

MORTALITY PREDICTION USING SELF-RATED HEALTH AND MORTALITY EXPECTATIONS

CSDI 2013

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OVERVIEW

- Mortality prediction
 - Why?
 - Survey-based predictors
- Data and methods
- Results
- Implications

MORTALITY PREDICTION

- Individual decision making
 - Finance
 - Health and health care
- Age-based public policy decisions
 - Public expenditures
 - e.g., Social Security, Medicare in the US
- Difficult to predict!

SURVEY-BASED MORTALITY PREDICTORS

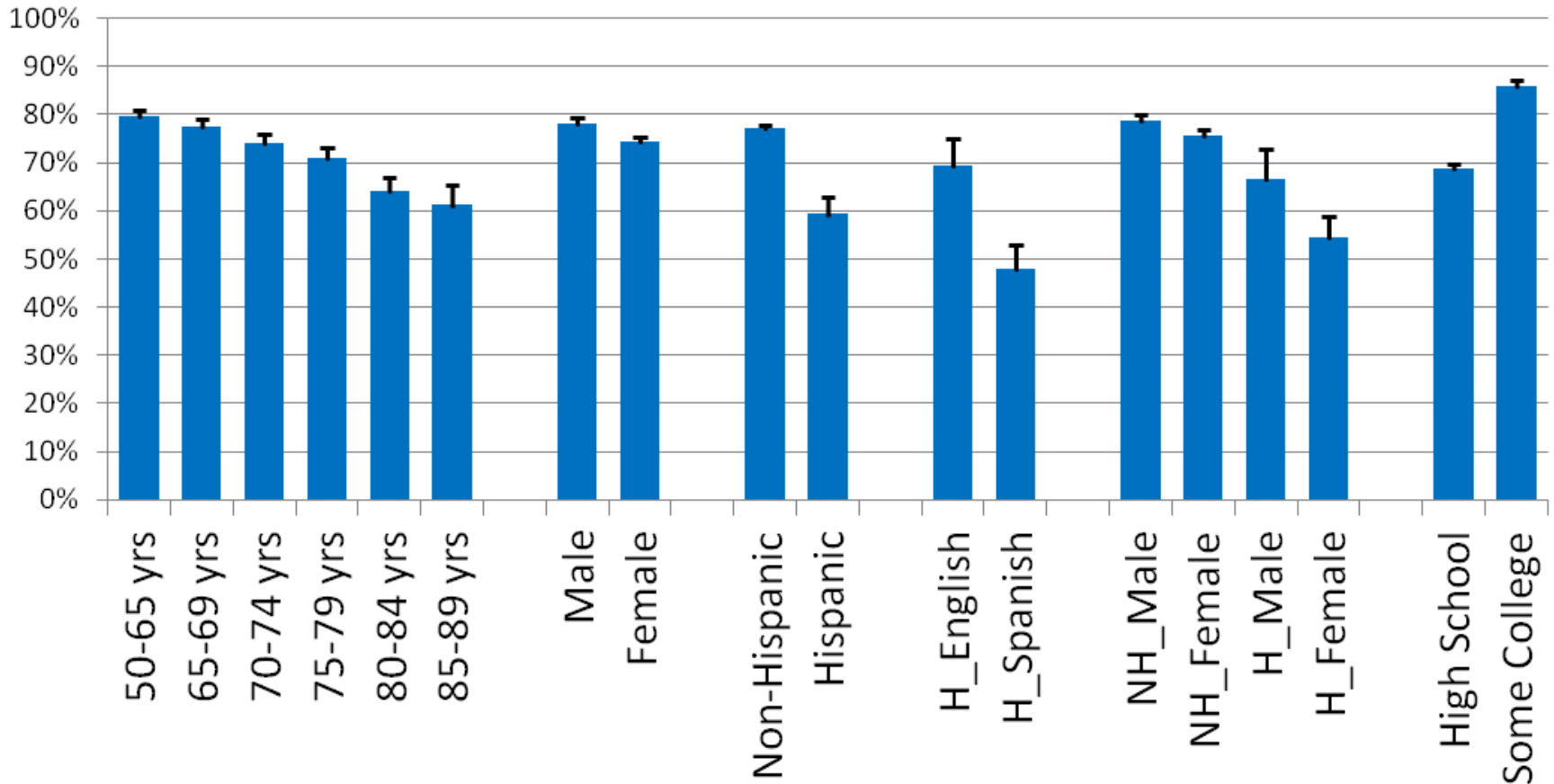
- Self-rated health (SRH)
 - “Would you say your health is excellent, very good, good, fair, or poor?”
 - Public health
- Subjective mortality expectations (SME)
 - “What is the percent chance that you will live to be [CERTAIN AGE] or more?”
 - Economics, demography
- Hold cross-culturally? Hispanics?

DATA AND METHODS

- **Health and Retirement Study (HRS)**
 - **Baseline data: HRS 2000**
 - Both SRH and SME included
 - Born in 1947 or prior years
 - Self-respondents ages 50-89 (n=16,722)
 - **Mortality data: HRS 2010 tracking info**
 - Available for 12,805 of the baseline sample
 - **Link baseline and mortality data**

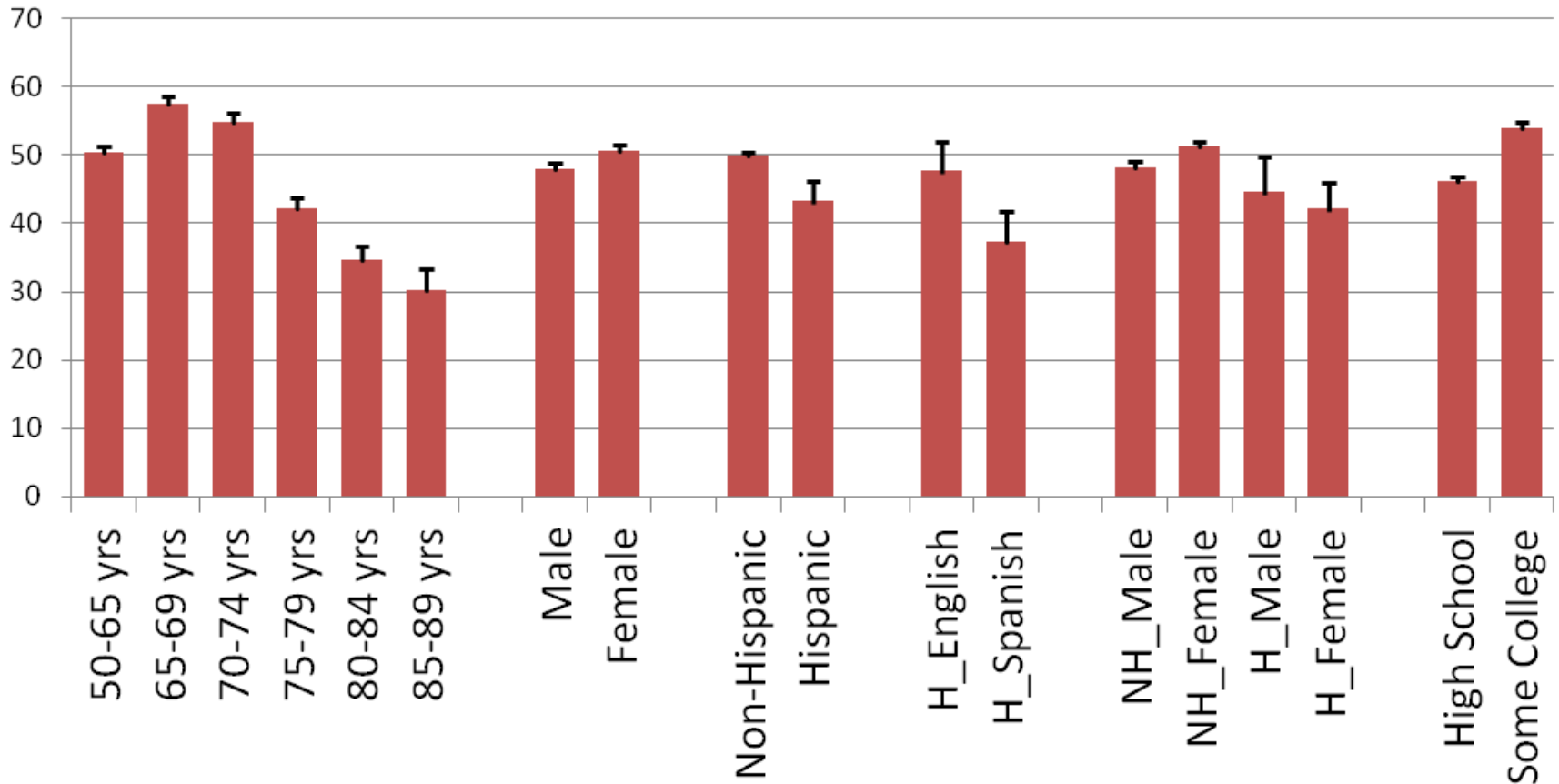
RESULTS: BASELINE SRH

% Excellent, Very good, Good health in 2000



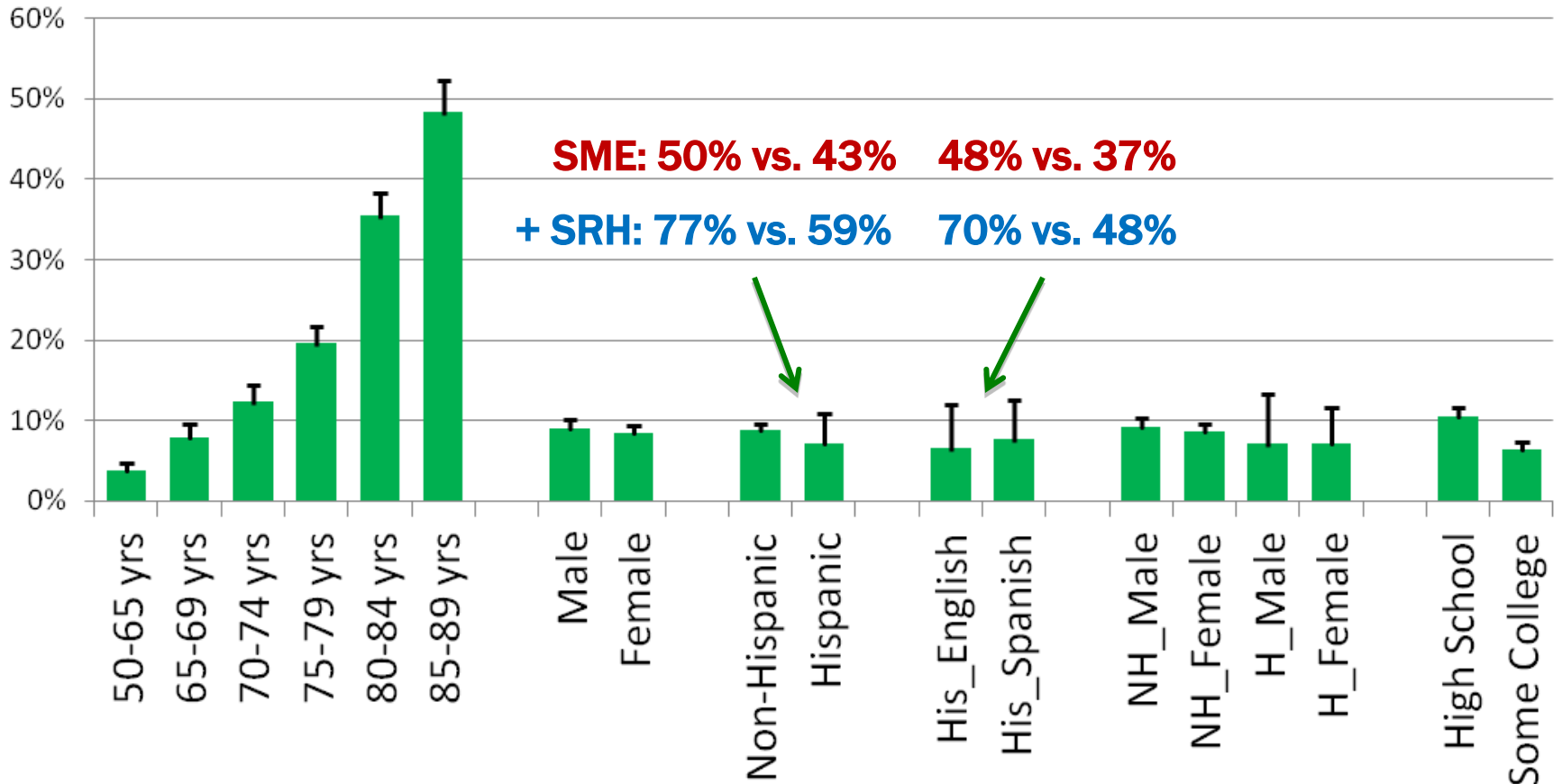
RESULTS: BASELINE SME

% Survival Expectations Upto Specified Age in 2000

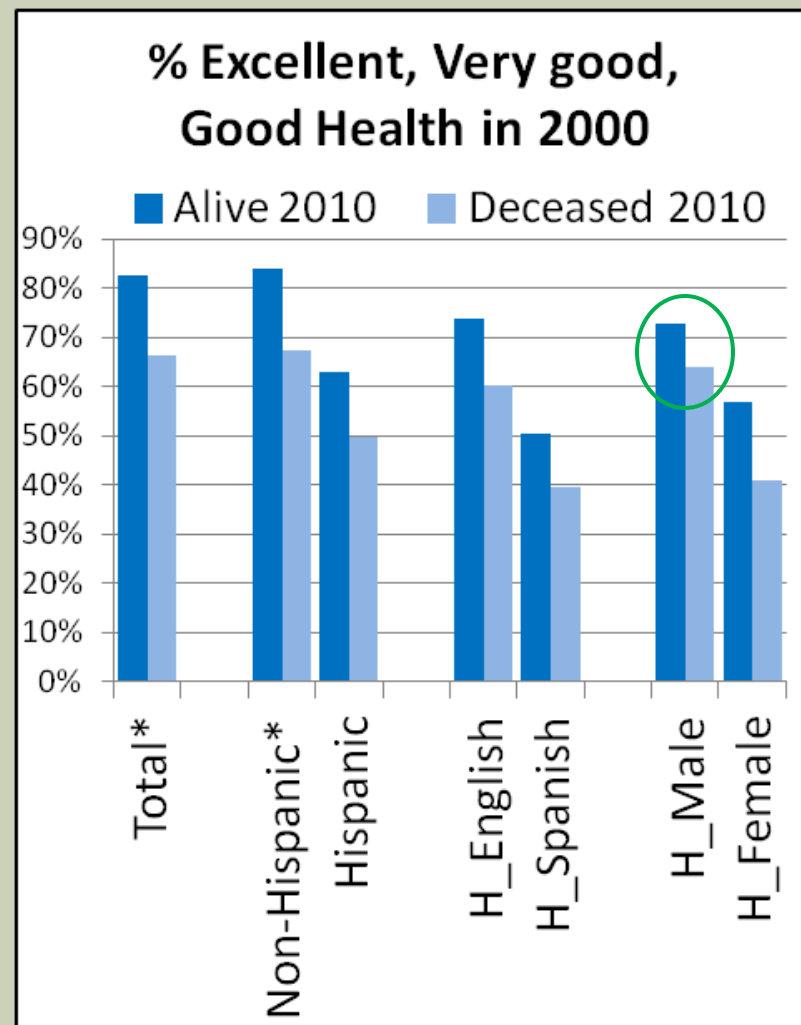
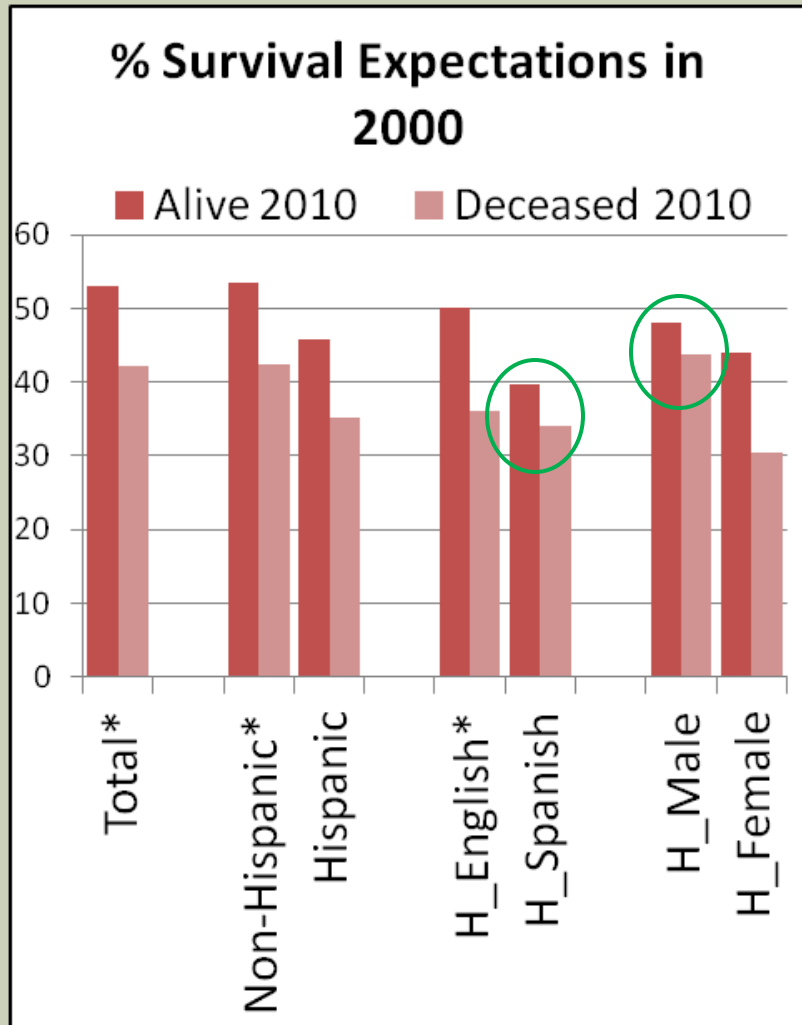


RESULTS: SUBSEQUENT MORTALITY

% Deceased by 2010



RESULTS: SRH AND SME BY MORTALITY



* Difference between alive and deceased in 2010 significant at $p < 0.05$

IMPLICATIONS

- Preliminary, but!
 - Both SME and SRH, good predictors
 - Some quirks with SME and younger age
 - Not as good for Hispanics, especially,
 - Spanish-speaking Hispanics
 - Hispanic males

WHAT' S NEXT?

- Further data exploration
 - Mortality prediction based on vital stats table
 - National death index for refining subsequent mortality status
 - Expectations scale usage

THANK YOU!!

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