

# The Great Recession and Health Vulnerability: Understanding the Role of Perceived Discrimination

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## Summary

**Background:** The Great Recession of 2007-2009 is regarded as the severest global economic crisis since the 1930's<sup>1</sup>. Despite clear evidence that fluctuations in the economy were beyond the control of individuals, foreclosures, unemployment, and financial loss were nonetheless blamed on individual factors, such as laziness and poor decision-making. Further, unemployment and debt are highly stigmatized, especially in America<sup>2</sup>. Experiences of Recession hardship may therefore heighten feelings discrimination from others, becoming sources of stress that lead to psychological and physical health problems<sup>3</sup>. Few studies, however, have addressed linkages between Recession hardship, perceived discrimination, and objective health indicators, such as cardiovascular health.

**Research Aims.** First, we examined links between experiences of Recession hardships and cardiovascular (CV) health in a national sample of adults. Second, we tested the role of perceived discrimination in contributing to CV health vulnerability in the face of Recession hardship.

**Method/Results:** A national sample of adults, aged 25-75, from the Midlife in the U.S. Study (MIDUS) completed self-reports on Recession-related hardships and perceived daily discrimination (e.g., extent that you feel others think you are less smart). CV health consisted of seven metrics that were assessed in a medical interview<sup>4</sup>. Structural equation models demonstrated that Recession hardships predicted both higher perceived discrimination and worse CV health. Tests of mediation revealed that perceived discrimination partially accounted for the relationship between Recession hardship exposure and CV health.

**Conclusions:** In summary, perceptions of discrimination may play an important role in increasing CV health vulnerability in the aftermath of the Great Recession. Future work is needed to determine whether reducing perceptions of social stigma among those most vulnerable to Recession hardship can improve well-being and health outcomes.

## Study Aims

- 1) To investigate relationships between experiences of Recession hardships and cardiovascular health.
- 2) To examine perceived discrimination as a mediator of Recession hardships and cardiovascular health.

## Method

**Sample:** 817 adults (ages 25-75) from the Midlife in the United States Study (MIDUS) who were recruited in 2011-2013 and a completed biomedical health visit.



## Method Continued

### Measures:

**Recession hardships** - (18 item checklist). Participants responded "yes" if they had experienced any job/financial/housing hardships since the start of the recession in August, 2008.

**Perceived discrimination** - 9-item self-report measure of how often on a day-to-day basis they experience different types of discrimination (1 = never to 4 = often). For example, how often "people act as if they think you are not smart", how often "you are treated with less respect than other people."

**Cardiovascular health** - Ideal cardiovascular (CV) health was based on the American Heart Association's criteria for 7 metrics (including health behaviors and biological factors, see Table 1). Individuals were given points (two, one, or zero) for meeting criteria for ideal, intermediate, or poor CV health, respectively, on each of seven metrics. These points were summed to create an overall index of CV health (ranging from 0 to 14, higher values reflect better CV health).

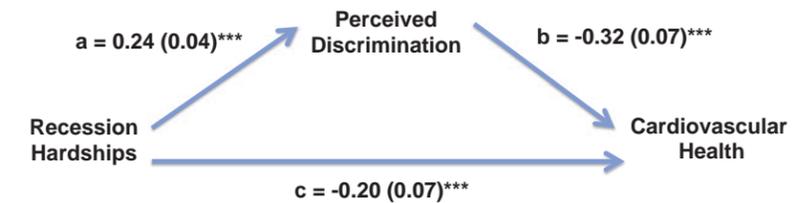
**Covariates**- Age, Gender, Educational Standing, Race

**Analysis:** Structural equation modeling tested direct and indirect effects using the Lavaan package in the R statistical platform<sup>6</sup>.

**Table 1: Sample Descriptive Statistics**

Variable	M (SD)	Range
<b>Cardiovascular (CV) Health Metric: Composite measure of seven criteria</b>	8.3 (2.4)	1-14
Percent who meet ideal CV criteria	%	
1) Blood Pressure Criteria: <120/<80 mm Hg	27.5	
2) Total Cholesterol Criteria: < 200mg/dL	54.2	
3) Glucose criteria: <100 mg/dL	58.9	
4) Physical Activity Criteria: 150 minutes moderate activity or 75 minutes vigorous activity/week	61.8	
5) BMI Criteria: <= 25	24.9	
6) Smoking Criteria: Non-smoker past year	89.5	
7) Diet Criteria: met fruit, vegetable, fish, low sugar consumption criteria	1.0	
	M (SD) or %	Range
<b>Recession Hardships</b>	3.0 (2.9)	0-14
<b>Perceived Discrimination</b>	4.2 (5.2)	0-27
<b>Sociodemographic variables (Covariates)</b>		
Educational Standing		
<=High School (%)	16.7	
Some College (%)	30.8	
>=College Degree (%)	52.5	
Age in years	50.7 (13.4)	25-76
Gender (% Female)	51.4	
Race (% non-White)	23.5	

## Results



Displayed are the standardized estimates of the direct paths between Recession hardship, perceived discrimination and cardiovascular health.

### Aim 1 Results: Recession hardship predicted CV Health.

More widespread recession hardship predicted worse CV health. ( $B = -0.27$ ,  $SE = 0.07$ ,  $p < .001$ ,  $95\% CI [-0.41, -0.13]$ ).

### Aim 2 Results: Perceived discrimination mediated the association between Recession hardship and CV health outcomes.

Table 2 shows the estimates for the total effect, the mediated effect and the percentage of the total effect that is accounted by the mediated effect. Perceived discrimination accounts for 29% of the total effect.

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

**Table 2: Mediation Results**

	Cardiovascular Health	
	B (SE)	95% CI
Total Effect ( $a*b + c$ )	-0.27 (0.07)***	(-0.41, -0.13)
Mediated Effect ( $a*b$ )	-0.08 (0.02)***	(-0.12, -0.04)

## Conclusions

- ◆ More widespread exposure to Recession hardships predicted more compromised (less ideal) cardiovascular (CV) health
- ◆ Perceived discrimination partially explained the relationship between recession hardships and CV health.
  - Adults who reported more recession hardships experienced more perceived discrimination
  - Adults who reported more experiences of perceived discrimination had worse CV health.
- ◆ These findings have relevance for the development of economic and health policies geared towards vulnerable individuals.
- ◆ Future work needs to track the longitudinal impact of Recession hardships and perceived discrimination and examine alternative risk and protective factors related to Recession hardship and health.

### References

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### Acknowledgments

Julie Kirsch was supported by National Institute on Aging (NIA) grant 2T32AG000129-29. The MIDUS investigation was supported by NIA grant (P01-AG020166). The original study was supported by the John D. and Catherine T. MacArthur Foundation Research Network on Successful Midlife Development.