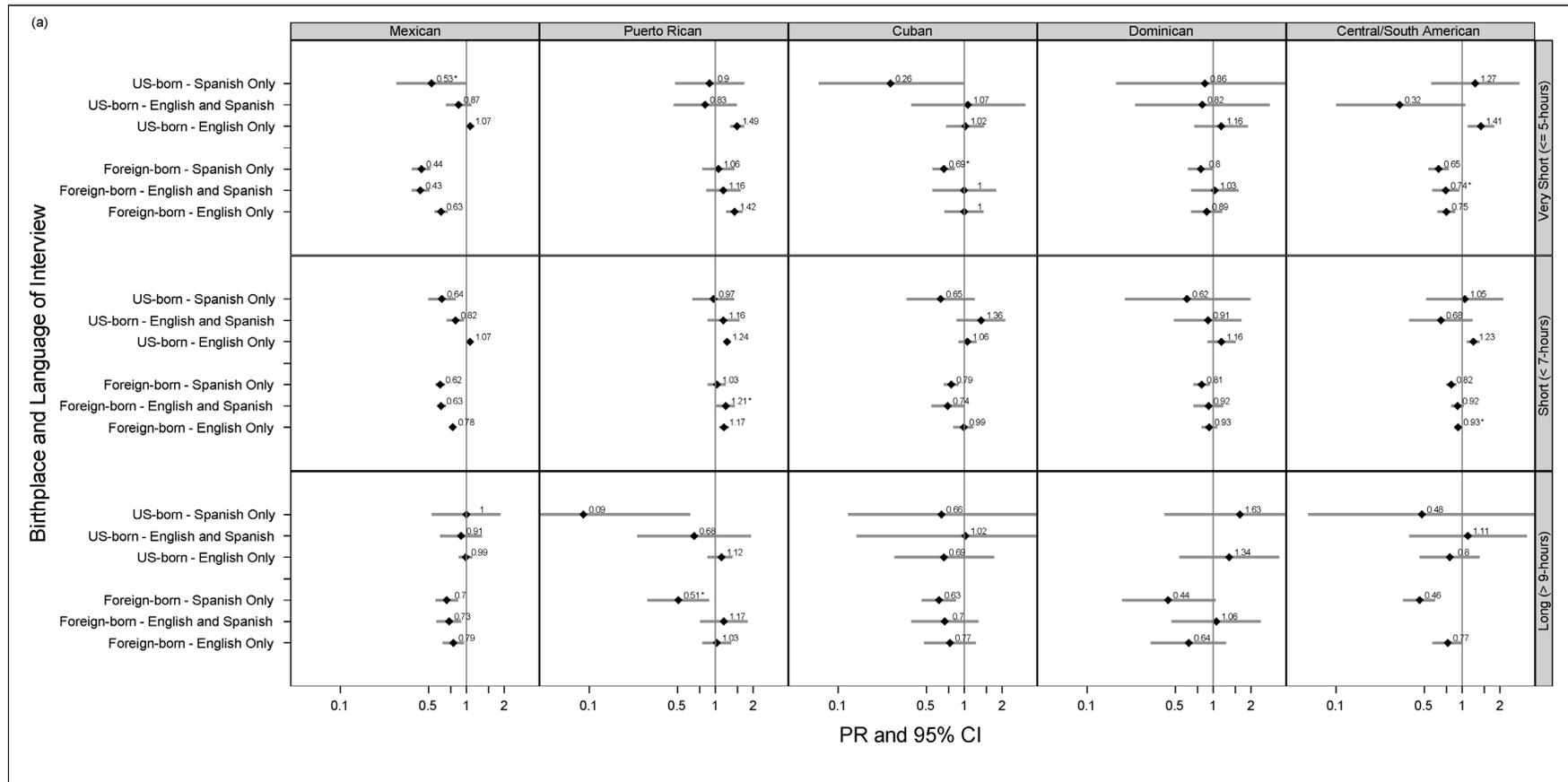
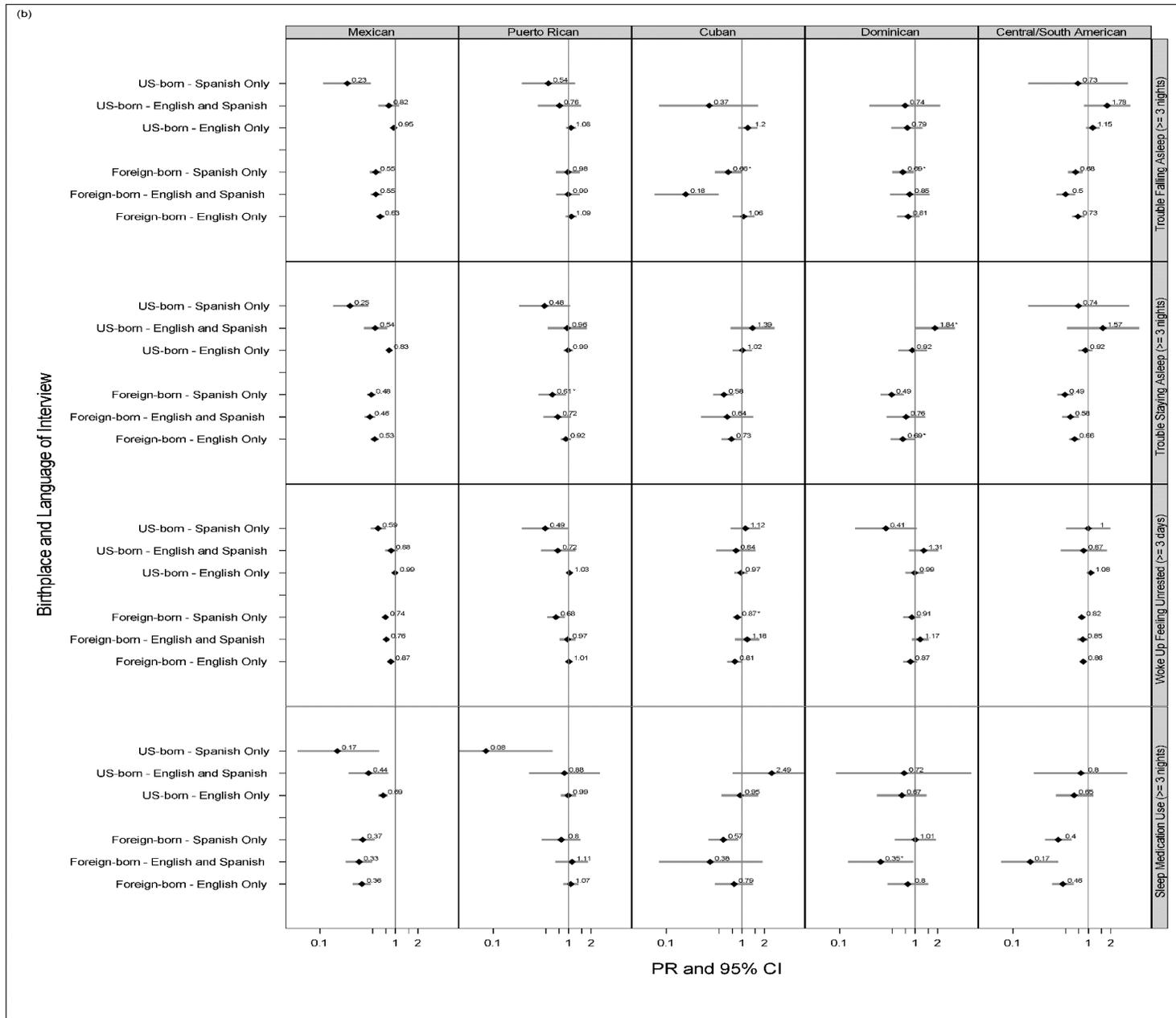


Supplemental Figure 1. Flow Chart Diagram of Final Analytic Sample

Supplemental Figure 2. Fully-Adjusted Prevalence Ratios of Sleep (a) Duration and (b) Quality^a Characteristics for Hispanic/Latino Heritage Groups compared to non-Hispanic Whites by Language Acculturation Status^b: Results after False Discovery Rate Correction, National Health Interview Survey, 2004-2017 (N=245,812)





^a Trouble falling asleep, trouble staying asleep, sleep medication use, and restorative sleep were measured during the survey years 2013-2017.

^b Language acculturation categories include high (English only interview), medium (English and Spanish interview), and low (Spanish only interview).

Adjusted for age (18-30, 31-49, 50-64, 65+ years), sex/gender (male, female), annual household income (<\$35,000, \$35,000-\$74,999, \$75,000+), educational attainment (<high school, high school graduate, some college, ≥college), unemployed/not in the labor force (yes, no), occupational class (professional/management, support services, laborers), marital/cohabitating status (married/cohabitating, divorced/widowed, single), region of residence (Northeast, Midwest, South, West), alcohol consumption (never, former, current), serious psychological distress (Kessler-6 psychological distress scale score ≥13), "ideal" cardiovascular health (never smoking/quit >12 months prior to interview, BMI <25 kg/m², meeting physical activity guidelines, and no prior diagnosis of dyslipidemia, hypertension, or diabetes/prediabetes), and cancer.

Note. All estimates are weighted for the survey's complex sampling design. Certain associations were not estimable due to small sample sizes and are, therefore, not provided (e.g., long sleep duration among Central/South Americans with medium acculturation compared to non-Hispanic Whites).

* Results were statistically significant in original analyses but became statistically non-significant after applying false discovery rate p-values.

Supplemental Table 1. Global Region of Birth among Foreign-born Non-Hispanic Whites, National Health Interview Survey, 2004-2017 (N=8,857)

Region of Birth	n (%)
Mexico, Central American, Caribbean Islands	238 (2.7)
South America	236 (2.7)
Europe	4,670 (52.7)
Russia	838 (9.5)
Africa	368 (4.2)
Middle East	895 (10.1)
Indian Subcontinent	64 (0.7)
Asia	177 (2.0)
Southeast Asia	117 (1.3)
Elsewhere	1,254 (14.2)

Note: Data are presented as absolute counts and age-standardized, weighted percentages.

Supplemental Table 2. Fully-Adjusted Prevalence Ratios of Sleep Characteristics for Foreign-born non-Hispanic Whites and Hispanic/Latino Heritage Groups compared to U.S.-born non-Hispanic Whites: Results after False Discovery Rate Correction, National Health Interview Survey, 2004-2017 (N=254,669)

Group (n)	Prevalence Ratio (95% Confidence Interval)						
	Sleep Duration (reference: recommended (7-9 hours))			Sleep Quality in the Past Week			
	Very Short (≤5-hours) (n=21,227)	Short (<7-hours) (n=75,139)	Long (>9-hours) (n=9,190)	Trouble Falling Asleep (≥3 nights) (n=22,038)	Trouble Staying Asleep (≥3 nights) (n=30,013)	Non- restorative Sleep (≥3 days) (n=46,103)	Sleep Medication Use (≥3 nights) (n=11,097)
U.S.-born Non-Hispanic White (n=198,297)	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Foreign-born Non-Hispanic White (n=8,857)	1.03 (0.93-1.13)	1.03 (0.99-1.08)	1.07 (0.92-1.24)	1.09 (0.99-1.19)	1.27 (1.17-1.37)	1.06 (1.00-1.12)	1.34 (1.16-1.55)
Mexican							
Overall (n=30,100)	0.76 (0.71-0.81)	0.87 (0.85-0.90)	0.87 (0.79-0.96)	0.77 (0.72-0.82)	0.65 (0.62-0.69)	0.90 (0.87-0.94)	0.52 (0.46-0.58)
U.S.-born (yes) (n=14,282)	1.04 (0.97-1.12)	1.04 (1.00-1.08)	0.98 (0.87-1.11)	0.92 (0.85-0.99)	0.80 (0.74-0.85)	0.97 (0.93-1.01)	0.66 (0.58-0.76)
U.S.-born (no) (n=15,818)	0.52 (0.47-0.57)	0.70 (0.67-0.73)	0.75 (0.66-0.85)	0.59 (0.54-0.65)	0.50 (0.46-0.55)	0.81 (0.77-0.85)	0.36 (0.29-0.43)
Puerto Rican							
Overall (n=5,077)	1.39 (1.26-1.53)	1.20 (1.14-1.25)	1.00 (0.84-1.20)	1.05 (0.95-1.17)	0.91 (0.83-1.00)	0.98 (0.92-1.05)	0.99 (0.85-1.15)
U.S.-born (yes) (n=2,544)	1.44 (1.27-1.64)	1.23 (1.16-1.31)	1.08 (0.84-1.37)	1.05 (0.91-1.21)	0.97 (0.85-1.12)	1.00 (0.92-1.09)	0.96 (0.77-1.21)
U.S.-born (no) (n=2,533)	1.32 (1.16-1.51)	1.15 (1.08-1.24)	0.94 (0.74-1.19)	1.06 (0.92-1.22)	0.84 (0.73-0.97)	0.95 (0.86-1.05)	1.02 (0.83-1.25)
Cuban							
Overall (n=2,518)	0.83 (0.70-0.99)	0.89 (0.81-0.98)	0.69 (0.55-0.87)	0.78 (0.62-0.97)	0.70 (0.58-0.83)	0.90 (0.82-1.00)	0.68 (0.53-0.89)
U.S.-born (yes) (n=559)	0.93 (0.66-1.29)	1.04 (0.89-1.21)	0.71 (0.34-1.47)	0.97 (0.72-1.31)	0.94 (0.70-1.26)	0.98 (0.82-1.17)	0.98 (0.57-1.69)
U.S.-born (no) (n=1,959)	0.81 (0.66-0.99)	0.85 (0.76-0.95)	0.69 (0.54-0.88)	0.71 (0.53-0.95)	0.63 (0.49-0.79)	0.87 (0.78-0.98)	0.61 (0.43-0.85)
Dominican							
Overall (n=1,658)	0.90 (0.76-1.08)	0.92 (0.83-1.01)	0.72 (0.49-1.05)	0.76 (0.62-0.92)	0.67 (0.55-0.83)	0.93 (0.82-1.05)	0.81 (0.54-1.20)
U.S.-born (yes)	1.09	1.09	1.15	0.73	0.97	0.98	0.64

(n=264)	(0.68-1.74)	(0.85-1.40)	(0.49-2.73)	(0.47-1.13)	(0.65-1.43)	(0.77-1.26)	(0.31-1.31)
U.S.-born (no) (n=1,394)	0.87 (0.73-1.03)	0.88 (0.79-0.98)	0.60 (0.38-0.93)	0.76 (0.62-0.95)	0.61 (0.48-0.78)	0.92 (0.79-1.07)	0.84 (0.54-1.30)
Central/South American							
Overall (n=8,162)	0.78 (0.71-0.87)	0.93 (0.89-0.98)	0.68 (0.56-0.83)	0.76 (0.67-0.87)	0.65 (0.58-0.73)	0.89 (0.83-0.94)	0.42 (0.34-0.53)
U.S.-born (yes) (n=1,113)	1.30 (1.03-1.65)	1.18 (1.04-1.33)	0.82 (0.51-1.30)	1.21 (0.96-1.51)	0.98 (0.73-1.30)	1.05 (0.93-1.19)	0.64 (0.38-1.10)
U.S.-born (no) (n=7,049)	0.72 (0.64-0.80)	0.89 (0.85-0.94)	0.66 (0.54-0.82)	0.68 (0.59-0.77)	0.59 (0.53-0.67)	0.85 (0.80-0.90)	0.39 (0.30-0.50)

Abbreviations: ref (reference)

Adjusted for age (18-30, 31-49, 50-64, 65+ years), sex/gender (male, female), annual household income (<\$35,000, \$35,000-\$74,999, \$75,000+), educational attainment (<high school, high school graduate, some college, ≥college), unemployed/not in the labor force (yes, no), occupational class (professional/management, support services, laborers), marital/cohabitating status (married/cohabitating, divorced/widowed, single), region of residence (Northeast, Midwest, South, West), alcohol consumption (never, former, current), serious psychological distress (Kessler-6 psychological distress scale score ≥13), "ideal" cardiovascular health (never smoking/quit >12 months prior to interview, BMI <25 kg/m², meeting physical activity guidelines, and no prior diagnosis of dyslipidemia, hypertension, or diabetes/prediabetes), and cancer.

Note. All estimates are weighted for the survey's complex sampling design. Very short and short sleep are non-mutually exclusive sleep duration categories. Trouble falling asleep, trouble staying asleep, sleep medication use, and restorative sleep were measured during the survey years 2013-2017.

Italicized results indicate results that were statistically significant in original analyses but became statistically non-significant after applying false discovery rate p-values.

Supplemental Table 3. Fully-Adjusted Prevalence Ratios of Sleep Characteristics for Hispanic/Latino Heritage Groups compared to Foreign-born non-Hispanic Whites: Results after False Discovery Rate Correction, National Health Interview Survey, 2004-2017 (N=56,372)

Group (n)	Prevalence Ratio (95% Confidence Interval)						
	Sleep Duration (reference: recommended (7-9 hours))			Sleep Quality in the Past Week			
	Very Short (≤5-hours) (n=4,115)	Short (<7-hours) (n=14,048)	Long (>9-hours) (n=1,586)	Trouble Falling Asleep (≥3 nights) (n=3,431)	Trouble Staying Asleep (≥3 nights) (n=3,520)	Non- restorative Sleep (≥3 days) (n=7,734)	Sleep Medication Use (≥3 nights) (n=1,073)
Foreign-born Non-Hispanic White (n=8,857)	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Mexican							
Overall (n=30,100)	1.10 (0.96-1.26)	1.12 (1.05-1.18)	1.06 (0.86-1.31)	0.92 (0.81-1.05)	0.87 (0.78-0.97)	1.06 (0.99-1.14)	0.92 (0.73-1.14)
U.S.-born (yes) (n=14,282)	1.17 (1.02-1.34)	1.19 (1.12-1.26)	1.04 (0.84-1.29)	1.00 (0.87-1.14)	0.97 (0.86-1.10)	1.07 (0.99-1.15)	0.98 (0.78-1.23)
U.S.-born (no) (n=15,818)	0.89 (0.73-1.08)	0.98 (0.90-1.06)	1.05 (0.81-1.36)	0.78 (0.66-0.94)	0.72 (0.62-0.84)	1.02 (0.93-1.12)	0.68 (0.48-0.96)
Puerto Rican							
Overall (n=5,077)	1.75 (1.51-2.02)	1.34 (1.25-1.44)	1.13 (0.88-1.44)	1.19 (1.03-1.39)	1.14 (0.99-1.31)	1.06 (0.96-1.16)	1.33 (1.07-1.64)
U.S.-born (yes) (n=2,544)	1.85 (1.54-2.22)	1.39 (1.27-1.51)	1.33 (0.95-1.85)	1.20 (0.99-1.46)	1.22 (1.02-1.46)	1.06 (0.95-1.18)	1.32 (1.01-1.73)
U.S.-born (no) (n=2,533)	1.58 (1.32-1.90)	1.27 (1.16-1.39)	1.02 (0.77-1.35)	1.22 (1.01-1.46)	1.09 (0.91-1.30)	1.06 (0.94-1.20)	1.41 (1.09-1.83)
Cuban							
Overall (n=2,518)	0.97 (0.76-1.22)	0.98 (0.88-1.10)	0.69 (0.49-0.97)	0.92 (0.70-1.20)	0.93 (0.76-1.15)	1.03 (0.90-1.18)	1.09 (0.77-1.55)
U.S.-born (yes) (n=559)	1.03 (0.69-1.53)	1.15 (0.96-1.37)	0.83 (0.39-1.75)	1.14 (0.79-1.65)	1.17 (0.84-1.65)	1.05 (0.85-1.29)	1.63 (0.91-2.93)
U.S.-born (no) (n=1,959)	0.94 (0.72-1.22)	0.92 (0.81-1.05)	0.66 (0.46-0.94)	0.82 (0.59-1.14)	0.85 (0.65-1.10)	1.04 (0.89-1.21)	0.96 (0.63-1.45)
Dominican							
Overall (n=1,658)	1.12 (0.89-1.43)	1.02 (0.90-1.16)	0.91 (0.57-1.45)	0.88 (0.68-1.13)	0.94 (0.72-1.23)	1.00 (0.87-1.15)	1.03 (0.67-1.59)
U.S.-born (yes) (n=264)	1.40 (0.82-2.41)	1.24 (0.97-1.60)	1.80 (0.68-4.79)	0.82 (0.51-1.31)	1.25 (0.81-1.93)	1.01 (0.78-1.32)	0.97 (0.42-2.20)
U.S.-born (no) (n=1,394)	1.06 (0.84-1.34)	0.96 (0.84-1.10)	0.73 (0.45-1.20)	0.88 (0.68-1.16)	0.87 (0.65-1.18)	0.99 (0.84-1.18)	1.02 (0.64-1.63)

Central/South American							
Overall (n=8,162)	1.00 (0.86-1.17)	1.10 (1.02-1.17)	0.76 (0.57-1.02)	0.94 (0.78-1.13)	0.89 (0.76-1.04)	1.02 (0.95-1.11)	0.69 (0.51-0.91)
U.S.-born (yes) (n=1,113)	1.42 (1.06-1.92)	1.30 (1.13-1.49)	1.02 (0.59-1.75)	1.27 (0.96-1.67)	1.14 (0.86-1.52)	1.08 (0.94-1.25)	0.95 (0.56-1.62)
U.S.-born (no) (n=7,049)	0.92 (0.78-1.08)	1.05 (0.98-1.13)	0.77 (0.56-1.05)	0.84 (0.69-1.02)	0.84 (0.72-0.99)	1.00 (0.92-1.09)	0.64 (0.47-0.88)

Abbreviations: ref (reference)

Adjusted for age (18-30, 31-49, 50-64, 65+ years), sex/gender (male, female), annual household income (<\$35,000, \$35,000-\$74,999, \$75,000+), educational attainment (<high school, high school graduate, some college, ≥college), unemployed/not in the labor force (yes, no), occupational class (professional/management, support services, laborers), marital/cohabitating status (married/cohabitating, divorced/widowed, single), region of residence (Northeast, Midwest, South, West), alcohol consumption (never, former, current), serious psychological distress (Kessler-6 psychological distress scale score ≥13), "ideal" cardiovascular health (never smoking/quit >12 months prior to interview, BMI <25 kg/m², meeting physical activity guidelines, and no prior diagnosis of dyslipidemia, hypertension, or diabetes/prediabetes), and cancer.

Note. All estimates are weighted for the survey's complex sampling design. Very short and short sleep are non-mutually exclusive sleep duration categories. Trouble falling asleep, trouble staying asleep, sleep medication use, and restorative sleep were measured during the survey years 2013-2017.

Italicized results indicate results that were statistically significant in original analyses but became statistically non-significant after applying false discovery rate p-values.

Supplemental Table 4. Fully-Adjusted Prevalence Ratios of Sleep Characteristics for Hispanic/Latino Heritage Groups compared to non-Hispanic Whites, National Health Interview Survey, 2004-2017 (N=254,669)

Heritage Group Compared to non-Hispanic Whites, Overall (n=207,154)	Prevalence Ratio (95% Confidence Interval)						
	Sleep Duration (reference: recommended (7-9 hours))			Sleep Quality ^a			
	Very Short (≤5-hours) (n=21,227)	Short (<7-hours) (n=75,139)	Long (>9-hours) (n=9,190)	Trouble Falling Asleep (≥3 nights) (n=22,038)	Trouble Staying Asleep (≥3 nights) (n=30,013)	Non- restorative Sleep (≥3 days) (n=46,103)	Sleep Medication Use (≥3 nights) (n=11,097)
Mexican (n=30,100 Mexican)	0.89 (0.82-0.95)	0.95 (0.92-0.98)	0.94 (0.84-1.04)	0.85 (0.79-0.91)	0.75 (0.71-0.80)	0.95 (0.91-0.99)	0.62 (0.54-0.70)
Puerto Rican (n=5,077)	1.41 (1.27-1.57)	1.21 (1.16-1.27)	1.05 (0.87-1.27)	1.10 (0.99-1.22)	1.02 (0.92-1.12)	1.01 (0.94-1.08)	1.10 (0.94-1.30)
Cuban (n=2,518)	0.90 (0.75-1.07)	0.94 (0.86-1.04)	0.75 (0.58-0.97)	0.88 (0.71-1.09)	0.88 (0.74-1.05)	0.96 (0.87-1.07)	0.93 (0.70-1.23)
Dominican (n=1,658)	0.95 (0.78-1.16)	0.96 (0.86-1.06)	0.79 (0.53-1.18)	0.82 (0.66-1.02)	0.84 (0.68-1.04)	0.98 (0.87-1.11)	1.04 (0.69-1.58)
Central/South American (n=8,162)	0.89 (0.78-1.01)	1.01 (0.95-1.07)	0.75 (0.60-0.94)	0.88 (0.75-1.03)	0.83 (0.73-0.95)	0.95 (0.88-1.02)	0.57 (0.44-0.73)

Adjusted for age (18-30, 31-49, 50-64, 65+ years), sex (male, female), annual household income (<\$35,000, \$35,000-\$74,999, \$75,000+), educational attainment (<high school, high school graduate, some college, ≥college), unemployed/not in the labor force (yes, no), occupational class (professional/management, support services, laborers), marital/cohabitating status (married/cohabitating, divorced/widowed, single), region of residence (Northeast, Midwest, South, West), alcohol consumption (lifetime abstainer, former, current), serious psychological distress (Kessler-6 psychological distress scale score ≥13), and "ideal" cardiovascular health (never smoking/quit >12 months prior to interview, BMI <25 kg/m², meeting physical activity guidelines, and no prior diagnosis of dyslipidemia, hypertension, or diabetes/prediabetes), cancer, and US nativity status/years lived in the US (US-born, 15+ years in the US, <15 years in the US).

Note. All estimates are weighted for the survey's complex sampling design. Trouble falling asleep, trouble staying asleep, awakening feeling rested, and sleep medication were measured during the survey years 2013-2017.

Supplemental Table 5. Fully-Adjusted Prevalence Ratios of Sleep Characteristics for (1) foreign-born non-Hispanic Whites and (2) Hispanic/Latino Heritage Groups compared to US-born non-Hispanic Whites, Stratified by Sex/Gender, National Health Interview Survey, 2004-2017 (N=254,669)

Group (n)	Prevalence Ratio (95% Confidence Interval)													
	Sleep Duration (reference: recommended (7-9 hours))						Sleep Quality in the Past Week							
	Very Short (≤5-hours) (n=21,227)		Short (<7-hours) (n=75,139)		Long (>9-hours) (n=9,190)		Trouble Falling Asleep (≥3 nights) (n=22,038)		Trouble Staying Asleep (≥3 nights) (n=30,013)		Non-restorative Sleep (≥3 days) (n=46,103)		Sleep Medication Use (≥3 nights) (n=11,097)	
Sex/Gender	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
U.S.-born Non-Hispanic White (n=198,297)	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
Foreign-born Non-Hispanic White (n=8,857)	1.12 (0.98-1.30)	0.94 (0.83-1.06)	1.07 (1.00-1.13)	1.00 (0.95-1.06)	1.18 (0.94-1.47)	1.00 (0.82-1.21)	1.08 (0.92-1.27)	1.09 (0.97-1.21)	1.31 (1.16-1.49)	1.22 (1.11-1.35)	1.11 (1.02-1.21)	1.01 (0.95-1.08)	1.44 (1.12-1.85)	1.28 (1.07-1.52)
Mexican														
Overall (n=30,100)	0.70 (0.63-0.77)	0.83 (0.76-0.91)	0.83 (0.79-0.86)	0.94 (0.90-0.97)	0.96 (0.84-1.10)	0.77 (0.68-0.87)	0.77 (0.73-0.82)	0.80 (0.74-0.86)	0.66 (0.62-0.70)	0.68 (0.63-0.73)	0.91 (0.87-0.94)	0.91 (0.87-0.95)	0.52 (0.46-0.59)	0.48 (0.41-0.56)
U.S.-born (yes) (n=14,282)	1.02 (0.91-1.14)	1.05 (0.96-1.15)	1.01 (0.96-1.07)	1.07 (1.03-1.12)	1.09 (0.91-1.31)	0.88 (0.75-1.03)	0.92 (0.85-0.99)	0.92 (0.84-1.00)	0.80 (0.74-0.86)	0.77 (0.71-0.85)	0.97 (0.93-1.01)	0.95 (0.90-1.00)	0.66 (0.58-0.76)	0.59 (0.50-0.70)
U.S.-born (no) (n=15,818)	0.47 (0.40-0.54)	0.60 (0.52-0.69)	0.66 (0.62-0.70)	0.77 (0.71-0.82)	0.83 (0.70-0.99)	0.65 (0.54-0.78)	0.60 (0.55-0.66)	0.64 (0.58-0.71)	0.51 (0.46-0.55)	0.55 (0.49-0.62)	0.82 (0.77-0.86)	0.85 (0.80-0.90)	0.36 (0.30-0.44)	0.34 (0.27-0.42)
Puerto Rican														
Overall (n=5,077)	1.31 (1.13-1.53)	1.45 (1.29-1.63)	1.19 (1.11-1.28)	1.21 (1.14-1.28)	1.05 (0.82-1.34)	0.95 (0.74-1.21)	1.05 (0.94-1.16)	1.08 (0.96-1.22)	0.91 (0.83-1.00)	0.87 (0.78-0.97)	0.98 (0.91-1.05)	1.04 (0.97-1.12)	0.98 (0.84-1.15)	1.02 (0.84-1.23)
U.S.-born (yes) (n=2,544)	1.33 (1.08-1.63)	1.53 (1.30-1.81)	1.21 (1.11-1.33)	1.24 (1.15-1.35)	1.26 (0.89-1.77)	0.94 (0.66-1.33)	1.04 (0.90-1.21)	1.14 (0.98-1.33)	0.97 (0.85-1.11)	0.91 (0.78-1.05)	1.00 (0.92-1.09)	1.10 (1.01-1.20)	0.96 (0.76-1.19)	0.97 (0.73-1.30)
U.S.-born (no) (n=2,533)	1.29 (1.03-1.61)	1.36 (1.17-1.58)	1.15 (1.04-1.27)	1.16 (1.06-1.26)	0.89 (0.63-1.26)	0.96 (0.72-1.28)	1.05 (0.91-1.21)	1.01 (0.86-1.18)	0.84 (0.73-0.97)	0.82 (0.70-0.97)	0.95 (0.86-1.04)	0.96 (0.85-1.08)	1.01 (0.83-1.24)	1.08 (0.86-1.35)
Cuban														
Overall (n=2,518)	0.75 (0.59-0.96)	0.94 (0.75-1.18)	0.84 (0.74-0.95)	0.97 (0.87-1.09)	0.73 (0.54-0.99)	0.63 (0.42-0.93)	0.76 (0.61-0.94)	0.78 (0.60-1.01)	0.68 (0.57-0.81)	0.72 (0.57-0.91)	0.89 (0.81-0.99)	0.98 (0.85-1.14)	0.66 (0.51-0.87)	0.77 (0.55-1.06)
U.S.-born Cuban (yes) (n=559)	0.78 (0.44-1.39)	1.08 (0.74-1.58)	1.01 (0.81-1.25)	1.08 (0.89-1.31)	0.49 (0.18-1.29)	0.95 (0.39-2.31)	0.95 (0.70-1.28)	0.96 (0.66-1.39)	0.92 (0.69-1.23)	0.83 (0.53-1.31)	0.96 (0.80-1.16)	1.07 (0.86-1.34)	0.95 (0.54-1.66)	1.37 (0.78-2.42)
U.S.-born Cuban (no) (n=1,959)	0.75 (0.56-1.00)	0.90 (0.69-1.18)	0.78 (0.67-0.91)	0.94 (0.82-1.07)	0.78 (0.57-1.05)	0.55 (0.35-0.87)	0.69 (0.52-0.92)	0.71 (0.52-0.98)	0.61 (0.48-0.78)	0.68 (0.50-0.94)	0.87 (0.77-0.97)	0.95 (0.80-1.13)	0.59 (0.42-0.83)	0.60 (0.40-0.89)
Dominican														
Overall (n=1,658)	0.82 (0.60-1.11)	0.96 (0.79-1.16)	0.83 (0.71-0.97)	0.98 (0.88-1.10)	1.05 (0.68-1.61)	0.49 (0.24-1.00)	0.77 (0.63-0.94)	0.83 (0.66-1.03)	0.68 (0.56-0.84)	0.77 (0.61-0.97)	0.94 (0.83-1.06)	0.96 (0.84-1.09)	0.83 (0.55-1.23)	0.93 (0.60-1.45)
U.S.-born (yes)	1.13 (0.60-2.11)	1.02 (0.58-1.79)	0.86 (0.60-1.23)	1.32 (0.98-1.77)	0.96 (0.30-3.07)	1.35 (0.48-3.80)	0.73 (0.48-1.12)	0.62 (0.36-1.07)	0.97 (0.65-1.44)	0.91 (0.53-1.57)	0.99 (0.78-1.26)	0.93 (0.68-1.29)	0.64 (0.31-1.30)	0.57 (0.23-1.43)

(n=264)														
U.S.-born (no) (n=1,394)	0.74 (0.52-1.04)	0.95 (0.78-1.15)	0.82 (0.69-0.97)	0.92 (0.81-1.04)	1.08 (0.63-1.85)	0.29 (0.15-0.53)	0.78 (0.63-0.97)	0.88 (0.69-1.12)	0.62 (0.49-0.80)	0.74 (0.57-0.97)	0.92 (0.79-1.08)	0.96 (0.83-1.13)	0.86 (0.55-1.34)	1.00 (0.61-1.63)
Central/South American														
Overall (n=8,162)	0.71 (0.61-0.83)	0.87 (0.76-0.99)	0.93 (0.87-0.99)	0.94 (0.88-1.01)	0.66 (0.48-0.91)	0.70 (0.56-0.89)	0.78 (0.68-0.88)	0.83 (0.71-0.97)	0.65 (0.58-0.73)	0.73 (0.63-0.86)	0.89 (0.84-0.95)	0.96 (0.89-1.04)	0.43 (0.34-0.54)	0.46 (0.35-0.61)
U.S.-born (yes) (n=1,113)	1.31 (0.92-1.87)	1.31 (0.96-1.77)	1.25 (1.08-1.45)	1.10 (0.92-1.30)	0.64 (0.35-1.16)	0.95 (0.52-1.74)	1.21 (0.96-1.53)	1.40 (1.06-1.86)	0.97 (0.73-1.30)	1.13 (0.80-1.61)	1.05 (0.92-1.20)	1.13 (0.97-1.32)	0.64 (0.38-1.10)	0.47 (0.24-0.94)
U.S.-born (no) (n=7,049)	0.64 (0.54-0.76)	0.80 (0.70-0.93)	0.88 (0.82-0.94)	0.92 (0.85-0.98)	0.66 (0.47-0.94)	0.67 (0.52-0.87)	0.69 (0.60-0.78)	0.71 (0.61-0.83)	0.60 (0.53-0.68)	0.66 (0.57-0.77)	0.85 (0.80-0.91)	0.92 (0.85-0.99)	0.40 (0.31-0.51)	0.46 (0.34-0.62)

Abbreviations: ref (reference)

Adjusted for age (18-30, 31-49, 50-64, 65+ years), annual household income (<\$35,000, \$35,000-\$74,999, \$75,000+), educational attainment (<high school, high school graduate, some college, ≥college), unemployed/not in the labor force (yes, no), occupational class (professional/management, support services, laborers), marital/cohabitating status (married/cohabitating, divorced/widowed, single), region of residence (Northeast, Midwest, South, West), heavy alcohol consumption (≥2 drinks/day for women and ≥3 drinks/day for men), serious psychological distress (Kessler-6 psychological distress scale score ≥13), “ideal” cardiovascular health (never smoking/quit >12 months prior to interview, BMI <25 kg/m², meeting physical activity guidelines, and no prior diagnosis of dyslipidemia, hypertension, or diabetes/prediabetes), and cancer.

Note. All estimates are weighted for the survey’s complex sampling design. Trouble falling asleep, trouble staying asleep, sleep medication use, and restorative sleep were measured during the survey years 2013-2017.

Supplemental Table 6. Fully-Adjusted Prevalence Ratios of Sleep Characteristics for (1) foreign-born non-Hispanic Whites and (2) Hispanic/Latino Heritage Groups compared to US-born non-Hispanic Whites, Stratified by Age Group, National Health Interview Survey, 2004-2017 (N=254,669)

Group (n)	Prevalence Ratio (95% Confidence Interval)																				
	Sleep Duration (reference: recommended (7-9 hours))									Sleep Quality in the Past Week											
	Very Short (≤5-hours) (n=21,227)			Short (≤7-hours) (n=75,139)			Long (>9-hours) (n=9,190)			Trouble Falling Asleep (≥3 nights) (n=22,038)			Trouble Staying Asleep (≥3 nights) (n=30,013)			Non-restorative Sleep (≥3 days) (n=46,103)			Sleep Medication Use (≥3 nights) (n=11,097)		
Age (years) Group	18-30	31-49	50+	18-30	31-49	50+	18-30	31-49	50+	18-30	31-49	50+	18-30	31-49	50+	18-30	31-49	50+	18-30	31-49	50+
U.S.-born Non-Hispanic White (n=198,297)	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Foreign-born Non-Hispanic White (n=8,857)	0.93 (0.71- 1.23)	1.33 (1.13- 1.56)	0.89 (0.80- 1.00)	1.08 (0.95- 1.22)	1.13 (1.05- 1.21)	0.96 (0.91- 1.01)	1.24 (0.80- 1.92)	1.12 (0.79- 1.59)	0.96 (0.82- 1.13)	0.98 (0.74- 1.31)	1.24 (1.06- 1.44)	1.04 (0.92- 1.17)	1.11 (0.79- 1.56)	1.44 (1.24- 1.68)	1.20 (1.10- 1.31)	1.02 (0.89- 1.16)	1.15 (1.07- 1.25)	1.00 (0.92- 1.08)	1.64 (0.95- 2.85)	1.64 (1.21- 2.22)	1.22 (1.03- 1.44)
Mexican																					
Overall (n=30,100)	0.78 (0.69- 0.89)	0.69 (0.62- 0.76)	0.98 (0.87- 1.10)	0.88 (0.83- 0.93)	0.87 (0.83- 0.90)	0.96 (0.91- 1.02)	0.96 (0.80- 1.15)	0.72 (0.61- 0.87)	0.86 (0.75- 0.98)	0.81 (0.76- 0.86)	0.66 (0.60- 0.73)	0.92 (0.83- 1.01)	0.65 (0.61- 0.69)	0.58 (0.53- 0.64)	0.71 (0.64- 0.78)	0.95 (0.92- 0.99)	0.88 (0.84- 0.92)	0.93 (0.87- 1.00)	0.50 (0.44- 0.56)	0.41 (0.33- 0.51)	0.61 (0.52- 0.72)
U.S.-born (yes) (n=14,282)	1.03 (0.90- 1.18)	1.03 (0.91- 1.15)	1.14 (1.01- 1.27)	1.00 (0.93- 1.06)	1.09 (1.03- 1.15)	1.06 (0.99- 1.13)	1.04 (0.85- 1.26)	0.85 (0.67- 1.09)	0.96 (0.81- 1.13)	0.96 (0.89- 1.03)	0.81 (0.73- 0.91)	1.01 (0.90- 1.15)	0.77 (0.71- 0.82)	0.73 (0.65- 0.82)	0.84 (0.75- 0.95)	1.02 (0.98- 1.06)	0.96 (0.91- 1.03)	1.00 (0.92- 1.09)	0.61 (0.53- 0.70)	0.64 (0.51- 0.80)	0.64 (0.54- 0.76)
U.S.-born (no) (n=15,818)	0.43 (0.34- 0.54)	0.48 (0.41- 0.55)	0.82 (0.68- 0.98)	0.67 (0.61- 0.74)	0.69 (0.65- 0.74)	0.86 (0.79- 0.93)	0.81 (0.62- 1.06)	0.65 (0.51- 0.82)	0.76 (0.63- 0.92)	0.63 (0.58- 0.69)	0.54 (0.46- 0.62)	0.80 (0.69- 0.93)	0.51 (0.47- 0.56)	0.46 (0.40- 0.52)	0.57 (0.50- 0.65)	0.86 (0.82- 0.91)	0.79 (0.74- 0.85)	0.85 (0.77- 0.94)	0.36 (0.29- 0.43)	0.22 (0.15- 0.32)	0.57 (0.44- 0.75)
Puerto Rican																					
Overall (n=5,077)	1.47 (1.17- 1.83)	1.30 (1.12- 1.51)	1.56 (1.36- 1.78)	1.26 (1.13- 1.39)	1.15 (1.07- 1.24)	1.27 (1.18- 1.36)	1.28 (0.94- 1.75)	0.88 (0.64- 1.20)	0.88 (0.69- 1.14)	1.12 (1.01- 1.23)	0.93 (0.78- 1.11)	1.35 (1.18- 1.56)	0.92 (0.84- 1.02)	0.92 (0.77- 1.09)	0.92 (0.80- 1.07)	1.04 (0.97- 1.10)	0.97 (0.87- 1.07)	1.04 (0.93- 1.17)	0.98 (0.84- 1.15)	0.83 (0.62- 1.12)	1.15 (0.93- 1.40)
U.S.-born (yes) (n=2,544)	1.53 (1.19- 1.96)	1.47 (1.24- 1.74)	1.55 (1.17- 2.06)	1.26 (1.12- 1.42)	1.25 (1.15- 1.36)	1.28 (1.11- 1.48)	1.36 (0.97- 1.91)	1.00 (0.66- 1.54)	0.64 (0.35- 1.19)	1.14 (0.99- 1.31)	0.93 (0.75- 1.14)	1.49 (1.20- 1.86)	0.98 (0.85- 1.12)	1.02 (0.82- 1.25)	1.01 (0.79- 1.28)	1.08 (0.99- 1.18)	0.99 (0.87- 1.12)	1.11 (0.94- 1.31)	0.93 (0.74- 1.17)	0.79 (0.52- 1.19)	1.25 (0.92- 1.69)
U.S.-born (no) (n=2,533)	1.27 (0.86- 1.87)	1.08 (0.85- 1.38)	1.56 (1.34- 1.81)	1.23 (1.01- 1.51)	1.01 (0.90- 1.14)	1.26 (1.16- 1.37)	1.03 (0.53- 2.02)	0.75 (0.47- 1.18)	0.96 (0.74- 1.25)	1.09 (0.94- 1.25)	0.95 (0.73- 1.22)	1.27 (1.06- 1.51)	0.86 (0.75- 0.99)	0.77 (0.58- 1.02)	0.87 (0.73- 1.03)	0.98 (0.88- 1.08)	0.94 (0.80- 1.10)	1.00 (0.87- 1.14)	1.04 (0.85- 1.27)	0.90 (0.60- 1.35)	1.08 (0.85- 1.37)
Cuban																					
Overall (n=2,518)	0.69 (0.40- 1.17)	0.66 (0.50- 0.86)	1.08 (0.87- 1.34)	0.75 (0.59- 0.95)	0.79 (0.67- 0.93)	1.06 (0.96- 1.18)	0.64 (0.32- 1.26)	0.69 (0.42- 1.14)	0.71 (0.55- 0.93)	0.78 (0.63- 0.97)	0.72 (0.52- 1.00)	1.00 (0.79- 1.26)	0.70 (0.59- 0.84)	0.73 (0.56- 0.94)	0.73 (0.58- 0.91)	0.91 (0.83- 1.01)	0.81 (0.70- 0.94)	0.98 (0.84- 1.14)	0.69 (0.53- 0.90)	0.66 (0.43- 1.04)	0.76 (0.56- 1.04)

U.S.-born Cuban (yes) (n=559)	0.81 (0.47-1.42)	0.83 (0.49-1.41)	1.65 (0.93-2.94)	0.98 (0.76-1.26)	1.11 (0.91-1.35)	1.04 (0.69-1.57)	0.93 (0.39-2.23)	0.45 (0.14-1.41)	0.21 (0.03-1.53)	1.05 (0.78-1.41)	1.11 (0.72-1.71)	1.54 (0.85-2.78)	0.91 (0.68-1.22)	1.02 (0.68-1.53)	1.04 (0.62-1.75)	1.05 (0.87-1.26)	0.94 (0.72-1.24)	0.99 (0.61-1.63)	0.91 (0.52-1.60)	1.53 (0.83-2.80)	0.63 (0.26-1.49)
U.S.-born Cuban (no) (n=1,959)	0.59 (0.24-1.43)	0.61 (0.44-0.84)	1.03 (0.81-1.31)	0.48 (0.31-0.75)	0.67 (0.53-0.83)	1.06 (0.95-1.18)	0.32 (0.08-1.34)	0.75 (0.42-1.34)	0.74 (0.56-0.96)	0.70 (0.53-0.93)	0.57 (0.35-0.95)	0.94 (0.74-1.20)	0.64 (0.50-0.81)	0.61 (0.41-0.90)	0.69 (0.54-0.89)	0.87 (0.78-0.97)	0.76 (0.64-0.89)	0.98 (0.83-1.16)	0.62 (0.44-0.88)	0.30 (0.13-0.66)	0.77 (0.56-1.07)
Dominican																					
Overall (n=1,658)	0.64 (0.41-0.99)	0.90 (0.68-1.19)	1.18 (0.95-1.46)	0.81 (0.62-1.05)	0.94 (0.82-1.08)	1.02 (0.89-1.17)	1.32 (0.73-2.36)	0.48 (0.22-1.03)	0.42 (0.21-0.84)	0.80 (0.66-0.97)	0.69 (0.47-1.01)	0.90 (0.68-1.18)	0.68 (0.55-0.83)	0.51 (0.33-0.77)	0.71 (0.53-0.96)	0.98 (0.86-1.11)	0.79 (0.65-0.97)	1.12 (0.94-1.34)	0.79 (0.53-1.18)	0.37 (0.20-0.69)	1.31 (0.82-2.07)
U.S.-born (yes) (n=264)	0.63 (0.31-1.30)	2.17 (1.33-3.55)	1.65 (0.41-6.68)	0.87 (0.58-1.31)	1.62 (1.30-2.02)	0.98 (0.43-2.20)	1.32 (0.52-3.33)	2.50 (0.76-8.25)	NE	0.78 (0.50-1.21)	0.88 (0.44-1.76)	0.82 (0.12-5.75)	0.85 (0.56-1.28)	1.05 (0.55-2.02)	0.46 (0.07-3.02)	1.06 (0.82-1.36)	1.05 (0.77-1.42)	1.60 (0.70-3.67)	0.50 (0.24-1.02)	1.26 (0.52-3.02)	0.69 (0.08-5.75)
U.S.-born (no) (n=1,394)	0.63 (0.37-1.08)	0.76 (0.55-1.04)	1.16 (0.94-1.44)	0.75 (0.55-1.03)	0.84 (0.72-0.99)	1.02 (0.89-1.17)	1.31 (0.64-2.68)	0.33 (0.12-0.87)	0.44 (0.22-0.87)	0.80 (0.65-0.99)	0.66 (0.44-0.97)	0.90 (0.69-1.18)	0.63 (0.50-0.81)	0.41 (0.26-0.64)	0.72 (0.54-0.96)	0.96 (0.82-1.12)	0.75 (0.59-0.94)	1.11 (0.91-1.35)	0.87 (0.56-1.35)	0.20 (0.09-0.47)	1.33 (0.84-2.12)
Central/South American																					
Overall (n=8,162)	0.90 (0.72-1.12)	0.72 (0.62-0.84)	0.92 (0.78-1.09)	0.97 (0.87-1.08)	0.92 (0.86-0.99)	0.99 (0.91-1.07)	0.90 (0.63-1.27)	0.63 (0.45-0.87)	0.51 (0.36-0.72)	0.81 (0.71-0.92)	0.70 (0.58-0.85)	0.85 (0.71-1.02)	0.65 (0.58-0.73)	0.55 (0.46-0.66)	0.66 (0.55-0.79)	0.93 (0.88-0.99)	0.85 (0.79-0.93)	0.91 (0.81-1.02)	0.41 (0.33-0.52)	0.33 (0.21-0.51)	0.50 (0.38-0.67)
U.S.-born Central/South American (yes) (n=1,113)	1.31 (0.94-1.82)	1.52 (1.07-2.16)	0.98 (0.43-2.25)	1.19 (1.02-1.40)	1.23 (1.04-1.45)	1.02 (0.65-1.58)	0.82 (0.48-1.40)	0.96 (0.34-2.74)	0.36 (0.08-1.54)	1.26 (1.01-1.55)	1.28 (0.90-1.83)	1.66 (1.01-2.73)	0.87 (0.65-1.15)	0.73 (0.53-1.03)	0.93 (0.53-1.63)	1.10 (0.97-1.25)	1.02 (0.84-1.23)	0.80 (0.46-1.41)	0.52 (0.30-0.89)	0.23 (0.11-0.49)	1.41 (0.67-2.95)
U.S.-born Central/South American (no) (n=7,049)	0.73 (0.56-0.96)	0.65 (0.55-0.77)	0.92 (0.77-1.09)	0.86 (0.76-0.98)	0.89 (0.83-0.96)	0.99 (0.91-1.07)	0.93 (0.61-1.41)	0.61 (0.44-0.85)	0.51 (0.36-0.73)	0.72 (0.63-0.82)	0.63 (0.51-0.78)	0.83 (0.69-0.99)	0.61 (0.54-0.69)	0.53 (0.43-0.65)	0.65 (0.54-0.78)	0.90 (0.84-0.96)	0.83 (0.76-0.91)	0.91 (0.81-1.03)	0.40 (0.31-0.51)	0.34 (0.22-0.55)	0.47 (0.35-0.64)

Abbreviations: ref (reference)

Adjusted for sex (male, female), annual household income (<\$35,000, \$35,000-\$74,999, \$75,000+), educational attainment (<high school, high school graduate, some college, ≥college), unemployed/not in the labor force (yes, no), occupational class (professional/management, support services, laborers), marital/cohabitating status (married/cohabitating, divorced/widowed, single), region of residence (Northeast, Midwest, South, West), heavy alcohol consumption (≥2 drinks/day for women and ≥3 drinks/day for men), serious psychological distress (Kessler-6 psychological distress scale score ≥13), "ideal" cardiovascular health (never smoking/quit >12 months prior to interview, BMI <25 kg/m², meeting physical activity guidelines, and no prior diagnosis of dyslipidemia, hypertension, or diabetes/prediabetes), and cancer.

Note. All estimates are weighted for the survey's complex sampling design. Trouble falling asleep, trouble staying asleep, sleep medication use, and restorative sleep were measured during the survey years 2013-2017.

Supplemental Table 7. Fully-Adjusted Prevalence Ratios of Sleep Characteristics for Hispanic/Latino Heritage Groups compared to foreign-born non-Hispanic Whites, Stratified by Sex/Gender, National Health Interview Survey, 2004-2017 (N=56,372)

Group (n)	Prevalence Ratio (95% Confidence Interval)													
	Sleep Duration (reference: recommended (7-9 hours))						Sleep Quality in the Past Week							
	Very Short (≤5-hours) (n=4,115)		Short (<7-hours) (n=14,048)		Long (>9-hours) (n=1,586)		Trouble Falling Asleep (≥3 nights) (n=3,431)		Trouble Staying Asleep (≥3 nights) (n=3,520)		Non-restorative Sleep (≥3 days) (n=7,734)		Sleep Medication Use (≥3 nights) (n=1,073)	
Sex/Gender	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Foreign-born Non-Hispanic White (n=8,857)	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Mexican														
Overall (n=30,100)	1.23 (1.00-1.51)	1.00 (0.84-1.19)	1.14 (1.05-1.24)	1.09 (1.02-1.18)	1.26 (0.92-1.73)	0.90 (0.68-1.19)	0.87 (0.69-1.09)	0.97 (0.84-1.12)	0.85 (0.70-1.02)	0.87 (0.76-1.01)	1.15 (1.03-1.29)	0.99 (0.91-1.08)	1.03 (0.72-1.47)	0.85 (0.65-1.13)
U.S.-born (yes) (n=14,282)	1.31 (1.06-1.61)	1.06 (0.88-1.26)	1.23 (1.12-1.35)	1.15 (1.06-1.24)	1.20 (0.86-1.68)	0.91 (0.69-1.20)	1.00 (0.79-1.27)	1.00 (0.85-1.17)	1.03 (0.84-1.27)	0.92 (0.78-1.08)	1.17 (1.04-1.31)	0.99 (0.90-1.09)	1.06 (0.75-1.50)	0.91 (0.69-1.22)
U.S.-born (no) (n=15,818)	0.99 (0.73-1.34)	0.80 (0.62-1.02)	1.00 (0.89-1.12)	0.96 (0.87-1.07)	1.20 (0.82-1.76)	0.92 (0.63-1.34)	0.71 (0.52-0.96)	0.86 (0.71-1.05)	0.62 (0.48-0.79)	0.80 (0.66-0.98)	1.07 (0.92-1.24)	0.97 (0.87-1.08)	0.80 (0.45-1.40)	0.64 (0.42-0.99)
Puerto Rican														
Overall (n=5,077)	1.84 (1.46-2.30)	1.64 (1.36-1.99)	1.39 (1.26-1.54)	1.29 (1.17-1.42)	1.27 (0.90-1.81)	0.97 (0.71-1.33)	1.13 (0.88-1.47)	1.24 (1.05-1.47)	1.26 (0.99-1.60)	1.04 (0.88-1.22)	1.02 (0.88-1.18)	1.08 (0.97-1.20)	1.62 (1.11-2.37)	1.19 (0.92-1.56)
U.S.-born (yes) (n=2,544)	1.83 (1.37-2.45)	1.79 (1.39-2.29)	1.43 (1.26-1.62)	1.32 (1.19-1.49)	1.63 (0.99-2.70)	1.11 (0.74-1.66)	1.05 (0.75-1.47)	1.32 (1.07-1.62)	1.36 (1.00-1.85)	1.08 (0.88-1.33)	0.96 (0.80-1.16)	1.12 (0.99-1.26)	1.68 (1.08-2.63)	1.12 (0.81-1.55)
U.S.-born (no) (n=2,533)	1.77 (1.31-2.37)	1.44 (1.15-1.81)	1.33 (1.17-1.51)	1.20 (1.07-1.35)	1.07 (0.70-1.65)	0.92 (0.64-1.34)	1.24 (0.91-1.68)	1.20 (0.97-1.48)	1.15 (0.85-1.55)	1.02 (0.83-1.26)	1.10 (0.91-1.33)	1.02 (0.89-1.18)	1.74 (1.06-2.83)	1.31 (0.95-1.81)
Cuban														
Overall (n=2,518)	1.01 (0.71-1.45)	0.92 (0.68-1.26)	0.95 (0.81-1.12)	1.02 (0.88-1.17)	0.81 (0.47-1.39)	0.56 (0.35-0.91)	0.91 (0.65-1.36)	0.96 (0.72-1.30)	0.90 (0.66-1.22)	0.97 (0.74-1.28)	1.02 (0.83-1.24)	1.07 (0.88-1.28)	0.98 (0.57-1.70)	1.13 (0.75-1.69)
U.S.-born Cuban (yes) (n=559)	0.93 (0.48-1.80)	1.11 (0.71-1.74)	1.12 (0.88-1.43)	1.16 (0.93-1.44)	0.59 (0.19-1.85)	1.05 (0.43-2.52)	1.14 (0.64-2.02)	1.18 (0.76-1.83)	1.28 (0.79-2.09)	1.04 (0.63-1.73)	0.98 (0.72-1.35)	1.13 (0.86-1.49)	0.85 (0.24-2.99)	2.09 (1.08-4.01)
U.S.-born Cuban (no) (n=1,959)	1.04 (0.70-1.57)	0.85 (0.59-1.22)	0.89 (0.74-1.08)	0.96 (0.81-1.13)	0.85 (0.49-1.49)	0.47 (0.27-0.80)	0.83 (0.52-1.32)	0.86 (0.60-1.23)	0.76 (0.54-1.07)	0.94 (0.66-1.35)	1.02 (0.81-1.29)	1.05 (0.85-1.31)	1.01 (0.55-1.85)	0.87 (0.55-1.38)
Dominican														
Overall (n=1,658)	1.21 (0.81-1.78)	1.07 (0.79-1.43)	1.00 (0.83-1.21)	1.03 (0.87-1.21)	1.39 (0.81-2.40)	0.61 (0.27-1.38)	0.76 (0.47-1.23)	0.97 (0.73-1.29)	0.77 (0.47-1.27)	0.99 (0.72-1.36)	1.01 (0.80-1.26)	0.98 (0.82-1.17)	1.11 (0.54-2.29)	0.94 (0.59-1.51)
U.S.-born (yes) (n=264)	1.61 (0.78-3.30)	1.15 (0.58-2.26)	1.05 (0.73-1.52)	1.42 (1.04-1.95)	1.40 (0.32-6.12)	2.40 (0.83-6.95)	1.06 (0.52-2.17)	0.72 (0.40-1.31)	1.30 (0.51-3.34)	1.18 (0.64-2.18)	1.10 (0.72-1.67)	0.97 (0.68-1.37)	1.88 (0.57-6.19)	0.68 (0.23-1.98)
U.S.-born (no) (n=1,394)	1.09 (0.72-1.64)	1.04 (0.77-1.39)	0.99 (0.81-1.21)	0.92 (0.78-1.09)	1.42 (0.79-2.54)	0.34 (0.16-0.72)	0.67 (0.39-1.15)	1.03 (0.76-1.40)	0.65 (0.36-1.17)	0.96 (0.68-1.35)	0.99 (0.74-1.32)	0.98 (0.81-1.19)	0.96 (0.43-2.14)	0.98 (0.58-1.65)
Central/South American														

Overall (n=8,162)	1.12 (0.87-1.45)	0.91 (0.76-1.10)	1.17 (1.06-1.30)	1.02 (0.93-1.12)	0.92 (0.56-1.51)	0.68 (0.48-0.94)	0.86 (0.63-1.16)	1.01 (0.83-1.24)	0.77 (0.59-1.01)	0.99 (0.81-1.21)	1.02 (0.89-1.16)	1.03 (0.93-1.14)	0.62 (0.39-0.99)	0.73 (0.51-1.06)
U.S.-born Central/South American (yes) (n=1,113)	1.62 (1.03-2.54)	1.26 (0.86-1.84)	1.45 (1.21-1.74)	1.15 (0.95-1.38)	0.76 (0.34-1.70)	1.22 (0.64-2.30)	1.01 (0.61-1.67)	1.47 (1.09-1.99)	0.83 (0.51-1.36)	1.43 (1.03-1.99)	1.05 (0.83-1.33)	1.11 (0.93-1.31)	1.56 (0.72-3.38)	0.67 (0.31-1.45)
U.S.-born Central/South American (no) (n=7,049)	1.02 (0.78-1.35)	0.84 (0.69-1.04)	1.13 (1.02-1.25)	0.99 (0.89-1.09)	0.98 (0.58-1.67)	0.65 (0.45-0.93)	0.79 (0.57-1.09)	0.90 (0.72-1.11)	0.77 (0.58-1.02)	0.90 (0.74-1.11)	1.00 (0.86-1.15)	1.01 (0.91-1.12)	0.48 (0.29-0.79)	0.74 (0.50-1.10)

Abbreviations: ref (reference)

Adjusted for age (18-30, 31-49, 50-64, 65+ years), annual household income (<\$35,000, \$35,000-\$74,999, \$75,000+), educational attainment (<high school, high school graduate, some college, ≥college), unemployed/not in the labor force (yes, no), occupational class (professional/management, support services, laborers), marital/cohabitating status (married/cohabitating, divorced/widowed, single), region of residence (Northeast, Midwest, South, West), heavy alcohol consumption (≥2 drinks/day for women and ≥3 drinks/day for men), serious psychological distress (Kessler-6 psychological distress scale score ≥13), "ideal" cardiovascular health (never smoking/quit >12 months prior to interview, BMI <25 kg/m², meeting physical activity guidelines, and no prior diagnosis of dyslipidemia, hypertension, or diabetes/prediabetes), and cancer.

Note. All estimates are weighted for the survey's complex sampling design. Trouble falling asleep, trouble staying asleep, sleep medication use, and restorative sleep were measured during the survey years 2013-2017.

Supplemental Table 8. Fully-Adjusted Prevalence Ratios of Sleep Characteristics for Hispanic/Latino Heritage Groups compared to foreign-born non-Hispanic Whites, Stratified by Age Group, National Health Interview Survey, 2004-2017 (N=56,372)

Group (n)	Prevalence Ratio (95% Confidence Interval)																				
	Sleep Duration (reference: recommended (7-9 hours))									Sleep Quality in the Past Week											
	Very Short (≤5-hours) (n=4,115)			Short (<7-hours) (n=14,048)			Long (>9-hours) (n=1,586)			Trouble Falling Asleep (≥3 nights) (n=3,431)			Trouble Staying Asleep (≥3 nights) (n=3,520)			Non-restorative Sleep (≥3 days) (n=7,734)			Sleep Medication Use (≥3 nights) (n=1,073)		
Age (years) Group	18-30	31-49	50+	18-30	31-49	50+	18-30	31-49	50+	18-30	31-49	50+	18-30	31-49	50+	18-30	31-49	50+	18-30	31-49	50+
Foreign-born Non-Hispanic White (n=8,857)	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Mexican																					
Overall (n=30,100)	1.04 (0.76-1.44)	1.26 (1.00-1.58)	0.99 (0.83-1.19)	1.15 (0.99-1.33)	1.17 (1.08-1.28)	1.03 (0.94-1.13)	1.51 (0.96-2.38)	1.02 (0.65-1.61)	0.79 (0.60-1.04)	0.97 (0.71-1.32)	0.81 (0.67-0.98)	1.01 (0.84-1.21)	0.97 (0.67-1.40)	0.82 (0.67-1.01)	0.90 (0.78-1.04)	1.09 (0.93-1.27)	1.10 (0.99-1.21)	1.04 (0.93-1.17)	1.17 (0.59-2.32)	0.81 (0.51-1.28)	0.89 (0.70-1.15)
U.S.-born (yes) (n=14,282)	1.12 (0.80-1.58)	1.43 (1.14-1.81)	1.02 (0.86-1.21)	1.19 (1.02-1.39)	1.31 (1.20-1.43)	1.07 (0.97-1.17)	1.45 (0.93-2.26)	1.06 (0.64-1.75)	0.81 (0.61-1.07)	1.07 (0.77-1.48)	0.93 (0.75-1.15)	1.02 (0.84-1.25)	1.08 (0.73-1.60)	0.94 (0.75-1.17)	0.98 (0.84-1.16)	1.06 (0.90-1.24)	1.13 (1.01-1.26)	1.04 (0.92-1.18)	1.44 (0.70-2.95)	1.02 (0.63-1.63)	0.85 (0.66-1.11)
U.S.-born (no) (n=15,818)	0.84 (0.54-1.29)	0.97 (0.72-1.30)	0.87 (0.64-1.17)	0.96 (0.77-1.20)	1.03 (0.92-1.16)	0.94 (0.83-1.07)	1.67 (0.99-2.82)	1.04 (0.62-1.74)	0.67 (0.47-0.94)	0.76 (0.53-1.10)	0.71 (0.54-0.92)	0.91 (0.72-1.15)	0.85 (0.54-1.32)	0.65 (0.50-0.85)	0.76 (0.62-0.93)	1.12 (0.92-1.37)	1.01 (0.89-1.15)	1.01 (0.87-1.19)	NE	0.41 (0.22-0.76)	0.91 (0.60-1.39)
Puerto Rican																					
Overall (n=5,077)	1.87 (1.24-2.81)	1.92 (1.49-2.47)	1.58 (1.32-1.90)	1.44 (1.20-1.73)	1.37 (1.22-1.53)	1.27 (1.15-1.40)	1.67 (0.92-3.02)	1.30 (0.78-2.14)	0.80 (0.59-1.09)	1.01 (0.71-1.45)	1.07 (0.82-1.39)	1.45 (1.18-1.78)	1.05 (0.67-1.64)	1.21 (0.92-1.58)	1.14 (0.95-1.37)	1.03 (0.85-1.25)	1.07 (0.92-1.25)	1.13 (0.98-1.32)	1.61 (0.87-2.96)	1.20 (0.78-1.86)	1.30 (1.00-1.68)
U.S.-born (yes) (n=2,544)	1.88 (1.22-2.90)	2.08 (1.59-2.72)	1.56 (1.14-2.13)	1.40 (1.15-1.70)	1.43 (1.27-1.62)	1.27 (1.08-1.49)	1.71 (0.91-3.19)	1.51 (0.85-2.68)	0.58 (0.31-1.07)	1.11 (0.76-1.63)	1.01 (0.75-1.35)	1.61 (1.23-2.11)	1.02 (0.62-1.67)	1.28 (0.94-1.75)	1.25 (0.95-1.65)	1.06 (0.87-1.29)	1.07 (0.90-1.27)	1.17 (0.97-1.42)	1.33 (0.66-2.69)	0.99 (0.65-1.51)	1.34 (0.95-1.91)
U.S.-born (no) (n=2,533)	1.69 (0.99-2.88)	1.51 (1.04-2.20)	1.61 (1.31-1.97)	1.38 (1.05-1.79)	1.20 (1.02-1.42)	1.27 (1.14-1.42)	0.77 (0.37-1.58)	1.25 (0.68-2.32)	0.87 (0.63-1.21)	0.87 (0.49-1.53)	1.22 (0.87-1.71)	1.40 (1.11-1.78)	1.17 (0.62-2.22)	1.08 (0.76-1.53)	1.09 (0.88-1.33)	1.01 (0.75-1.37)	1.08 (0.89-1.32)	1.12 (0.94-1.33)	NE	1.59 (0.90-2.84)	1.27 (0.93-1.73)
Cuban																					
Overall (n=2,518)	0.77 (0.37-1.58)	0.99 (0.67-1.47)	1.02 (0.74-1.40)	0.77 (0.56-1.04)	1.01 (0.84-1.21)	1.03 (0.90-1.19)	NE	0.92 (0.42-2.03)	0.55 (0.37-0.81)	0.42 (0.21-0.85)	1.00 (0.67-1.51)	1.10 (0.81-1.50)	0.58 (0.26-1.31)	1.05 (0.75-1.47)	0.98 (0.76-1.27)	0.99 (0.73-1.34)	0.97 (0.80-1.18)	1.11 (0.91-1.34)	NE	1.58 (0.77-3.23)	1.06 (0.71-1.58)
U.S.-born Cuban (yes) (n=559)	0.70 (0.34-1.44)	1.11 (0.61-2.00)	1.45 (0.81-2.59)	0.97 (0.71-1.33)	1.28 (1.03-1.58)	0.97 (0.64-1.48)	NE	0.59 (0.14-2.51)	0.16 (0.02-1.23)	0.73 (0.38-1.40)	1.39 (0.85-2.27)	1.64 (0.88-3.08)	0.90 (0.42-1.91)	1.37 (0.84-2.22)	1.27 (0.76-2.11)	1.08 (0.78-1.50)	1.05 (0.79-1.38)	0.98 (0.57-1.68)	NE	2.92 (1.39-6.12)	0.75 (0.31-1.83)

U.S.-born Cuban (no) (n=1,959)	0.80 (0.28-2.27)	0.94 (0.60-1.49)	0.97 (0.69-1.37)	0.49 (0.29-0.82)	0.88 (0.68-1.13)	1.04 (0.90-1.20)	NE	1.06 (0.43-2.64)	0.57 (0.39-0.84)	0.08 (0.01-0.61)	0.79 (0.44-1.39)	1.04 (0.76-1.43)	0.15 (0.03-0.72)	0.89 (0.55-1.44)	0.95 (0.71-1.27)	0.87 (0.55-1.36)	0.93 (0.74-1.18)	1.14 (0.93-1.40)	NE	0.75 (0.25-2.23)	1.10 (0.72-1.69)
Dominican																					
Overall (n=1,658)	0.81 (0.44-1.48)	1.18 (0.77-1.79)	1.29 (0.98-1.70)	0.96 (0.69-1.34)	1.08 (0.89-1.32)	1.02 (0.87-1.21)	NE	0.92 (0.36-2.39)	0.41 (0.19-0.85)	0.80 (0.46-1.39)	0.92 (0.58-1.44)	1.00 (0.72-1.39)	1.22 (0.63-2.35)	0.74 (0.44-1.24)	1.00 (0.72-1.39)	0.96 (0.72-1.29)	0.86 (0.68-1.08)	1.25 (1.01-1.56)	NE	0.58 (0.28-1.23)	1.33 (0.79-2.23)
U.S.-born (yes) (n=264)	0.80 (0.35-1.84)	2.84 (1.64-4.93)	1.80 (0.42-7.78)	0.98 (0.65-1.49)	1.70 (1.34-2.16)	0.97 (0.43-2.17)	NE	4.28 (1.23-14.91)	NE	0.81 (0.41-1.63)	1.09 (0.52-2.33)	0.91 (0.14-6.03)	1.22 (0.62-2.39)	1.53 (0.77-3.03)	0.60 (0.84-4.34)	0.93 (0.64-1.37)	1.11 (0.79-1.57)	1.74 (0.73-4.13)	NE	2.01 (0.76-5.34)	0.69 (0.08-6.05)
U.S.-born (no) (n=1,394)	0.78 (0.40-1.54)	0.95 (0.59-1.51)	1.28 (0.97-1.68)	0.86 (0.57-1.29)	0.96 (0.76-1.21)	1.03 (0.87-1.21)	NE	0.59 (0.20-1.76)	0.43 (0.20-0.90)	0.77 (0.37-1.63)	0.86 (0.53-1.39)	1.00 (0.72-1.39)	1.16 (0.41-3.31)	0.60 (0.34-1.06)	1.01 (0.73-1.41)	1.04 (0.70-1.54)	0.80 (0.62-1.04)	1.24 (0.98-1.57)	NE	0.31 (0.13-0.73)	1.36 (0.80-2.30)
Central/South American																					
Overall (n=8,162)	1.02 (0.69-1.51)	1.12 (0.87-1.46)	0.88 (0.71-1.10)	1.13 (0.94-1.36)	1.17 (1.06-1.29)	0.98 (0.89-1.10)	1.44 (0.84-2.46)	0.91 (0.54-1.54)	0.42 (0.26-0.67)	0.83 (0.59-1.17)	1.04 (0.78-1.39)	0.94 (0.75-1.17)	1.07 (0.72-1.59)	0.84 (0.65-1.09)	0.83 (0.67-1.02)	1.06 (0.89-1.25)	1.03 (0.92-1.15)	1.02 (0.88-1.18)	NE	0.65 (0.38-1.12)	0.65 (0.46-0.90)
U.S.-born Central/South American (yes) (n=1,113)	1.25 (0.79-1.98)	1.80 (1.22-2.65)	0.86 (0.37-1.97)	1.28 (1.03-1.59)	1.33 (1.11-1.58)	0.96 (0.62-1.49)	1.22 (0.67-2.23)	1.14 (0.38-3.41)	0.28 (0.06-1.27)	1.04 (0.71-1.52)	1.40 (0.97-2.04)	1.65 (1.03-2.64)	1.21 (0.77-1.90)	0.99 (0.68-1.44)	1.10 (0.65-1.87)	1.08 (0.90-1.31)	1.10 (0.90-1.33)	0.81 (0.47-1.40)	NE	0.31 (0.13-0.69)	1.79 (0.86-3.70)
U.S.-born Central/South American (no) (n=7,049)	0.89 (0.57-1.40)	1.00 (0.75-1.33)	0.88 (0.71-1.10)	1.02 (0.82-1.26)	1.14 (1.02-1.27)	0.98 (0.88-1.09)	NE	0.92 (0.53-1.61)	0.42 (0.26-0.68)	0.67 (0.44-1.03)	0.94 (0.68-1.32)	0.90 (0.71-1.13)	0.95 (0.59-1.52)	0.83 (0.62-1.11)	0.81 (0.65-1.01)	1.00 (0.81-1.24)	1.01 (0.90-1.13)	1.03 (0.89-1.19)	NE	0.75 (0.41-1.38)	0.60 (0.42-0.84)

Abbreviations: ref (reference)

Adjusted for sex (male, female), annual household income (<\$35,000, \$35,000-\$74,999, \$75,000+), educational attainment (<high school, high school graduate, some college, ≥college), unemployed/not in the labor force (yes, no), occupational class (professional/management, support services, laborers), marital/cohabitating status (married/cohabitating, divorced/widowed, single), region of residence (Northeast, Midwest, South, West), heavy alcohol consumption (≥2 drinks/day for women and ≥3 drinks/day for men), serious psychological distress (Kessler-6 psychological distress scale score ≥13), “ideal” cardiovascular health (never smoking/quit >12 months prior to interview, BMI <25 kg/m², meeting physical activity guidelines, and no prior diagnosis of dyslipidemia, hypertension, or diabetes/prediabetes), and cancer.

Note. All estimates are weighted for the survey’s complex sampling design. Trouble falling asleep, trouble staying asleep, sleep medication use, and restorative sleep were measured during the survey years 2013-2017.

Supplemental Table 9. Fully-Adjusted Prevalence Ratios of Sleep Characteristics for Hispanic/Latino Heritage Groups compared to US-born non-Hispanic Whites by Language Acculturation Status*, Stratified by Sex/Gender, National Health Interview Survey, 2004-2017 (N=245,812)

Group (n)	Prevalence Ratio (95% Confidence Interval)													
	Sleep Duration (reference: recommended (7-9 hours))						Sleep Quality in the Past Week							
	Very Short (≤5-hours) (n=17,112)		Short (<7-hours) (n=61,091)		Long (>9-hours) (n=7,604)		Trouble Falling Asleep (≥3 nights) (n=18,607)		Trouble Staying Asleep (≥3 nights) (n=26,493)		Non-restorative Sleep (≥3 days) (n=38,369)		Sleep Medication Use (≥3 nights) (n=10,024)	
Sex/Gender	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
U.S.-born Non-Hispanic White (n=198,297)	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
Mexican														
U.S.-born (yes) (n=14,282)	1.02 (0.91-1.14)	1.05 (0.96-1.15)	1.01 (0.96-1.07)	1.07 (1.03-1.12)	1.09 (0.91-1.31)	0.88 (0.75-1.03)	0.92 (0.85-0.99)	0.92 (0.84-1.00)	0.80 (0.74-0.86)	0.77 (0.71-0.85)	0.97 (0.93-1.01)	0.95 (0.90-1.00)	0.66 (0.58-0.76)	0.59 (0.50-0.70)
High Acculturation (n=13,075)	1.05 (0.93-1.19)	1.08 (0.98-1.19)	1.04 (0.98-1.10)	1.09 (1.05-1.14)	1.12 (0.93-1.36)	0.86 (0.74-1.01)	0.94 (0.84-1.06)	0.95 (0.87-1.03)	0.86 (0.76-0.97)	0.80 (0.73-0.88)	1.01 (0.95-1.08)	0.97 (0.92-1.02)	0.78 (0.62-0.99)	0.63 (0.53-0.75)
Medium/Low Acculturation (n=1,188)	0.75 (0.56-1.01)	0.79 (0.58-1.09)	0.71 (0.60-0.85)	0.84 (0.70-1.00)	0.89 (0.58-1.38)	0.97 (0.60-1.59)	0.63 (0.40-1.00)	0.59 (0.43-0.83)	0.46 (0.28-0.74)	0.43 (0.29-0.64)	0.82 (0.64-1.04)	0.75 (0.61-0.92)	0.56 (0.29-1.08)	0.15 (0.06-0.40)
U.S.-born (no) (n=15,818)	0.47 (0.40-0.54)	0.60 (0.52-0.69)	0.66 (0.62-0.70)	0.77 (0.71-0.82)	0.83 (0.70-0.99)	0.65 (0.54-0.78)	0.60 (0.55-0.66)	0.64 (0.58-0.71)	0.51 (0.46-0.55)	0.55 (0.49-0.62)	0.82 (0.77-0.86)	0.85 (0.80-0.90)	0.36 (0.30-0.44)	0.34 (0.27-0.42)
High Acculturation (n=6,141)	0.59 (0.50-0.70)	0.69 (0.58-0.83)	0.76 (0.71-0.82)	0.81 (0.74-0.88)	0.88 (0.68-1.14)	0.69 (0.52-0.91)	0.57 (0.46-0.69)	0.70 (0.61-0.81)	0.47 (0.39-0.58)	0.59 (0.50-0.69)	0.83 (0.75-0.92)	0.90 (0.83-0.98)	0.30 (0.19-0.47)	0.40 (0.29-0.57)
Medium/Low Acculturation (n=9,666)	0.38 (0.31-0.46)	0.54 (0.45-0.64)	0.57 (0.53-0.62)	0.73 (0.66-0.80)	0.81 (0.66-1.00)	0.61 (0.49-0.75)	0.53 (0.43-0.66)	0.58 (0.50-0.67)	0.44 (0.36-0.53)	0.52 (0.44-0.60)	0.71 (0.64-0.79)	0.78 (0.72-0.85)	0.45 (0.31-0.67)	0.29 (0.21-0.39)
Puerto Rican														
U.S.-born (yes) (n=2,544)	1.33 (1.08-1.63)	1.53 (1.30-1.81)	1.21 (1.11-1.33)	1.24 (1.15-1.35)	1.26 (0.89-1.77)	0.94 (0.66-1.33)	1.04 (0.90-1.21)	1.14 (0.98-1.33)	0.97 (0.85-1.11)	0.91 (0.78-1.05)	1.00 (0.92-1.09)	1.10 (1.01-1.20)	0.96 (0.76-1.19)	0.97 (0.73-1.30)
High Acculturation (n=2,359)	1.36 (1.11-1.68)	1.59 (1.34-1.89)	1.22 (1.11-1.34)	1.26 (1.16-1.37)	1.32 (0.93-1.86)	0.98 (0.68-1.40)	0.93 (0.72-1.21)	1.17 (1.00-1.38)	1.08 (0.84-1.39)	0.92 (0.79-1.07)	0.92 (0.79-1.06)	1.11 (1.02-1.22)	1.00 (0.69-1.44)	1.00 (0.74-1.35)
Medium/Low Acculturation (n=184)	0.79 (0.36-1.74)	0.89 (0.56-1.42)	1.17 (0.83-1.65)	1.01 (0.73-1.40)	0.48 (0.10-2.30)	0.51 (0.19-1.31)	0.72 (0.32-1.66)	0.61 (0.32-1.16)	0.74 (0.35-1.54)	0.75 (0.39-1.44)	0.36 (0.16-0.81)	0.87 (0.55-1.39)	0.52 (0.10-2.77)	0.60 (0.17-2.10)
U.S.-born (no) (n=2,533)	1.29 (1.03-1.61)	1.36 (1.17-1.58)	1.15 (1.04-1.27)	1.16 (1.06-1.26)	0.89 (0.63-1.26)	0.96 (0.72-1.28)	1.05 (0.91-1.21)	1.01 (0.86-1.18)	0.84 (0.73-0.97)	0.82 (0.70-0.97)	0.95 (0.86-1.04)	0.96 (0.85-1.08)	1.01 (0.83-1.24)	1.08 (0.86-1.35)
High Acculturation (n=1,773)	1.48 (1.16-1.90)	1.37 (1.14-1.64)	1.14 (1.00-1.30)	1.20 (1.09-1.33)	1.06 (0.72-1.57)	0.97 (0.69-1.37)	1.14 (0.85-1.52)	1.06 (0.88-1.28)	0.98 (0.76-1.26)	0.87 (0.72-1.05)	1.02 (0.88-1.20)	1.00 (0.87-1.14)	0.97 (0.62-1.52)	1.14 (0.88-1.48)

Medium/Low Acculturation (n=755)	0.81 (0.48-1.37)	1.32 (1.07-1.64)	1.15 (0.95-1.40)	1.05 (0.91-1.22)	0.57 (0.30-1.07)	0.96 (0.60-1.53)	1.16 (0.76-1.77)	0.86 (0.64-1.16)	0.60 (0.38-0.95)	0.69 (0.50-0.95)	0.73 (0.53-1.01)	0.84 (0.69-1.02)	0.87 (0.41-1.86)	0.92 (0.63-1.36)
Cuban														
U.S.-born Cuban (yes) (n=559)	0.78 (0.44-1.39)	1.08 (0.74-1.58)	1.01 (0.81-1.25)	1.08 (0.89-1.31)	0.49 (0.18-1.29)	0.95 (0.39-2.31)	0.95 (0.70-1.28)	0.96 (0.66-1.39)	0.92 (0.69-1.23)	0.83 (0.53-1.31)	0.96 (0.80-1.16)	1.07 (0.86-1.34)	0.95 (0.54-1.66)	1.37 (0.78-2.42)
High Acculturation (n=440)	0.89 (0.49-1.62)	1.16 (0.79-1.71)	1.08 (0.86-1.35)	1.05 (0.85-1.30)	0.29 (0.09-0.96)	1.06 (0.38-2.97)	1.34 (0.85-2.10)	1.17 (0.82-1.67)	1.24 (0.82-1.88)	0.84 (0.54-1.29)	0.93 (0.68-1.28)	1.03 (0.78-1.36)	0.53 (0.17-1.64)	1.30 (0.71-2.38)
Medium/Low Acculturation (n=119)	0.37 (0.11-1.22)	0.72 (0.21-2.46)	0.69 (0.40-1.20)	1.21 (0.71-2.06)	0.88 (0.20-3.91)	0.63 (0.16-2.51)	NE	0.27 (0.06-1.23)	0.28 (0.06-1.40)	0.82 (0.29-2.28)	0.76 (0.38-1.51)	1.21 (0.90-1.62)	0.25 (0.03-1.90)	1.65 (0.39-6.94)
U.S.-born Cuban (no) (n=1,959)	0.75 (0.56-1.00)	0.90 (0.69-1.18)	0.78 (0.67-0.91)	0.94 (0.82-1.07)	0.78 (0.57-1.05)	0.55 (0.35-0.87)	0.69 (0.52-0.92)	0.71 (0.52-0.98)	0.61 (0.48-0.78)	0.68 (0.50-0.94)	0.87 (0.77-0.97)	0.95 (0.80-1.13)	0.59 (0.42-0.83)	0.60 (0.40-0.89)
High Acculturation (n=571)	0.90 (0.54-1.51)	1.13 (0.70-1.82)	0.91 (0.68-1.22)	1.09 (0.89-1.34)	0.87 (0.48-1.58)	0.63 (0.30-1.34)	1.08 (0.64-1.82)	1.04 (0.68-1.59)	0.58 (0.36-0.91)	0.95 (0.62-1.46)	0.75 (0.53-1.04)	0.89 (0.65-1.23)	0.93 (0.43-2.01)	0.61 (0.30-1.25)
Medium/Low Acculturation (n=1,386)	0.68 (0.50-0.93)	0.82 (0.58-1.16)	0.71 (0.61-0.84)	0.87 (0.74-1.03)	0.71 (0.49-1.01)	0.53 (0.30-0.94)	0.52 (0.31-0.89)	0.64 (0.42-0.95)	0.56 (0.39-0.80)	0.61 (0.40-0.92)	0.84 (0.68-1.04)	1.00 (0.84-1.21)	0.46 (0.26-0.80)	0.60 (0.37-0.98)
Dominican														
U.S.-born (yes) (n=264)	1.13 (0.60-2.11)	1.02 (0.58-1.79)	0.86 (0.60-1.23)	1.32 (0.98-1.77)	0.96 (0.30-3.07)	1.35 (0.48-3.80)	0.73 (0.48-1.12)	0.62 (0.36-1.07)	0.97 (0.65-1.44)	0.91 (0.53-1.57)	0.99 (0.78-1.26)	0.93 (0.68-1.29)	0.64 (0.31-1.30)	0.57 (0.23-1.43)
High Acculturation (n=208)	1.30 (0.67-2.55)	1.00 (0.54-1.08)	0.94 (0.64-1.38)	1.38 (1.00-1.90)	1.32 (0.40-4.36)	1.36 (0.42-4.40)	1.01 (0.58-1.76)	0.62 (0.34-1.15)	1.12 (0.47-2.67)	0.79 (0.41-1.50)	1.10 (0.76-1.60)	0.90 (0.63-1.30)	0.80 (0.26-2.47)	0.56 (0.20-1.56)
Medium/Low Acculturation (n=56)	0.63 (0.12-3.25)	1.11 (0.34-3.57)	0.58 (0.23-1.47)	1.05 (0.56-1.97)	0.23 (0.03-1.74)	1.30 (0.19-8.81)	NE	0.62 (0.22-1.79)	NE	1.42 (0.69-2.94)	0.47 (0.11-1.96)	1.06 (0.61-1.84)	NE	0.62 (0.08-4.72)
U.S.-born (no) (n=1,394)	0.74 (0.52-1.04)	0.95 (0.78-1.15)	0.82 (0.69-0.97)	0.92 (0.81-1.04)	1.08 (0.63-1.85)	0.29 (0.15-0.53)	0.78 (0.63-0.97)	0.88 (0.69-1.12)	0.62 (0.49-0.80)	0.74 (0.57-0.97)	0.92 (0.79-1.08)	0.96 (0.83-1.13)	0.86 (0.55-1.34)	1.00 (0.61-1.63)
High Acculturation (n=594)	0.89 (0.56-1.39)	0.88 (0.63-1.24)	0.94 (0.75-1.18)	0.92 (0.76-1.11)	1.51 (0.67-3.40)	0.15 (0.06-0.35)	0.79 (0.44-1.40)	0.81 (0.54-1.22)	0.62 (0.31-1.21)	0.73 (0.48-1.11)	0.72 (0.51-1.00)	0.96 (0.75-1.23)	0.67 (0.21-2.10)	0.85 (0.43-1.70)
Medium/Low Acculturation (n=800)	0.63 (0.38-1.03)	0.98 (0.76-1.26)	0.72 (0.55-0.93)	0.91 (0.79-1.06)	0.90 (0.41-1.94)	0.36 (0.17-0.74)	0.34 (0.18-0.65)	0.94 (0.71-1.25)	0.22 (0.11-0.44)	0.76 (0.56-1.03)	0.96 (0.67-1.37)	0.97 (0.78-1.21)	0.38 (0.12-1.13)	1.13 (0.60-2.11)
Central/South American														
U.S.-born (yes) (n=1,113)	1.31 (0.92-1.87)	1.31 (0.96-1.77)	1.25 (1.08-1.45)	1.10 (0.92-1.30)	0.64 (0.35-1.16)	0.95 (0.52-1.74)	1.21 (0.96-1.53)	1.40 (1.06-1.86)	0.97 (0.73-1.30)	1.13 (0.80-1.61)	1.05 (0.92-1.20)	1.13 (0.97-1.32)	0.64 (0.38-1.10)	0.47 (0.24-0.94)
High Acculturation (n=994)	1.40 (0.97-2.04)	1.42 (1.04-1.94)	1.30 (1.11-1.51)	1.15 (0.97-1.36)	0.48 (0.22-1.07)	1.03 (0.53-2.00)	0.97 (0.64-1.47)	1.30 (1.04-1.63)	0.71 (0.46-1.10)	1.06 (0.82-1.37)	0.99 (0.80-1.23)	1.14 (1.00-1.30)	1.01 (0.45-2.27)	0.44 (0.21-0.90)
Medium/Low Acculturation	0.73 (0.29-1.83)	0.61 (0.22-1.69)	0.92 (0.51-1.64)	0.74 (0.36-1.52)	1.26 (0.51-3.12)	0.52 (0.11-2.62)	0.86 (0.27-2.75)	1.90 (0.87-4.12)	0.89 (0.24-3.25)	1.50 (0.48-4.75)	0.60 (0.28-1.32)	1.07 (0.61-1.87)	0.43 (0.06-3.19)	0.66 (0.11-3.91)

(n=119)														
U.S.-born (no) (n=7,049)	0.64 (0.54-0.76)	0.80 (0.70-0.93)	0.88 (0.82-0.94)	0.92 (0.85-0.98)	0.66 (0.47-0.94)	0.67 (0.52-0.87)	0.69 (0.60-0.78)	0.71 (0.61-0.83)	0.60 (0.53-0.68)	0.66 (0.57-0.77)	0.85 (0.80-0.91)	0.92 (0.85-0.99)	0.40 (0.31-0.51)	0.46 (0.34-0.62)
High Acculturation (n=3,366)	0.72 (0.57-0.91)	0.79 (0.63-0.98)	0.94 (0.85-1.04)	0.91 (0.82-1.02)	0.77 (0.50-1.17)	0.76 (0.53-1.11)	0.66 (0.50-0.88)	0.80 (0.64-0.98)	0.57 (0.42-0.76)	0.74 (0.61-0.89)	0.75 (0.65-0.86)	0.96 (0.87-1.06)	0.38 (0.22-0.67)	0.52 (0.36-0.76)
Medium/Low Acculturation (n=3,664)	0.56 (0.45-0.72)	0.82 (0.68-0.98)	0.80 (0.72-0.89)	0.92 (0.84-1.00)	0.58 (0.34-0.98)	0.59 (0.42-0.84)	0.60 (0.43-0.84)	0.63 (0.51-0.79)	0.44 (0.32-0.61)	0.59 (0.47-0.74)	0.80 (0.67-0.94)	0.87 (0.77-0.97)	0.19 (0.09-0.38)	0.40 (0.26-0.63)

Abbreviations: ref (reference); NE (non-estimable)

* Language acculturation categories include high (English only interview) and medium/low (English and Spanish interview or Spanish only interview).

Adjusted for age (18-30, 31-49, 50-64, 65+ years), annual household income (<\$35,000, \$35,000-\$74,999, \$75,000+), educational attainment (<high school, high school graduate, some college, ≥college), unemployed/not in the labor force (yes, no), occupational class (professional/management, support services, laborers), marital/cohabitating status (married/cohabitating, divorced/widowed, single), region of residence (Northeast, Midwest, South, West), heavy alcohol consumption (≥2 drinks/day for women and ≥3 drinks/day for men), serious psychological distress (Kessler-6 psychological distress scale score ≥13), “ideal” cardiovascular health (never smoking/quit >12 months prior to interview, BMI <25 kg/m², meeting physical activity guidelines, and no prior diagnosis of dyslipidemia, hypertension, or diabetes/prediabetes), and cancer.

Note. All estimates are weighted for the survey’s complex sampling design. Trouble falling asleep, trouble staying asleep, sleep medication use, and restorative sleep were measured during the survey years 2013-2017.

Supplemental Table 10. Fully-Adjusted Prevalence Ratios of Sleep Characteristics for Hispanic/Latino Heritage Groups compared to non-Hispanic Whites by Language Acculturation Status*, Stratified by Age Group, National Health Interview Survey, 2004-2017 (N=245,812)

Group (n)	Prevalence Ratio (95% Confidence Interval)																				
	Sleep Duration (reference: recommended (7-9 hours))									Sleep Quality in the Past Week											
	Very Short (≤5-hours) (n=17,112)			Short (<7-hours) (n=61,091)			Long (>9-hours) (n=7,604)			Trouble Falling Asleep (≥3 nights) (n=18,607)			Trouble Staying Asleep (≥3 nights) (n=26,493)			Non-restorative Sleep (≥3 days) (n=38,369)			Sleep Medication Use (≥3 nights) (n=10,024)		
Age (years) Group	18-30	31-49	50+	18-30	31-49	50+	18-30	31-49	50+	18-30	31-49	50+	18-30	31-49	50+	18-30	31-49	50+	18-30	31-49	50+
U.S.-born Non-Hispanic White (n=198,297)	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Mexican																					
U.S.-born (yes) (n=14,282)	1.03 (0.90-1.18)	1.03 (0.91-1.15)	1.14 (1.01-1.27)	1.00 (0.93-1.06)	1.09 (1.03-1.15)	1.06 (0.99-1.13)	1.04 (0.85-1.26)	0.85 (0.67-1.09)	0.96 (0.81-1.13)	0.96 (0.89-1.03)	0.81 (0.73-0.91)	1.01 (0.90-1.15)	0.77 (0.71-0.82)	0.73 (0.65-0.82)	0.84 (0.75-0.95)	1.02 (0.98-1.06)	0.96 (0.91-1.03)	1.00 (0.92-1.09)	0.61 (0.53-0.70)	0.64 (0.51-0.80)	0.64 (0.54-0.76)
High Acculturation (n=13,075)	1.07 (0.93-1.23)	1.03 (0.92-1.16)	1.18 (1.05-1.33)	1.04 (0.97-1.11)	1.09 (1.04-1.15)	1.09 (1.02-1.17)	1.03 (0.84-1.27)	0.86 (0.67-1.10)	0.98 (0.82-1.17)	1.02 (0.89-1.17)	0.83 (0.74-0.94)	1.03 (0.91-1.17)	0.89 (0.76-1.04)	0.76 (0.67-0.85)	0.87 (0.77-0.97)	1.02 (0.94-1.09)	0.97 (0.91-1.03)	1.03 (0.94-1.13)	0.87 (0.60-1.25)	0.65 (0.52-0.83)	0.65 (0.54-0.77)
Medium/Low Acculturation (n=1,188)	0.77 (0.54-1.10)	0.95 (0.67-1.35)	0.69 (0.42-1.14)	0.72 (0.59-0.88)	1.00 (0.83-1.21)	0.64 (0.49-0.86)	1.00 (0.62-1.60)	0.79 (0.30-2.11)	0.83 (0.59-1.15)	0.64 (0.41-0.99)	0.49 (0.28-0.88)	0.78 (0.51-1.18)	0.47 (0.27-0.81)	0.31 (0.16-0.59)	0.57 (0.38-0.84)	0.82 (0.67-1.01)	0.88 (0.71-1.09)	0.61 (0.41-0.89)	0.08 (0.01-0.60)	0.38 (0.12-1.19)	0.58 (0.30-1.10)
U.S.-born (no) (n=15,818)	0.43 (0.34-0.54)	0.48 (0.41-0.55)	0.82 (0.68-0.98)	0.67 (0.61-0.74)	0.69 (0.65-0.74)	0.86 (0.79-0.93)	0.81 (0.62-1.06)	0.65 (0.51-0.82)	0.76 (0.63-0.92)	0.63 (0.58-0.69)	0.54 (0.46-0.62)	0.80 (0.69-0.93)	0.51 (0.47-0.56)	0.46 (0.40-0.52)	0.57 (0.50-0.65)	0.86 (0.82-0.91)	0.79 (0.74-0.85)	0.85 (0.77-0.94)	0.36 (0.29-0.43)	0.22 (0.15-0.32)	0.57 (0.44-0.75)
High Acculturation (n=6,141)	0.62 (0.48-0.81)	0.55 (0.46-0.65)	0.98 (0.76-1.25)	0.79 (0.70-0.90)	0.76 (0.70-0.81)	0.92 (0.82-1.03)	0.80 (0.57-1.13)	0.65 (0.46-0.92)	0.91 (0.66-1.25)	0.63 (0.50-0.80)	0.57 (0.47-0.69)	0.86 (0.69-1.08)	0.68 (0.52-0.90)	0.48 (0.40-0.57)	0.57 (0.46-0.69)	1.06 (0.94-1.20)	0.83 (0.76-0.90)	0.86 (0.74-1.00)	0.22 (0.08-0.60)	0.26 (0.17-0.41)	0.58 (0.40-0.84)
Medium/Low Acculturation (n=9,666)	0.29 (0.20-0.41)	0.41 (0.34-0.49)	0.74 (0.58-0.94)	0.56 (0.48-0.65)	0.62 (0.56-0.68)	0.82 (0.74-0.91)	0.80 (0.58-1.10)	0.64 (0.49-0.83)	0.69 (0.55-0.87)	0.45 (0.32-0.64)	0.50 (0.41-0.60)	0.77 (0.64-0.93)	0.46 (0.32-0.68)	0.44 (0.37-0.52)	0.57 (0.48-0.67)	0.79 (0.66-0.96)	0.75 (0.68-0.82)	0.84 (0.74-0.95)	0.27 (0.07-1.02)	0.19 (0.12-0.31)	0.56 (0.40-0.80)
Puerto Rican																					
U.S.-born (yes) (n=2,544)	1.53 (1.19-1.96)	1.47 (1.24-1.74)	1.55 (1.17-2.06)	1.26 (1.12-1.42)	1.25 (1.15-1.36)	1.28 (1.11-1.48)	1.36 (0.97-1.91)	1.00 (0.66-1.54)	0.64 (0.35-1.19)	1.14 (0.99-1.31)	0.93 (0.75-1.14)	1.49 (1.20-1.86)	0.98 (0.85-1.12)	1.02 (0.82-1.25)	1.01 (0.79-1.28)	1.08 (0.99-1.18)	0.99 (0.87-1.12)	1.11 (0.94-1.31)	0.93 (0.74-1.17)	0.79 (0.52-1.19)	1.25 (0.92-1.69)
High Acculturation (n=2,359)	1.50 (1.17-1.94)	1.52 (1.28-1.81)	1.71 (1.28-2.30)	1.25 (1.10-1.42)	1.25 (1.14-1.36)	1.35 (1.17-1.55)	1.40 (0.99-1.97)	1.03 (0.66-1.61)	0.73 (0.40-1.34)	1.02 (0.78-1.33)	0.94 (0.75-1.17)	1.58 (1.27-1.97)	0.89 (0.62-1.28)	1.01 (0.81-1.26)	1.07 (0.84-1.36)	1.04 (0.91-1.20)	1.01 (0.89-1.14)	1.17 (0.99-1.38)	0.81 (0.41-1.60)	0.81 (0.53-1.23)	1.32 (0.97-1.78)
Medium/Low Acculturation (n=184)	1.88 (1.07-3.31)	0.64 (0.27-1.51)	0.55 (0.25-1.18)	1.38 (0.93-2.05)	1.25 (0.93-1.68)	0.71 (0.34-1.47)	0.78 (0.24-2.52)	0.75 (0.25-2.24)	NE	NE	0.73 (0.36-1.49)	0.80 (0.35-1.84)	0.44 (0.06-3.38)	1.08 (0.58-2.01)	0.54 (0.23-1.23)	0.36 (0.07-1.79)	0.68 (0.38-1.23)	0.67 (0.33-1.38)	NE	0.45 (0.09-2.24)	0.67 (0.18-2.52)
U.S.-born (no)	1.27	1.08	1.56	1.23	1.01	1.26	1.03	0.75	0.96	1.09	0.95	1.27	0.86	0.77	0.87	0.98	0.94	1.00	1.04	0.90	1.08

(n=2,533)	(0.86-1.87)	(0.85-1.38)	(1.34-1.81)	(1.01-1.51)	(0.90-1.14)	(1.16-1.37)	(0.53-2.02)	(0.47-1.18)	(0.74-1.25)	(0.94-1.25)	(0.73-1.22)	(1.06-1.51)	(0.75-0.99)	(0.58-1.02)	(0.73-1.03)	(0.88-1.08)	(0.80-1.10)	(0.87-1.14)	(0.85-1.27)	(0.60-1.35)	(0.85-1.37)
High Acculturation (n=1,773)	1.25 (0.82-1.91)	1.05 (0.78-1.42)	1.85 (1.56-2.19)	1.20 (0.94-1.53)	0.99 (0.86-1.14)	1.35 (1.23-1.48)	0.87 (0.35-2.21)	0.91 (0.57-1.43)	1.09 (0.79-1.52)	0.51 (0.28-0.93)	0.95 (0.72-1.24)	1.41 (1.14-1.74)	0.99 (0.63-1.56)	0.82 (0.60-1.12)	0.98 (0.81-1.18)	0.98 (0.71-1.35)	1.05 (0.91-1.22)	1.01 (0.86-1.20)	0.73 (0.21-2.53)	1.06 (0.69-1.64)	1.09 (0.82-1.46)
Medium/Low Acculturation (n=755)	1.31 (0.62-2.79)	1.16 (0.78-1.72)	1.04 (0.84-1.29)	1.33 (0.99-1.78)	1.08 (0.87-1.32)	1.08 (0.92-1.27)	1.48 (0.66-3.36)	0.28 (0.08-0.94)	0.76 (0.48-1.20)	1.25 (0.60-2.60)	0.93 (0.51-1.68)	0.97 (0.70-1.36)	1.19 (0.46-3.13)	0.62 (0.35-1.12)	0.61 (0.43-0.86)	0.74 (0.35-1.60)	0.62 (0.42-0.91)	0.95 (0.76-1.19)	2.05 (0.61-6.90)	0.41 (0.19-0.86)	1.05 (0.66-1.67)
Cuban																					
U.S.-born Cuban (yes) (n=559)	0.81 (0.47-1.42)	0.83 (0.49-1.41)	1.65 (0.93-2.94)	0.98 (0.76-1.26)	1.11 (0.91-1.35)	1.04 (0.69-1.57)	0.93 (0.39-2.23)	0.45 (0.14-1.41)	0.21 (0.03-1.53)	1.05 (0.78-1.41)	1.11 (0.72-1.71)	1.54 (0.85-2.78)	0.91 (0.68-1.22)	1.02 (0.68-1.53)	1.04 (0.62-1.75)	1.05 (0.87-1.26)	0.94 (0.72-1.24)	0.99 (0.61-1.63)	0.91 (0.52-1.60)	1.53 (0.83-2.80)	0.63 (0.26-1.49)
High Acculturation (n=440)	1.00 (0.56-1.77)	0.84 (0.47-1.50)	1.69 (0.92-3.10)	1.01 (0.78-1.32)	1.12 (0.90-1.39)	1.06 (0.68-1.63)	1.06 (0.37-3.04)	0.30 (0.07-1.21)	0.25 (0.04-1.82)	0.92 (0.55-1.53)	1.32 (0.86-2.03)	1.66 (0.90-3.06)	1.04 (0.57-1.90)	0.97 (0.62-1.54)	1.11 (0.64-1.90)	1.05 (0.80-1.40)	0.92 (0.67-1.26)	1.00 (0.59-1.70)	0.10 (0.01-0.76)	1.45 (0.78-2.69)	0.63 (0.24-1.64)
Medium/Low Acculturation (n=119)	0.22 (0.03-1.53)	0.81 (0.30-2.19)	1.13 (0.26-4.86)	0.87 (0.42-1.82)	1.06 (0.69-1.61)	0.85 (0.25-2.91)	0.73 (0.17-3.17)	1.02 (0.23-4.51)	NE	NE	0.30 (0.05-1.92)	0.50 (0.11-2.21)	NE	1.18 (0.51-2.74)	0.36 (0.07-2.00)	1.10 (0.63-1.93)	1.03 (0.66-1.63)	0.88 (0.27-2.90)	NE	1.84 (0.48-7.11)	0.64 (0.14-2.89)
U.S.-born Cuban (no) (n=1,959)	0.59 (0.24-1.43)	0.61 (0.44-0.84)	1.03 (0.81-1.31)	0.48 (0.31-0.75)	0.67 (0.53-0.83)	1.06 (0.95-1.18)	0.32 (0.08-1.34)	0.75 (0.42-1.34)	0.74 (0.56-0.96)	0.70 (0.53-0.93)	0.57 (0.35-0.95)	0.94 (0.74-1.20)	0.64 (0.50-0.81)	0.61 (0.41-0.90)	0.69 (0.54-0.89)	0.87 (0.78-0.97)	0.76 (0.64-0.89)	0.98 (0.83-1.16)	0.62 (0.44-0.88)	0.30 (0.13-0.66)	0.77 (0.56-1.07)
High Acculturation (n=571)	0.55 (0.16-1.91)	0.75 (0.44-1.28)	1.31 (0.82-2.09)	0.55 (0.27-1.12)	0.87 (0.67-1.11)	1.18 (0.95-1.47)	0.91 (0.21-4.01)	0.76 (0.21-2.83)	0.75 (0.45-1.26)	NE	0.38 (0.14-0.98)	1.66 (1.20-2.30)	0.20 (0.03-1.47)	0.58 (0.25-1.37)	0.85 (0.61-1.19)	0.66 (0.31-1.40)	0.65 (0.41-1.04)	0.95 (0.70-1.28)	NE	0.16 (0.02-1.11)	1.03 (0.58-1.85)
Medium/Low Acculturation (n=1,386)	0.62 (0.20-1.92)	0.55 (0.37-0.82)	0.92 (0.71-1.19)	0.47 (0.27-0.83)	0.57 (0.41-0.78)	1.00 (0.90-1.12)	0.13 (0.01-1.08)	0.75 (0.40-1.41)	0.69 (0.49-0.99)	0.11 (0.02-0.74)	0.64 (0.36-1.12)	0.62 (0.45-0.86)	0.12 (0.02-0.85)	0.62 (0.40-0.96)	0.62 (0.43-0.89)	1.01 (0.63-1.64)	0.79 (0.68-0.92)	1.00 (0.83-1.20)	NE	0.33 (0.14-0.82)	0.66 (0.47-0.94)
Dominican																					
U.S.-born (yes) (n=264)	0.63 (0.31-1.30)	2.17 (1.33-3.55)	1.65 (0.41-6.68)	0.87 (0.58-1.31)	1.62 (1.30-2.02)	0.98 (0.43-2.20)	1.32 (0.52-3.33)	2.50 (0.76-8.25)	NE	0.78 (0.50-1.21)	0.88 (0.44-1.76)	0.82 (0.12-5.75)	0.85 (0.56-1.28)	1.05 (0.55-2.02)	0.46 (0.07-3.02)	1.06 (0.82-1.36)	1.05 (0.77-1.42)	1.60 (0.70-3.67)	0.50 (0.24-1.02)	1.26 (0.52-3.02)	0.69 (0.08-5.75)
High Acculturation (n=208)	0.68 (0.31-1.51)	2.15 (1.25-3.69)	1.85 (0.46-7.43)	0.99 (0.64-1.51)	1.60 (1.27-2.02)	1.05 (0.46-2.44)	1.45 (0.52-4.00)	3.32 (1.11-9.93)	NE	0.77 (0.41-1.45)	1.04 (0.54-2.02)	0.82 (0.12-5.75)	1.15 (0.59-2.27)	0.83 (0.35-1.99)	0.46 (0.07-3.02)	0.97 (0.66-1.43)	1.06 (0.77-1.46)	1.60 (0.70-3.67)	0.23 (0.03-1.62)	1.45 (0.57-3.66)	0.69 (0.08-5.75)
Medium/Low Acculturation (n=56)	0.49 (0.11-2.16)	2.28 (0.86-6.06)	NE	0.44 (0.18-1.09)	1.72 (1.11-2.67)	0.38 (0.05-2.93)	0.97 (0.22-4.36)	NE	NE	0.44 (0.20-1.01)	0.52 (0.10-2.59)	NE	0.62 (0.25-1.50)	1.63 (0.74-3.57)	NE	0.99 (0.45-2.17)	1.00 (0.48-2.10)	NE	NE	0.78 (0.10-6.23)	NE
U.S.-born (no) (n=1,394)	0.63 (0.37-1.08)	0.76 (0.55-1.04)	1.16 (0.94-1.44)	0.75 (0.55-1.03)	0.84 (0.72-0.99)	1.02 (0.89-1.17)	1.31 (0.64-2.68)	0.33 (0.12-0.87)	0.44 (0.22-0.87)	0.80 (0.65-0.99)	0.66 (0.44-0.97)	0.90 (0.69-1.18)	0.63 (0.50-0.81)	0.41 (0.26-0.64)	0.72 (0.54-0.96)	0.96 (0.82-1.12)	0.75 (0.59-0.94)	1.11 (0.91-1.35)	0.87 (0.56-1.35)	0.20 (0.09-0.47)	1.33 (0.84-2.12)
High Acculturation (n=594)	1.08 (0.61-1.92)	0.72 (0.45-1.14)	1.23 (0.81-1.88)	1.04 (0.75-1.46)	0.90 (0.74-1.09)	1.00 (0.78-1.27)	1.12 (0.41-3.04)	0.26 (0.05-1.41)	0.72 (0.22-2.40)	0.99 (0.47-2.10)	0.77 (0.47-1.27)	0.87 (0.48-1.56)	1.41 (0.64-3.10)	0.37 (0.21-0.67)	0.93 (0.57-1.54)	1.11 (0.80-1.55)	0.65 (0.48-0.89)	1.18 (0.84-1.65)	0.06 (0.01-0.54)	0.10 (0.03-0.32)	1.65 (0.91-2.99)
Medium/Low Acculturation (n=800)	0.21 (0.08-0.56)	0.79 (0.54-1.15)	1.14 (0.85-1.51)	0.43 (0.25-0.75)	0.78 (0.63-0.97)	1.03 (0.87-1.21)	1.42 (0.56-3.61)	0.38 (0.12-1.25)	0.34 (0.15-0.76)	0.43 (0.16-1.11)	0.51 (0.27-0.95)	0.92 (0.67-1.25)	0.53 (0.18-1.56)	0.46 (0.25-0.83)	0.60 (0.41-0.90)	0.92 (0.41-2.04)	0.87 (0.62-1.23)	1.07 (0.85-1.33)	0.28 (0.04-1.91)	0.34 (0.13-0.93)	1.16 (0.60-2.26)

Central/South American																					
U.S.-born (yes) (n=1,113)	1.31 (0.94-1.82)	1.52 (1.07-2.16)	0.98 (0.43-2.25)	1.19 (1.02-1.40)	1.23 (1.04-1.45)	1.02 (0.65-1.58)	0.82 (0.48-1.40)	0.96 (0.34-2.74)	0.36 (0.08-1.54)	1.26 (1.01-1.55)	1.28 (0.90-1.83)	1.66 (1.01-2.73)	0.87 (0.65-1.15)	0.73 (0.53-1.03)	0.93 (0.53-1.63)	1.10 (0.97-1.25)	1.02 (0.84-1.23)	0.80 (0.46-1.41)	0.52 (0.30-0.89)	0.23 (0.11-0.49)	1.41 (0.67-2.95)
High Acculturation (n=994)	1.43 (1.02-2.02)	1.59 (1.10-2.30)	1.08 (0.47-2.45)	1.28 (1.09-1.49)	1.24 (1.05-1.45)	1.04 (0.66-1.64)	0.81 (0.42-1.57)	1.04 (0.36-2.98)	0.45 (0.11-1.86)	1.08 (0.81-1.46)	1.30 (0.91-1.84)	1.47 (0.85-2.55)	1.01 (0.72-1.42)	0.80 (0.57-1.12)	1.08 (0.64-1.81)	1.10 (0.94-1.29)	1.07 (0.89-1.29)	0.91 (0.53-1.56)	0.96 (0.43-2.13)	0.24 (0.11-0.53)	1.00 (0.43-2.34)
Medium/Low Acculturation (n=119)	0.74 (0.32-1.72)	0.67 (0.16-2.90)	NE	0.74 (0.45-1.22)	1.15 (0.46-2.85)	0.77 (0.16-3.66)	0.85 (0.36-1.99)	NE	NE	1.52 (0.69-3.34)	1.12 (0.18-7.07)	2.78 (1.47-5.24)	1.87 (0.86-4.05)	NE	NE	1.06 (0.66-1.70)	0.46 (0.11-1.83)	NE	0.19 (0.02-1.49)	NE	3.59 (2.21-5.82)
U.S.-born (no) (n=7,049)	0.73 (0.56-0.96)	0.65 (0.55-0.77)	0.92 (0.77-1.09)	0.86 (0.76-0.98)	0.89 (0.83-0.96)	0.99 (0.91-1.07)	0.93 (0.61-1.41)	0.61 (0.44-0.85)	0.51 (0.36-0.73)	0.72 (0.63-0.82)	0.63 (0.51-0.78)	0.83 (0.69-0.99)	0.61 (0.54-0.69)	0.53 (0.43-0.65)	0.65 (0.54-0.78)	0.90 (0.84-0.96)	0.83 (0.76-0.91)	0.91 (0.81-1.03)	0.40 (0.31-0.51)	0.34 (0.22-0.55)	0.47 (0.35-0.64)
High Acculturation (n=3,366)	0.75 (0.50-1.12)	0.70 (0.55-0.88)	0.92 (0.70-1.20)	1.00 (0.85-1.18)	0.92 (0.84-1.01)	0.94 (0.82-1.07)	1.11 (0.72-1.70)	0.74 (0.49-1.11)	0.56 (0.33-0.94)	0.75 (0.51-1.11)	0.68 (0.51-0.90)	0.87 (0.64-1.18)	1.12 (0.80-1.56)	0.59 (0.46-0.76)	0.62 (0.46-0.83)	0.96 (0.80-1.16)	0.82 (0.74-0.92)	0.91 (0.76-1.09)	0.44 (0.16-1.21)	0.39 (0.22-0.68)	0.56 (0.37-0.85)
Medium/Low Acculturation (n=3,664)	0.71 (0.49-1.03)	0.60 (0.48-0.75)	0.91 (0.73-1.12)	0.70 (0.57-0.87)	0.84 (0.76-0.93)	1.04 (0.94-1.15)	0.79 (0.41-1.52)	0.51 (0.32-0.81)	0.47 (0.30-0.75)	0.47 (0.28-0.79)	0.57 (0.42-0.79)	0.80 (0.63-1.02)	0.40 (0.21-0.74)	0.44 (0.31-0.61)	0.68 (0.55-0.86)	0.86 (0.67-1.11)	0.84 (0.73-0.95)	0.91 (0.77-1.07)	0.09 (0.02-0.46)	0.29 (0.14-0.60)	0.39 (0.25-0.60)

Abbreviations: ref (reference); NE (not estimable)

* Language acculturation categories include high (English only interview) and medium/low (English and Spanish interview or Spanish only interview).

Adjusted for sex (male, female), annual household income (<\$35,000, \$35,000-\$74,999, \$75,000+), educational attainment (<high school, high school graduate, some college, ≥college), unemployed/not in the labor force (yes, no), occupational class (professional/management, support services, laborers), marital/cohabitating status (married/cohabitating, divorced/widowed, single), region of residence (Northeast, Midwest, South, West), heavy alcohol consumption (≥2 drinks/day for women and ≥3 drinks/day for men), serious psychological distress (Kessler-6 psychological distress scale score ≥13), "ideal" cardiovascular health (never smoking/quit >12 months prior to interview, BMI <25 kg/m², meeting physical activity guidelines, and no prior diagnosis of dyslipidemia, hypertension, or diabetes/prediabetes), and cancer.

Note. All estimates are weighted for the survey's complex sampling design. Trouble falling asleep, trouble staying asleep, sleep medication use, and restorative sleep were measured during the survey years 2013-2017.

Supplemental Table 11. Fully-Adjusted Prevalence Ratios of Sleep Characteristics for (a) US-Born Hispanic/Latino Heritage Groups and (b) Foreign-born Hispanic/Latino Heritage Groups With and Without Adjustment for Time in the US Compared Foreign-born non-Hispanic Whites, National Health Interview Survey, 2004-2017 (N=56,372)

Group (n)	Prevalence Ratio (95% Confidence Interval)						
	Sleep Duration (reference: recommended (7-9 hours))			Sleep Quality			
	Very Short (≤5-hours) (n=4,115)	Short (<7-hours) (n=14,048)	Long (>9-hours) (n=1,586)	Trouble Falling Asleep (≥3 nights) (n=3,431)	Trouble Staying Asleep (≥3 nights) (n=3,520)	Non- restorative Sleep (≥3 days) (n=7,734)	Sleep Medication Use (≥3 nights) (n=1,073)
Foreign-born Non-Hispanic Whites (n=8,857)	ref	ref	ref	ref	ref	ref	ref
Mexican							
Overall (n=30,100)	1.09 (0.96-1.25)	1.14 (1.06-1.22)	1.00 (0.88-1.13)	0.92 (0.81-1.05)	0.87 (0.78-0.97)	0.97 (0.92-1.01)	0.92 (0.73-1.14)
US-born (yes) (n=14,282)	1.17 (1.02-1.33)	1.23 (1.14-1.33)	1.01 (0.88-1.15)	1.00 (0.87-1.14)	0.97 (0.86-1.10)	0.96 (0.91-1.01)	0.98 (0.78-1.23)
US-born (no) (n=15,818)							
Not Adjusted for Time in the US	0.88 (0.73-1.07)	1.00 (0.91-1.10)	1.00 (0.86-1.17)	0.78 (0.66-0.94)	0.72 (0.62-0.84)	0.98 (0.93-1.04)	0.68 (0.48-0.96)
Adjusted for Time in the US	0.88 (0.73-1.06)	0.97 (0.90-1.06)	1.05 (0.81-1.36)	0.79 (0.66-0.94)	0.72 (0.62-0.84)	1.03 (0.94-1.13)	0.69 (0.49-0.97)
Puerto Rican							
Overall (n=5,077)	1.73 (1.49-2.00)	1.30 (1.19-1.41)	1.06 (0.89-1.25)	1.19 (1.03-1.39)	1.14 (0.99-1.31)	0.95 (0.90-1.01)	1.33 (1.07-1.64)
US-born (yes) (n=2,544)	1.81 (1.51-2.17)	1.33 (1.19-1.48)	1.04 (0.82-1.33)	1.20 (0.99-1.46)	1.22 (1.02-1.46)	0.94 (0.87-1.02)	1.32 (1.01-1.73)
US-born (no) (n=2,533)							
Not Adjusted for Time in the US	1.58 (1.32-1.89)	1.23 (1.10-1.38)	1.11 (0.92-1.33)	1.22 (1.01-1.46)	1.09 (0.91-1.30)	0.95 (0.88-1.02)	1.41 (1.09-1.83)
Adjusted for Time in the US	1.56 (1.20-1.88)	1.26 (1.15-1.38)	1.02 (0.77-1.36)	1.24 (1.04-1.50)	1.11 (0.93-1.33)	1.07 (0.95-1.21)	1.40 (1.08-1.82)
Cuban							
Overall (n=2,518)	0.95 (0.75-1.20)	0.99 (0.86-1.14)	0.76 (0.60-0.98)	0.92 (0.70-1.20)	0.93 (0.76-1.15)	0.97 (0.90-1.04)	1.09 (0.77-1.55)
US-born Cuban (yes) (n=559)	1.01 (0.67-1.51)	1.20 (0.98-1.47)	0.79 (0.47-1.33)	1.14 (0.79-1.65)	1.17 (0.84-1.65)	0.91 (0.78-1.06)	1.63 (0.91-2.93)
US-born Cuban (no)							

<i>(n=1,959)</i>							
Not Adjusted for Time in the US	0.92 (0.71-1.20)	0.90 (0.77-1.06)	0.76 (0.58-1.00)	0.82 (0.59-1.14)	0.85 (0.65-1.10)	0.99 (0.91-1.06)	0.96 (0.63-1.45)
Adjusted for Time in the US	0.99 (0.76-1.28)	0.95 (0.84-1.08)	0.69 (0.48-0.99)	0.88 (0.64-1.22)	0.90 (0.69-1.17)	1.05 (0.90-1.23)	1.03 (0.68-1.57)
Dominican							
Overall (n=1,658)	1.11 (0.88-1.41)	0.98 (0.83-1.16)	0.91 (0.64-1.28)	0.88 (0.68-1.13)	0.94 (0.72-1.23)	1.02 (0.94-1.12)	1.03 (0.67-1.59)
US-born (yes) <i>(n=264)</i>	1.38 (0.80-2.38)	1.21 (0.88-1.67)	0.98 (0.49-1.99)	0.82 (0.51-1.31)	1.25 (0.81-1.93)	0.92 (0.75-1.13)	0.97 (0.42-2.20)
US-born (no) <i>(n=1,394)</i>							
Not Adjusted for Time in the US	1.05 (0.84-1.33)	0.92 (0.76-1.10)	0.89 (0.60-1.32)	0.88 (0.68-1.16)	0.87 (0.65-1.18)	1.05 (0.95-1.17)	1.02 (0.64-1.63)
Adjusted for Time in the US	1.07 (0.85-1.34)	0.96 (0.84-1.10)	0.74 (0.45-1.20)	0.90 (0.69-1.19)	0.89 (0.66-1.21)	1.00 (0.84-1.19)	1.05 (0.65-1.68)
Central/South American							
Overall (n=8,162)	0.99 (0.85-1.15)	1.13 (1.04-1.23)	0.81 (0.69-0.96)	0.94 (0.78-1.13)	0.89 (0.76-1.04)	0.98 (0.94-1.03)	0.69 (0.51-0.91)
US-born (yes) <i>(n=1,113)</i>	1.41 (1.05-1.90)	1.30 (1.10-1.53)	0.85 (0.60-1.20)	1.27 (0.96-1.67)	1.14 (0.86-1.52)	0.95 (0.85-1.06)	0.95 (0.56-1.62)
US-born (no) <i>(n=7,049)</i>							
Not Adjusted for Time in the US	0.91 (0.77-1.07)	1.10 (1.01-1.20)	0.83 (0.70-1.00)	0.84 (0.69-1.02)	0.84 (0.72-0.99)	0.99 (0.94-1.04)	0.64 (0.47-0.88)
Adjusted for Time in the US	0.94 (0.80-1.11)	1.07 (1.00-1.15)	0.78 (0.57-1.06)	0.86 (0.71-1.05)	0.87 (0.74-1.02)	1.01 (0.93-1.10)	0.66 (0.48-0.90)

Abbreviations: ref (reference)

Adjusted for age (18-30, 31-49, 50-64, 65+ years), sex (male, female), annual household income (<\$35,000, \$35,000-\$74,999, \$75,000+), educational attainment (<high school, high school graduate, some college, ≥college), unemployed/not in the labor force (yes, no), occupational class (professional/management, support services, laborers), marital/cohabitating status (married/cohabitating, divorced/widowed, single), region of residence (Northeast, Midwest, South, West), alcohol consumption (never, former, current), serious psychological distress (Kessler-6 psychological distress scale score ≥13), "ideal" cardiovascular health (never smoking/quit >12 months prior to interview, BMI <25 kg/m², meeting physical activity guidelines, and no prior diagnosis of dyslipidemia, hypertension, or diabetes/prediabetes), and cancer.

Note. All estimates are weighted for the survey's complex sampling design. Trouble falling asleep, trouble staying asleep, nonrestorative sleep, and sleep medication were measured during the survey years 2013-2017. Time in the US was defined as 15 years, 15+ years.

Supplemental Table 12. Fully-Adjusted Prevalence Ratios of Sleep Characteristics for (a) Foreign-born Whites Stratified by Time in the US, (b) US-Born Hispanic/Latino Heritage Groups, and (c) Foreign-born Hispanic/Latino Heritage Groups Stratified by Time in the US Compared to US-born non-Hispanic Whites, National Health Interview Survey, 2004-2017 (N=254,669)

Group (n)	Prevalence Ratio (95% Confidence Interval)						
	Sleep Duration (reference: recommended (7-9 hours))			Sleep Quality			
	Very Short (≤5-hours) (n=21,227)	Short (<7-hours) (n=75,139)	Long (>9-hours) (n=9,190)	Trouble Falling Asleep (≥3 nights) (n=22,038)	Trouble Staying Asleep (≥3 nights) (n=30,013)	Non- restorative Sleep (≥3 days) (n=46,103)	Sleep Medication Use (≥3 nights) (n=11,097)
US-born Non-Hispanic Whites (n=198,297)	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Foreign-born Non-Hispanic White (n=8,857)	1.03 (0.94-1.14)	1.05 (1.00-1.11)	1.11 (1.01-1.21)	1.09 (0.99-1.19)	1.27 (1.17-1.37)	0.96 (0.93-0.99)	1.34 (1.16-1.55)
Time in the US (<15 years) (n=2,169)	0.70 (0.54-0.91)	0.80 (0.71-0.90)	0.69 (0.43-1.12)	0.76 (0.58-0.98)	0.76 (0.59-0.98)	0.92 (0.81-1.06)	0.72 (0.46-1.13)
Time in the US (15+ years) (n=6,657)	1.42 (1.09-1.85)	1.25 (1.11-1.40)	1.44 (0.90-2.33)	1.32 (1.02-1.71)	1.31 (1.02-1.68)	1.08 (0.94-1.24)	1.38 (0.88-2.16)
Mexican							
Overall (n=30,100)	0.75 (0.71-0.80)	0.88 (0.85-0.92)	0.87 (0.81-0.93)	0.77 (0.72-0.82)	0.65 (0.62-0.69)	1.08 (1.05-1.11)	0.52 (0.46-0.58)
US-born (yes) (n=14,282)	1.04 (0.97-1.12)	1.04 (0.99-1.09)	0.95 (0.87-1.03)	0.92 (0.85-0.99)	0.80 (0.74-0.85)	1.02 (0.98-1.05)	0.66 (0.58-0.76)
US-born (no) (n=15,818)	0.52 (0.47-0.57)	0.72 (0.68-0.76)	0.79 (0.72-0.86)	0.59 (0.54-0.65)	0.50 (0.46-0.55)	1.17 (1.13-1.21)	0.36 (0.29-0.43)
Time in the US (<15 years) (n=5,739)	0.31 (0.27-0.37)	0.56 (0.52-0.60)	0.81 (0.68-0.98)	0.42 (0.36-0.50)	0.39 (0.32-0.47)	0.80 (0.74-0.87)	0.25 (0.15-0.42)
Time in the US (15+ years) (n=9,919)	0.63 (0.56-0.70)	0.77 (0.73-0.81)	0.70 (0.60-0.81)	0.65 (0.59-0.72)	0.53 (0.49-0.59)	0.81 (0.76-0.86)	0.39 (0.32-0.48)
Puerto Rican							
Overall (n=5,077)	1.37 (1.24-1.51)	1.15 (1.08-1.22)	0.92 (0.81-1.03)	1.05 (0.95-1.17)	0.91 (0.83-1.00)	1.01 (0.96-1.07)	0.99 (0.85-1.15)
US-born (yes) (n=2,544)	1.41 (1.24-1.60)	1.19 (1.09-1.29)	0.87 (0.73-1.04)	1.05 (0.91-1.21)	0.97 (0.85-1.12)	1.00 (0.93-1.07)	0.96 (0.77-1.21)
US-born (no) (n=2,533)	1.31 (1.15-1.49)	1.11 (1.01-1.21)	0.97 (0.83-1.12)	1.06 (0.92-1.22)	0.84 (0.73-0.97)	1.03 (0.96-1.10)	1.02 (0.83-1.25)
Time in the US (<15 years) (n=550)	1.26 (0.91-1.76)	1.17 (1.01-1.35)	1.16 (0.73-1.83)	0.77 (0.54-1.08)	0.61 (0.40-0.94)	0.82 (0.66-1.02)	0.98 (0.64-1.52)
Time in the US (15+ years) (n=1,969)	1.33	1.15	0.89	1.17	0.92	1.01	1.01

	(1.16-1.52)	(1.06-1.23)	(0.69-1.14)	(1.02-1.36)	(0.80-1.06)	(0.91-1.12)	(0.80-1.26)
Cuban							
Overall (n=2,518)	0.81 (0.68-0.96)	0.88 (0.78-1.00)	0.68 (0.56-0.82)	0.78 (0.62-0.97)	0.70 (0.58-0.83)	1.06 (1.00-1.12)	0.68 (0.53-0.89)
US-born Cuban (yes) (n=559)	0.90 (0.64-1.27)	1.07 (0.89-1.29)	0.66 (0.40-1.09)	0.97 (0.72-1.31)	0.94 (0.70-1.26)	0.97 (0.84-1.12)	0.98 (0.57-1.69)
US-born Cuban (no) (n=1,959)	0.79 (0.65-0.96)	0.82 (0.71-0.94)	0.68 (0.55-0.85)	0.71 (0.53-0.95)	0.63 (0.49-0.79)	1.09 (1.03-1.15)	0.61 (0.43-0.85)
Time in the US (<15 years) (n=634)	0.56 (0.37-0.83)	0.61 (0.51-0.74)	0.57 (0.36-0.92)	0.46 (0.26-0.81)	0.45 (0.29-0.69)	0.75 (0.61-0.93)	0.17 (0.08-0.38)
Time in the US (15+ years) (n=1,319)	1.00 (0.80-1.26)	1.00 (0.89-1.12)	0.74 (0.55-1.00)	0.92 (0.72-1.19)	0.75 (0.59-0.95)	0.97 (0.85-1.10)	0.85 (0.59-1.21)
Dominican							
Overall (n=1,658)	0.89 (0.75-1.06)	0.88 (0.77-1.01)	0.73 (0.54-0.98)	0.76 (0.62-0.92)	0.67 (0.55-0.83)	1.09 (1.00-1.20)	0.81 (0.54-1.20)
US-born (yes) (n=264)	1.08 (0.68-1.73)	1.06 (0.78-1.46)	0.77 (0.40-1.48)	0.73 (0.47-1.13)	0.97 (0.65-1.43)	0.97 (0.79-1.20)	0.64 (0.31-1.31)
US-born (no) (n=1,394)	0.85 (0.72-1.01)	0.84 (0.72-0.97)	0.72 (0.50-1.03)	0.76 (0.62-0.95)	0.61 (0.48-0.78)	1.13 (1.01-1.25)	0.84 (0.54-1.30)
Time in the US (<15 years) (n=426)	0.59 (0.40-0.88)	0.65 (0.51-0.82)	0.60 (0.29-1.24)	0.71 (0.50-1.01)	0.54 (0.34-0.85)	0.79 (0.57-1.11)	0.49 (0.18-1.29)
Time in the US (15+ years) (n=962)	1.00 (0.84-1.20)	0.99 (0.89-1.10)	0.60 (0.35-1.04)	0.79 (0.59-1.04)	0.64 (0.49-0.84)	0.98 (0.84-1.15)	0.97 (0.62-1.51)
Central/South American							
Overall (n=8,162)	0.78 (0.70-0.86)	0.96 (0.90-1.02)	0.73 (0.64-0.82)	0.76 (0.67-0.87)	0.65 (0.58-0.73)	1.09 (1.05-1.13)	0.42 (0.34-0.53)
US-born (yes) (n=1,113)	1.29 (1.02-1.63)	1.15 (1.00-1.33)	0.74 (0.55-0.99)	1.21 (0.96-1.51)	0.98 (0.73-1.30)	0.99 (0.89-1.11)	0.64 (0.38-1.10)
US-born (no) (n=7,049)	0.71 (0.64-0.79)	0.93 (0.87-0.98)	0.72 (0.64-0.82)	0.68 (0.59-0.77)	0.59 (0.53-0.67)	1.11 (1.07-1.16)	0.39 (0.30-0.50)
Time in the US (<15 years) (n=3,032)	0.55 (0.46-0.67)	0.80 (0.73-0.87)	0.74 (0.53-1.03)	0.54 (0.42-0.69)	0.43 (0.34-0.55)	0.79 (0.70-0.89)	0.30 (0.16-0.58)
Time in the US (15+ years) (n=3,989)	0.85 (0.74-0.96)	0.96 (0.91-1.02)	0.60 (0.47-0.78)	0.75 (0.64-0.87)	0.67 (0.58-0.77)	0.87 (0.80-0.95)	0.43 (0.33-0.55)

Abbreviations: ref (reference)

Adjusted for age (18-30, 31-49, 50-64, 65+ years), sex (male, female), annual household income (<\$35,000, \$35,000-\$74,999, \$75,000+), educational attainment (<high school, high school graduate, some college, ≥college), unemployed/not in the labor force (yes, no), occupational class (professional/management, support services, laborers), marital/cohabitating status (married/cohabitating, divorced/widowed, single), region of residence (Northeast, Midwest, South, West), alcohol consumption (never, former, current), serious psychological distress (Kessler-6 psychological distress scale)

score ≥ 13), "ideal" cardiovascular health (never smoking/quit >12 months prior to interview, BMI <25 kg/m², meeting physical activity guidelines, and no prior diagnosis of dyslipidemia, hypertension, or diabetes/prediabetes), and cancer.

Note. All estimates are weighted for the survey's complex sampling design. Trouble falling asleep, trouble staying asleep, nonrestorative sleep, and sleep medication were measured during the survey years 2013-2017.