

# Economic Stress

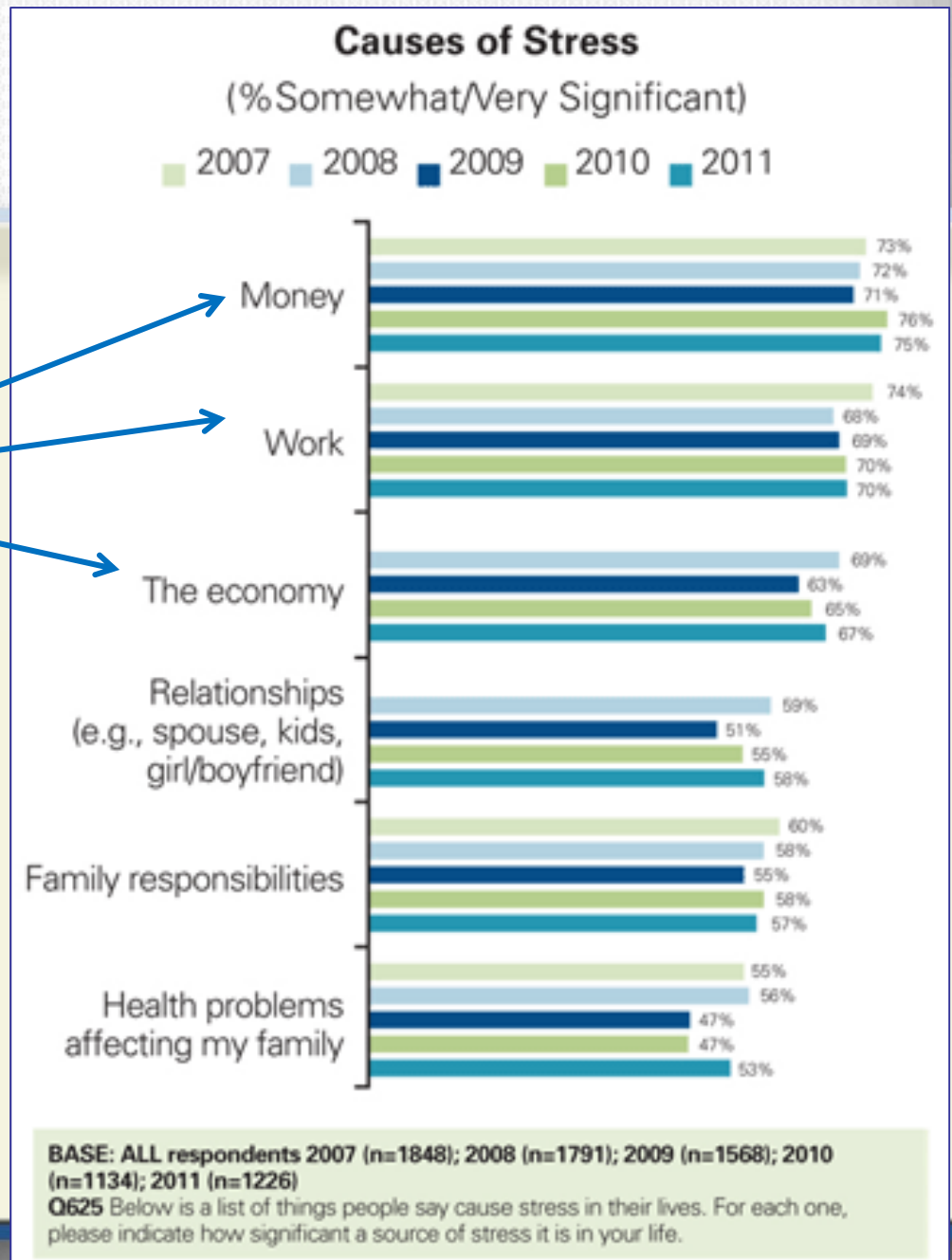
**A Primer For Occupational Health  
Researchers**

**Bob Sinclair  
Clemson University**

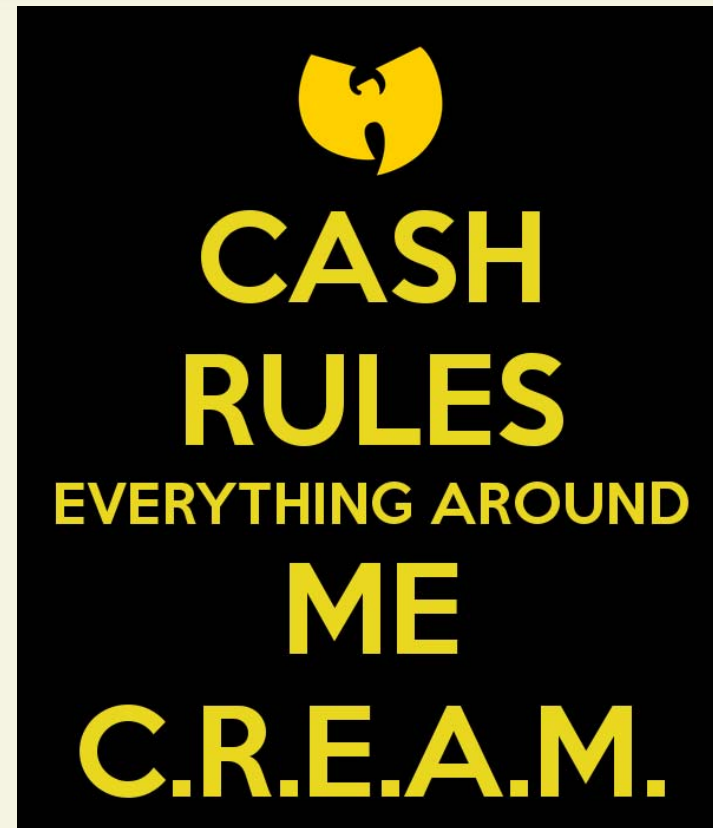
# Acknowledgments



APA surveys show money, work, and economy are **top 3 sources of stress** in US



# ***What is the link between OHP, Income and health?***



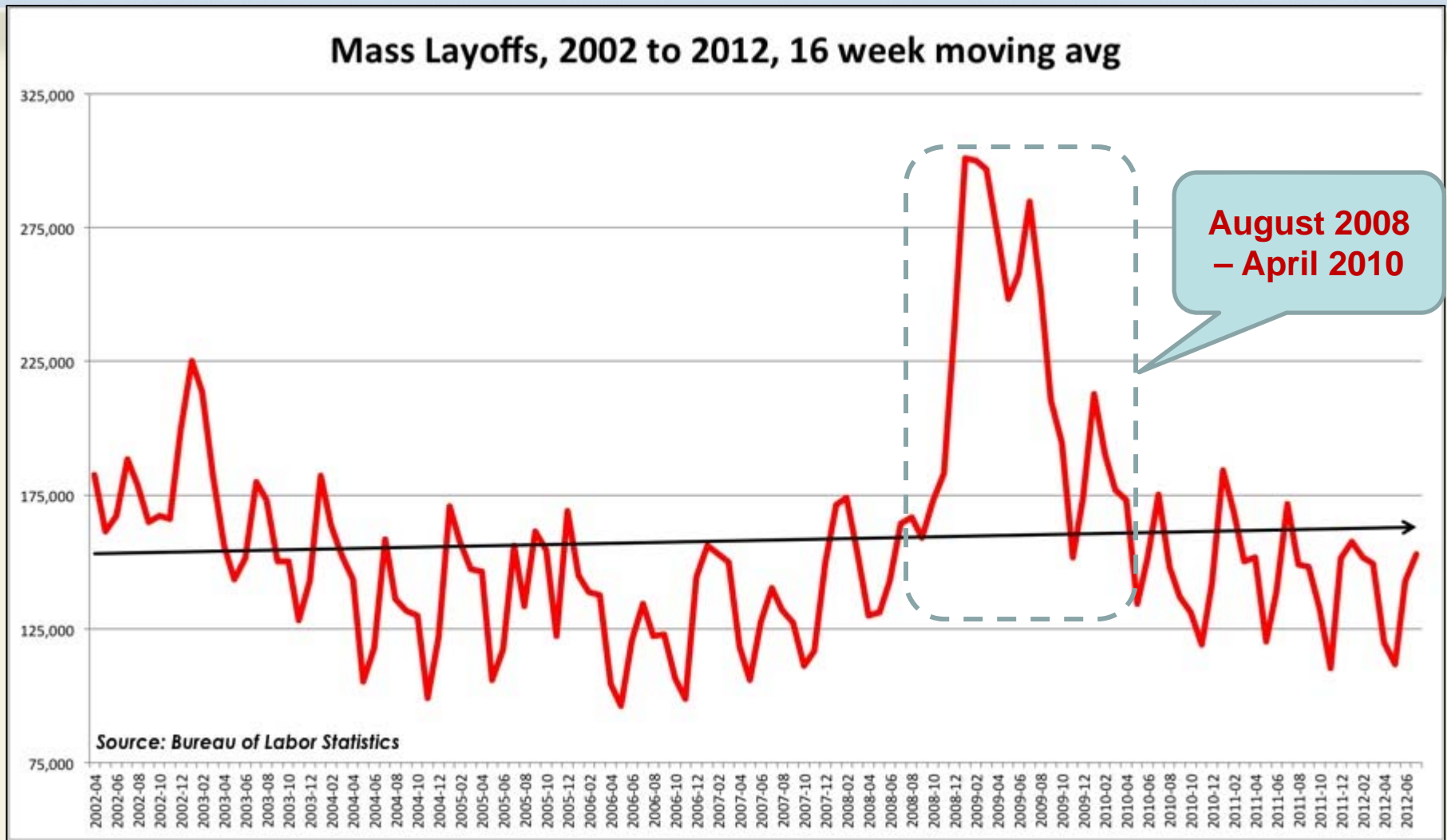
# Goals

- Brief review of current economic trends relevant to occupational health.
- Present a framework for organizing economic stress constructs.
- Discuss measurement issues in relation to financial stress.
- Highlight challenges and opportunities in economic stress research.



# Economic Trends

# Downturn caused massive employment disruption

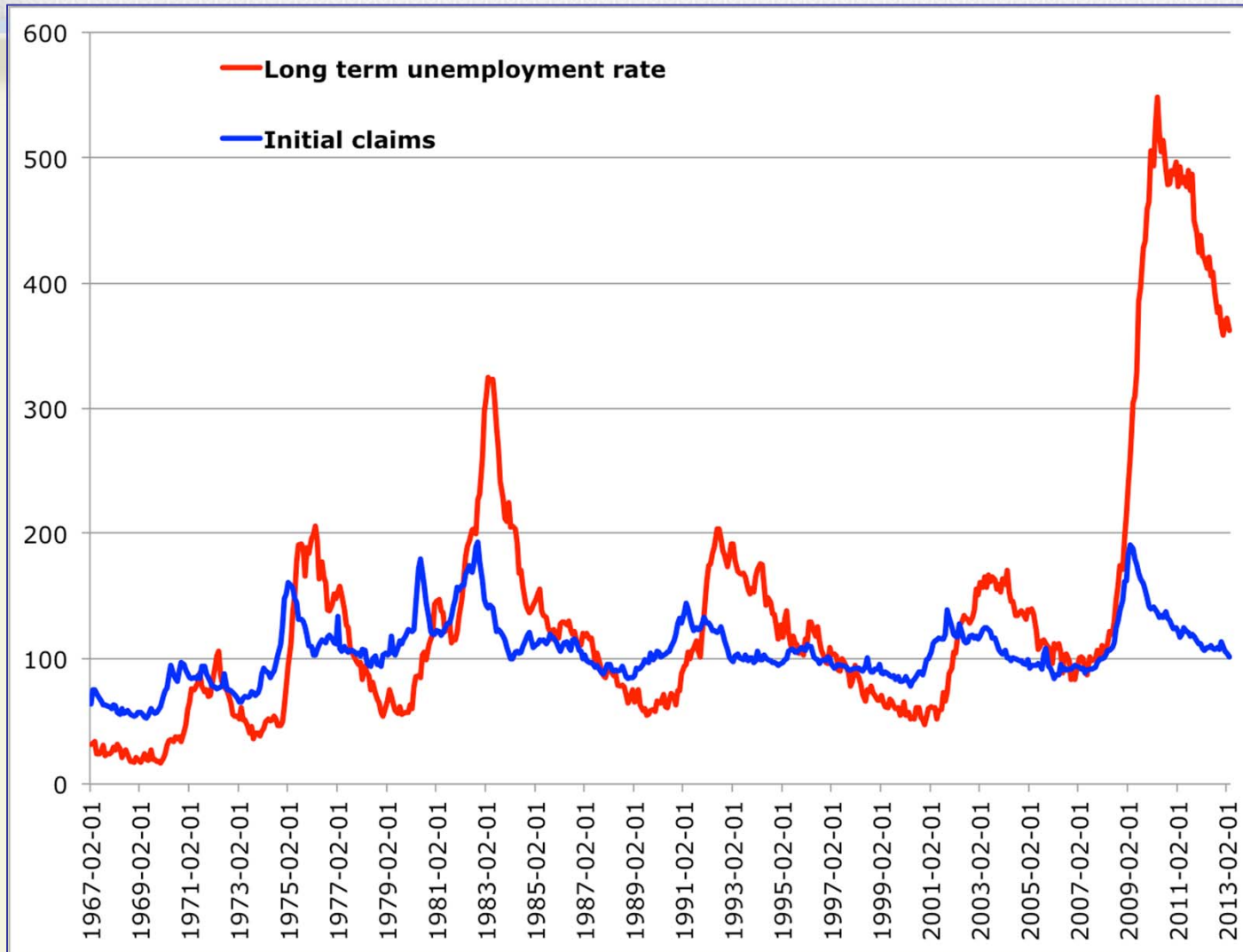


# Economic Downturn: 2007 vs. 2011

- Food Stamp Enrollment
  - 2007: 26 million in US
  - 2011: **43.2 million in US**
- Families in homeless shelters
  - 2007: 131,000
  - 2009: **170,000**
- Living "paycheck to paycheck"
  - 2007: 43% of US
  - 2010: **55% of US**

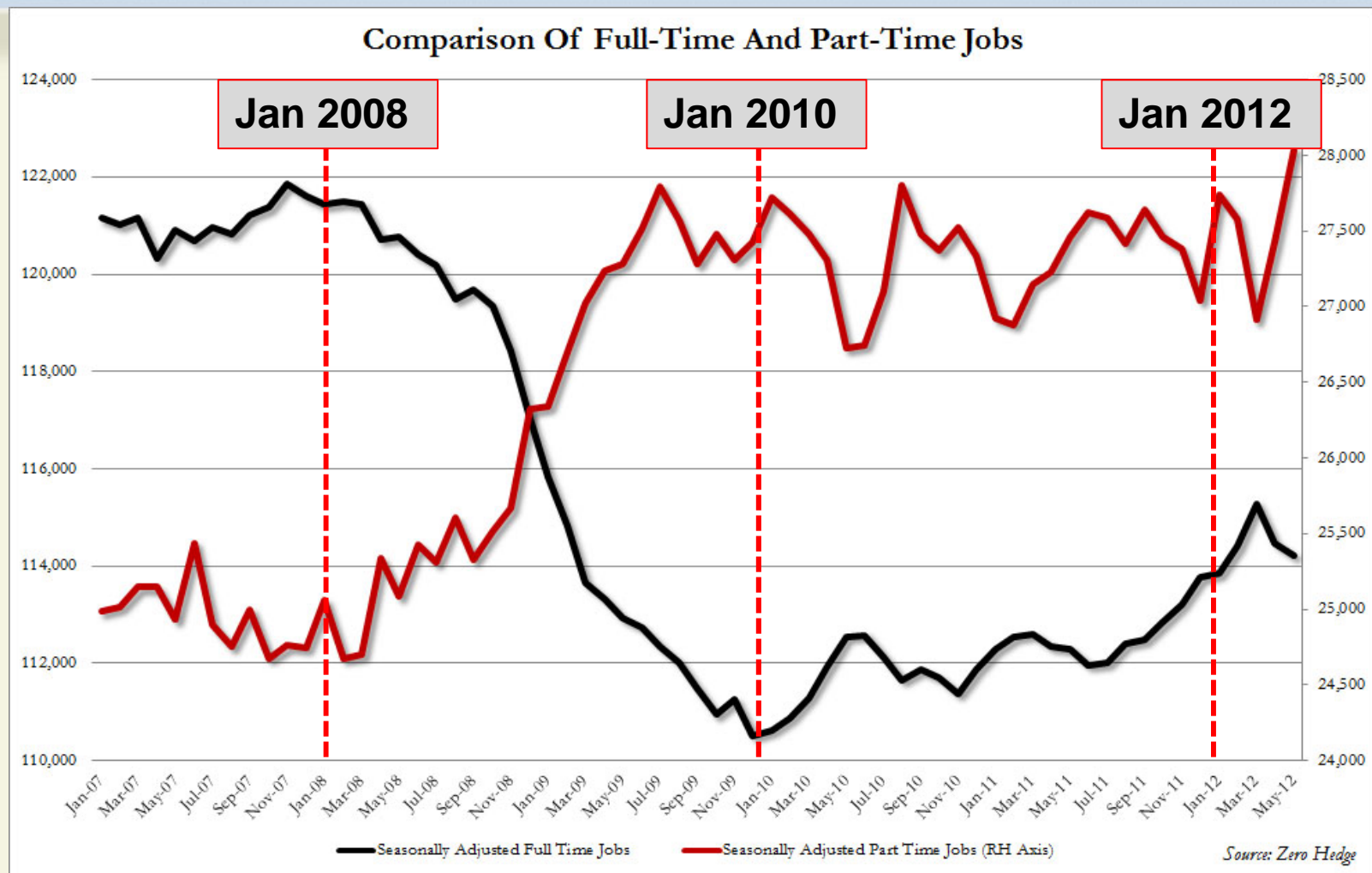


# Rising rates of long term unemployed



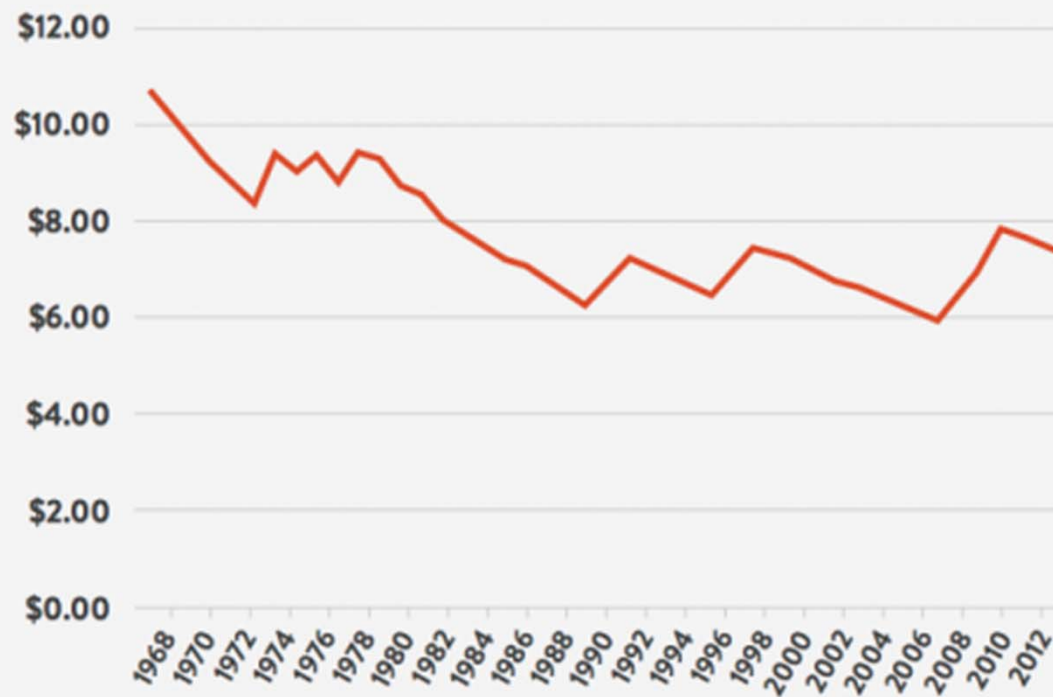
BLS Data  
through  
Feb 2013

# Much of recovery is in part-time jobs



# Stagnant/Declining Minimum Wage

**FIGURE 1:** REAL VALUE OF THE FEDERAL MINIMUM WAGE, 1968-2012 (IN 2012 DOLLARS)



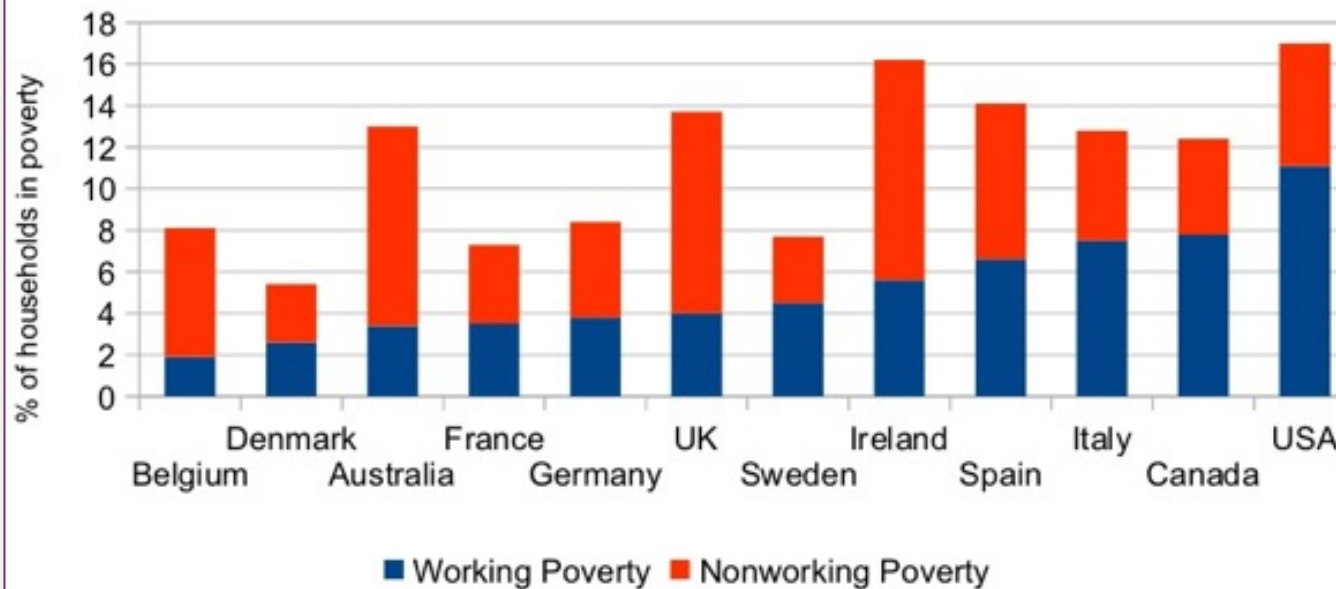
SOURCE: U.S. Department of Labor- Wage and Hour Division, Adjusted for inflation with the Consumer Price Index

Demos.org

# Working Poor

## Working and Nonworking Poverty

Source: Brady, Fullerton, and Cross (2010)



### Food Stamps in US

2007: 26 million

2011: **43.2** million

### Families in homeless shelters

2007: 131,000

2009: **170,000**

### Living "paycheck to paycheck"

2007: 43% of US

2010: **55%** of US



# Low Income Working Families: Health Concerns

- ~25% of US children in low-income working families (median wage: \$9/hour). These families
  - Receive fewer health & vacation benefits.
  - Face greater food and housing hardships.
  - Have greater proportional costs of child care
  - Are over twice as likely to report fair or poor health
  - Have children who are more likely to have health problems; lower school engagement; more behavioral and emotional problems



# A World-Wide Crisis

- **18-50M jobs lost** in 2009 (worst since 1991)
- 1.5 to 1.6 billion in '**vulnerable employment**'
- ~456 workers in **extreme poverty** (below \$1.25 per day).
- **Young workers** much more likely to be adversely affected.

# OHP pays less attention to economic issues (cites through 2010)

	<i>JOHP</i>	<i>JAP</i>
Satisfaction	201	1295
Support	132	691
Performance	65	2289
Retention/Turnover	20	308
Job Security/Precarious Employment	17	45
Pay/Income/Compensation	15	280
Poverty/Working Poor	9	16

# Of course it's getting better, right?

## 2012-2013 Citation counts

	<i>JOHP</i>	<i>JAP</i>
Satisfaction	46	37
Support	33	46
Performance	14	86
Retention/Turnover	7	11
Job Security/Precarious Employment	3	2
Money/Pay/Income/Compensation	3	5
Poverty/Working Poor/Low Income	0	4
Economic Stress/Financial Stress	0	0

# Economic Stress and Occupational Health



**Economic stress: It's about how much money you make, right?**





# ***What makes economic stress complicated?***

- **Multiple dimensions**
- **Contextual features**
- **Temporal features**
- **Social/Relational features**

# Defining Economic Stress

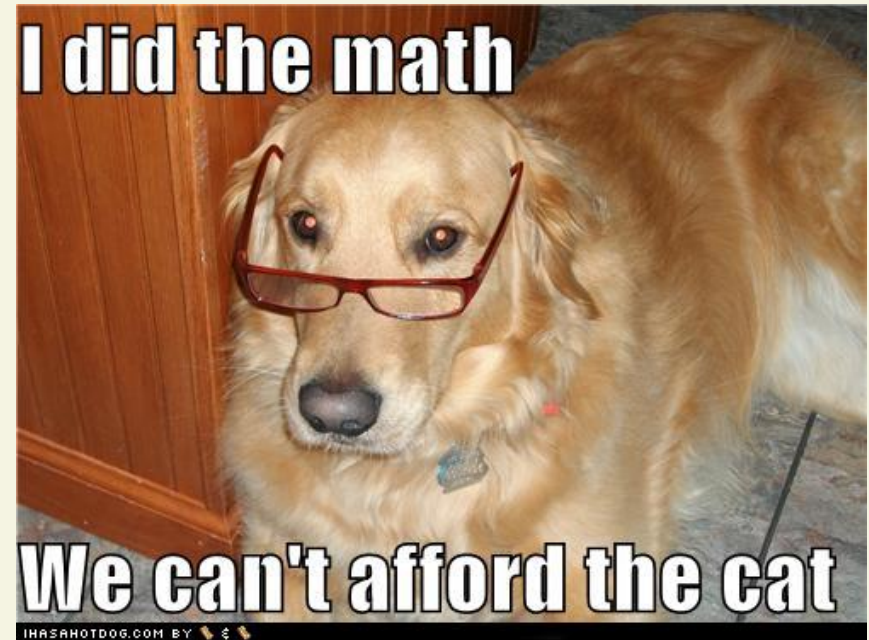
- “...aspects of economic life that are potential stressors for employees and their families and consists of both **objective** and **subjective components** reflecting the **employment** and **income** **dimensions** of the worker-earner role”  
(Probst, 2005 p. 268).

# Two Key Dimensions of Economic Stressors

	Employment Stressors	Financial Stressors
Objective Stressors	<u>Instability</u> (Unemployment)	<u>Deprivation</u> (Financial)
Subjective Stressors	<u>Uncertainty</u> (Job Insecurity)	<u>Stress</u> (Financial)

# Financial Deprivation

- Inability to meet current financial needs
- Loss of income and financial resources



# What Financial Measure?

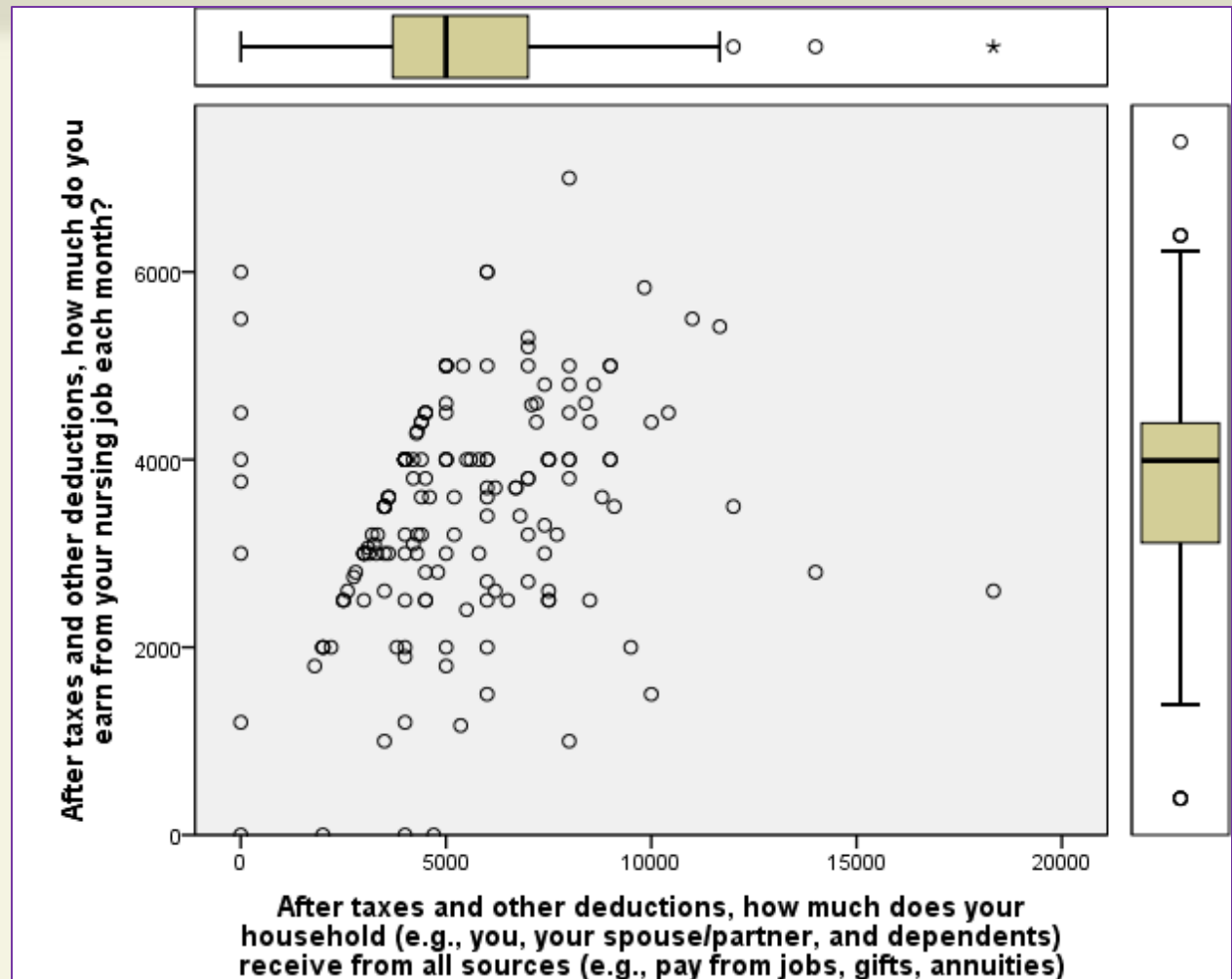
## Direct or Indirect?

- **Direct measures**
  - Salary/Wages
  - Household income
  - Financial resources
  - Debt-to-asset ratios
  - Income rel. to cost of living
- **Indirect measures**
  - Family size
  - Adult dependents

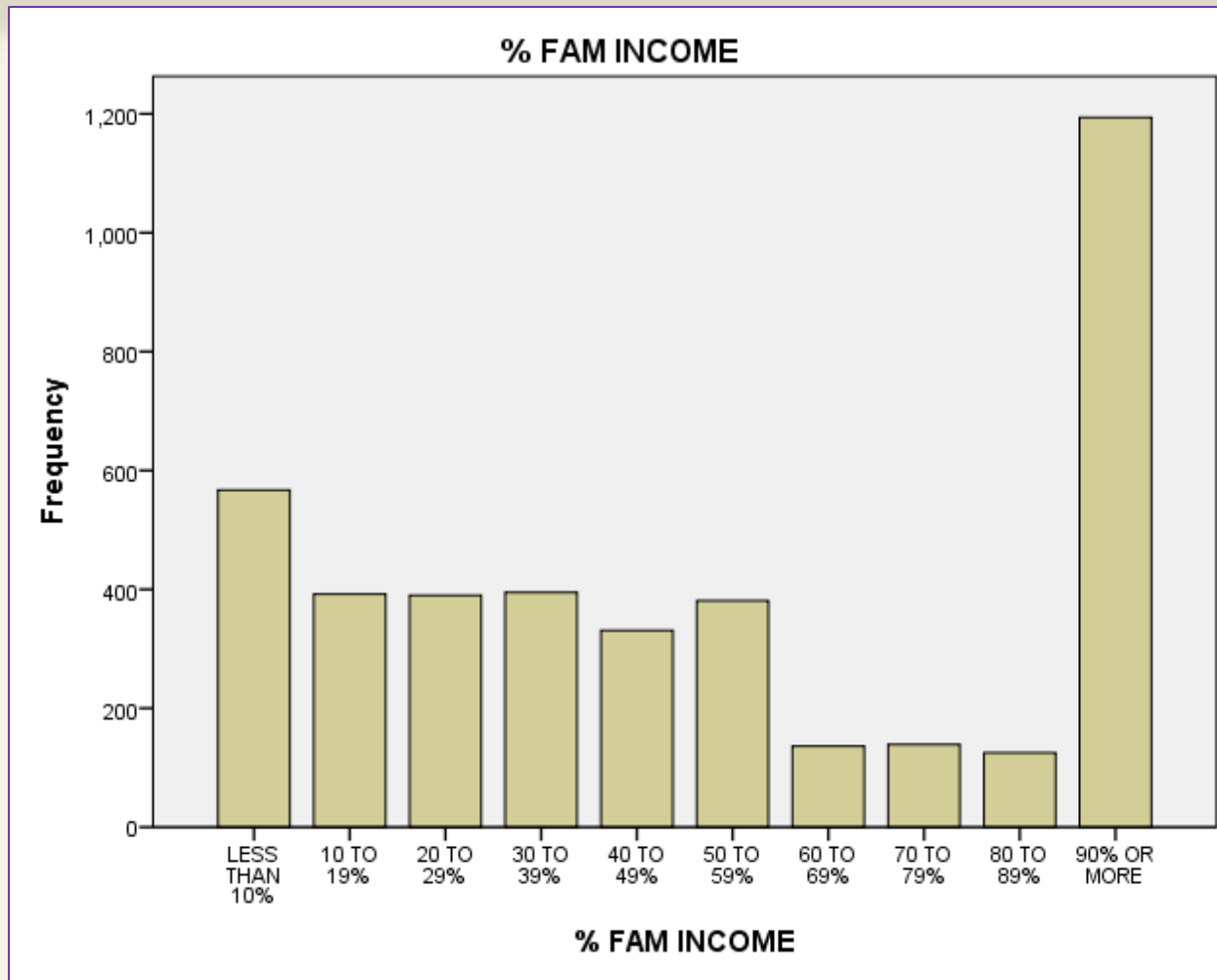


# What financial measure: Household or job income?

$$r = .25, p < .05$$



# What Financial Measure: Primaries vs. Supplementers



# What Financial Measure?

## Federal Poverty Guidelines

Household Size	100%	200%
1	\$11,490	\$22,980
2	\$15,510	\$31,020
3	\$19,350	\$39,060
4	\$23,550	\$47,100
5	\$27,570	\$55,140
6	\$31,590	\$63,180
7	\$35,610	\$71,220
8	\$39,630	\$79,260
Each additional person	\$4,020	\$8,040

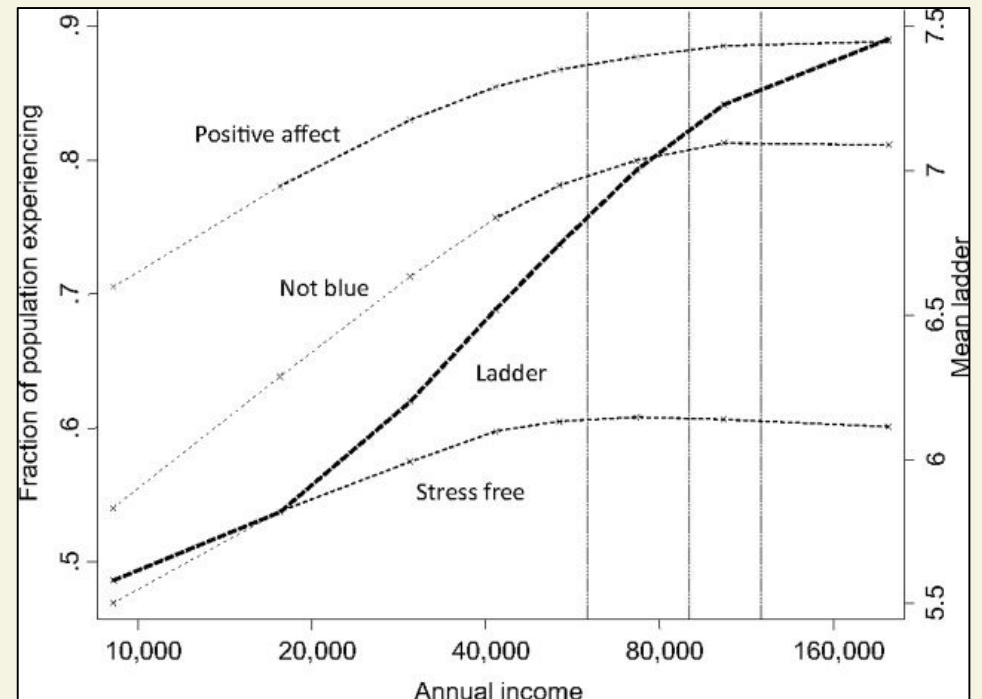
Used for  
eligibility in  
various  
programs

No single  
method to  
calculate

Supplemental  
Poverty Index  
(SPI) includes  
resources

# Is \$75K the threshold for well-being?

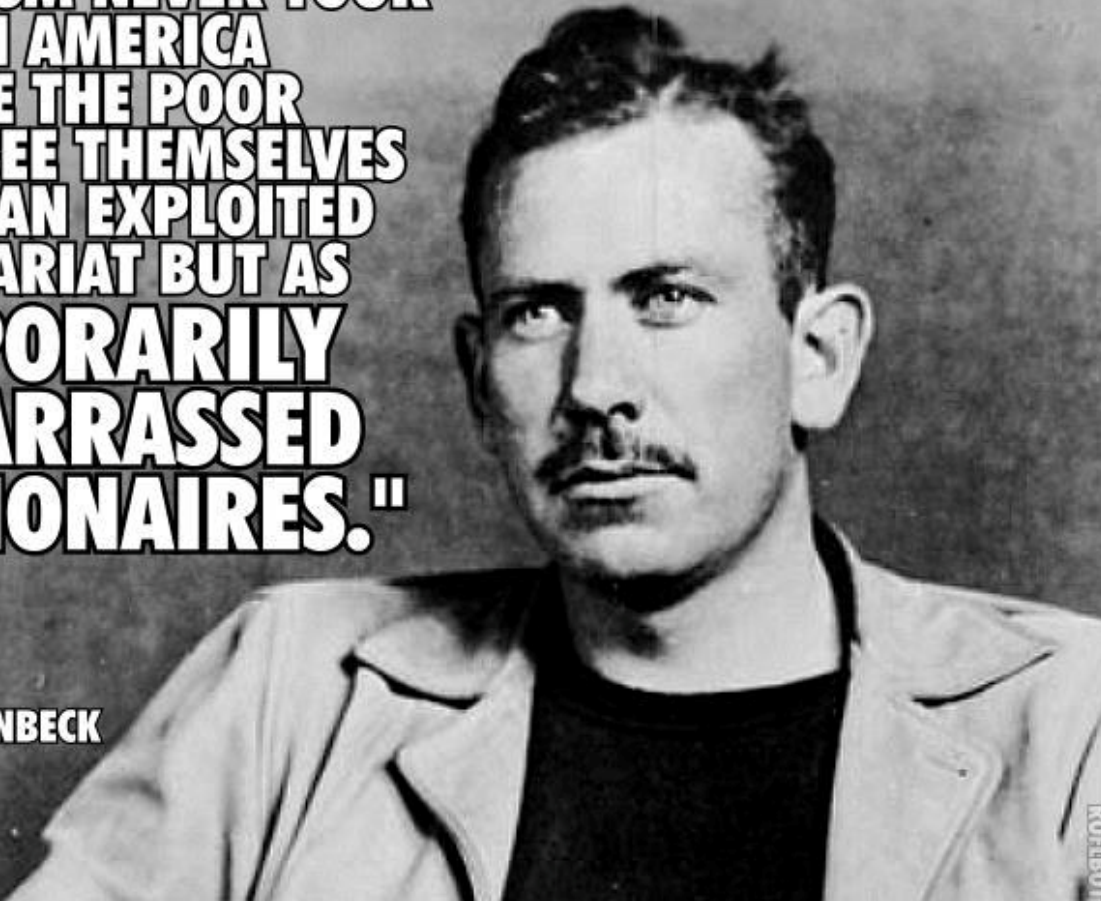
- **Linear effects for life satisfaction beyond 75K.**
- **75K threshold for daily mood, etc.**
- **Increased “pain” below 75K.**



# Subjective Aspects of Money

**"SOCIALISM NEVER TOOK  
ROOT IN AMERICA  
BECAUSE THE POOR  
THERE SEE THEMSELVES  
NOT AS AN EXPLOITED  
PROLETARIAT BUT AS  
TEMPORARILY  
EMBARRASSED  
MILLIONAIRES."**

**- JOHN STEINBECK**





# Financial Stress as perceived income adequacy (PIA)

- **Wants & Needs**

- **Primary Deprivation:**
  - Necessities
- **Secondary Deprivation:**
  - Desired non-necessities

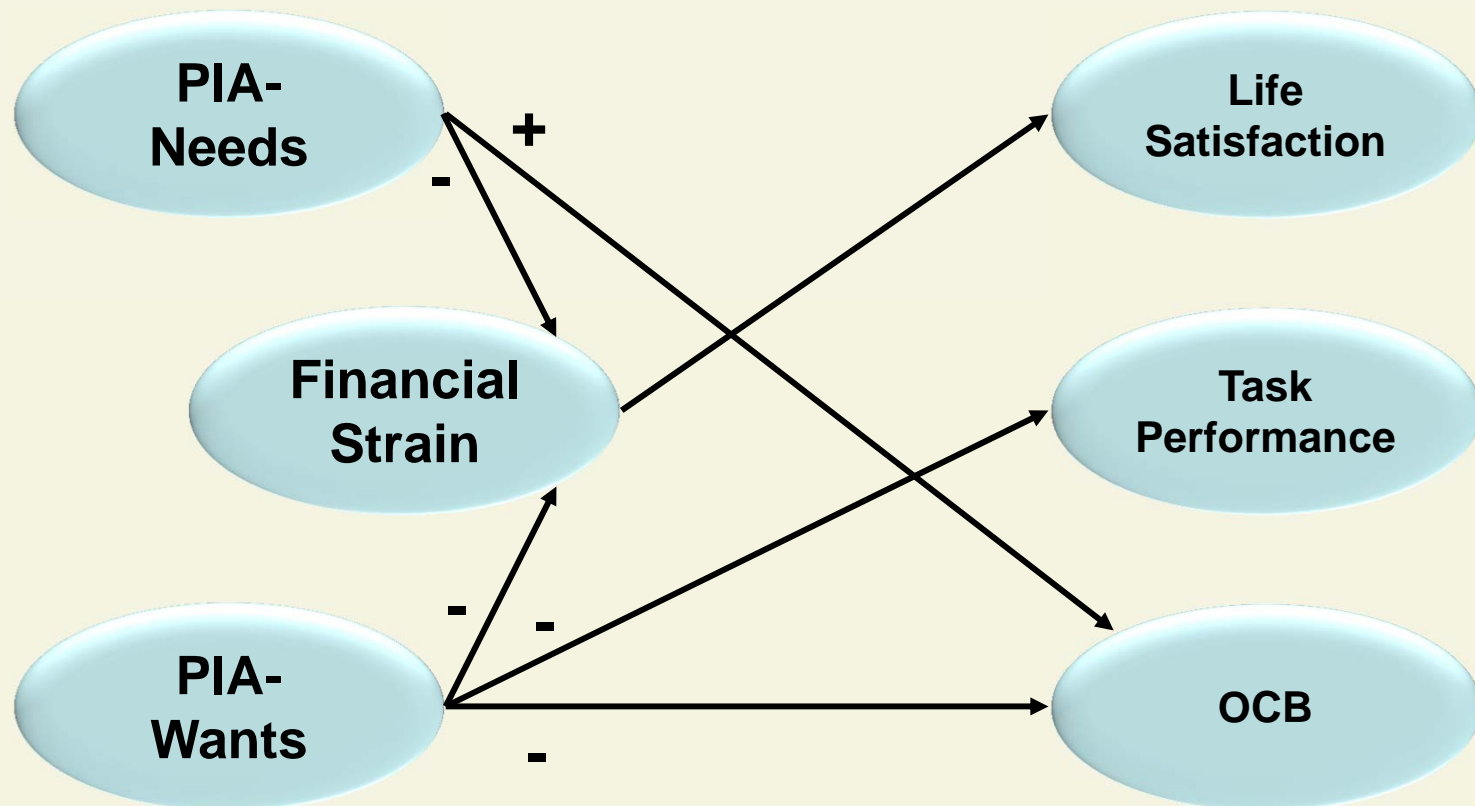
- **Current & Future**

- **Present concerns**
- **Expectations**

	Current	Future
Wants	Current Wants	Future Wants
Needs	Current Needs	Future Needs

# PIA Predicts Work-related Outcomes

(*N*=316; Chinese Manufacturing)



# PIA Predicts Health Outcomes

$N = 141$  Acute Care Nurses;  $^t p < .10$ ,  $^* p < .05$ ,  $^{**} p < .01$

	Depression	Burnout	Physical Symptoms	Engagement
Fragility	.20*	.16 <sup>t</sup>	.19*	-.06
Job Income	-.09	.14 <sup>t</sup>	.08	-.07
Family Income	-.03	-.10	-.04	.03
PIA-Current	-.20*	-.21*	-.26**	.26*
PIA-Future	-.04	.09	.06	.00
Total R2	.13**	.18**	.19**	.09*

# Perceived income adequacy may be (in part) a cognitive personality style

	PIA-Current		PIA-Future	
	Needs	Wants	Needs	Wants
1. Demographics	.01	.09	.02	.01**
2. Hardiness	.12**	.10**	.10**	.12**
3. Objective	.07**	.11**	.03**	.07**

Values shown are incremental  $R^2$

$N = 285$  College students

Demographics: Gender, Age, Credit Hours, Hours Spend on School, Hours Spent Working

Objective: Income, Debt, % of own expenses, # kids as dependents

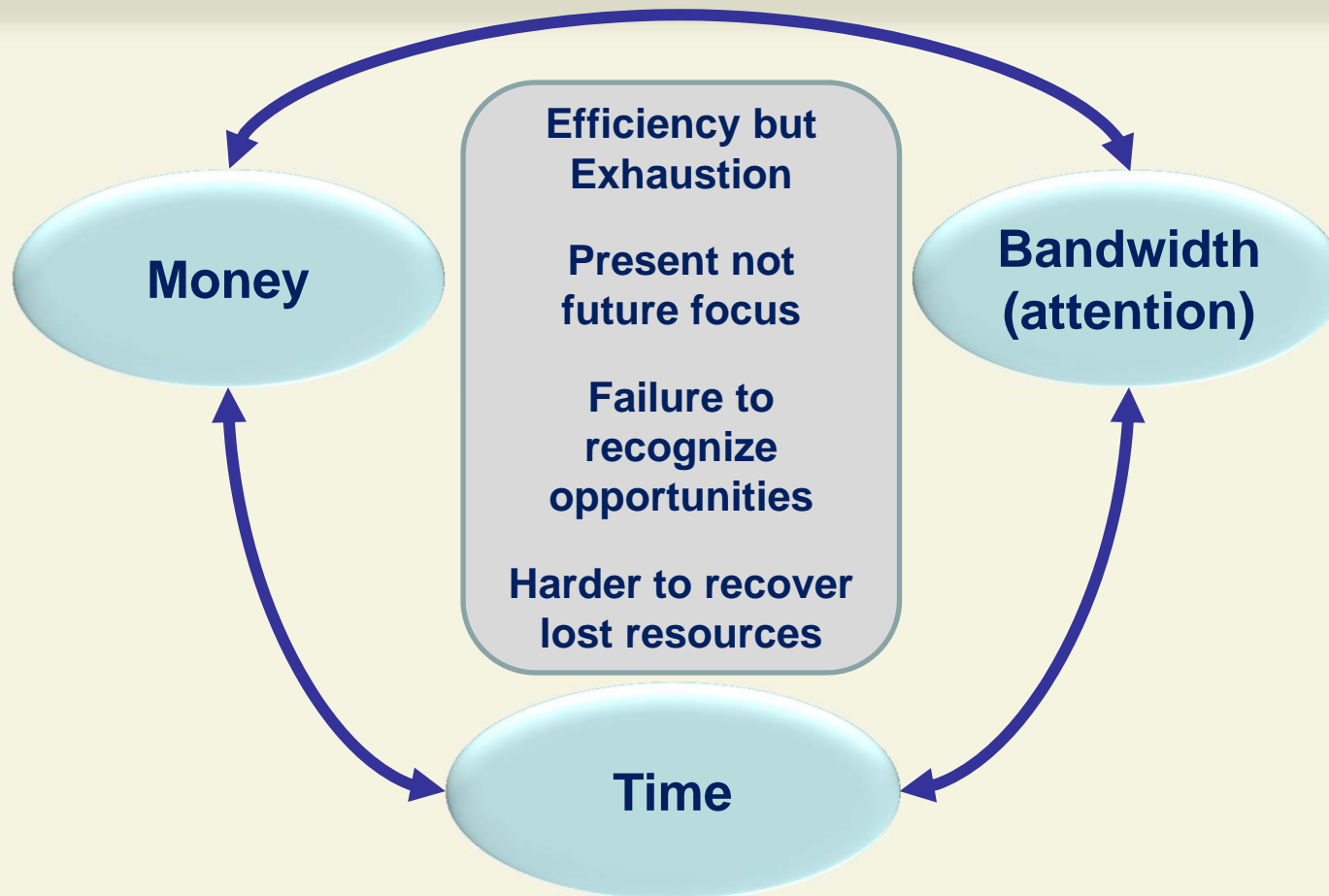
# ***COR provides a theoretical framework***

- **Resource loss**
  - Stronger than gain; caused by lost resources, threatened resources, failure to recover resources
- **Resource investment...**
  - ...to maintain health, protect against loss, recover from loss, gain resources.
- **Resource spirals**
  - Those with more resources are less vulnerable to resource loss and more capable of orchestrating gain.



# Resource Scarcity as a Mindset

## Mullainathan & Shafir



# Propositions about resource interactions

- **Scarcity Juggling**
  - “You borrow from tomorrow, and tomorrow you have less time than you have today, and tomorrow becomes more costly. It’s a very costly loan.”
- **Fungible/Equifinal Resources**

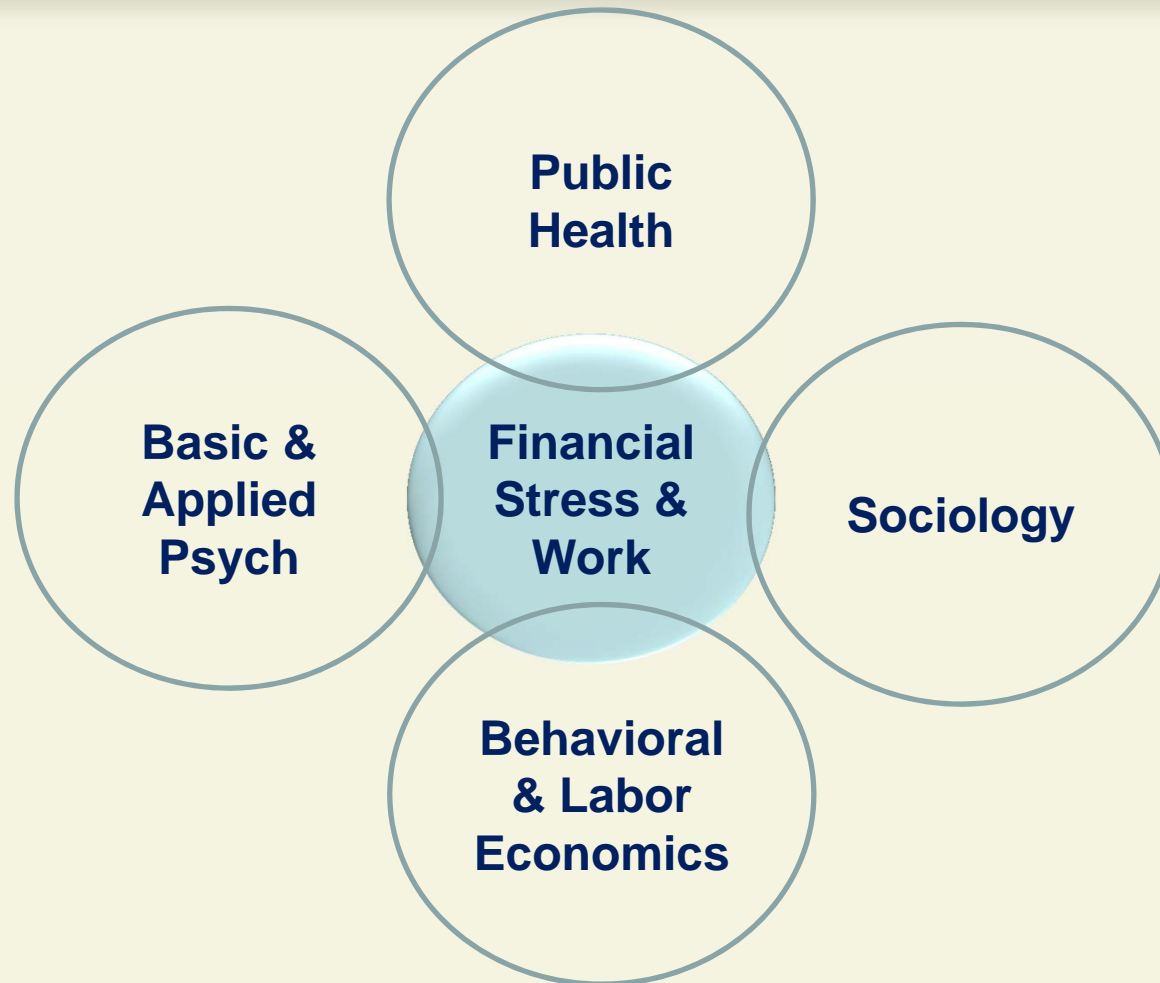


# Relativistic Effects

- **Hedonic Treadmill Theory**
  - Habituated emotional response to particular levels of a stimulus (e.g., resource)
- **Relative Deprivation Theory**
  - Assessments of resources relative to those of social referents
- **Future/Temporal Discounting**
  - Values shift to opportunities/challenges closer in time

# Challenges & Opportunities

# Challenge: Economic Research is multidisciplinary





# OHP Opportunity: Boundary Spanning Research

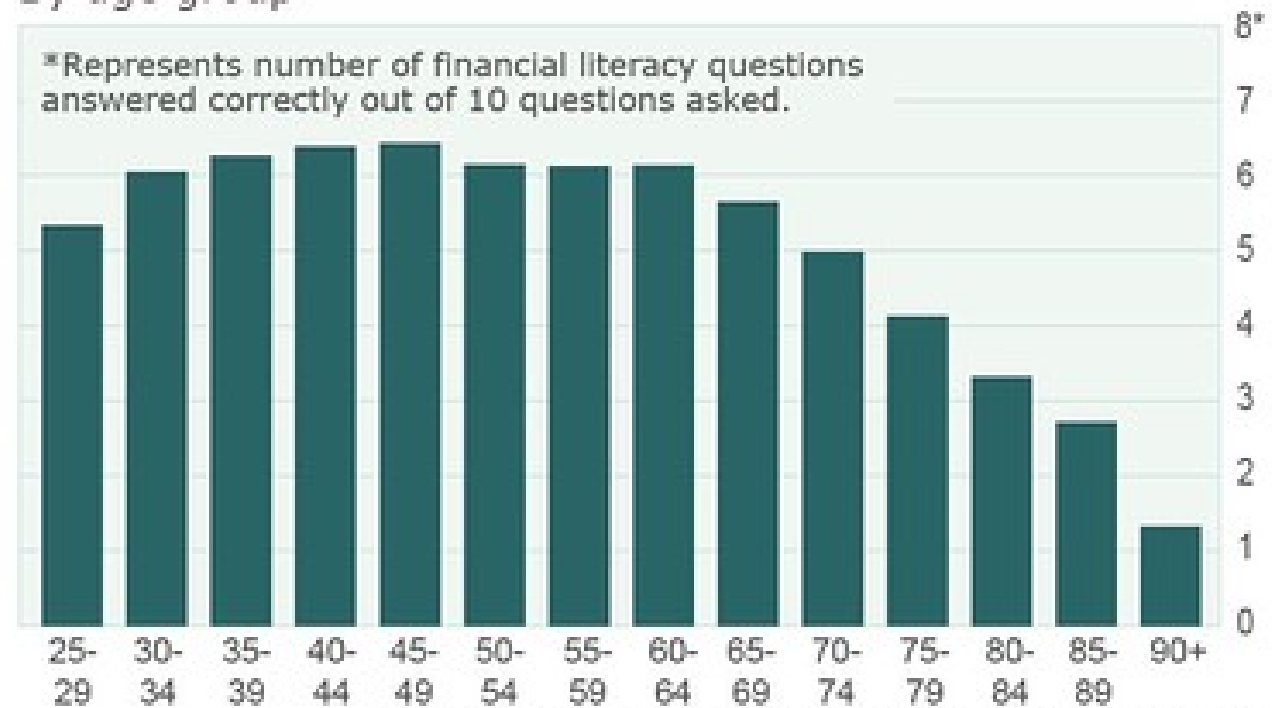


# Challenge: Financial Literacy

## Average financial literacy score

By age group

\*Represents number of financial literacy questions answered correctly out of 10 questions asked.

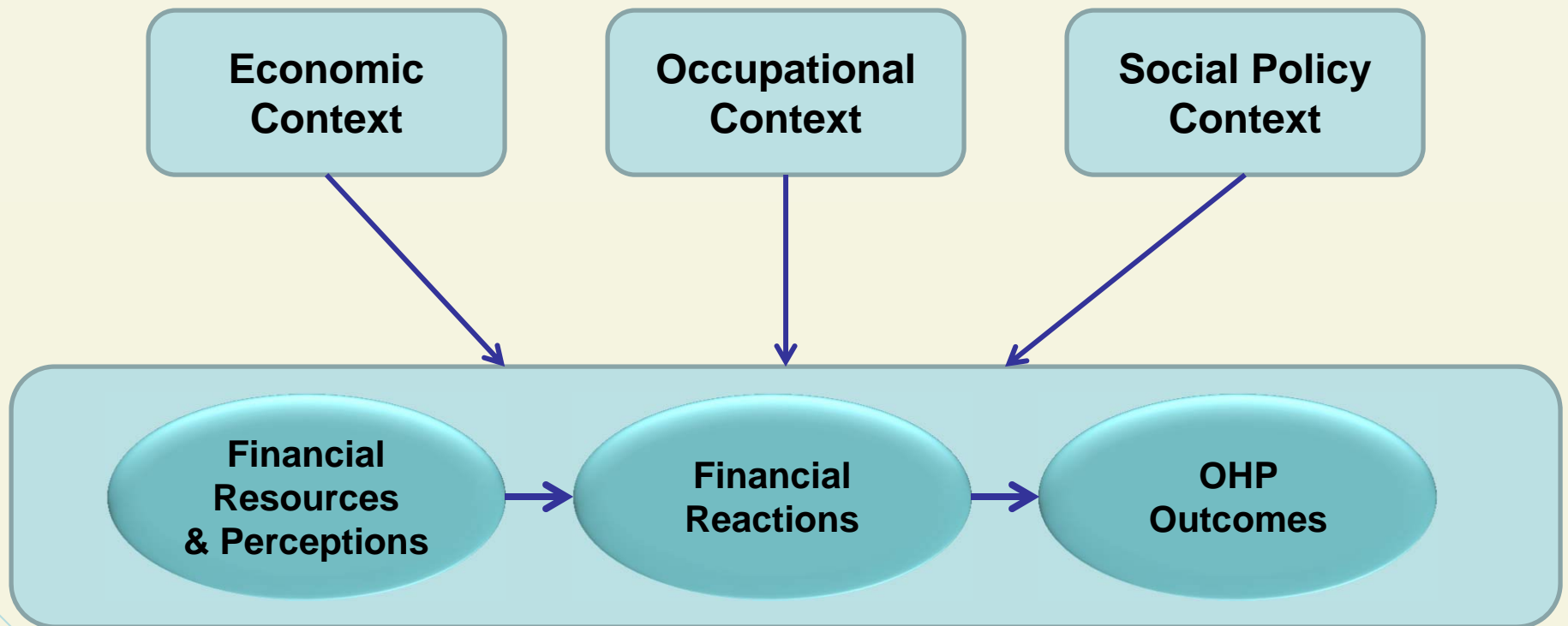


Data: Texas Tech University, University of Missouri at Columbia

# Opportunity: Building financial capability at work

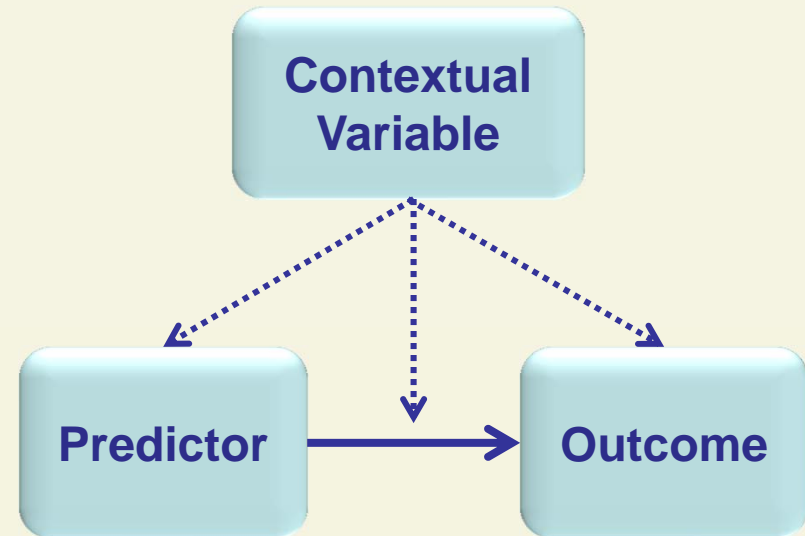
- **President's Advisory Council on Financial Capability**
  - To help keep America competitive and assist the American people in understanding and addressing financial matters, and thereby contribute to financial stability, it is the **policy of the Federal Government to promote and enhance financial capability among the American people.**
  - **Financial capability is the capacity, based on knowledge, skills, and access, to manage financial resources effectively.**
  - In order to develop this capacity, **individuals must have appropriate access to and understanding of financial products, services, and concepts.** Financial capability empowers individuals to make informed choices, avoid pitfalls, know where to go for help, and take other actions to improve their present and long-term financial well-being.

# Challenge: Contextual Effects



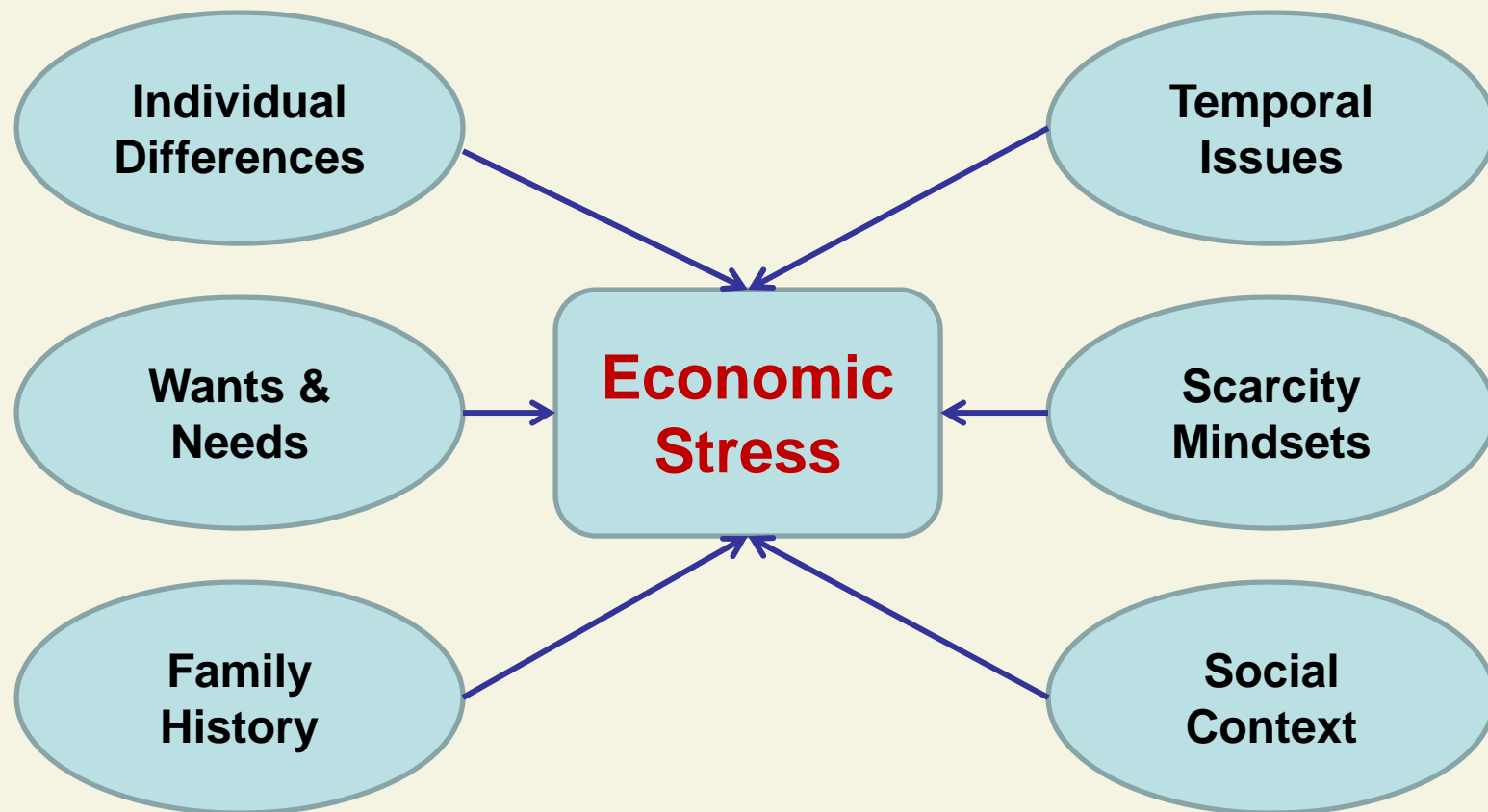
# Opportunity: Multilevel Research

- **Country level income & employment security**
  - (Debus et al., 2012)
- **Future employment prospects**
  - (Jiang et al. 2013)
- **Investment in active labor market programs**
  - (Stuckler et al., 2009)
- **Community/neighborhood effects**
  - (Zajack, 2010; Kneis et al., 2007)





# Challenge: Relating Subjective & Objective aspects of Money



# Opportunity: Meaning of Money

- **Value importance of money**
  - I believe that the more money you have, the happier you are.
- **Personal involvement with money**
  - I make out a budget for my expenditures.
- **Time spent thinking about financial affairs**
  - I have explicit plans for how I can make more money.
- **Skill at handling money**
  - I never have checks that bounce.
- **Comfort in taking financial risks**
  - I would prefer to win big or lose big than to be conservative.
- **Knowledge of financial affairs**
  - I understand how banks make money on loans, mortgages, savings accounts, etc.
- **Source of power and status**
  - I use money to influence others..

# **OHP areas that might benefit from better/continued economic research**

- **Work-family**
- **Good & Bad behavior at work**
- **Engagement/Burnout**
- **Group Dynamics/Climate**
- **Retention/Retirement/etc.**
- **Decision making**

# Conclusions

- **Increased salience of financial issues; limited attention in OHP.**
- **Poverty creates dynamic demands.**
- **Subjective aspects of income assessment.**
- **Financial issues require multidisciplinary, multifaceted, multilevel response.**



# ***Thanks! Any Questions?***

