Ingroup Bias and Its Implications for Using Visual Images in Computerized Surveys*

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Background – 1

- Visual images in survey instruments
  - Easier
  - Effective
  - Couper et al. (2007):

    a picture of a woman jogging vs.

    a woman in a hospital bed

    → Respondents use images to infer question meaning.
- Subjective concepts (e.g., health)
  - Visual images may standardize or clarify the meaning.

Background – 2

For cross-cultural research,

- Ingroup bias: a pattern that people favor members of own group (ingroup) over members of other groups (outgroups) or bias against ingroup

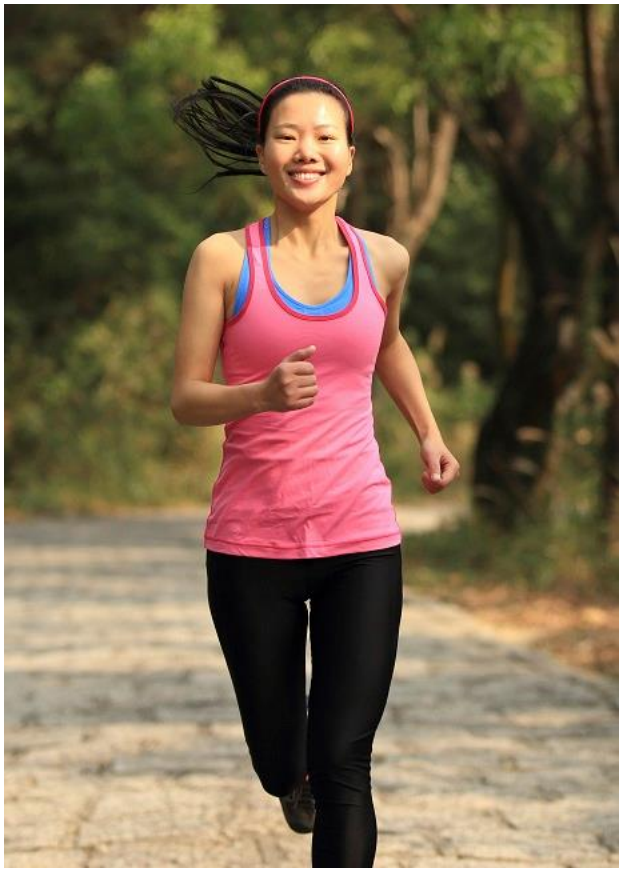
→ Visual images may inadvertently complicate measurement comparability

Data

- Experiments in two different web surveys
- Experiment 1
  - Respondent-driven sample of non-US-born Koreans in U.S. (n=~600)
  - Question about life style healthiness: self → 3 visual images
  - 3 intensity levels, each varying age, race, and gender
- Experiment 2
  - Web survey panel quota sample of non-Hispanic Whites, non-Hispanic Blacks, Hispanics by language in U.S. (n=750 per group)
  - Question about health domains affect, mobility, pain, and sleep: self → 3 visual images
  - 3 intensity levels, varying race, fitness, age, and gender

Data – Experiment 1: Intensity 1

- How healthy is the life style of the person in this picture? Very healthy somewhat healthy, neither, somewhat unhealthy or very unhealthy?



Data – Experiment 1: Intensity 2

- How healthy is the life style of the person in this picture? Very healthy, somewhat healthy, neither, somewhat unhealthy or very unhealthy?

Data – Experiment 1: Intensity 3

- How healthy is the life style of the person in this picture? Very healthy, somewhat healthy, neither, somewhat unhealthy or very unhealthy?

Results – Experiment 1: Age

	Very healthy (%)	
N	*308*	*310*
Overall	58.1	63.6
By respondent age		
<40 yrs	56.5	59.1
40+ yrs	**60.5**	**71.4**

Bold estimates significantly different between vignette conditions

Results – Experiment 1: Race

	Very/Somewhat unhealthy (%)	
N	*311*	*307*
Overall	84.2	81.8
By respondent sex		
Male	**89.4**	**81.9**
Female	80.9	81.7

Bold estimates significantly different between vignette conditions

Results – Experiment 1: Sex

	Very unhealthy (%)	
N	*310*	*309*
Overall	66.1	70.6
Br respondent sex		
Male	61.3	63.5
Female	69.1	75.4

Bold estimates significantly different between vignette conditions

Results – Experiment 1: Sex

	Very unhealthy (%)	
Br respondent age		
<40 yrs	66.7	64.6
40+ yrs	**65.2**	**78.6**
Br respondent sex & age		
Male, <40 yrs	60.5	53.5
Male, 40+ yrs	**62.8**	**82.9**
Female, <40 yrs	70.6	74.2
Female, 40+ yrs	66.7	76.5

Bold estimates significantly different between vignette conditions

Data – Experiment 2: Affect

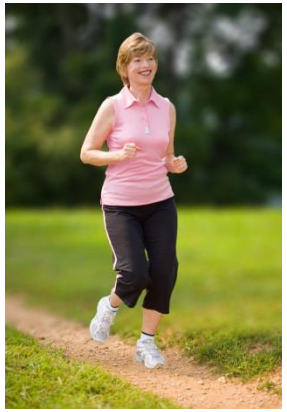
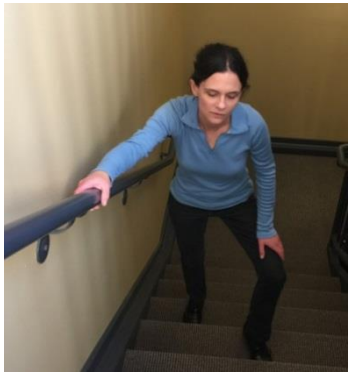
- Overall, how sad, low or depressed does this person feel? None, Mildly, Moderately, Severely or Extremely?

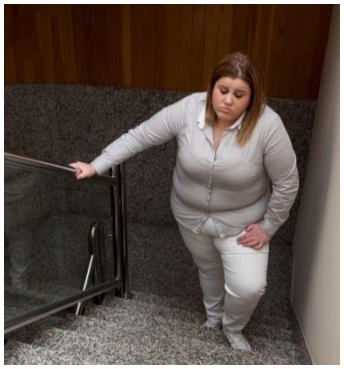
Data – Experiment 2: Mobility

- Overall, how much difficulty does this person have with moving around? None, Mild, Moderate, Severe or Extreme?

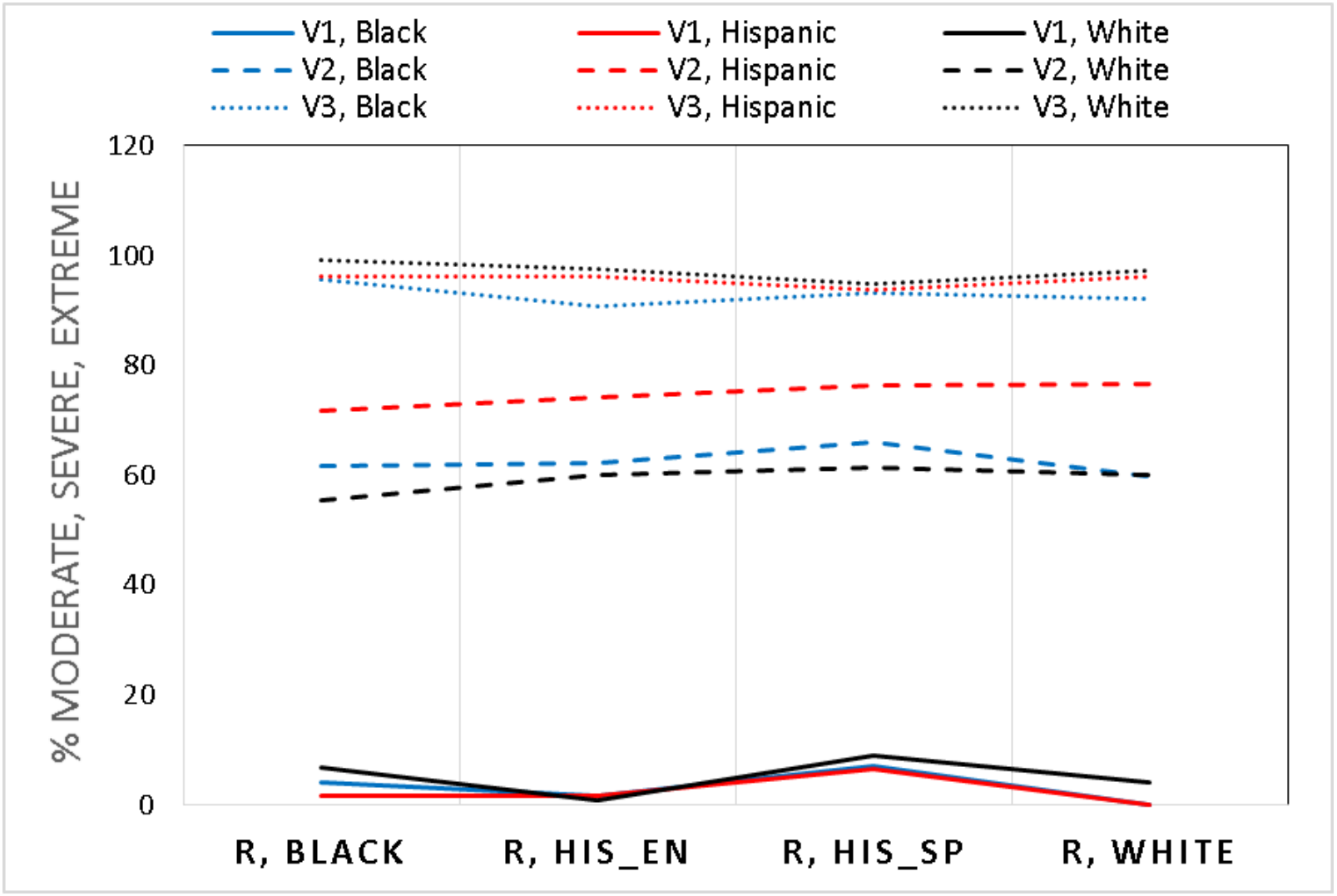
Intensity Level 1, 2, 3

Fit vs. Obese

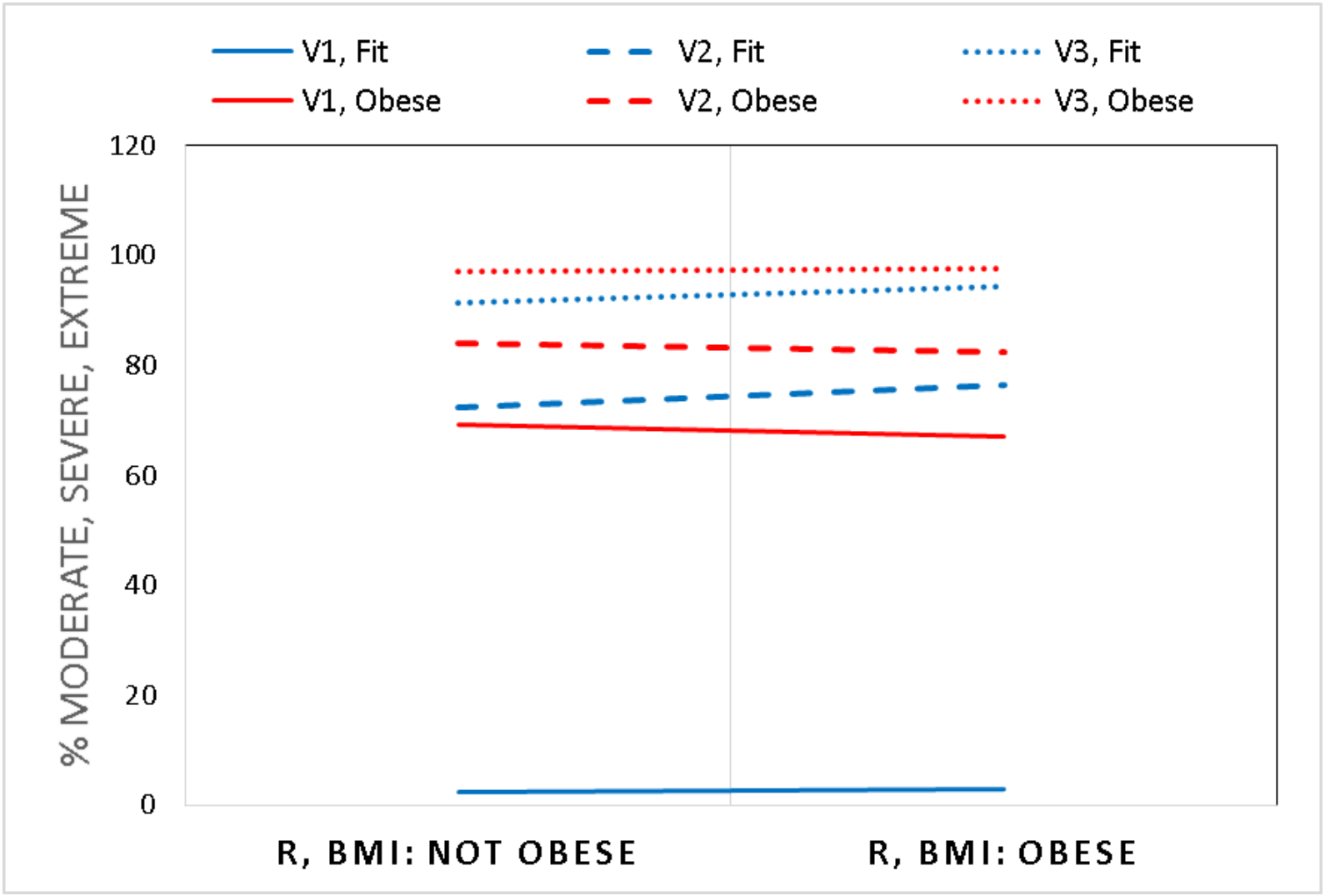




Results – Experiment 2: Affect



Results – Experiment 2: Mobility



What did we learn?

- Very preliminary but
- Respondents use images
- For healthy lifestyle,
  - Visual image person's character mattered moderately
  - Particularly for male and older respondents
- For health domains,
  - Visual image person's character largely did not matter
- No clear indication of interaction between R's and V's race/ethnicity