The Great Recession and Health: Identifying Vulnerability with Latent Class Analysis

Julie A. Kirsch and Carol D. Ryff

Introduction

The Great Recession of 2007-2009 was the deepest and longest economic downturn since World War II, with potential consequences for American's health and well-being.[1]

Americans were not equally impacted by the recession, with some experiencing extreme losses (job loss, foreclosure), and others reporting minor losses (cutting back on spending).[2]

Few studies have examined predictors of vulnerability to extreme losses and the health consequences of the Great Recession.

Predictions

1) Individuals who report more severe recession hardships will be more vulnerable to the health impacts of the recession compared to individuals who report more minor losses.
2) Gender, age, education, and marital status will predict the severity of recession hardships experienced.

Method

Sample: 3,577 adults (ages 25-75) from the Midlife in the United States Study (MIDUS) who completed phone interviews and a self-administered questionnaire in years 2011-2014.
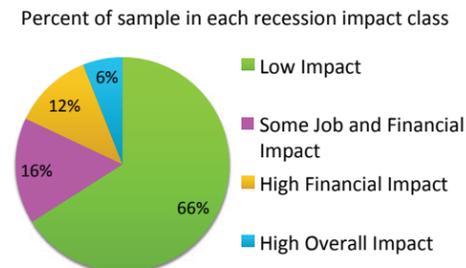
Measures: **Recession hardships** were assessed with an 18 item checklist (See Table 1). Participants were asked to respond "yes" if they had experienced any of these hardships since the start of the recession in August, 2008. **Physical health** was assessed with self-rated physical health, chronic conditions (e.g., diabetes, heart disease), and smoking status.

Analysis: Latent class analysis categorized individuals into severity of recession hardships. Multinomial regression tested gender, age, education, and marital status as predictors of recession impact class membership. General linear models were used to predict health outcomes based on severity of recession hardships.

| Table 1: Recession Impact Items ("Yes" Responses)	N	%
Job Impact		
Lost your job	689	19.3%
Taken a job you did not like	405	11.3%
Taken a job below your education or experience level	604	16.9%
Taken another job	528	14.8%
Home Impact		
Missed a mortgage or rent payment	459	12.8%
Threatened with foreclosure or eviction	260	7.3%
Sold your home for less than it cost you	120	3.4%
Experienced foreclosure on your house	71	2.0%
Lost your home due to something other than foreclosure	66	2.0%
Had family or friend move in with you to save money	561	15.7%
Moved in with family or friends to save money	227	6.3%
Financial Impact		
Declared bankruptcy	131	3.7%
Missed a credit card payment	561	15.7%
Missed other debt payment	440	12.3%
Increased credit card debt	1045	29.3%
Sold some of your possessions to make ends meet	777	21.7%
Cut back on your spending	2656	74.3%
Exhausted unemployment benefits.	350	9.9%

Results

Latent class analysis identified four types (classes) of recession impact.

Percent of sample in each recession impact class

- Low Impact — 66%
- Some Job and Financial Impact — 16%
- High Financial Impact — 12%
- High Overall Impact — 6%

Recession impact severity predicted health outcomes, including chronic conditions, smoking status and self-rated health.


Recession Impact Class as Predictor of Total Chronic Conditions
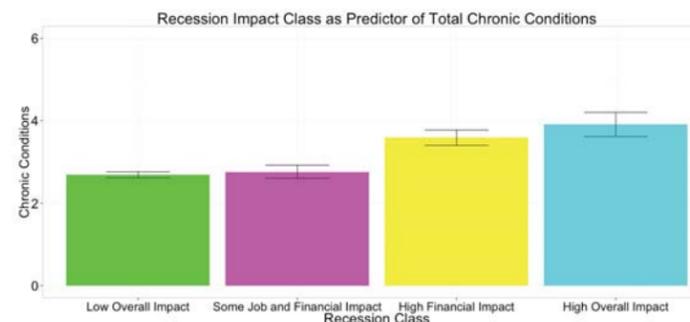
Gender, age, education, and marital status significantly predicted severity of recession impact.

Age as Predictor of Recession Class Membership

Education as Predictor of Recession Class Membership
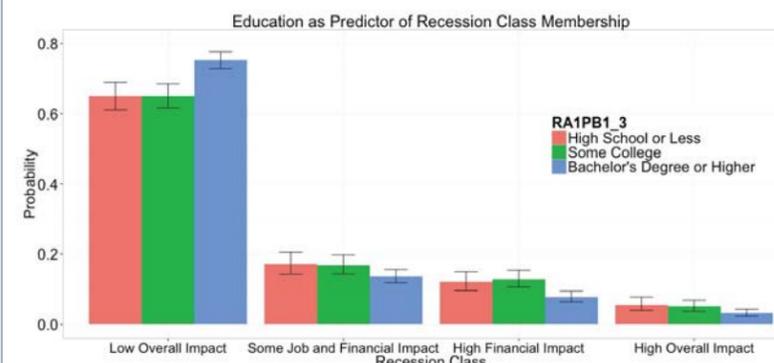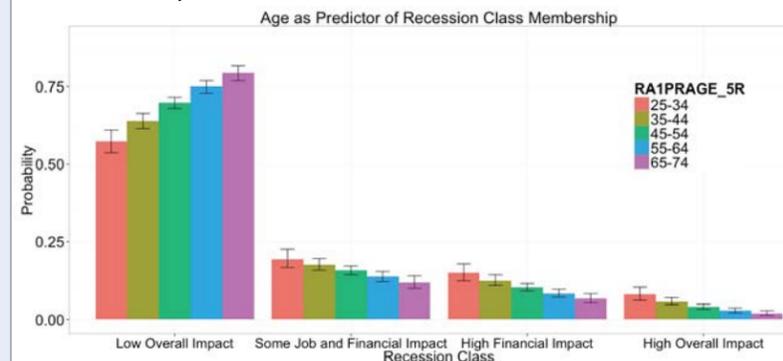
Results Continued

There was a significant interaction between education and recession impact for chronic conditions, indicating that the health impacts of the recession were more severe among lower educated adults.

Education By Recession Interaction
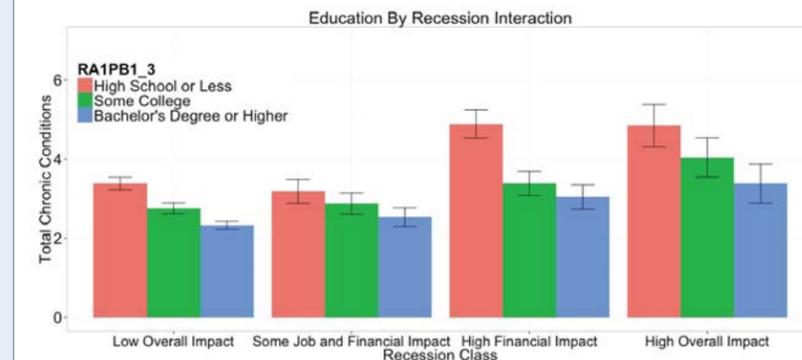
Conclusions

Latent Class Analysis identified *who* is vulnerable to the Great Recession

1) We identified four distinct sub-groups impacted by the Great Recession to varying degrees, with ~20% of the sample experiencing "High Financial Impact" and "High Overall Impact".
2) Younger, lower educated, unmarried, and women were more vulnerable to severe recession hardships compared to their counterparts.

This study presents novel findings that more severe types of recession impact have greater consequences for physical health, especially among certain sub-groups.

1) Those reporting severe types of recession hardships have worse physical health.
2) Lower educated are more susceptible to the negative health consequences of the Great Recession.

These findings can be applied to developing economic and health policies that are geared towards vulnerable individuals.

Future research should further study the biopsychosocial factors that may elucidate the links between the Great Recession and health outcomes.

References

1. Burgard, S. A., Ailshire, J. A., & Kalousova, L. (2013) The Great Recession and health: People, populations, and disparities. *Annals of the American Academy of Political and Social Science*, 650, 194-213.

2. Jacobsen, L. A., & Mather, M. (2011). A post recession update on U. S. social and economic trends. *Population Bulletin Update*.