

**Objective and Subjective Socioeconomic Gradients in Biological Health: Does Historical Context Matter?**

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**INTRO:**

- **Socioeconomic status (SES)** indicates one's access to resources and social standing
- The 2008 Great Recession is a historical event that worsened SES circumstances
- According to the Status Anxiety Hypothesis, uncertainty about one's SES increases disease and mortality risk (Layte, 2011)
- Historical differences in the relationship between SES and objective (biological) health is largely unexamined

**Hypothesis: SES will be more predictive of biological health after the 2008 Great Recession compared to before**

**METHODS**

**Data:** Two National Samples from the Midlife in the United States Study (MIDUS). One sample was recruited before the 2008 Great Recession and the other recruited after in 2012.

<b>Pre 2008-Recession</b> MIDUS 2 Biomarker Sample Years Sampled: 2004-2008 N = 841	<b>Post 2008-Recession</b> MIDUS Ref. Biomarker Sample Years Sampled: 2012-2016 N = 863
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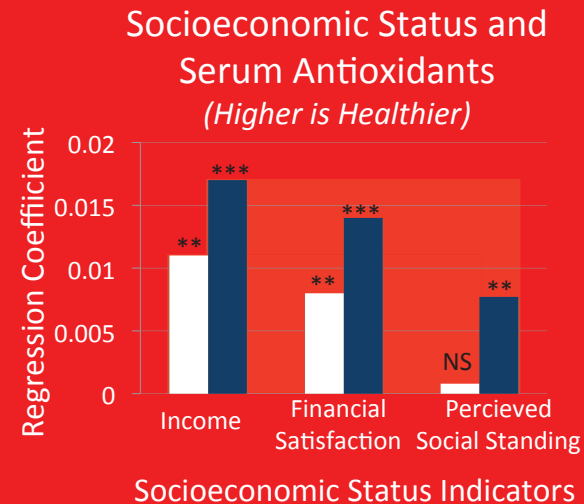
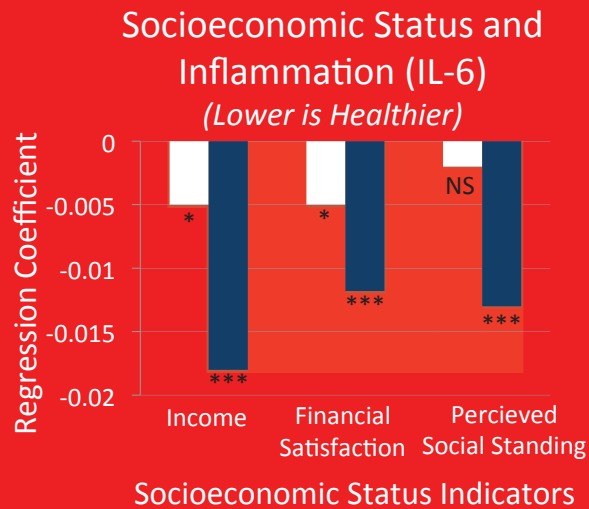
**Measures:**

- |   |                              |
|---|------------------------------|
| <b>SES Indicators</b>                   | <b>Biological Indicators</b> |
| • Income                                | • Inflammation               |
| • Financial Satisfaction                | • (Interleukin-6)            |
| • Perceived Social Standing (PSS; 1-10) | • Serum Antioxidants         |

**CONCLUSIONS**

- Historical periods of economic instability may increase salience of one's SES position
- Unstable economic periods may result in individual SES having a stronger influence on health
- Future work must investigate psychological mechanisms and interventions to reduce negative health consequences of SES

# The relationship between socioeconomic status and biological health strengthened after the 2008 Great Recession.



■ Before 2008 Recession  
■ After 2008 Recession

Note: NS = Not Significant; \*\*\*p<.001; \*\* p<.01, \*p<.05

**Analyses include the following covariates:**

Sociodemographics, Chronic Conditions, Body Mass Index, Smoking Status, Exercise, Diet, Medication Use, Multivitamin Use

**Table 1. Descriptive Statistics**

	Pre 2008 Sample (n=841)	Post 2008 Sample (n=863)
Age (M, SD)	54.9 (11.8)	50.8 (13.4)
Female (%)	56.5	52.1
Education (%)		
≤High School	30.0	17.3
Some coll.	30.5	30.5
≥ Coll. grad	39.5	52.2
Race (%)		
White	70.0	70.6
Minority	30.4	29.3
Partner/Mar. (%)	63.7	63.4
Income x 10 <sup>3</sup>	58.1 (49.2)	59.8 (48.5)
Financial Sat.	0.04 (0.78)	-0.03 (0.78)
Perc. Soc. Stand.	6.5 (1.9)	6.4 (1.8)
IL-6 (pg/mL)	1.03 (0.70)	2.75 (2.98)
Serum Antiox. (μmol/ L)	-0.02 (3.05)	-.16 (3.35)

**Table 2. Correlations among SES Indicators**

Pre 2008 Sample	Financial Satisfaction	Perc. Social Standing
Income	.417***	.187***
Financial Sat.		.335***
Post 2008 Sample	Financial Satisfaction	Perc. Social Standing
Income	.386***	.186***
Financial Sat.		.291***

Note: \*\*\*p<.001

**Financial Satisfaction Measure:**

Average of 5 items

- 1) Financial Situation Now (1 = Worst, 10 = Best)
- 2) Financial situation 10 years in the future (1 = Worst, 10 = Best)
- 3) Financial control (1 = No control at all, 10 = Very much in control)
- 4) Money to meet needs (1 = Not enough, 3 = More than enough)
- 5) How difficult is it to pay monthly bills (1 = Very, 4 = Not at all)