Appendix A: Tables with descriptive statistics, tests of association, and p-values

Table 1. Descriptive statistics and tests of association between CES-D scores, level of self-rated health, household income level, Pittsburgh Sleep Quality Index (PSQI), and frequency of making sarcastic comments when angry in the MacArthur study of Successful Midlife Development (MIDUS). N=979

	Overall	p-value
	N = 979	
CES-D score	8.0 (7.72)	-
Self-rated health		< 0.0001
Excellent	197 (20.12%)	
Very Good	409 (41.78%)	
Good	286 (29.21%)	
Fair	73 (7.46%)	
Poor	14 (1.43%)	
PSQI score	5.90 (3.44)	< 0.0001
Household income (USD)		0.02
Low income	298 (30.44%)	
Middle income	527 (53.83%)	
High income	154 (15.73%)	
Frequency of sarcastic comments		<0.0001
Some sarcasm	369 (37.69%)	
No sarcasm	610 (62.31%)	

Note: mean (sd) reported for quantitative variables; n (%) reported for categorical variables.

Table 2. Fishers test of association between CES-D scores <16 and Self-rated health in the MacArthur study of Successful Midlife Development (MIDUS). N = 979.

	Overall	CES-D score		p-value
		No significance (<16)	Depressive symptoms (≥ 16)	
	N = 979	853 (87.13%)	126 (12.87%)	0.0005
Self-rated health				
Excellent		189 (19.31%)	8 (0.82%)	
Very Good		363 (37.08%)	46 (4.70%)	
Good		243 (24.82%)	43 (4.39%)	
Fair		50 (5.11%)	23 (2.35%)	
Poor		8 (0.82%)	6 (0.61%)	

Table 3: Results of 2 sample t test with equal variance of CES-D scores in sarcastic comment category ("no sarcasm" and "some sarcasm") in the MacArthur study of Successful Midlife Development (MIDUS). N = 979.

	Overall	CES-D Score Mean (sd)	95% Confidence Interval		p-value
			Lower	Upper	
	t = -4.72		-3.36	-1.42	<0.0001
No sarcasm		6.53 (7.22)			
Some sarcasm		8.92 (7.94)			

Table 4. Tukey pairwise comparison results of CES-D scores for household income level: low (<42,000), middle (42,000 ≤ x ≤ 125,000), and high income (>125,000) in MacArthur Study of Successful Midlife Development (MIDUS). N=979.

	Mean Difference	95% Confidence Interval		p-adjusted value
		Lower	Upper	
Middle-low	-1.53	-2.85	-0.22	0.02
High-low	-1.62	-3.43	0.18	0.09
High-middle	-0.09	-1.76	1.57	0.99

Table 5. Linear regression results of CES-D scores regressed on Pittsburgh Sleep Quality Index scores in the MacArthur Study of Successful Midlife Development (MIDUS). N = 979.

	CES-D Score β (se)	95% Confidence Interval		p-value
		Lower	Upper	
Sleep quality score	1.05 (0.06)	0.93	1.18	< 0.001
Constant	1.81 (0.44)	0.96	2.67	< 0.001
Observations	979			
R^2	0.22			
F statistic	272			< 0.001
Correlation coefficient	0.47			< 0.001

Appendix B: Bi-variate plots of CES-D scores, self-rated health levels, sarcastic comment frequency, PSQI score, and household income (USD).

Figure 1. Level of self-rated health is associated with CES-D score categories "no significance" (<16) and "depressive symptoms" ($\geq$ 16) among American adults. N = 979
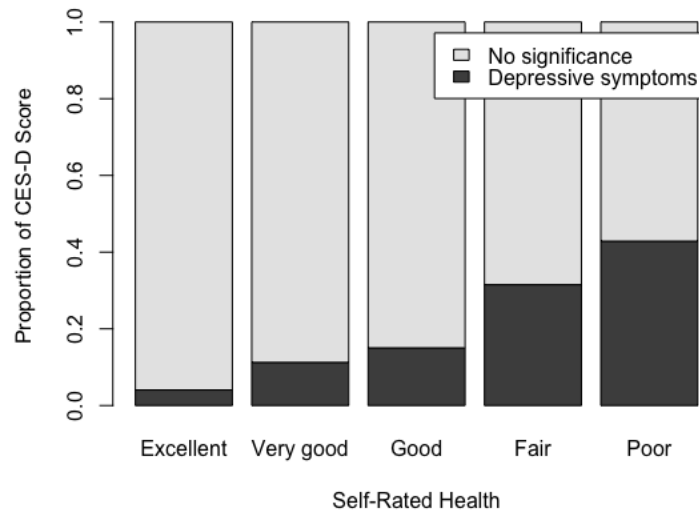

Figure 2. Category of sarcastic comment frequency is associated with CES-D score among American adults. N = 979
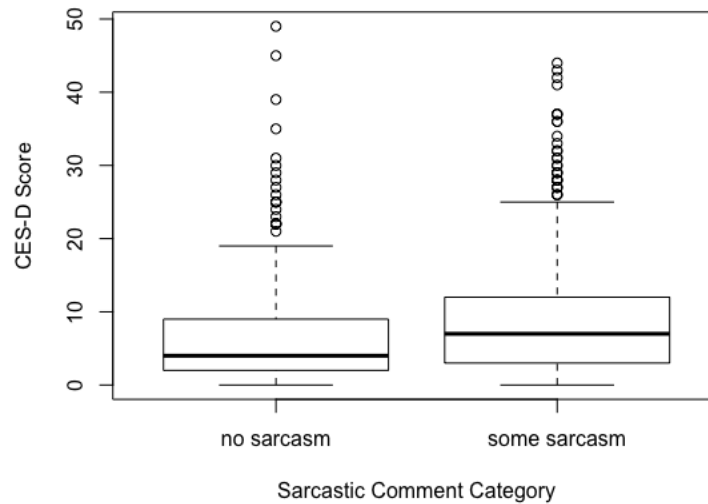
Figure 3: Household income levels "low income", "middle income" and "high income" are associated with CES-D score among American adults. N=979
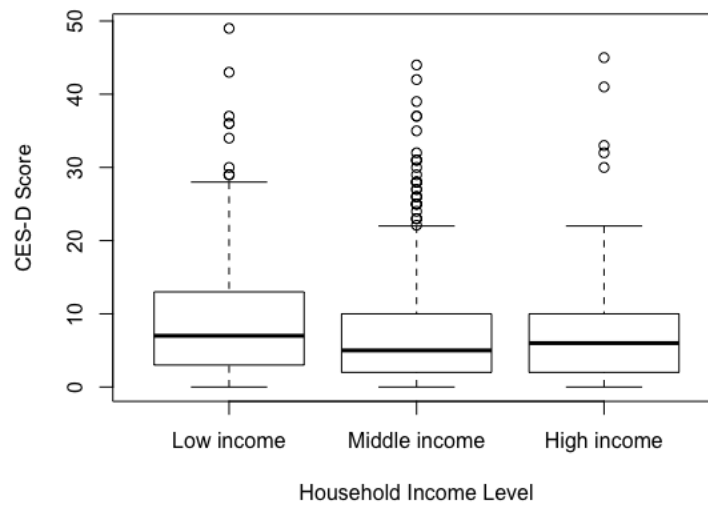

Figure 4: PSQI score is associated with CES-D score among American adults. N=979
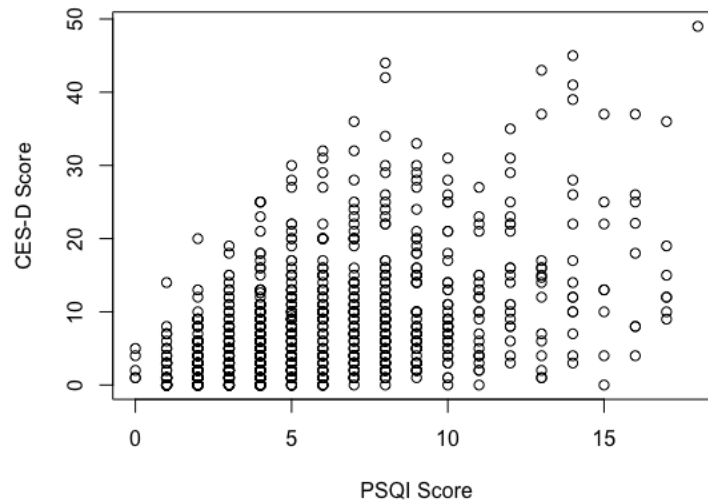
Figure 5: Tukey confidence interval plot comparing difference in mean CES-D score for levels of household income. N=979