

# Development and Testing of the Health Confidence Index

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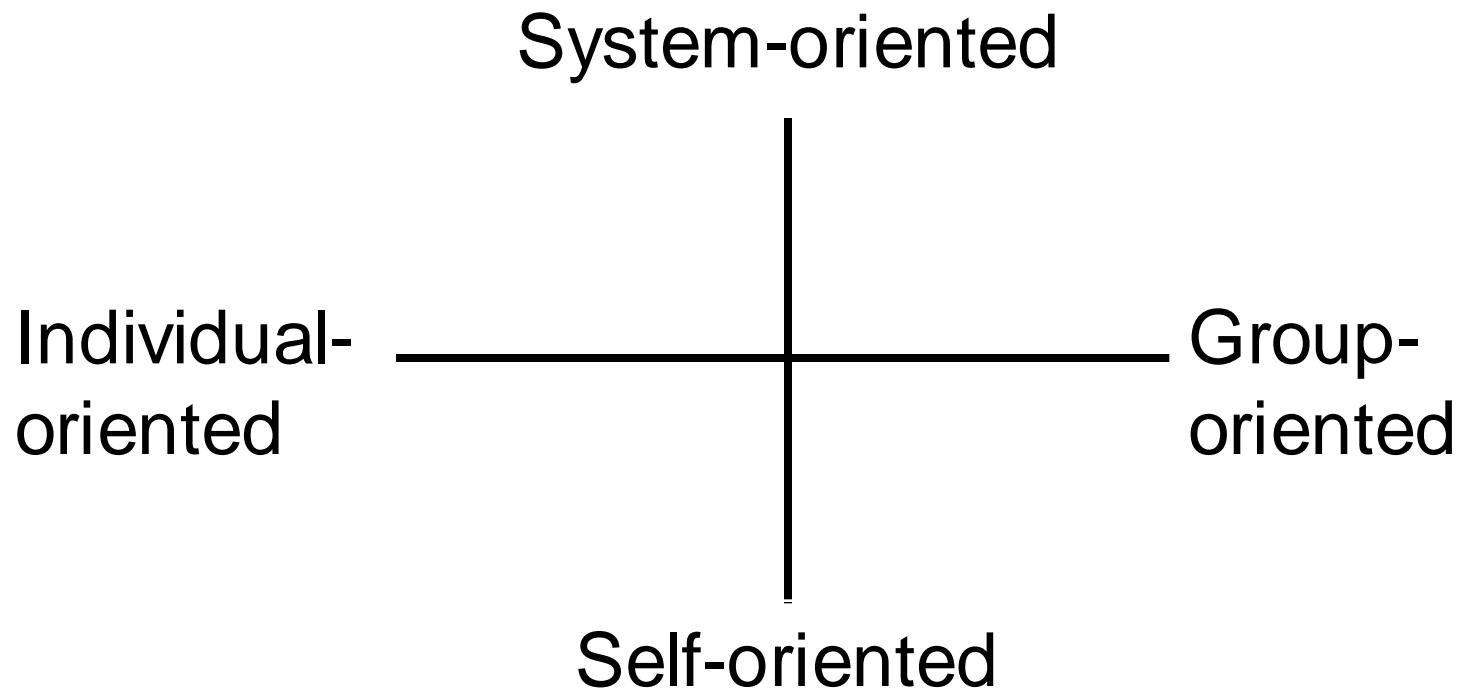
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# Background

- Economists' prediction of US employment vs. Consumers' subjective expectation
- Consumer Confidence Index
  - past and expected changes in personal finances
  - short- and long-term outlook for business condition
  - buying conditions
- A similar index for the US health care system?
  - The recent patient-as-consumer orientation

# Conceptualization of the Health Confidence



# Research Objectives

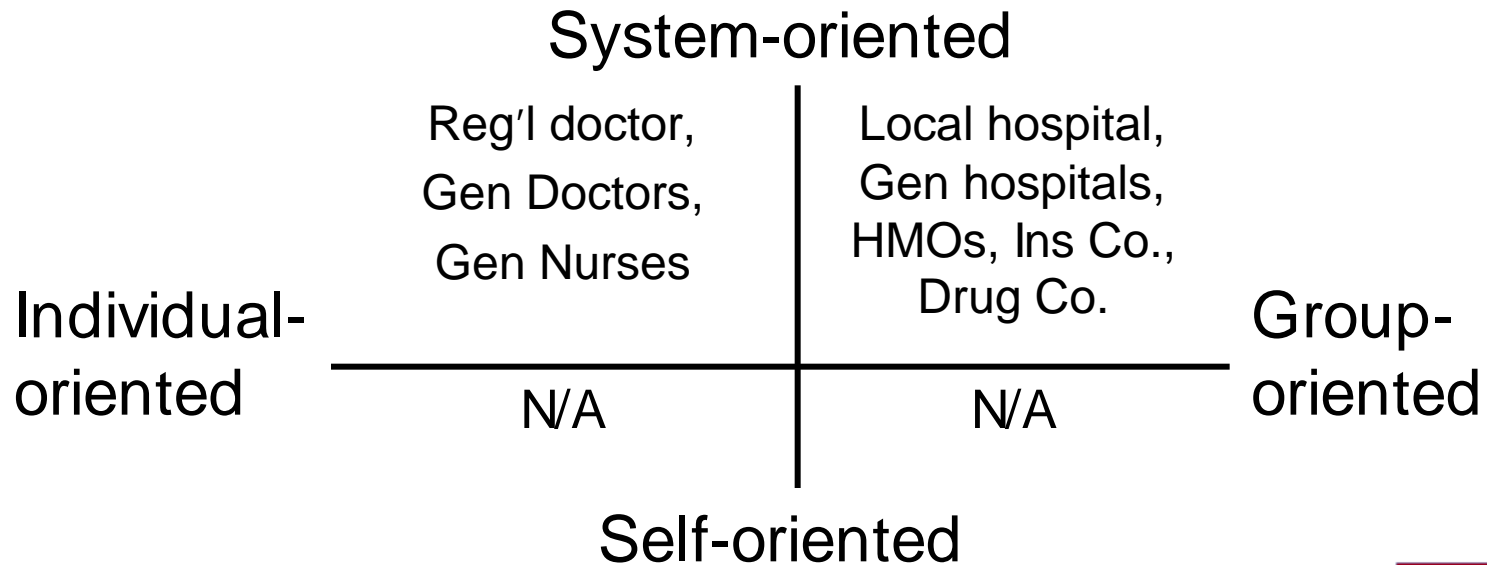
- Study 1: Initial development of an index to assess individuals' confidence in the US health care system
- Study 2: Modification and further validation of the Health Confidence Index
- Study 3: The Health Confidence Index as a predictor

# Study 1

- Data
  - Baseline survey from the *Healthcare Dialogue Project*, Summer 2004
- Sample
  - Adult citizens aged 18+ ( $N = 2,183$ )
  - The Knowledge Networks panel

# Study 1 (Cont.)

- Measurements
  - “How good a job of contributing to a quality health care system do you think each of the following is doing?” (alpha= .85)



# Study 1 (Cont.)

- Measurements
  - “How good a job of contributing to a quality health care system do you think each of the following is doing?”
  - Other items used for the validity test
    - Satisfaction with medical care
    - Worry about the prospective quality of medical care
    - Confidence in the people running health institutions
    - Need to change government regulation in health areas
    - Support for a radical plan on the health care system
    - Financial troubles paying medical costs

# The Construct Validity of HCI

- Those scored higher in the HCI were:
  - More likely to be satisfied with the quality and cost of medical care  
(after including controls,  $\beta = .48$ ,  $p < .001$ )
  - Less likely to be worried that the quality of medical care is getting worse ( $\beta = -.38$ ,  $p < .001$ )
  - More likely to have confidence in the people running health institutions ( $\beta = .54$ ,  $p < .001$ )



# Example: HCI and Satisfaction

- % of respondents who answered ... to “How satisfied are you with the quality of medical care you and your family now receive?”

Among those:	Lower half in HCI	Higher half in HCI
Very satisfied	15 %	48 %
Somewhat satisfied	52 %	44 %
Somewhat/very dissatisfied	33 %	8 %

# The Predictive Validity of HCI

- Those scored higher in the HCI were:
  - Less likely to think the current government regulation in the system should be changed (after including controls,  $\beta = -.20$ ,  $p < .001$ )
  - Less likely to support a universal, single-payer system of national health insurance ( $\beta = -.08$ ,  $p < .001$ )
  - Less likely to have financial problems paying their medical bills ( $\beta = -.12$ ,  $p < .001$ )

# Example: HCI and Gov Regulation

- % of respondents who answered ... to "Tell us if you think there should be more or less government regulation in the quality of doctors and hospitals."

Among those:	Lower half in HCI	Higher half in HCI
No change in regulation	27 %	42 %
More or less regulation	73 %	58 %

# Study 2

- Goal
  - Modification of the Index to tap into all four facets of Health Confidence
  - Further validation and Monthly trends
- Data
  - *Annenberg National Health Communication Survey, Jan 2005 - Aug 2006*
- Sample
  - Adult citizens aged 18+ ( $N = 2,993$ )
  - The Knowledge Networks panel



# HCI Items

## Study 1

- 5) Your local hospital
- 6) Hospitals in general
- 7) Nurses in general
- 8) HMOs

A. How good a job of contributing to a quality health care system do you think each of the following is doing?

- 1) Your regular doctor
- 2) Doctors in general
- 3) Medical insurance companies
- 4) Pharmaceutical and drug companies

## Study 2

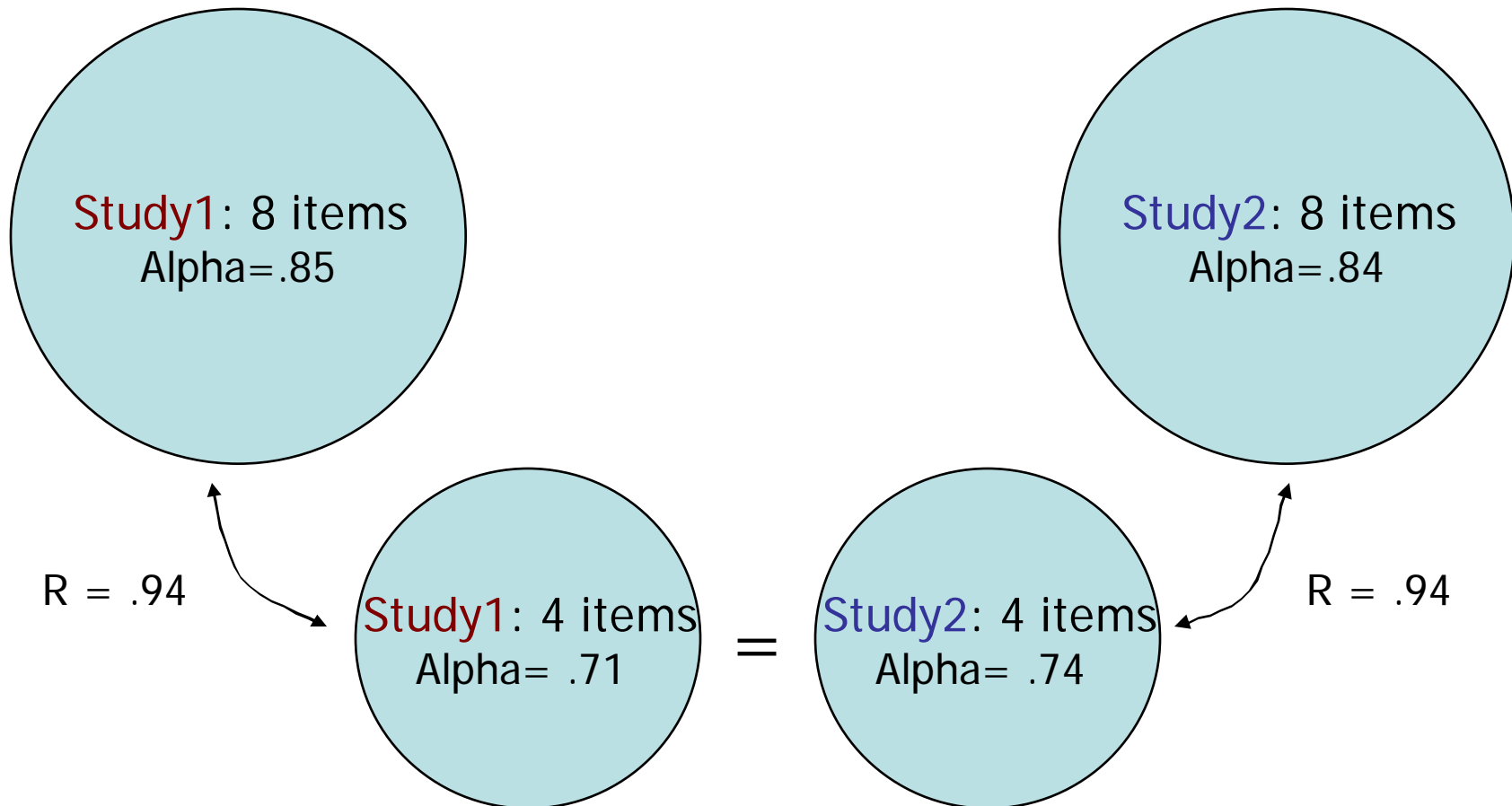
9) FDA

B. How would you rate the overall quality of medical care that you and your family now receive?

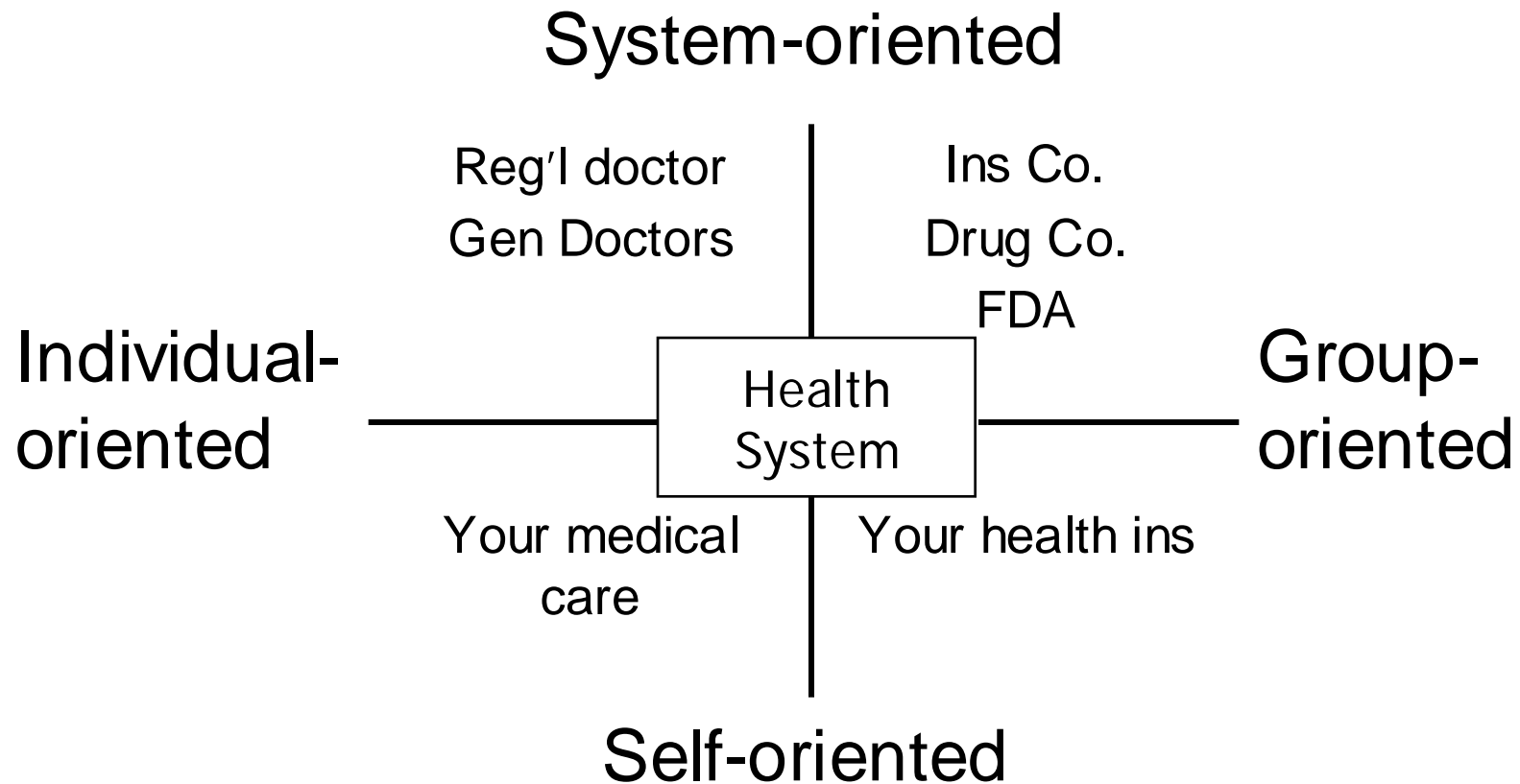
C. How would you rate your current health insurance coverage?

D. How would you rate the health care system as a whole in America today?

# Comparability across Study 1 & Study 2



# HCI Construction in Study 2



# Descriptive Summaries

	Reg'l doc	Gen doc	Ins co.	Drug co.	FDA	Your med. care	Your health ins	Overall health system
Poor -	3 %	4 %	33 %	28 %	20 %	4 %	5	28
Fair	10	20	33	28	34	14	17	34
Good	29	46	24	29	33	32	32	33
Very g.	34	26	8	12	10	36	33	10
Excel't	24	4	2	3	2	14	13	2
Total	100 %							



# Individuals High in HCI

- Socio-demographics
  - Older
  - Higher education
  - Higher income
- Health characteristics
  - Better health status
  - Having health insurance
- Political characteristics
  - Republican
  - More conservative

# HCI and Financial Problems

- How much of a hardship was it for you to pay your out-of-pocket health care costs?

Among those:	Lower half in HCI	Higher half in HCI
Very big/somewhat of a hardship	59 %	34 %
Not much of/not at all	41 %	66 %

- Have you or family member delayed taking a prescribed drug because it was too costly?

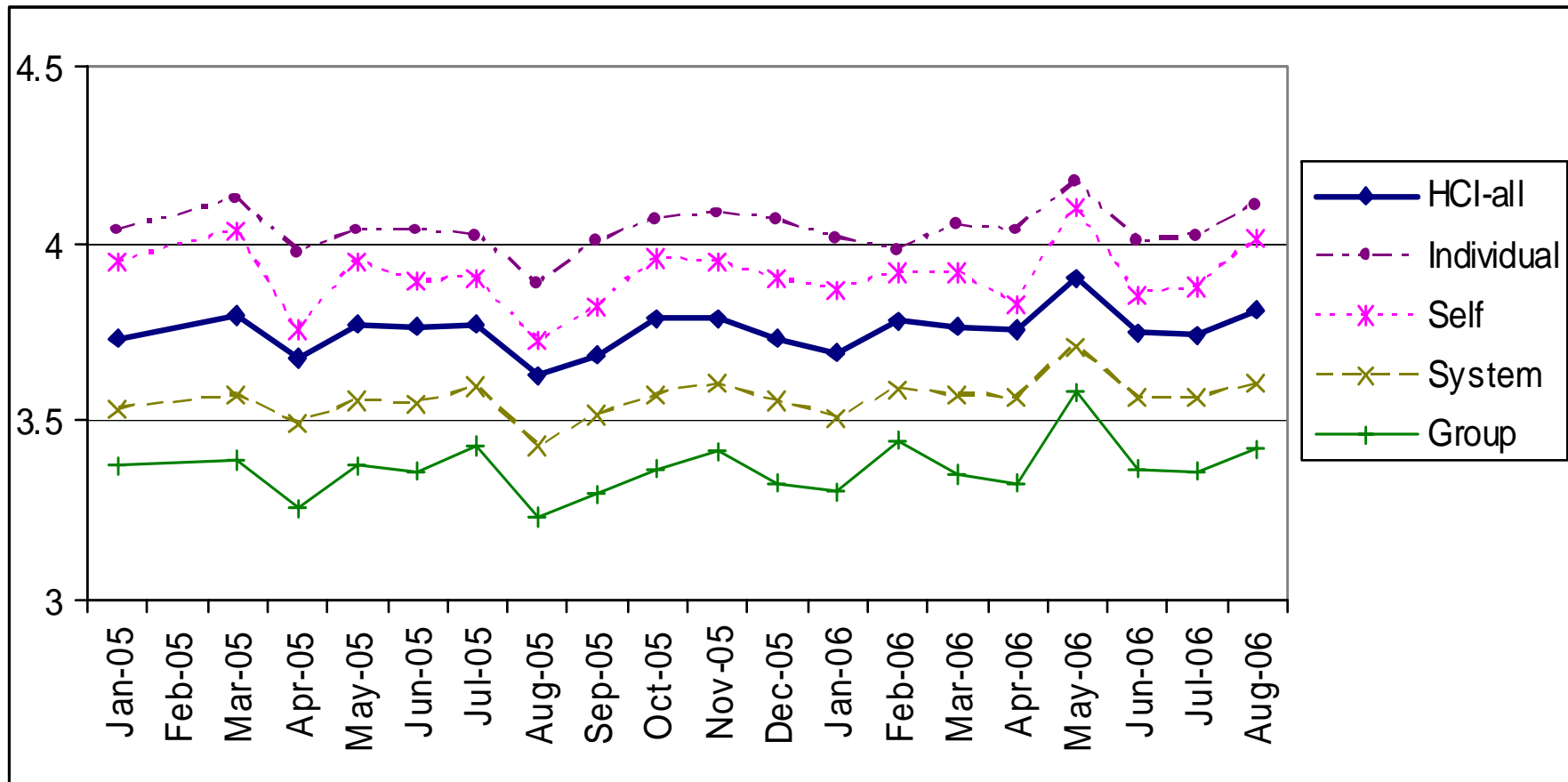
	Lower half	Higher half
Yes, delayed	41 %	20 %
No, did not	59 %	80 %

# HCI and Support for Regulation

- Do you support or oppose government regulation to control health care costs?

Among those:	Lower half in HCI	Higher half in HCI
Support	48 %	43 %
No opinion	26 %	25 %
Oppose	27 %	33 %

# Monthly Trends in HCI

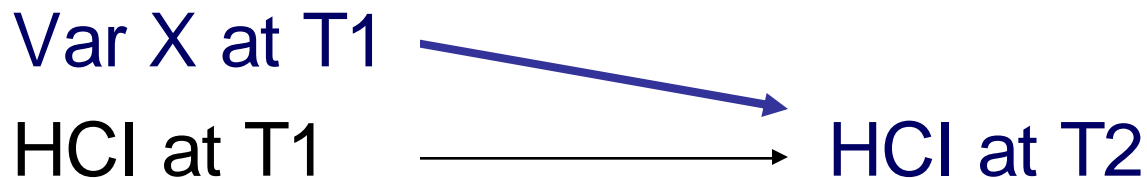
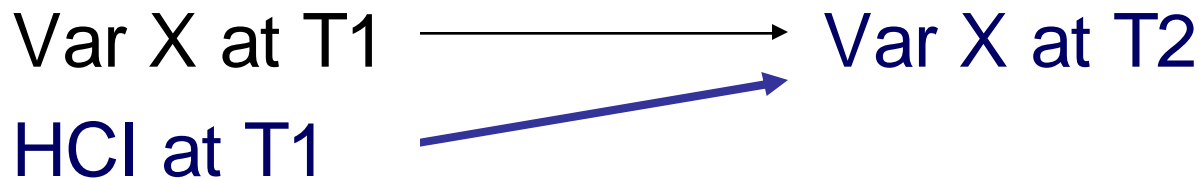


# Study 3

- Goal
  - Examination of predictive power of the HCI
- Data
  - Panel data from the *Healthcare Dialogue Project*
    - Summer 2004 & 2005 ( $N = 1,645$ )
  - Panel data from *Annenberg National Health Communication Survey*
    - Mar-Jul 2005 & 2006 ( $N = 502$ )

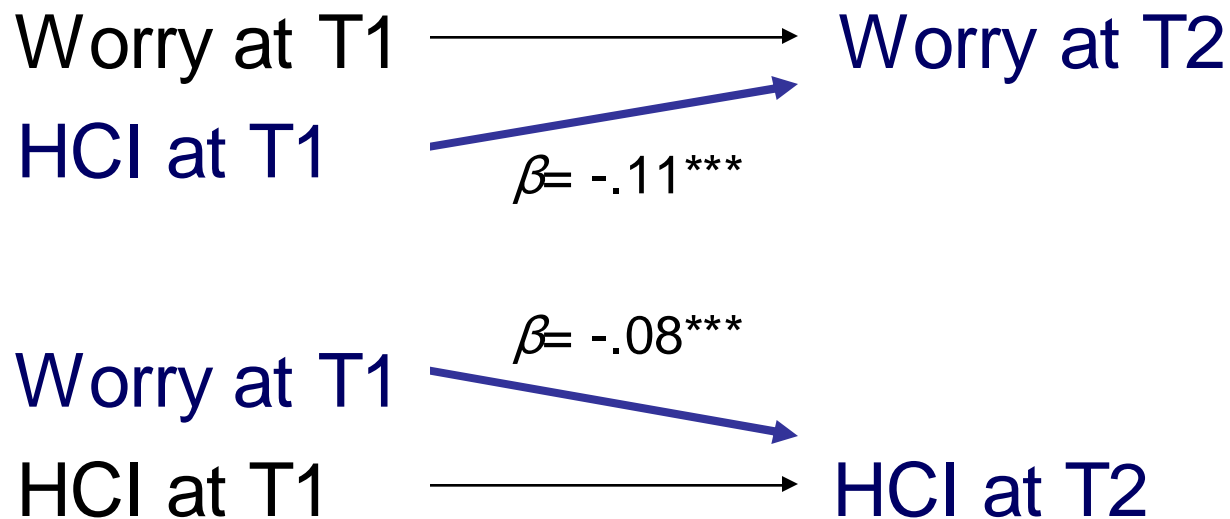
# Study 3 (Cont.)

- Analyses Scheme
  - Two pairs of regression analyses



# HCI and Prospective Worry

- Worry that the prospective quality of medical care is getting worse

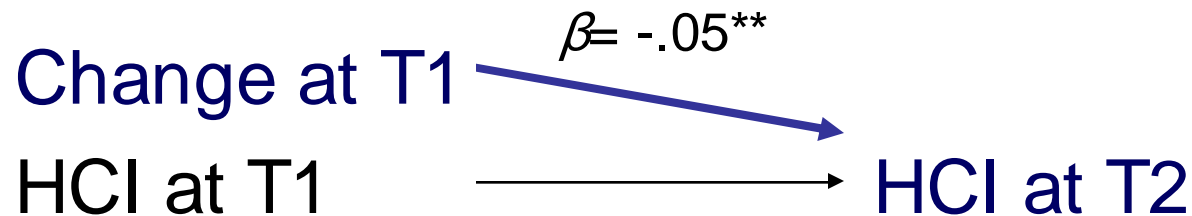
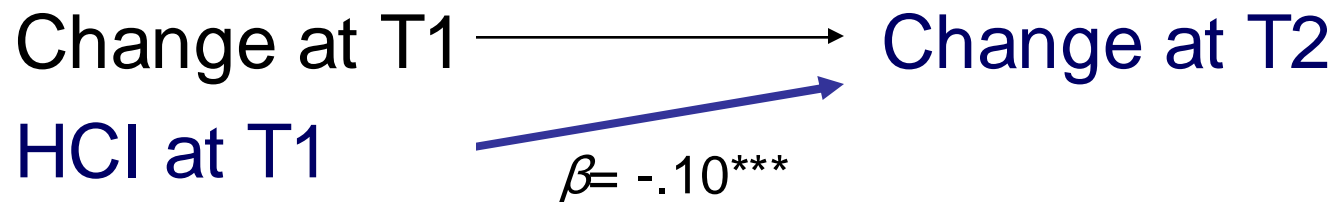


\*\*\*  $p < .001$



# HCI and Regulation Change

- Think that there should be a change in current government regulation in the system



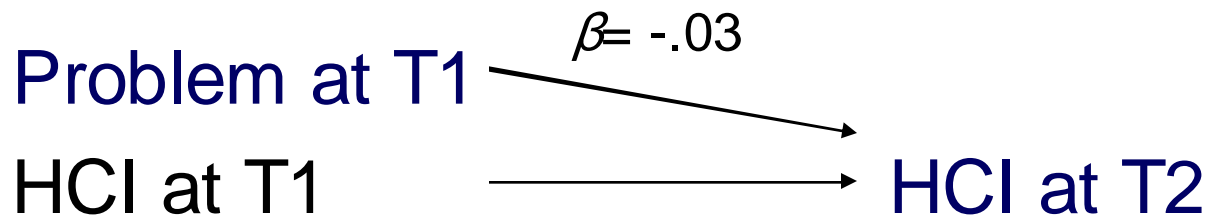
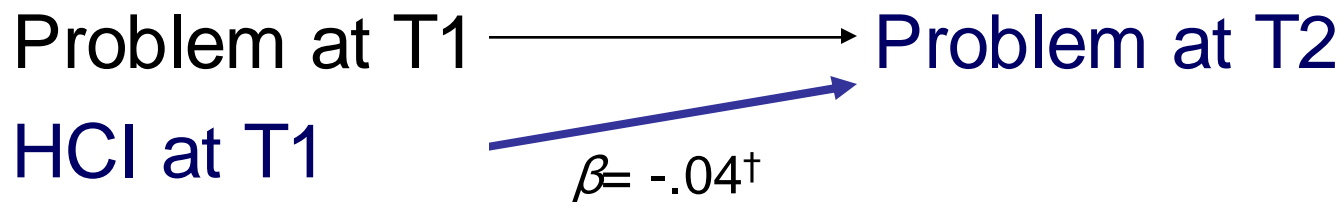
\*\*  $p < .01$ , \*\*\*  $p < .001$





# HCI and Financial Problems

- Had problems paying medical bills in the past 12 months



$^\dagger p < .07$



# Discussions

- Health Confidence Index
  - Reliability and construct validity
  - Temporally stable in the observed period
  - Predictive validity
- HCI and health care policy
- Future research direction