Differential Response Styles of Subjective Life Expectancy and Cultural Differences in Time Orientation

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Expectation Questions

- Solicit respondents to estimate probabilities of future events on a numeric scale of 0-100
  - Product purchase
  - Inflation
  - Asset value
- Popular among economists backed by empirical evidence
- Debate over probabilistic reasoning in psychology

Subjective Life Expectancy – 1

- Subjective life expectancy (SLE)

  "What is the percent chance that you will live to be [TARGET AGE] or more?"

- Predicts mortality and mortality-related economic and health behaviors (e.g., Social Security benefits claim)
- Used in surveys of older adults

Subjective Life Expectancy – 2

- Cognitive difficulties beyond probabilistic reasoning
- SLE assumes
    1. Future time orientation
    2. Pragmatic future outlook

→Directly against cultural sensitivity

1. Past, present, and future orientation
2. Fatalism, idealism and pragmatism

Subjective Life Expectancy – 3

- Time orientation: Past, present, and future
- Pragmatism: Fatalism, idealism and pragmatism

→Differential difficulties and Item nonresponse

→Differential future outlooks and deterministic responses (0 or 100)

Data

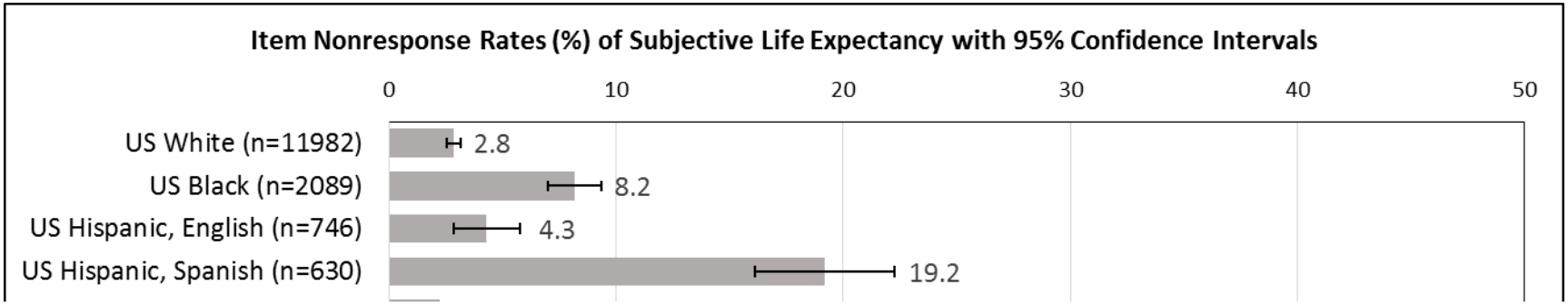
- Health and Retirement Study (HRS), 2004-2010
- English Longitudinal Study of Ageing (ELSA), Wave 1
- Survey of Health, Ageing and Retirement in Europe (SHARE), Wave 1
- China Health and Retirement Longitudinal Study (CHARLS), 2011

Analysis

- Focus on SLE item nonresponse
  - Mostly “don’t know”s

- HRS: Racial/ethnic/linguistic subgroups
- ELSA: Racial subgroup
- SHARE:
  - Germanic vs. Romance language speaking countries
  - Israel by ethnic/linguistic subgroups
- CHARLS

Results – 1. SLE Item NR %



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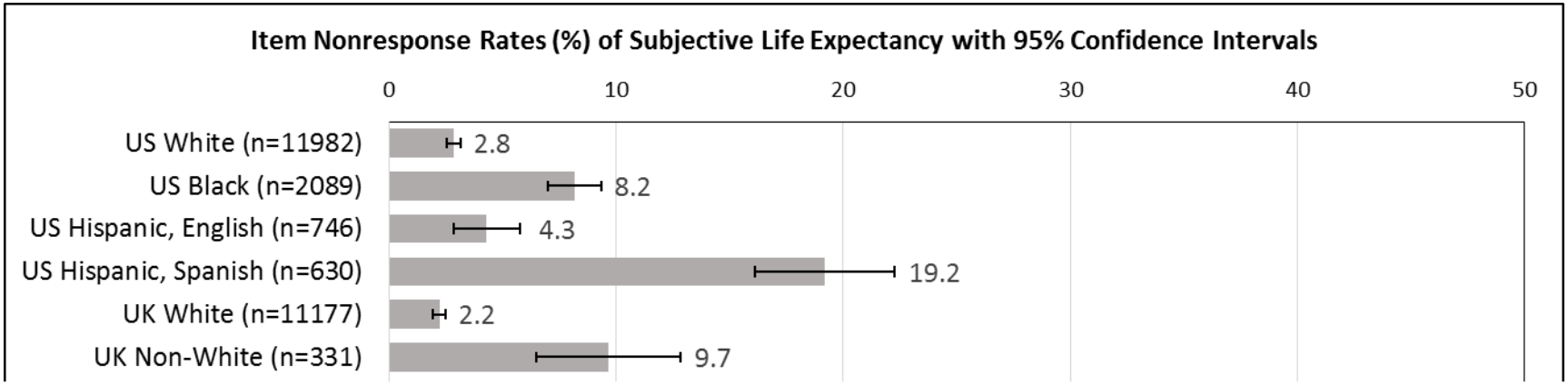

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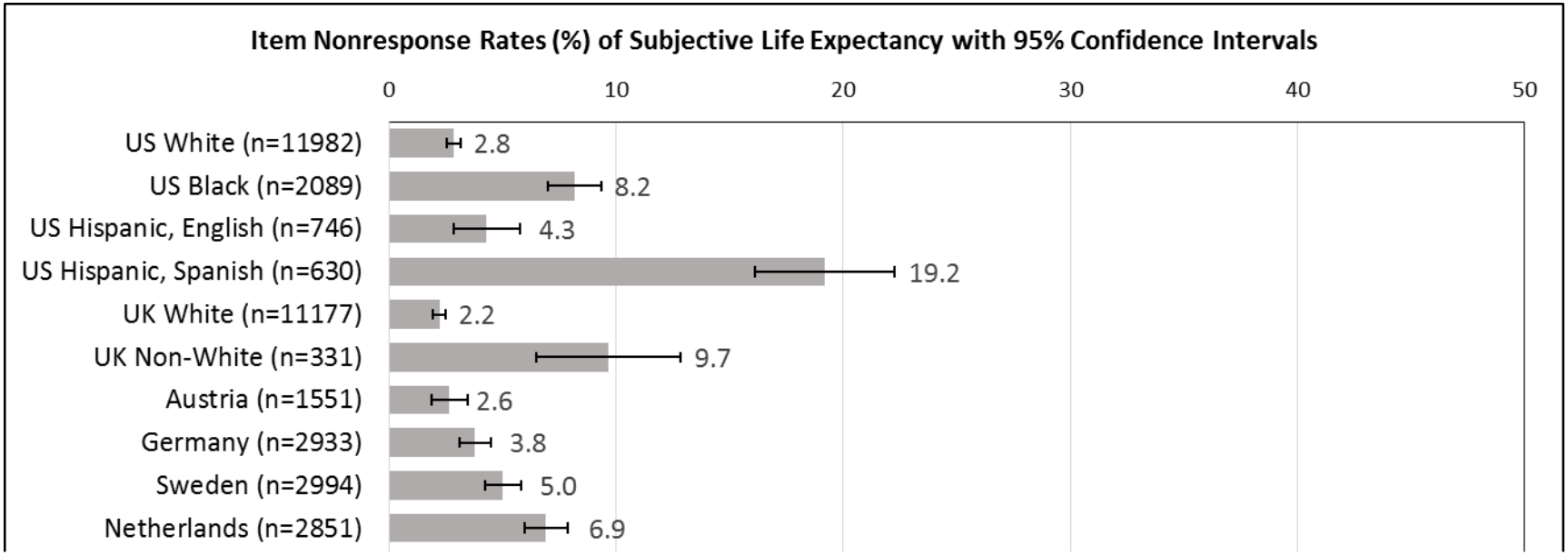

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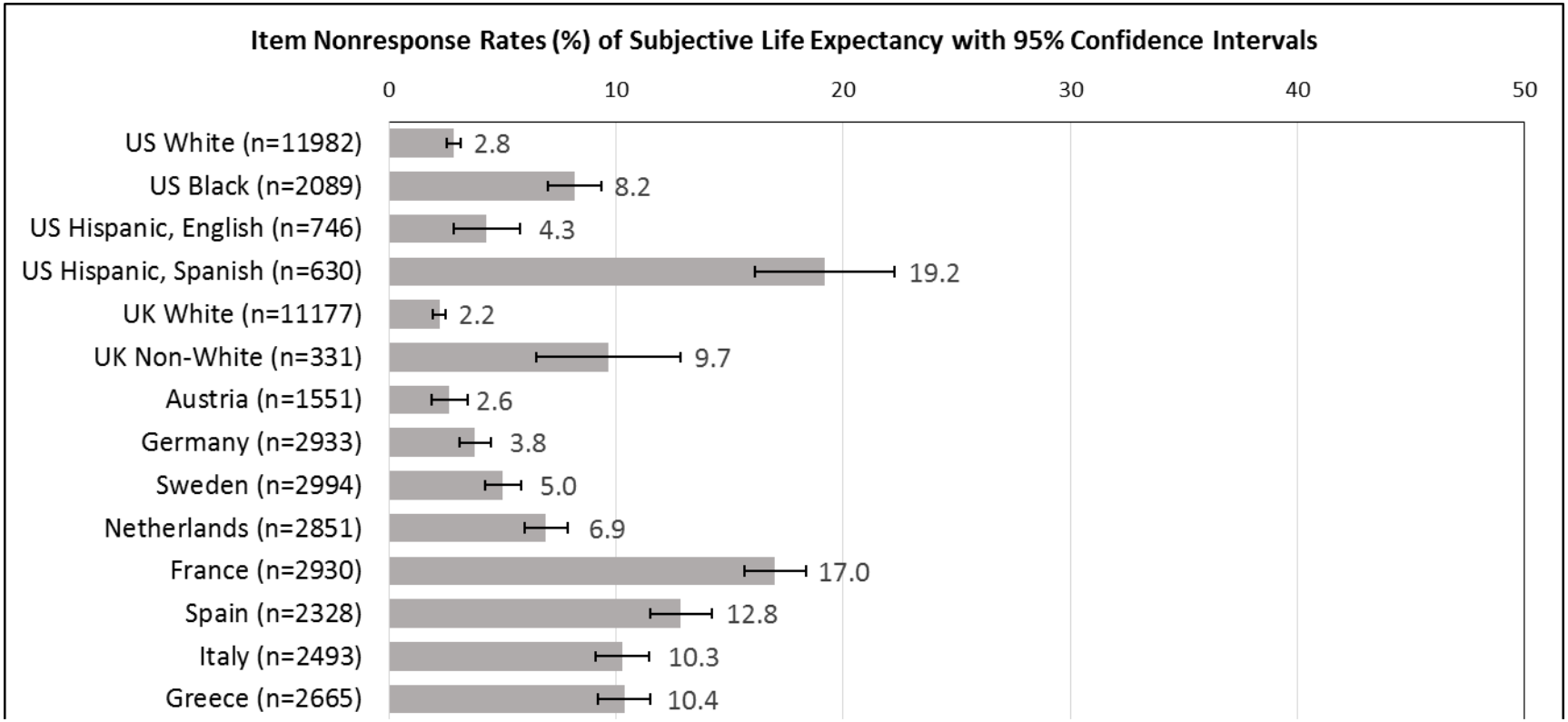

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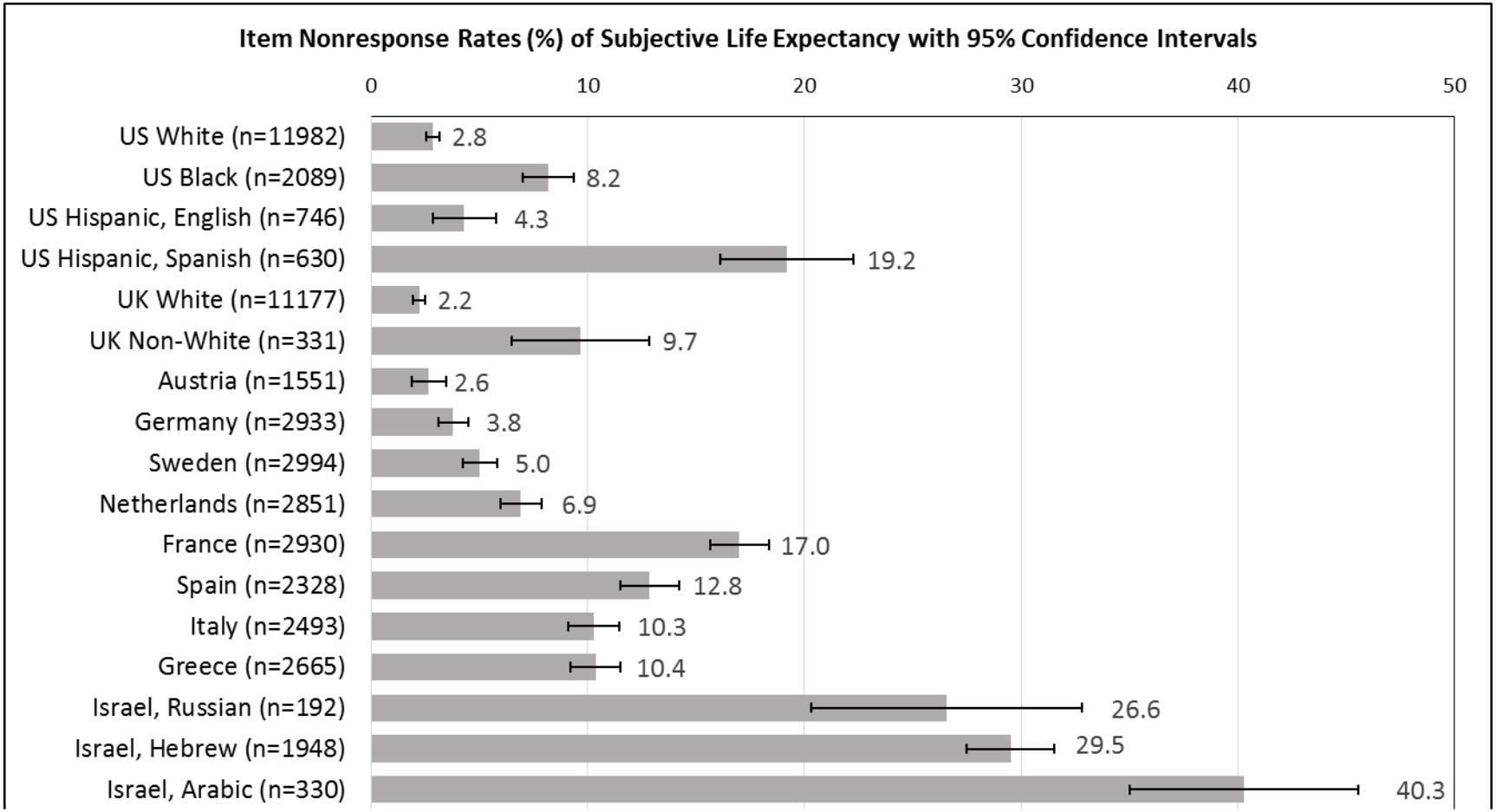

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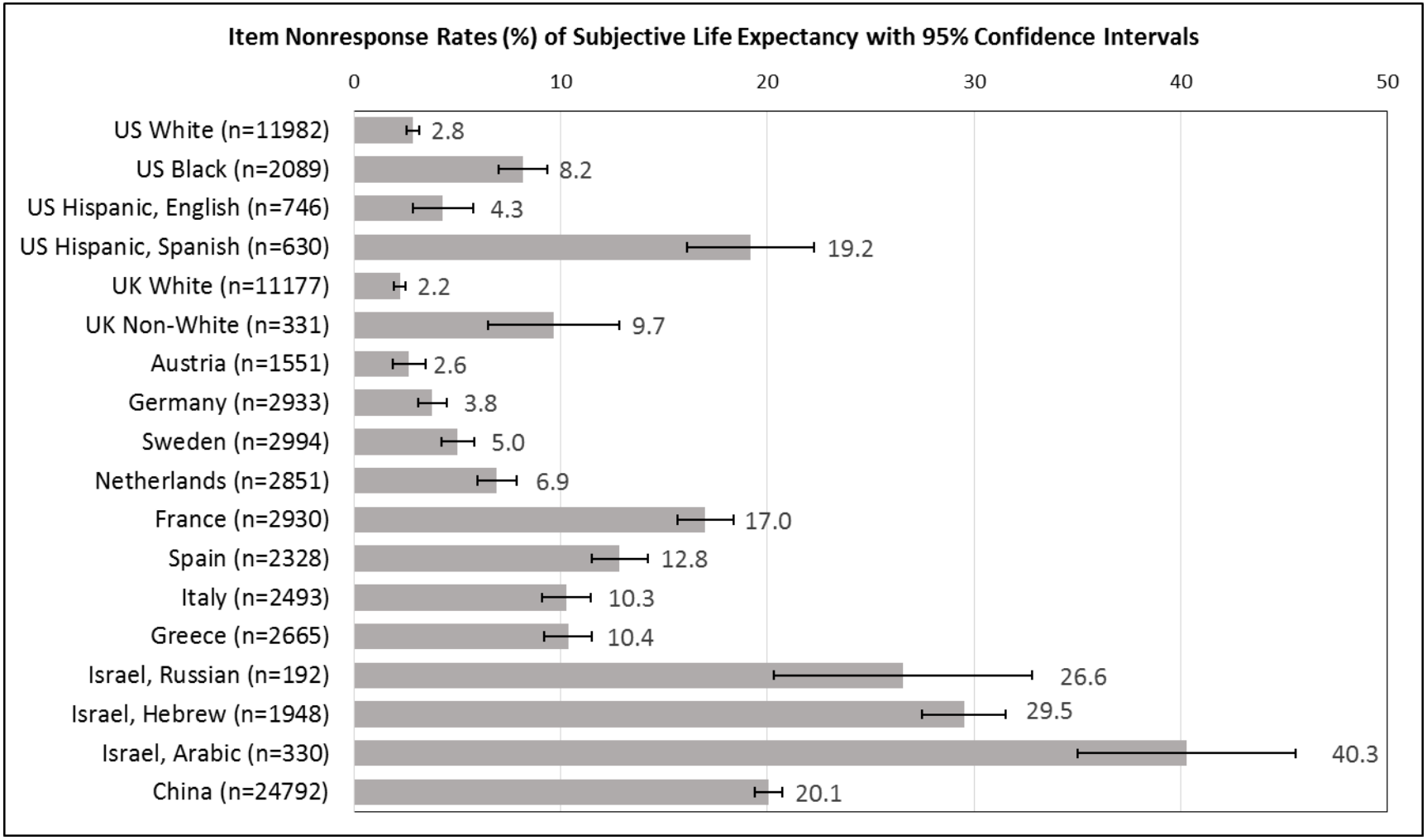


Results – 2. Item NR % on other q's

HRS	Self-Rated Health
White	0.14
Black	0.13
Hispanic, English	0.25
Hispanic, Spanish	0.13
ELSA	**Self-Rated Health**
White	0.11
Non-White	0.63
SHARE	**Self-Rated Health**
Austria	0.00
Germany	0.00
Sweden	0.17
Netherlands	0.00
Spain	0.00
Italy	0.00
France	0.10
Greece	0.04
Israel, Russian	0.00
Israel, Hebrew	0.05
Israel, Arabic	0.00
CHARLS	0.62

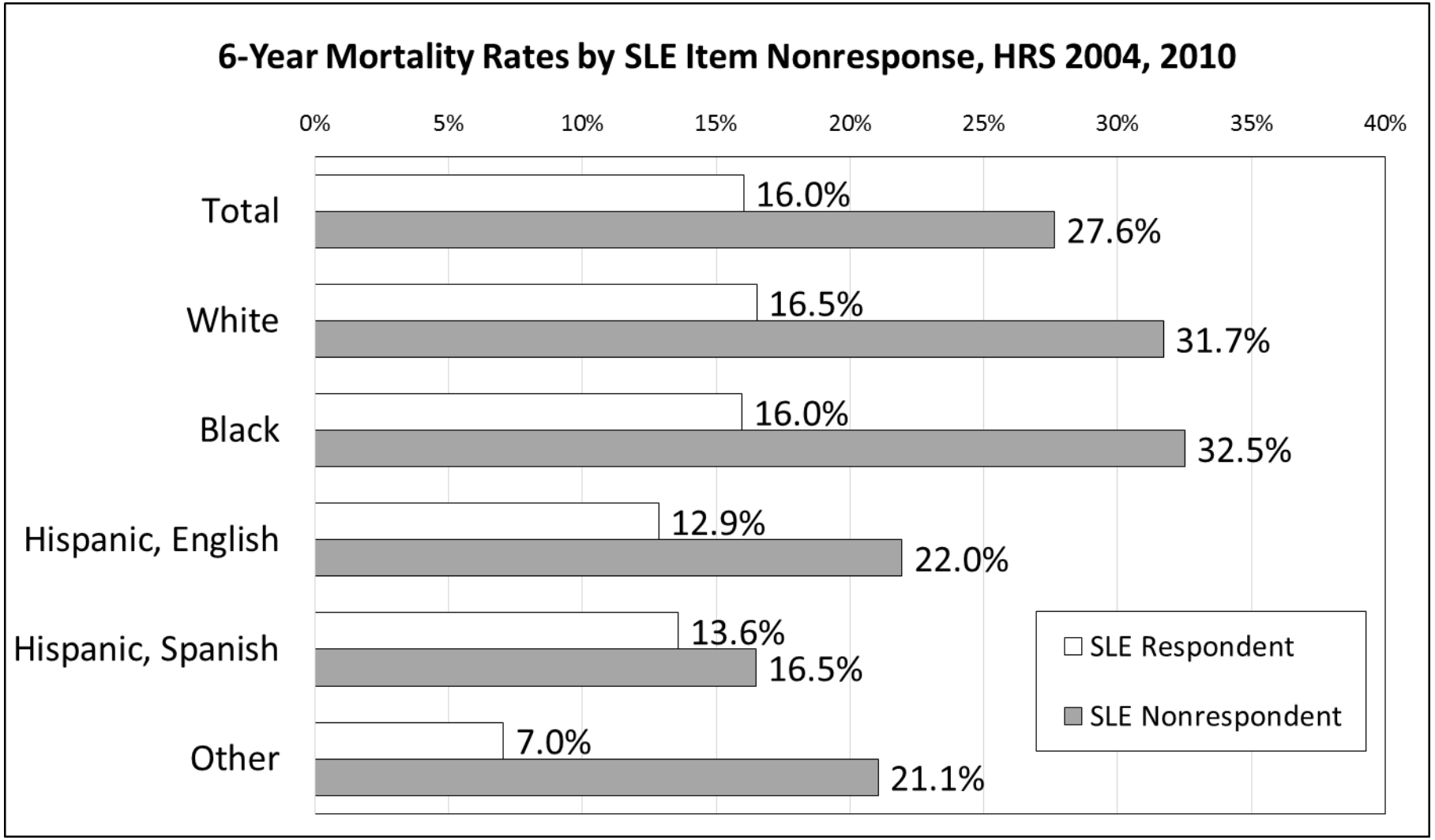
Results – 3. Time Orientation and SLE NR

Effect on SLE Item NR	HRS Odds Ratio
Personality Traits	
Present Orientation (1~6)	1.11 *
Future Optimism (1~6)	1.02
Religiosity (1~6)	0.98
Control over health (1~6)	0.98
Race, Ethnicity, and Language	
Black vs. White	3.69 ***
Hispanic, English vs. White	1.59
Hispanic, Spanish vs. White	5.57 ***
Control Variables	
Age (Years)	1.07 ***
Male vs. Female	0.58 ***
High school vs. <High school	0.48 ***
Some college+ vs. High school	0.40 ***
Negative vs. Positive health	1.10

Results – 3. Time Orientation and SLE NR

Effect on SLE Item NR	SHARE		
	Germanic Language Countries	Romance Language Countries	Israel
	Odds Ratio	Odds Ratio	Odds Ratio
Personality Traits			
Future Optimism (1~4)	0.74***	0.88*	0.82**
Religiosity (1~4)	1.16***	0.99	1.16***

Results – 4. Mortality and SLE NR



Implications

- Expectation question item nonresponse differs
  - Spanish-speaking Hispanics in US
  - Romance language speaking countries in Europe
  - Israel
  - China
- Time orientation matters for SLE item nonresponse
- SLE item nonresponse itself predicts higher mortality risks → Nonignorable missing