



Financial Shocks and Financial Well-Being: Which Factors Help Build Financial Resiliency in Lower-Income Households?

Michal Grinstein-Weiss, Shanti K. Khinduka Distinguished Professor

Sam Bufe, Statistical Data Analyst

Social Policy Institute

Washington University in St. Louis



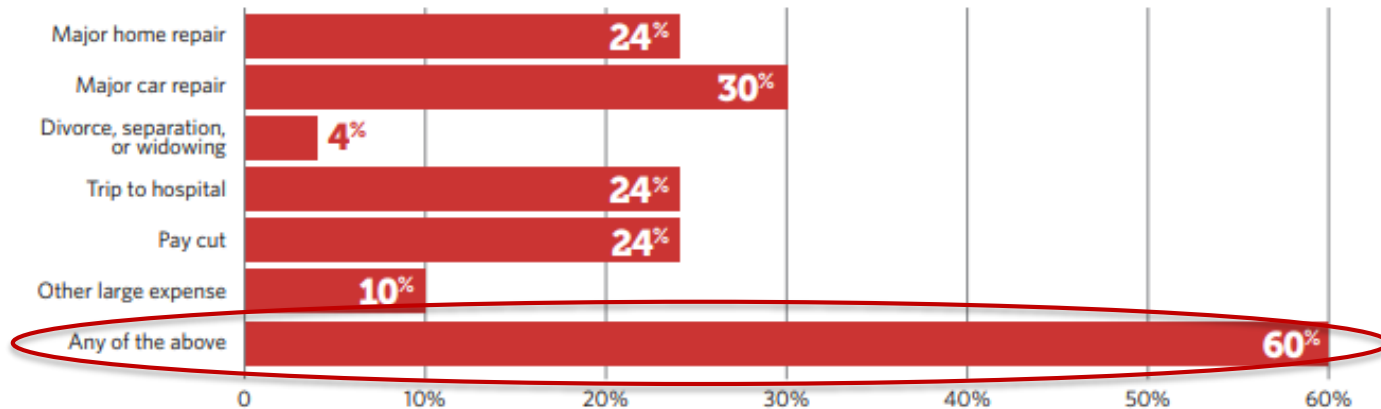
Background



Background: Financial Shocks and Financial Well-Being

Shocks are common in U.S. Households

A Majority of American Households Experienced a Financial Shock
Percentage of respondents reporting a shock in the past 12 months, by type





Background: Financial Shocks and Financial Well-Being



Skipped Medical Payments



Medical Care



Food Insecurity



Background: Financial Shocks and Financial Well-Being



Housing Stability



Child Development



Health



Background: Liquidity as a Buffer against Financial Shocks

- Previous research has shown that access to liquidity can mitigate the effects of financial shocks.^{1, 2}
- There is relatively little research on the impacts of financial shocks on an individual's subjective sense of financial well-being.³



¹ Carroll, 1997; Chase et al., 2011; McKernan et al., 2009; Mills & Amick, 2010

² Collins & Gjertson, 2013; Barr, 2004; Chiteji & Hamilton, 2005

³ See Sun et al., 2018; Sun et al., 2019; Bufe et al., 2019



Research Questions

1. Which types of financial shocks have the greatest impacts on the self-assessed financial well-being of LMI households?
 2. To what extent do household income, social networks, and liquid savings mitigate the negative effects of financial shocks on the financial well-being of LMI households?
-



Data and Sample



Data Collection Flow

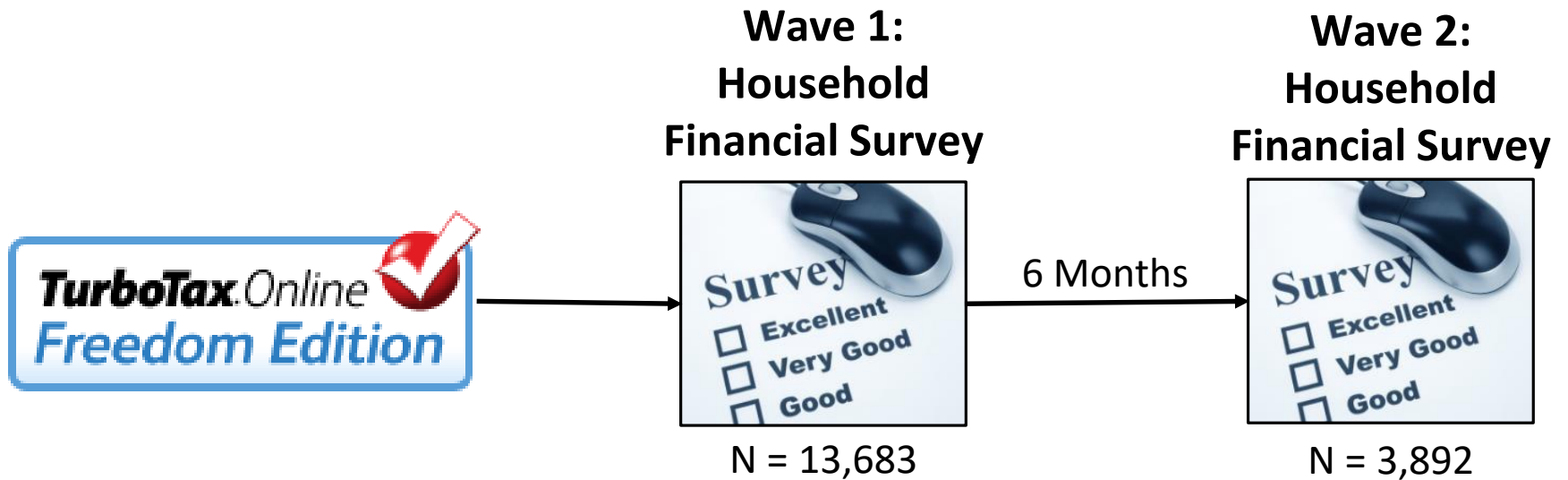




Table 1: Sample Characteristics

Characteristic	Mean
Financial well-being score (1 st Wave)	55.3
Age (years)	32.1
Male (%)	50.1
Race/Ethnicity	
White (%)	72.3
Black (%)	3.9
Hispanic (%)	8.0
Asian (%)	10.4
Other (%)	5.4
Insured (%)	93.0
Married/lives with partner (%)	23.0
Any children in household (%)	16.2
Student (%)	37.7
Has a Bachelor's degree (%)	56.7
N	1,580



Table 1: Sample Characteristics

Characteristic	Mean
Financial well-being score (1 st Wave)	55.3
→ Age (years)	32.1
Male (%)	50.1
Race/Ethnicity	
White (%)	72.3
Black (%)	3.9
Hispanic (%)	8.0
Asian (%)	10.4
Other (%)	5.4
Insured (%)	93.0
Married/lives with partner (%)	23.0
Any children in household (%)	16.2
Student (%)	37.7
Has a Bachelor's degree (%)	56.7
N	1,580



Table 1: Sample Characteristics

Characteristic	Mean
Financial well-being score (1 st Wave)	55.3
Age (years)	32.1
Male (%)	50.1
Race/Ethnicity	
→ White (%)	72.3
Black (%)	3.9
Hispanic (%)	8.0
Asian (%)	10.4
Other (%)	5.4
Insured (%)	93.0
Married/lives with partner (%)	23.0
Any children in household (%)	16.2
Student (%)	37.7
Has a Bachelor's degree (%)	56.7
N	1,580



Table 1: Sample Characteristics


Characteristic	Mean
Financial well-being score (1 st Wave)	55.3
Age (years)	32.1
Male (%)	50.1
Race/Ethnicity	
White (%)	72.3
Black (%)	3.9
Hispanic (%)	8.0
Asian (%)	10.4
Other (%)	5.4
 Insured (%)	93.0
Married/lives with partner (%)	23.0
Any children in household (%)	16.2
Student (%)	37.7
Has a Bachelor's degree (%)	56.7
N	1,580



Table 1: Sample Characteristics

Characteristic	Mean
Financial well-being score (1 st Wave)	55.3
Age (years)	32.1
Male (%)	50.1
Race/Ethnicity	
White (%)	72.3
Black (%)	3.9
Hispanic (%)	8.0
Asian (%)	10.4
Other (%)	5.4
Insured (%)	93.0
Married/lives with partner (%)	23.0
Any children in household (%)	16.2
→ Student (%)	37.7
→ Has a Bachelor's degree (%)	56.7
N	1,580



Methods



Methods

- Restrict sample to 1,580 people who completed both surveys and reported not experiencing a shock in the first survey.
 - Difference-in-difference models estimate change in financial well-being for people who experience a shock (in second wave), relative to the change for people who never experience a shock.
 - 3 Types of Shocks:
 - **Income shocks** – reduction in income (e.g., lost job)
 - **Expense shocks** – major vehicle or home repair
 - **Medical shocks** – out of pocket medical expense
-



Methods, continued...

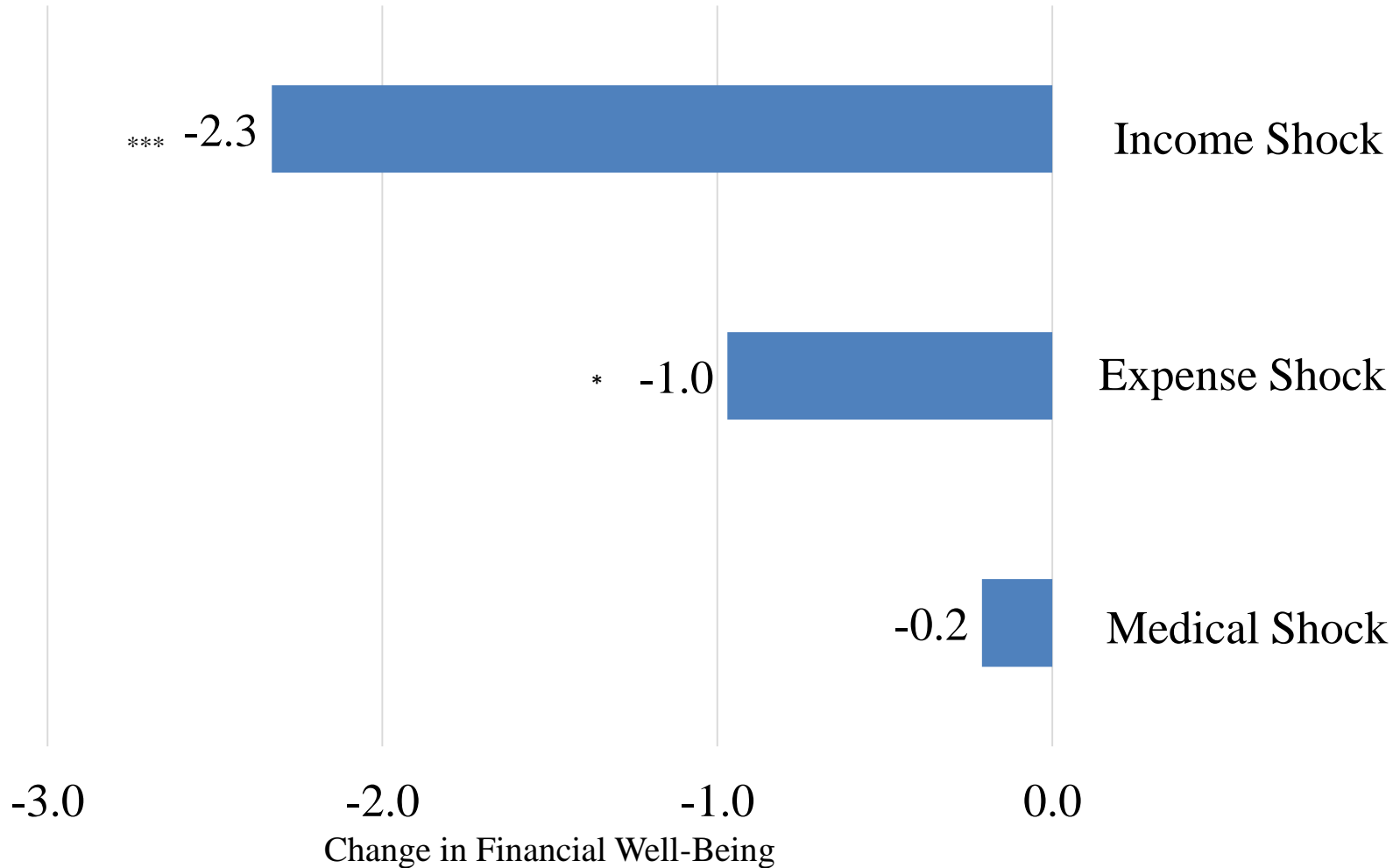
- After estimating the average impacts, we conduct subsample analyses.
 - We compare the impacts of these shocks by the respondents'
 - Self-reported gross income
 - Ability to rely on social networks
 - Level of liquid assets
-



Results



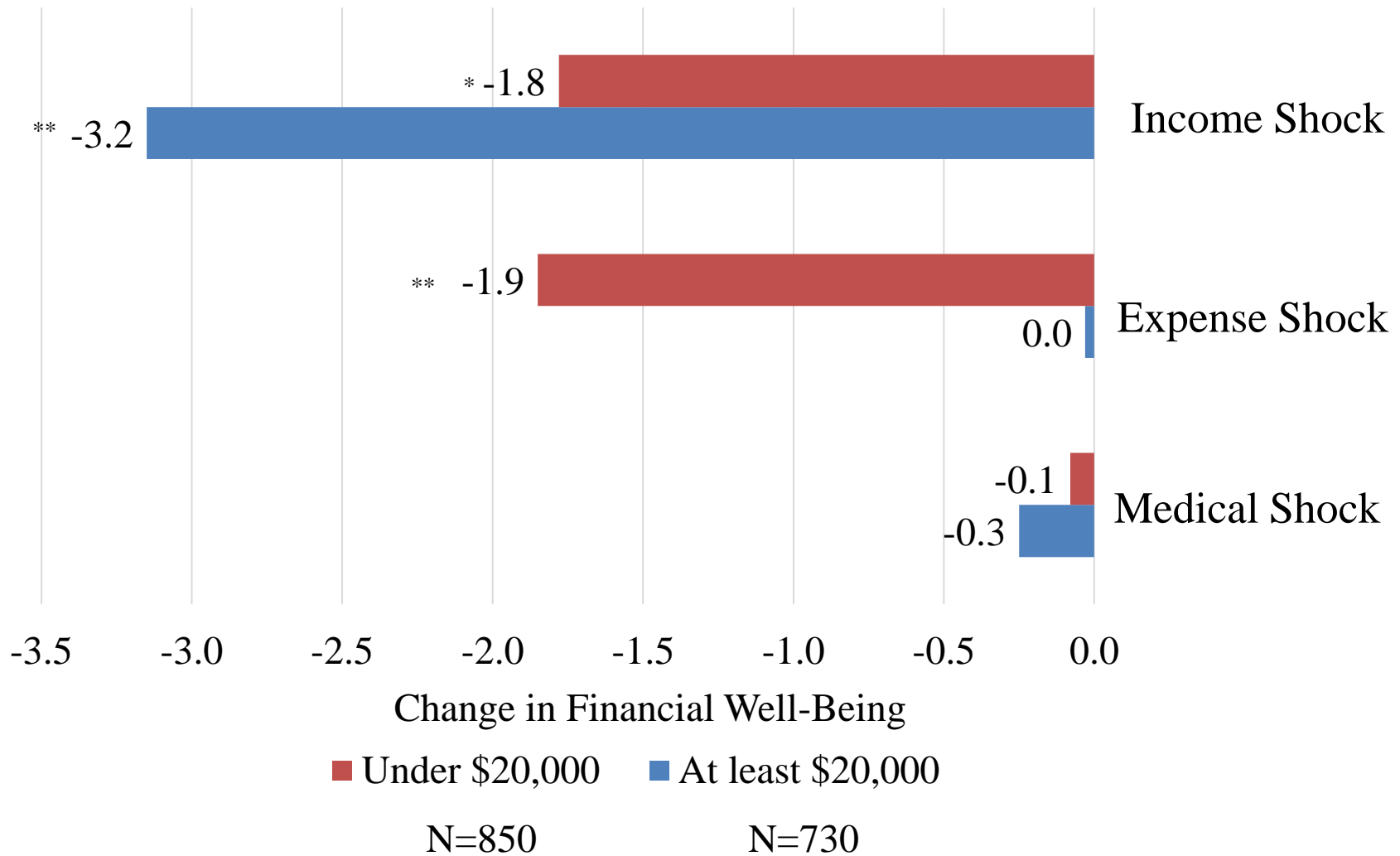
Overall Impact of Financial Shocks on Financial Well-Being in LMI Households



Statistical significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$



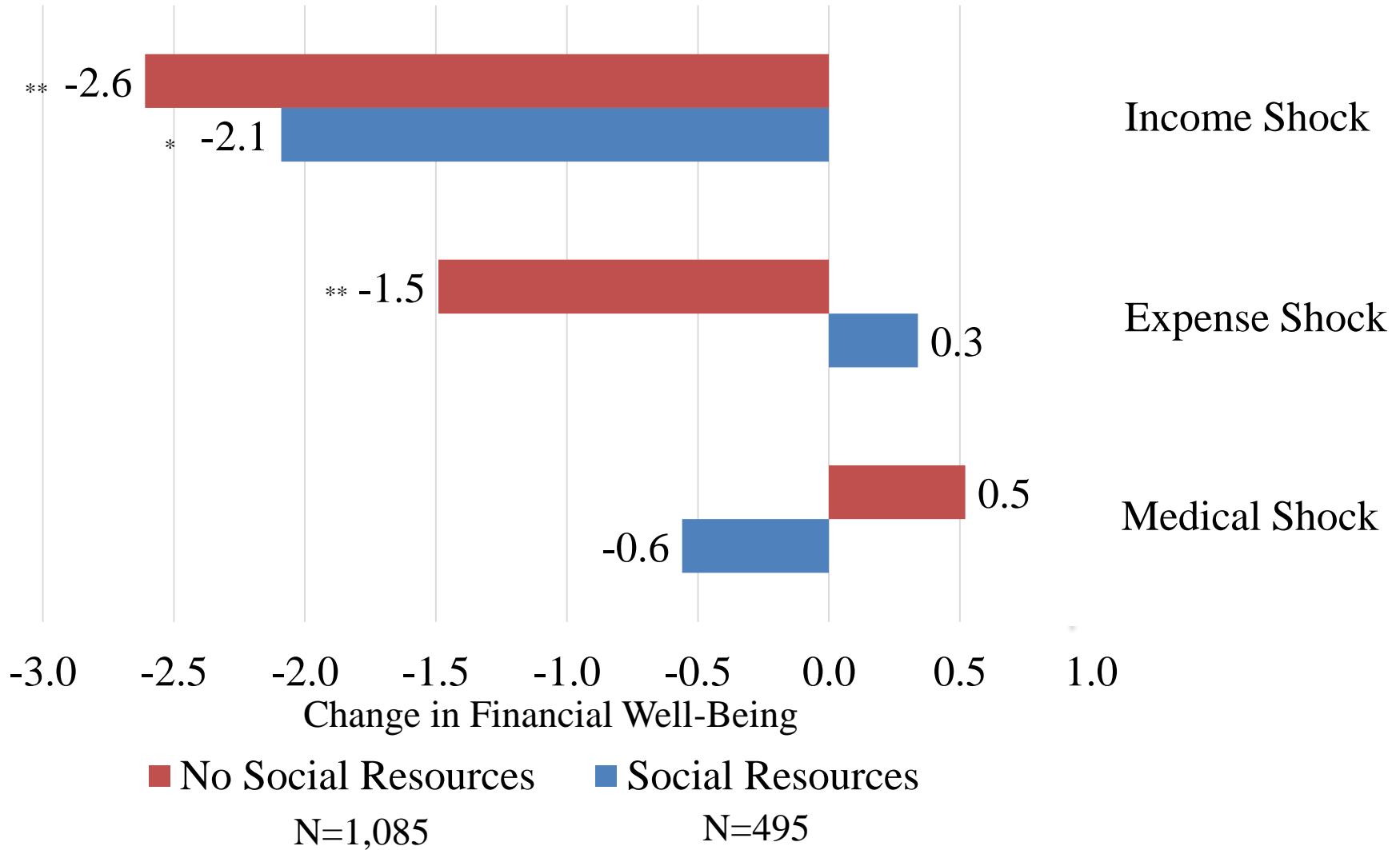
Impact of Financial Shocks on Financial Well-Being in LMI Households, by Gross Income



Statistical significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$



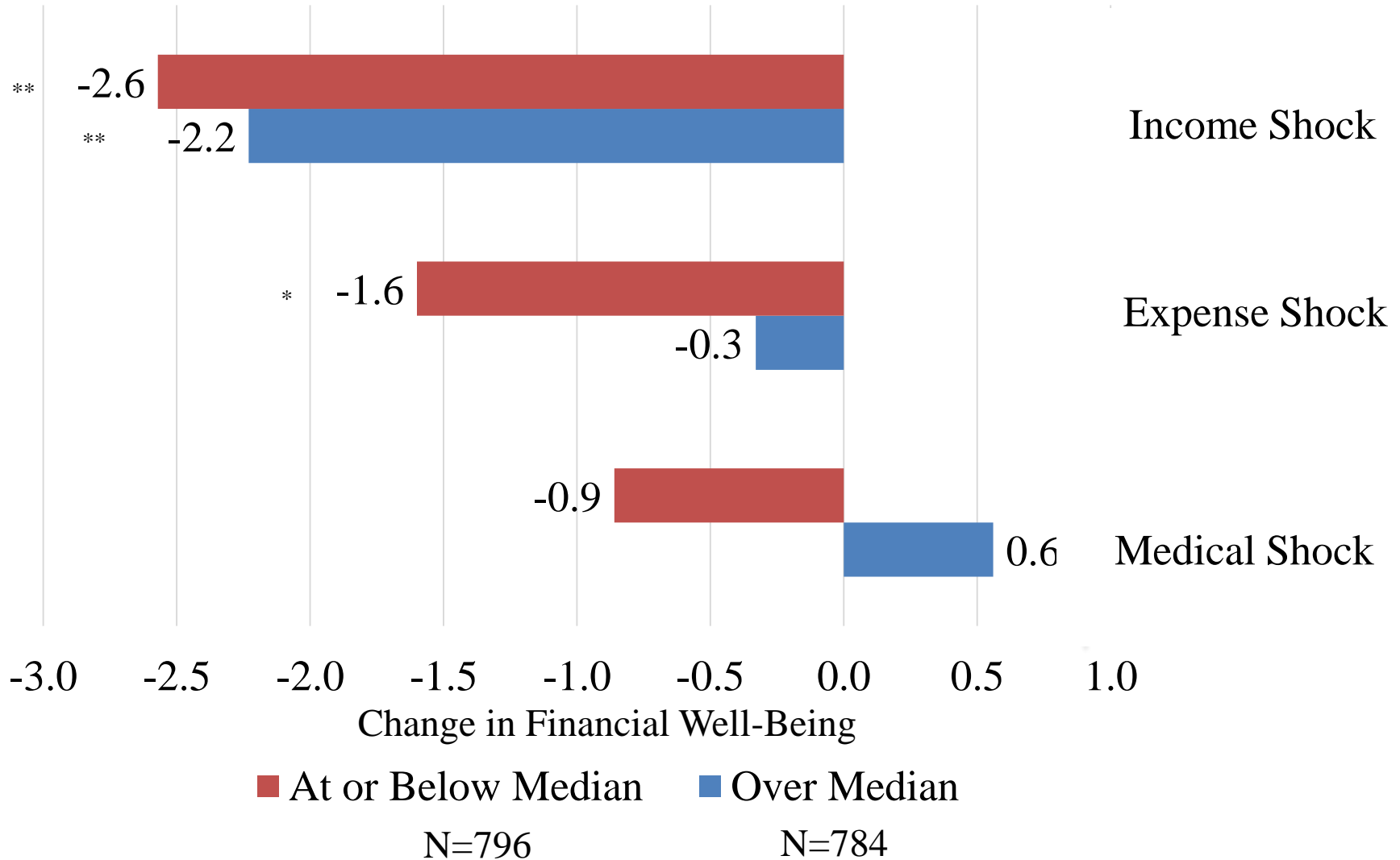
Impact of Financial Shocks on Financial Well-Being in LMI Households, by Social Networks



Statistical significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$



Impact of Financial Shocks on Financial Well-Being in LMI Households, by Liquid Assets



Statistical significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$



Conclusion and Discussion

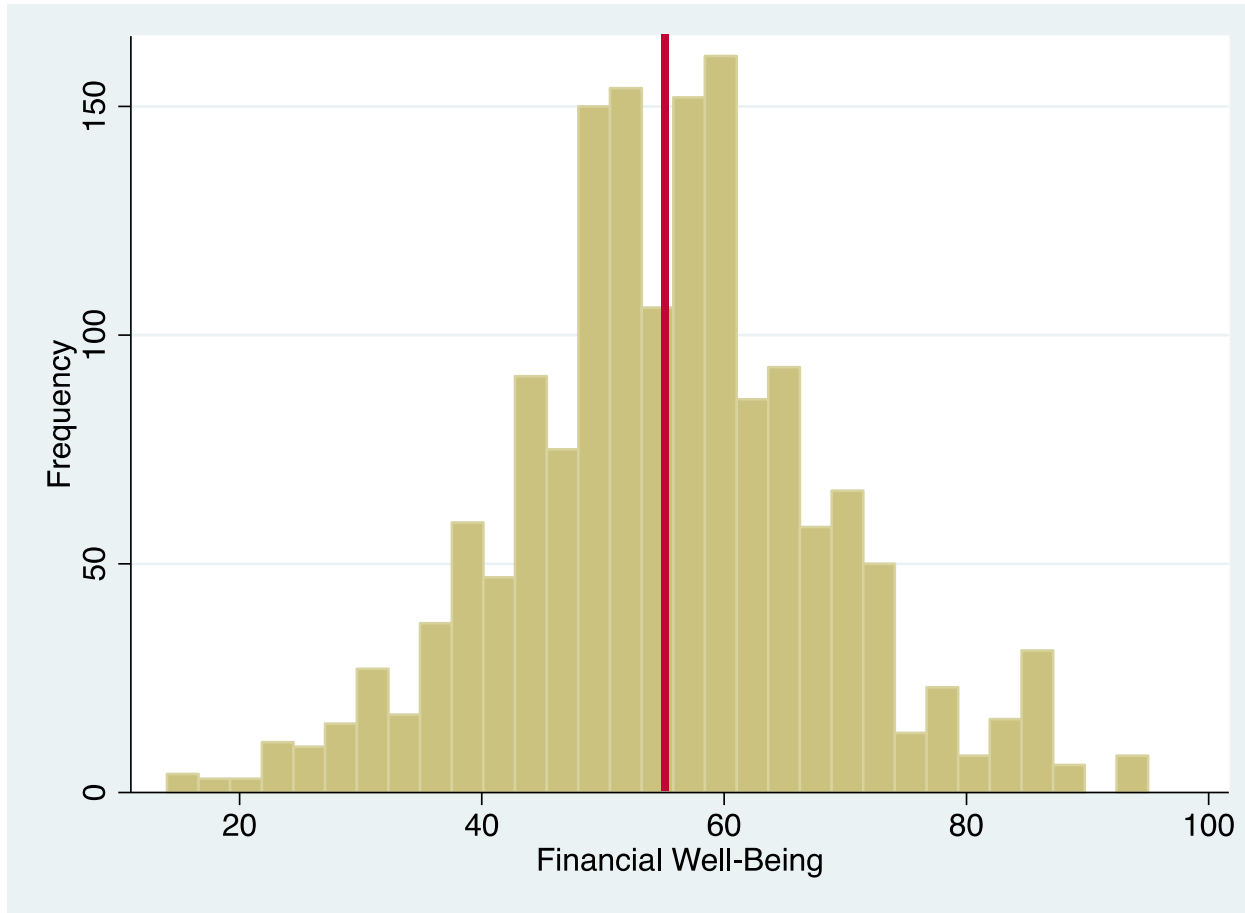


Discussion: Findings

- Income shocks had the largest impacts on financial well-being.
 - Impacts of medical shocks were statistically insignificant.
 - Directional evidence suggests that the impacts of these shocks may depend on the household's initial financial circumstances.
 - Overall impacts on financial well-being were small.
-

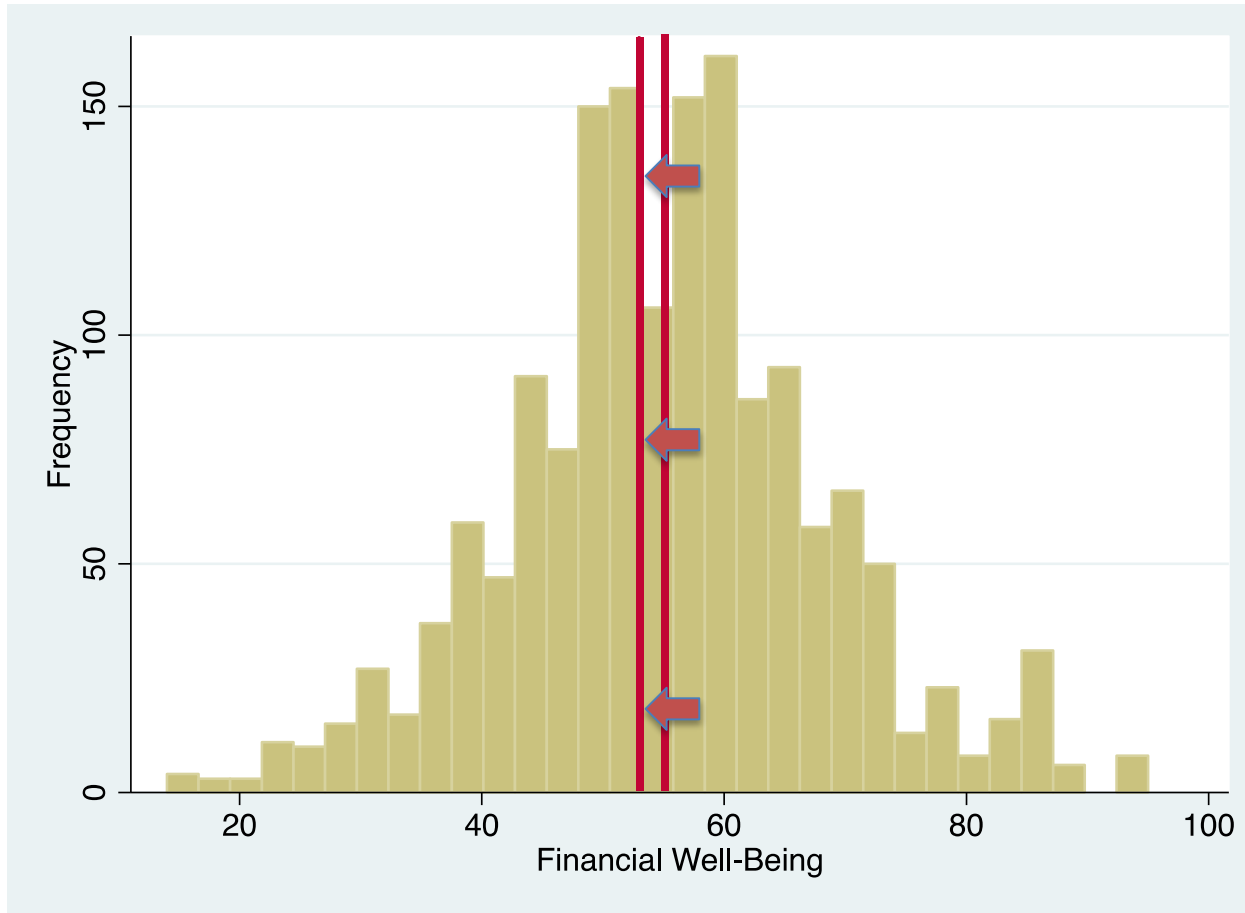


Discussion: Impacts were somewhat small





Discussion: Impacts were somewhat small





Discussion: Limitations

- Surveys only track respondents at two points in time.
 - Our sample is not nationally representative.
 - Other time-variant factors that impact financial well-being could bias these findings.
-



Discussion: Implications for Policy and Practice

- Promote preventative steps that may reduce the incidence of financial shocks.
 - Different sources of liquidity may help offset different types of financial shocks.
 - Increases in income may also reduce impacts of these shocks.
 - Help LMI workers with job training.
 - Help navigating new employment opportunities (e.g., gig economy).
-



Thank You!

Questions?

michalgw@wustl.edu

sambufe@wustl.edu



Appendix



Sample Information

		Sample					
		Income shock		Expense shock		Medical shock	
		Comparison	Treatment	Comparison	Treatment	Comparison	Treatment
Wave 1		Did not experience any financial shock					
Wave 2		Did not experience an income shock	Experienced an income shock	Did not experience an expense shock	Experienced an expense shock	Did not experience a medical shock	Experienced a medical shock
Number of observations		1,419	161	1,282	298	1,445	135
Experienced another shock (%)		23.0	37.9	14.7	26.5	24.4	47.4



Survey Questions: Financial Well-Being

- How well does this statement describe your situation? (Completely, Very well, Somewhat, Very little, Not at all)
 - I could handle a major unexpected expense
 - I am securing my financial future
 - Because of my money situation, I feel like I will never have things I want in life
 - I can enjoy life because of the way I'm managing my money
 - I am just getting by financially
 - I am concerned that the money I have or will save won't last
 - How often does this statement apply to you? (Always, Often, Sometimes, Rarely, Never)
 - Giving a gift for a wedding, birthday, or other occasion would put a strain on my finances for the month
 - I have money left over at the end of the month
 - I am behind with my finances
 - My finances control my life
-



Survey Questions: Income Shocks

- In the past 6 months, have you been laid off, terminated, or had your hours reduced by a current or former employer?
 - In the last 6 months, have you or has someone in your tax household:
 - Lost a job unexpectedly?
 - Had an unexpected reduction in income?
-



Survey Questions: Expense Shocks

- In the last 6 months, have you or has someone in your tax household:
 - Had an unexpected major house or appliance repair?
 - Made an unexpected major repair to a vehicle you own?
-



Survey Questions: Medical Shocks

- In the last 6 months, have you or has someone in your tax household:
 - Had unexpected major out-of-pocket medical expense?
 - In the last 6 months, have you or anybody in your tax household experienced a major medical event (e.g., the diagnosis of an illness, disease, allergic reaction, or injury) needing immediate professional treatment?
-



Survey Questions: All Shocks

- In the past 6 months, have you been laid off, terminated, or had your hours reduced by a current or former employer?
 - In the last 6 months, have you or has someone in your tax household:
 - Lost a job unexpectedly?
 - Had an unexpected reduction in income?
 - Had an unexpected major house or appliance repair?
 - Made an unexpected major repair to a vehicle you own?
 - Had unexpected major out-of-pocket medical expense?
 - In the last 6 months, have you or anybody in your tax household experienced a major medical event (e.g., the diagnosis of an illness, disease, allergic reaction, or injury) needing immediate professional treatment?
-



Table 1: Sample Characteristics

Characteristic	Income Shock Weights	Expense Shock Weights	Medical Shock Weights	Unweighted
Financial well-being score (1 st Wave)	52.7	54.7	53.7	55.3
Age (years)	32.5	32.4	32.3	32.1
Male (%)	52.9	50.6	49.4	50.1
Race/Ethnicity				
White (%)	72.6	72.7	71.9	72.3
Black (%)	4.4	4	3.9	3.9
Hispanic (%)	9	8.2	9.3	8.0
Asian (%)	9.2	9.8	8.5	10.4
Other (%)	4.8	5.4	6.4	5.4
Married/lives with partner (%)	23.1	23.4	23.7	23.0
Any children in household (%)	15.3	16.1	15.8	16.2
Student (%)	36.3	37.5	39.8	37.7
Has a Bachelor's degree (%)	56.9	55.7	55.3	56.7
Employment status				
Full-time (%)	45.5	44.6	44.5	45.2
Part-time (%)	33.4	33.9	33.4	34.1
Unemployed (%)	21.1	21.4	22.1	20.7
Self-rated health is above average (%)	44.8	44.9	46	44.9
Gross income is over \$20,000 (%)	47.1	46.3	44.2	46.2
Ability to rely on social networks (%)	31.1	30.5	30.9	31.3
Liquid assets (\$)	7,276	7,535	7,643	7,902
Ownership of a credit card (%)	66.7	68.5	67.6	67.4
Observations	1,580	1,580	1,580	1,580
Proportion of HHs in the treatment group (%)	10.2	18.9	8.5	30.1



Balance on Observable Characteristics After Weighting

Characteristic	No Income Shock	Income Shock	Sign	No Expense Shock	Expense Shock	Sign	No Medical Shock	Medical Shock	Sign
Financial Well-Being	55.8	49.6	***	55.8	53.6	***	55.6	51.7	***
Age	32.1	32.9		32.1	32.7		32.1	32.5	
Male (%)	50.1	55.7	**	50.3	50.8		49.9	48.8	
Race									
White (%)	72.2	73.0		72.5	72.8		72.4	71.4	
Black (%)	3.6	5.2		3.8	4.0		3.8	4.0	
Hispanic (%)	7.9	10.1		7.6	8.8		7.8	11.0	**
Asian (%)	10.9	7.6	**	10.8	8.8		10.9	6.0	***
Other (%)	5.5	4.0		5.3	5.5		5.2	7.7	**
Married, lives with partner (%)	22.8	23.3		22.9	24.0		23.1	24.4	
Any children (%)	16.1	14.6		16.4	15.8		16.3	15.1	
Student (%)	37.7	35.0		37.8	37.2		37.7	42.1	*
College (%)	56.7	57.0		56.8	54.6		56.9	53.5	
Employment									
Full-Time (%)	45.1	45.8		45.1	44.2		45.2	43.7	
Part-Time (%)	34.0	32.9		34.3	33.5		34.2	32.6	
Not-Employed (%)	20.9	21.3		20.6	22.3		20.6	23.7	
Above Average Health (%)	44.8	44.8		44.8	45.1		44.7	47.3	
Gross income at least \$20,000 (%)	46.3	47.9		45.9	46.7		46.4	41.9	*
Any help from social networks (%)	31.4	30.8		31.4	29.6		31.4	30.4	
Owns Credit Card (%)	67.3	66.1		66.4	70.6	*	67.0	68.1	
N	1,419	161		1,282	298		1,445	135	