Race and Ethnicity Measurement: Effects of Response Format

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Research Question:

Do different measures of race and ethnicity influence responses and population estimates?

Introduction

In modern complex societies, race and ethnicity are often seen as influencing people's thoughts, behaviors, and outcomes.

As a result, these concepts are often measured in surveys because we see them as useful explanatory mechanisms – even just running cross-tabs with race-ethnicity breaks for other variables is an attempt to understand if and how race-ethnicity influences, or is related to, the variable of interest.

Introduction

As in most countries, in the United States conceptual and measurement problems of both race and ethnicity abound. A primary ethnic focus in the U.S. is the Hispanic-Latino culture. The Hispanic identity is considered a cultural orientation in some cases, while in other cases, it is based on country of origin.

In most surveys to this point, Hispanic identity has been assessed separately from racial identity with its own question.

Introduction

Just as the conceptual definition of Hispanic identity is varied and sometimes multi-dimensional, measurement of Hispanic identity has also been operationalized in different ways in large-scale federal surveys.

Introduction

The U.S. Census is primarily a self-administered paper-pencil survey. For measuring Hispanic identity, the Census provides 5 responses, 4 of which indicate 'Yes':

Is [Person 1] of Hispanic, Latino, or Spanish origin?

- ❑ No, not of Hispanic, Latino, or Spanish origin
- ❑ Yes, Mexican, Mexican Am., Chicano
- ❑ Yes, Puerto Rican
- ❑ Yes, Cuban
- ❑ Yes, another Hispanic, Latino, or Spanish origin

Introduction

The National Health Interview Survey (NHIS) is primarily a face-to-face interview, and provides a simple dichotomous yes or no response to measure Hispanic ethnic identity:

Do you consider yourself to be Hispanic or Latino?
   O Yes
   O No

For those who respond 'Yes' they are then asked 'Where did your ancestors come from?'

Introduction

In addition to different conceptualizations and operationalizations of ethnicity, there have been a number of different ways of conceptualizing and measuring race.

In the Census, the wording of the race question ("What is [Person 1's] race?") may encourage respondents to select a single response using a singular referent, while the NHIS wording ("What race or races do you consider yourself to be?") may encourage selection of more than one race.

Introduction

Another challenge for measurement of race is that many people who identify as Hispanic seem to find it difficult to select a race in the race identity item, with a fairly high proportion selecting 'Other race.'

As a result of the difficulties that Hispanics have had in answering the race question, and in preparation for the 2020 Census, there has been some experimentation to create a more general single item that places the Hispanic response in the field of racial categories.

Introduction

Responses, especially for multi-element choices (as occurs for both Hispanic and race measurement), can significantly differ based on the nature of the response format.

In web-based questionnaires Thomas and Klein (2006) and Smyth, Dillman, Christian, & Stern (2006) identified response format effects for event assessment.

Introduction

In self-administered surveys, the general finding has been that Yes-No Grids had higher levels of endorsement than Multiple Response Formats across topic areas.

While the Census has traditionally used a multiple response format for race measurement with respondents being able to select one or more racial categories, another option to consider using is a Yes-No Grid (categories in rows, 'Yes' and 'No' in response columns).

Objectives

In Experiment 1, we compared the 2010 Census race-ethnicity format with that developed by NHIS to discern differences in outcome.

Experiment 2 built on Experiment 1, but included 2 additional conditions – 1) a combination measure that placed the 'Hispanic' category within a Multiple Response Format and 2) a combination measure that placed the 'Hispanic' category within a Yes-No Grid format.

Method

Experiment 1 Respondents:

As part of a larger project conducted in January and February 2013 for the Advertising Research Foundation (FOQ2), 57,104 respondents completed an online questionnaire that had the experimental manipulation embedded within it. Respondents came from 17 different sample providers, with at least 3,000 respondents provided by each provider. All respondents came from non-probability opt-in sources: 50,852 were from opt-in panels and 6,252 were from river samples.

Method

Experiment 2 Respondents:

This experiment fielded in April and May 2013 with 3,249 respondents from GfK's KnowledgePanel®. The KnowledgePanel is the largest U.S. probability-based online panel; it uses ABS recruitment to be representative of U.S. adults and includes: adults with no Internet access (22% of adults) for whom they are provided a web-enabled device and free ISP; cell phone-only households (30% of adults and growing); Spanish-language, and; extensive profile data maintained on each member with demographics, attitudes, behaviors, health, media usage, etc.

Method

In Experiment 1, respondents were randomly assigned to either Condition 1 or 2. In Experiment 2, respondents were randomly assigned to Conditions 1, 2, 3, or 4.

Experiments 1 & 2 – Condition 1 – Census Version

Are you of Hispanic, Latino, or Spanish origin?

❑   No, not of Hispanic, Latino, or Spanish origin

❑   Yes, Cuban

❑   Yes, Mexican, Mexican American, Chicano

❑   Yes, Puerto Rican

❑   Yes, another Hispanic, Latino, or Spanish origin

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Method

Experiments 1 & 2 – Condition 2 presented the dichotomous NHIS Version of the Hispanic identity question.

Do you consider yourself to be Hispanic or Latino?

O No

O Yes

Method

Experiments 1 & 2 – Conditions 1 & 2

Census Item Stem: What is your race? Please select ALL that apply to you.

NHIS Item Stem: What race or races do you consider yourself to be? Please select ALL that apply to you.

❑ **White or European American**

❑ **Black or African American**

❑ **American Indian or Alaska Native**

❑ **Asian or Asian American (e.g. Chinese, Japanese, Korean, Filipino, Indian, Pakistani, etc.)**

❑ **Native Hawaiian or Pacific Islander**

❑ **Another race**

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Method

Experiment 2 - Condition 3 was a Multiple Response Format (MRF) which combined the Hispanic identity item:

What is your race or origin? Please select ALL that apply to you.

❑ White or European American

❑ Black or African American

❑ Hispanic, Latino, or Spanish origin

❑ American Indian or Alaska Native

❑ Asian or Asian American (e.g. Chinese, Japanese, Korean, Filipino, Indian, Pakistani, etc.)

❑ Native Hawaiian or Pacific Islander

❑ Another race

Method

Experiment 2 - Condition 4 was a Yes-No Grid (YNG) which requested a response for each element and included Hispanic identity.

Is your race or origin…? Please select a response for each item.

|	Yes	No
White or European American	O	O
Black or African American	O	O
Hispanic, Latino, or Spanish origin	O	O
American Indian or Alaska Native	O	O
Asian or Asian American (e.g. Chinese, Japanese, Korean, Filipino, Indian, Pakistani, etc.)	O	O
Native Hawaiian or Pacific Islander	O	O
Another race	O	O

Results – Time to Complete

Experiment 1 Task Duration. Condition 1 – Census Version took 1.1 second longer than Condition 2 - NHIS version to complete (17.5 versus 16.4 seconds, *p*<.001).

Experiment 2 Task Duration. Condition 3 – Combined Hispanic in Multiple Response took the least amount of time to complete (10.6 seconds), significantly less than all other conditions. Condition 1 took the longest time (21.9 seconds), Conditions 2 and 4 were not significantly different (18.6 vs. 19.3 seconds).
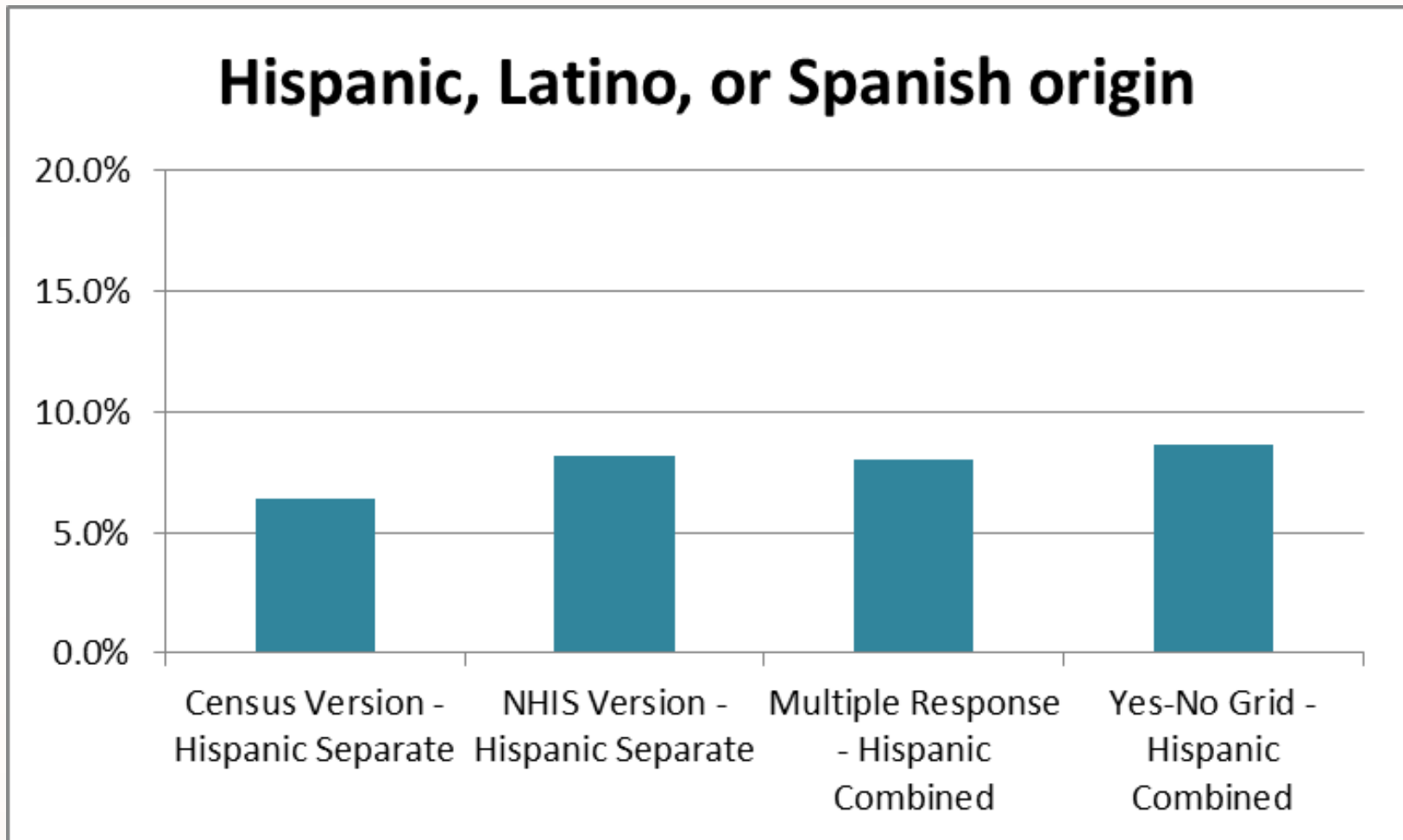
Results – Time to Complete
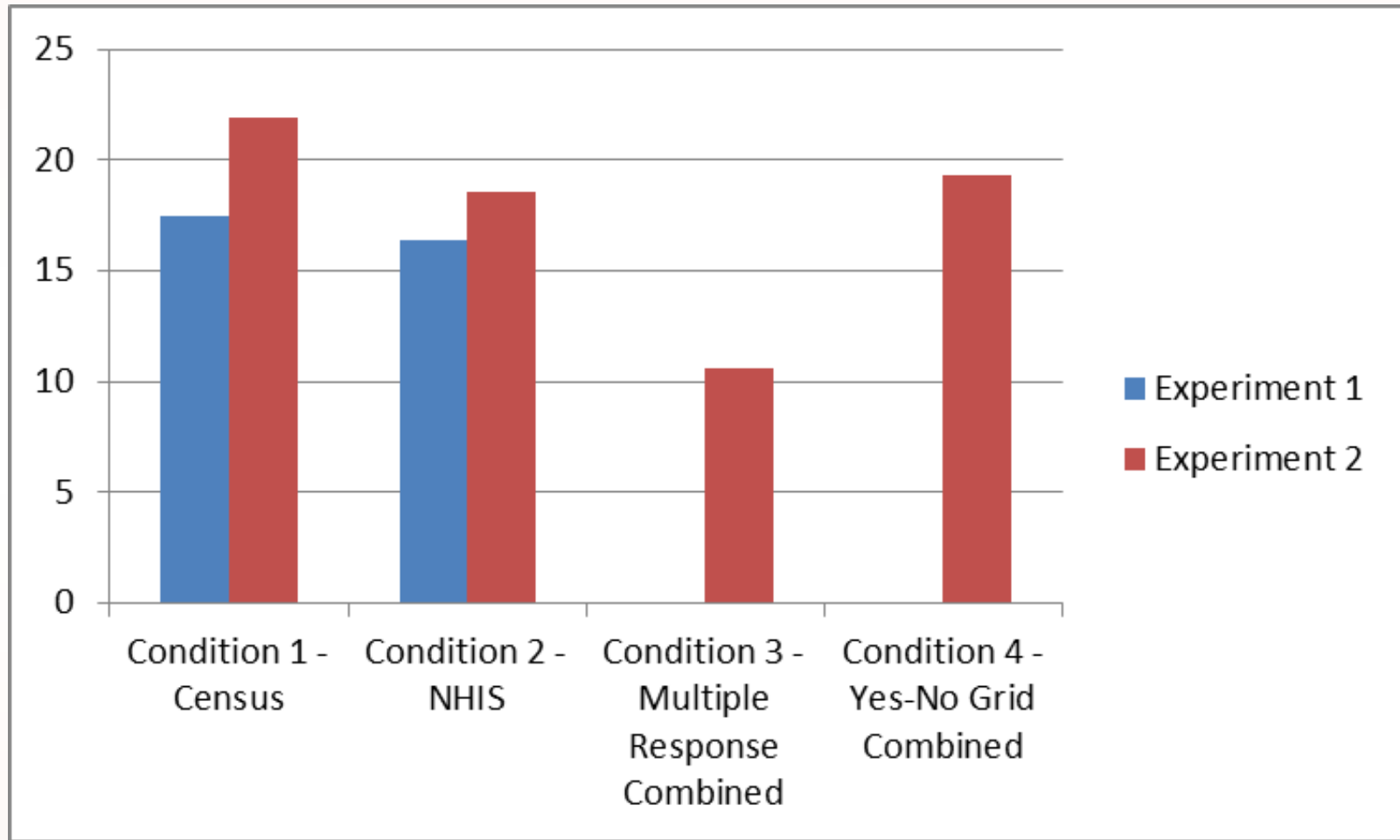
Results

Hispanic Ethnicity. **In both Experiments, Conditions 1 and 2 did not differ significantly in the number of people classifying themselves as Hispanic, though there was a marginal effect (with Condition 2 slightly higher than Condition 1 – 11.7% versus 11.2% in Experiment 1; 8.2% versus 6.4% in Experiment 2).**

In Experiment 2, the proportion selecting 'Hispanic' in Conditions 3 and 4 were not significantly different than Conditions 1 and 2, though Condition 4 had the highest level of endorsement (8.6%).

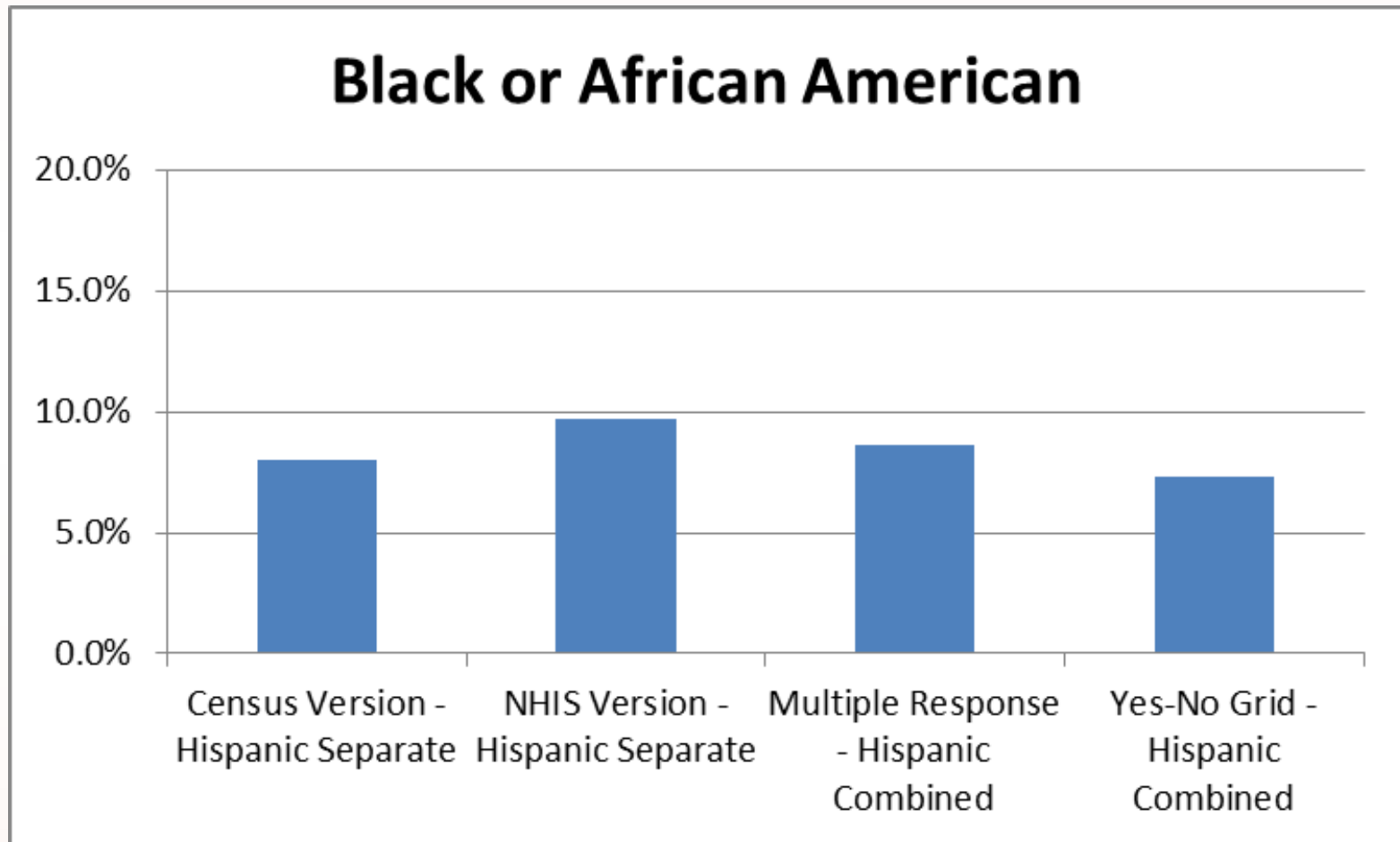# Results

Experiment 2

Results

Black – African American Classification. **In both Experiments, Conditions 1 and 2 did not differ significantly in the number of people classifying themselves as Black-African American.**

In Experiment 2, the proportion selecting 'Black-African American' in Conditions 3 and 4 were not significantly different than Conditions 1 and 2 (though Condition 4 was the lowest value at 7.3%).

Results

Experiment 2
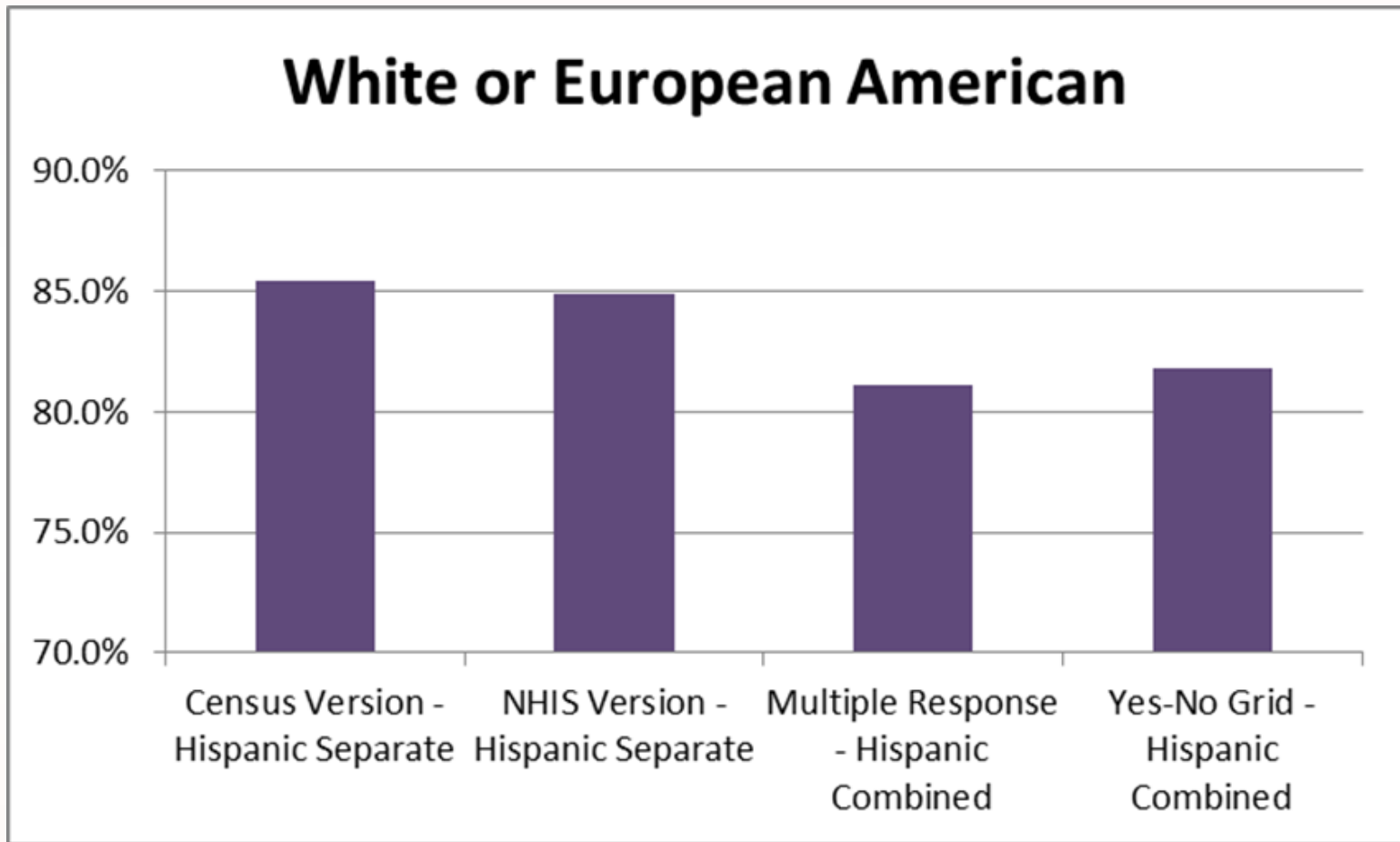
Results

<u>White – European American Classification.</u>   In Experiment 1, there was no significant difference between Conditions 1 and 2 for 'White – European American.'

The primary effect of the manipulations occurred in Experiment 2 for classification as 'White – European American'. Far fewer people classified themselves as 'White' when Hispanic was combined with race measurement for both Condition 3 - MRF and Condition 4 - YNG.
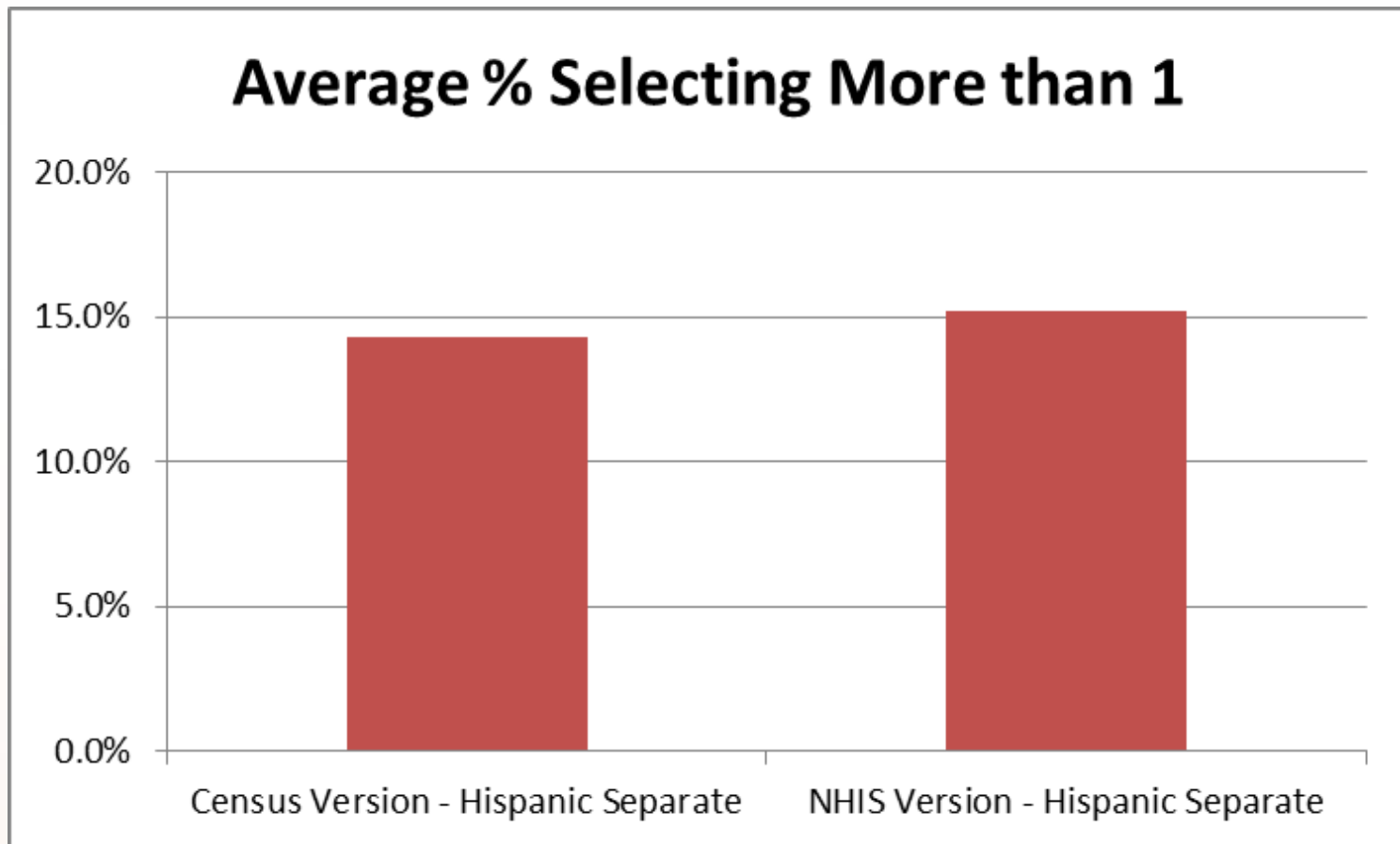
Results

Experiment 2

White or European American

Census Version - Hispanic Separate: ~85.4%
NHIS Version - Hispanic Separate: ~84.9%
Multiple Response - Hispanic Combined: ~81.2%
Yes-No Grid - Hispanic Combined: ~81.9%

Results

Experiment 1 – The number of people selecting more than 1 race was about 1% higher ($p<.01$) for Condition 2. Though significant, it was a small effect.

Average % Selecting More than 1

Results

Experiment 2 – The number of people selecting more than 1 race was much less in Condition 3 than Conditions 1 & 2. Condition 4 was also significantly lower than Condition 2.

Average % Selecting More than 1

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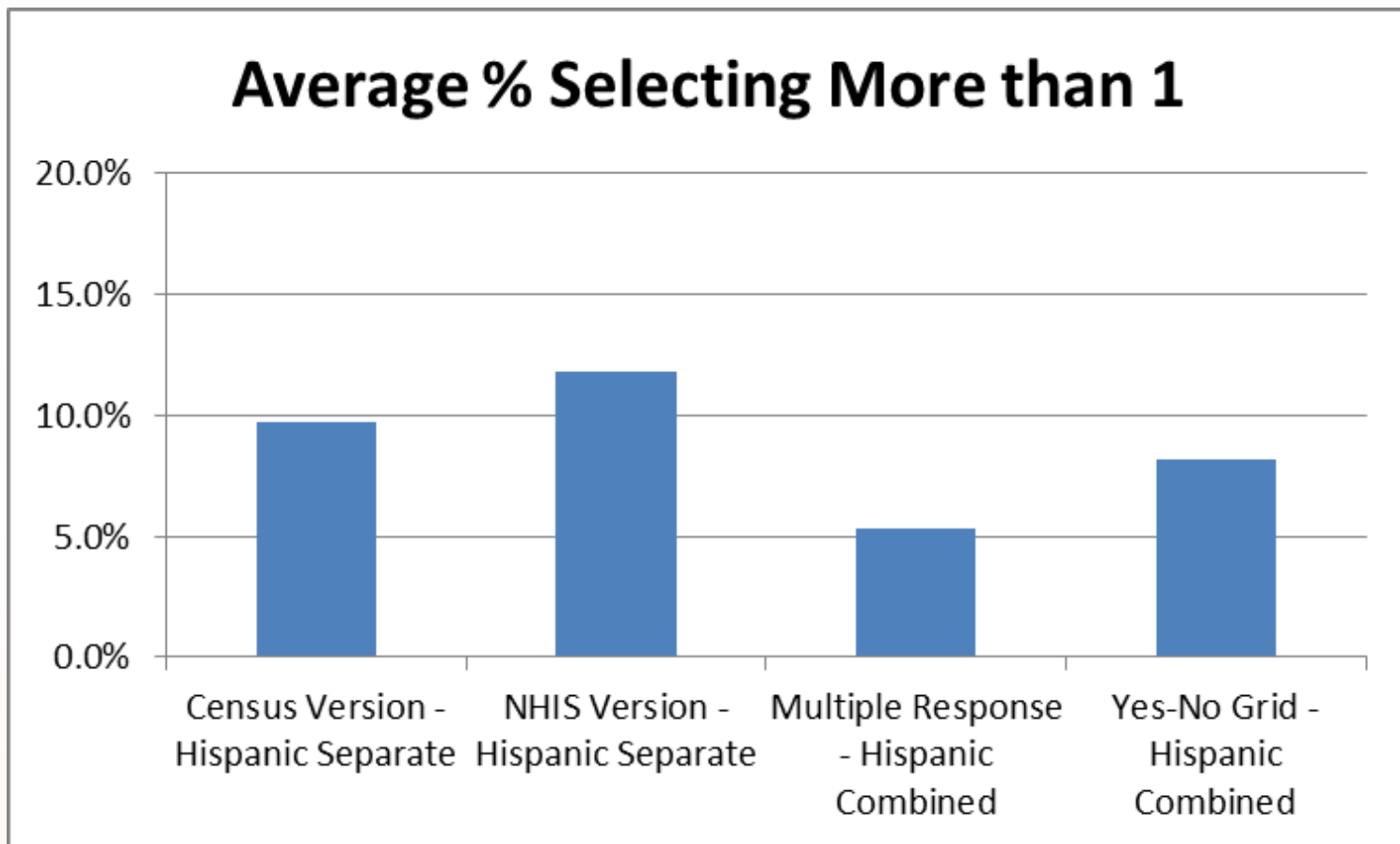
Discussion

While the current Census and NHIS versions of race-ethnicity measurement were generally comparable, they were associated with some small differences that seemed consistent across both experiments with two different populations.

Across both experiments, the biggest difference seems that the NHIS measure (Condition 2) takes slightly less time to complete and the item stem for the race measure for NHIS may encourage slightly greater selection of more than one race.

Discussion

In examining the new measures, Condition 3 (Multiple Response Format) did seem to show the greatest difference from the current measures in time to complete, taking the least amount of time.

Both Conditions 3 & 4 significantly reduced the proportion of people classifying themselves as 'White – European American'.

Discussion

However, in our analyses of the 4 category single race classification (White – Non-Hispanic, Black – Non-Hispanic, Hispanic, Other) that is often used for weighting and reports, we found no differences between experimental conditions. It appears that most who classify themselves as 'Hispanic' do not also select 'White' in the combined measures.

Discussion

These studies point to some significant differences in the measurement of race-ethnicity. Additional larger-scale work will be needed to confirm the effects with greater precision.

And as always in this area, clearer conceptualization and a better understanding of how people self-classify with regard to race and ethnicity will be needed.

Thank You!

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