

Answering on cue?

How corrective information can produce social desirability bias when racial differences are salient

Brendan Nyhan*, Jason Reifler[§], Christopher Edelman, William Passo, Ashley Banks, Emma Boston, Andrew Brown, Robert Carlson, KayAnne Gummersall, Elizabeth Hawkins, Lucy McKinstry, Jonathan Mikkelson, Emily Roesing, Vikram Srinivasan, Sarah Wakeman, Lindsey Wallace, and Rose Yan

February 28, 2017

Abstract

Previous studies have found that race of interviewer can affect the survey response, but do these effects vary based on other survey elements or cues given to respondents? We report the results of two experiments testing whether the effectiveness of corrections of the rumor that Barack Obama is a Muslim varied among white participants depending on the race of the researcher to whom the study was attributed. Some Republican respondents (the group most likely to hold the misperception in question) reported lower misperceptions in response to corrective information if the study was attributed to a nonwhite researcher, suggesting that social desirability bias altered how participants reacted to the correction. These findings suggest that social desirability bias in survey responses may be influenced by informational or contextual cues rather than mere presence alone.

* Brendan Nyhan, Department of Government, Dartmouth College
(nyhan@dartmouth.edu)

§ Jason Reifler, Department of Politics, University of Exeter (j.reifler@exeter.ac.uk)
Other co-authors were undergraduates in Nyhan's 2008 course at Duke University. We are grateful to Time-Sharing Experiments in the Social Sciences, the Duke University Undergraduate Research Support Office, and the Duke Interdisciplinary Initiative in Social Psychology for funding support and to Efrén Pérez for helpful comments. Full replication data and code will be made available upon publication at <http://www.dartmouth.edu/~nyhan/>.

An extensive literature examines how social desirability concerns can influence the way survey or experimental participants answer questions. In particular, many studies have found that white respondents tend to “give more liberal or pro-black opinions when the interviewer is black” (Hatchett and Schuman 1975/1976: 525) – an effect that is frequently interpreted as an attempt to express opinions that conform to the interviewer’s perceived expectations or to societal norms. These social desirability effects are typically thought to occur for all respondents. However, in some cases, respondents may only give socially desirable responses to people from other backgrounds when prompted by cues suggesting which responses are (un)desirable.

We examine this effect in the context of the widespread and persistent belief that Barack Obama is a Muslim. In this context, those who believe that Obama is a Muslim *may* feel pressure to report beliefs to the contrary, particularly given (for instance) John McCain’s highly publicized statement correcting a woman at a town hall who accused Obama of “being an Arab” during the 2008 campaign (Martin and Parnes 2008). In a previous study (self-citation omitted), we found that reported misperceptions decreased more (especially among Republicans) when a nonwhite researcher was present.

Though we did not manipulate researcher race in that study, the result suggests that the context in which a correction on a sensitive issue is delivered may affect how people react to it. In particular, when context makes racial or ethnic difference salient, respondents may be more likely to give socially desirable responses to messages that provide cues about what such a response might be (i.e., that Obama is not a Muslim).

To assess this hypothesis directly, we conducted two experiments in which we explicitly manipulated both researcher race and exposure to corrective information about a misperception. Our results provide evidence of differences in the response to corrective information depending on the context in which they were delivered, which we interpret as evidence of a social desirability effect that is conditional on a cue about the socially desirable response.

In our first study, which was conducted on Mechanical Turk, Republicans who were exposed to corrections were significantly more likely to report reduced misperceptions when the study was attributed to a nonwhite researcher, which suggests a social desirability effect created by the interaction between researcher race and the cue provided by the corrective information. However, a second study on a nationally representative sample of white non-Hispanic Republicans found that this researcher race/correction interaction effect replicated only among less educated individuals.

As we discuss in the conclusion, these results differ in important respects from prior research on social desirability effects in survey and experimental research. Previous studies have focused on whether respondents provide different answers depending on whether they are interacting with a white or non-white interviewer or researcher. In our study, however, we are more interested in how these cues interact with the content of our corrective information treatments. When context makes racial or ethnic difference salient (our race of researcher treatment) and provides guidance of how a question *should* be answered (our correction treatments), respondents may be more likely to give

the socially desirable answer (i.e., report in some fashion that Obama is not a Muslim) than the simple additive effect of our two treatments alone. Though our results differ somewhat between studies, they suggest that social desirability bias may depend not just on context (specifically, the person to whom the respondent is providing information) but on the cues that are provided about which answers are most appropriate or how those answers are likely to be judged.

Theoretical approach

People tend to resist information that contradicts their beliefs (e.g., Lord, Ross, and Lepper 1979, Edwards and Smith 1996, Taber and Lodge 2006, Taber, Cann, and Kuscova 2009), including their factual beliefs (e.g., Kuklinski et al. 2000, Nyhan and Reifler 2010). In some cases, unwelcome information can even backfire and *strengthen* respondents' previous beliefs (e.g., Redlawsk 2002, Nyhan and Reifler 2010), though these effects are not always observed (Berinsky forthcoming).

While scholars have analyzed the relationship between belief in the myth that President Obama is a Muslim and other variables (e.g., Barreto et al. 2009, Block and Onwunlil 2010, Smith 2010), our study is the first to examine how the effect of corrective information on misperceptions about Obama's religion varies depending on a contextual factor that might influence perceived social desirability – researcher race.

Such social desirability effects may be especially likely to occur among Republicans, who in this case are the partisan group that is motivated to hold false negative beliefs about President Obama. As a result, they are the group that is potentially the most likely

to change the views they might otherwise express due to desirability concerns. Polls have repeatedly found that Republicans are the partisan group that expresses the greatest belief that Obama is a Muslim (Pew 2008, 2009, 2010, 2012; Public Religion Research Institute 2011).

Though a great deal of previous research has found that even the “mere presence” of a person of a different race can induce more socially desirable answers on sensitive questions (e.g., Krysan and Couper 2003), social desirability concerns may not arise unless the sensitive topic is salient. For instance, Terkildsen (1993) finds that racial prejudice had a stronger relationship with evaluations of a light-skinned black male political candidate than a dark one. She interprets this finding as the result of under-reporting of negative attitudes by participants who became aware of the automatic activation of stereotypes in the case of the dark-skinned candidate but not the light one.

We similarly expect that the presence of a nonwhite researcher alone is not enough to induce social desirability bias, which is consistent with research finding that online surveys reduce this type of response bias (e.g., Kreuter et al. 2009). Instead, we hypothesize that it is the interaction between the cue provided by corrective information about a sensitive issue and researcher race that makes respondents more aware of or sensitive to social desirability concerns compared to those who view the same information in a study attributed to a white researcher.¹

¹ The effect we describe is analogous to the Davis and Silver (2003) account of how exposure to political knowledge questions in the presence of white interviewers can create stereotype threat for nonwhite survey respondents.

It is important to note that this process is similar to, but distinct from, concerns about “demand characteristics” (e.g., Orne 1962). Our expectation is not that participants are trying to fulfill a researcher's scientific expectations or conform to the hypothesis of a study, but that instead they may be more likely to (perhaps unconsciously) sense and react to perceived norms or disapproval of the beliefs they might otherwise report about Obama’s religion to a nonwhite scholar.

Hypotheses:

Each of the corrective information studies we present below was randomly attributed to either a white or nonwhite researcher, allowing us to test for two possible effects:

Contextual effect 1: Corrections and researcher race (two-way interactions)

Researcher race will moderate the effects of the experimental manipulations that are intended to correct misperceptions about Obama’s religion.

Contextual effect 2: Corrections, researcher race, and additional factors (three-way interactions)

The moderating effect of researcher race on the effects of corrective information about Obama’s religion will differ based on other factors – e.g., partisanship or education.

To test these hypotheses, we estimate all two- and three-way interactions between researcher race, treatment indicators, and GOP affiliation in Study 1. Study 2 focuses only on Republicans and instead considers education as a moderator.

Study 1

We conducted a 2x2 between-subjects experiment that manipulates the race of researcher (white or black) as well as whether the respondent received corrective information. Study 1 used Qualtrics to survey subjects recruited from Amazon.com's Mechanical Turk.² Participants were randomly assigned to one of two different conditions that varied the race of the supposed researcher. In the white researcher condition, the researcher was said to be Brad Kelly, Ph.D and was depicted as a white man using an image purchased from a stock photo website. In the black researcher condition, the researcher was said to be Rasheed Jackson, Ph.D. and the survey included a closely matched stock photo of an African American man. (See Supporting Information for the photos and other study materials.) The names of the fictional researchers were selected from a list of stereotypically white and black first and last names (Bertrand and Mullainathan 2004). Subjects saw the name and picture of the fictional researchers at the top of every survey page.

Participants first saw a video clip of Senator McCain discussing his religious faith to help disguise the purpose of the study. After the McCain clip, participants were randomly assigned to watch an unrelated control video or one in which Obama corrected the

² Recent studies by economists (Horton, Rand, and Zeckhauser 2011), psychologists (Buhrmester et al. 2011), and political scientists (Berinsky, Huber, and Lenz 2012) have validated Mechanical Turk as a useful source of experimental participants. The appendix provides further details on the questionnaire and data collection procedure and also summarizes the demographic characteristics of the participants in this study.

Muslim myth.³ Each clip lasted about 10 seconds and was followed by on-screen text displaying a key quote from the clip.

We then measured perceptions of Obama's religion in two ways. Each measure was coded such that higher values indicate stronger beliefs that Obama is a Muslim.

ObamaReligion records responses to a question asking "Do you happen to know what Barack Obama's religion is?" where 1=Christian, 2=DK/other, and 3=Muslim. *Muslim* is a seven-point scale for whether participants agree that Obama is a Muslim (where 1="Strongly disagree" and 7= "Strongly agree").⁴ (Descriptions and text of materials are provided in the Supporting Information.)

Study 1 allows us to assess how the effect of corrective information varies depending on researcher race – specifically, whether attributing the study to a nonwhite researchers make participants more likely to report lower misperceptions in response to corrective information about Obama. We also test whether this effect was most pronounced among Republicans.

Results

Given our focus on how researcher race affects reactions to corrective information, we first test whether our researcher race manipulation worked as intended. In the white

³ To simplify exposition, the correction condition collapses two versions of the corrective information from a 2x3 design – a misperception negation ("I am not and never have been of the Muslim faith") and a corrective affirmation ("I am a Christian") whose effects rarely differed significantly (self-citation omitted).

⁴ Missing responses were recoded to the scale midpoint. We also asked if people thought Obama used to be a Muslim (results available upon request).

researcher condition, 99% of subjects identified Brad Kelly as white. Though identification was not as high in the nonwhite researcher condition, 67% identified Rasheed Jackson as black and 14% as multiracial (respondents could select more than one category). In total, 71% of respondents identified Jackson as nonwhite – a sufficiently high proportion to allow us to examine differences in responses to the treatments by assigned researcher race (i.e., an intent-to-treat analysis).

We present two OLS models for each dependent variable. The first interacts indicators for corrective information and the nonwhite researcher condition, while the second includes all two- and three-way interactions between the corrections, GOP affiliation, and researcher race. We also control for political knowledge (measured as the proportion of correct answers on a standard five-item scale).

The results of these models, which are presented in Table 1, provide evidence of differing responses to corrective information depending on the contextual salience of race created by the involvement of a nonwhite researcher.⁵

⁵ These results and those in Table 2 below are robust to using ordered probit instead (available upon request).

Table 1: Interaction models of Obama Muslim myth (Study 1 – Mechanical Turk)

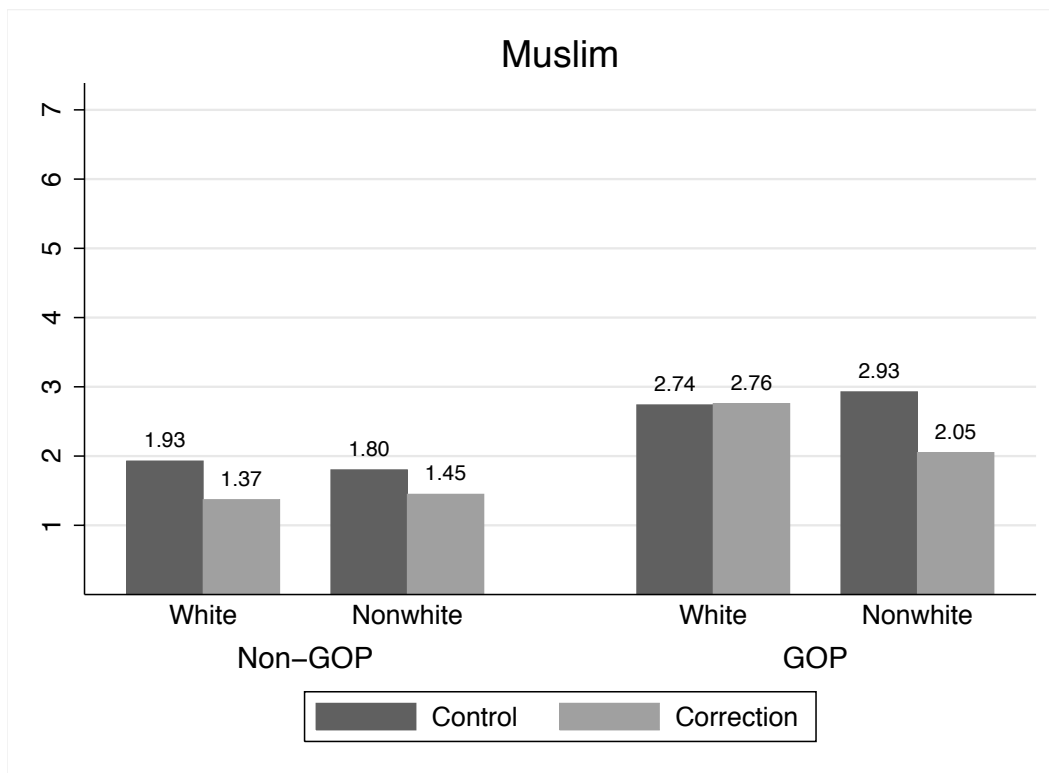
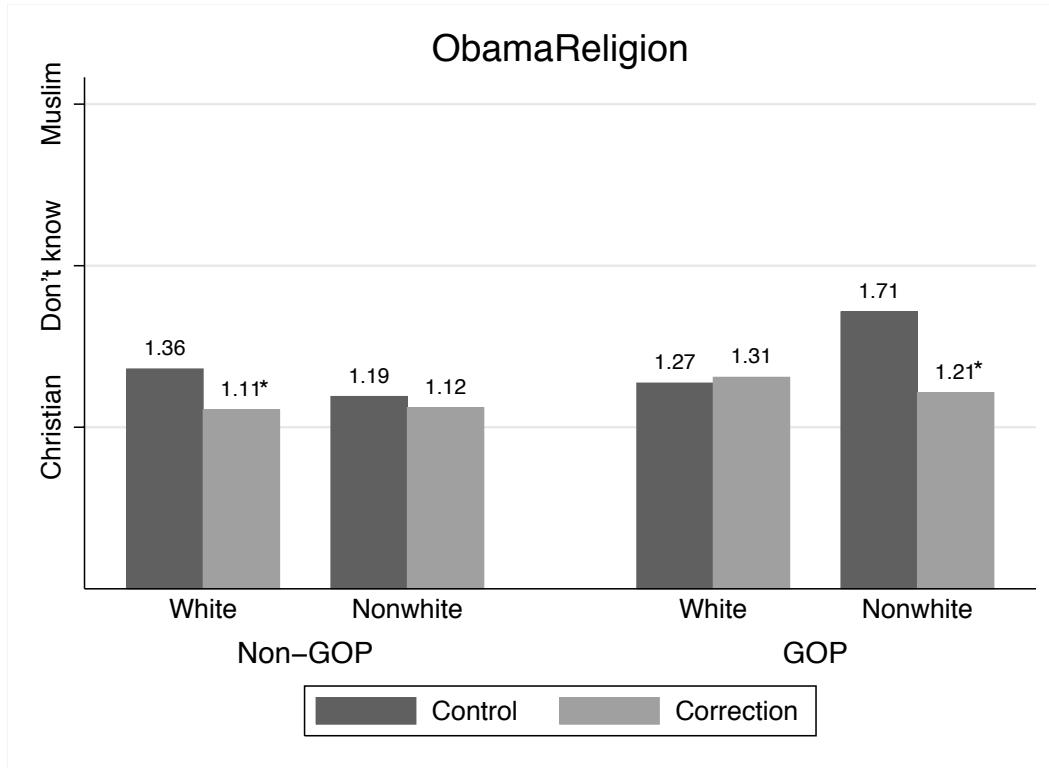
	<i>ObamaReligion</i>		<i>Muslim</i>	
Correction	-0.16*	-0.25**	-0.27	-0.56**
	(0.09)	(0.10)	(0.27)	(0.27)
Nonwhite researcher	0.03	-0.17	0.03	-0.13
	(0.12)	(0.12)	(0.32)	(0.31)
Nonwhite x correction	-0.06	0.18	-0.29	0.20
	(0.13)	(0.14)	(0.38)	(0.37)
Political knowledge	-0.35***	-0.35***	-1.22***	-1.34***
	(0.11)	(0.11)	(0.36)	(0.37)
GOP		-0.09		0.81
		(0.16)		(0.55)
Nonwhite x GOP		0.61**		0.32
		(0.27)		(0.79)
Correction x GOP		0.29		0.58
		(0.19)		(0.65)
Nonwhite x correction x GOP		-0.72**		-1.10
		(0.31)		(0.94)
Constant	1.55	1.57	2.86	2.73
	(0.12)	(0.13)	(0.34)	(0.36)
R ²	0.06	0.11	0.05	0.15
N	303	303	306	306

*p < .10, **p < 0.05, ***p < .01 (two-sided) – OLS regressions with robust standard errors. Higher values on *ObamaReligion* and *Muslim* represent greater belief that Obama is a Muslim.

Despite the treatment being relatively subtle (a name and image on a website rather than a nonwhite researcher being physically present or on the phone), we find a negative and statistically significant three-way interaction for *ObamaReligion* ($p < .05$) corresponding to a significant negative marginal effect of the correction on reported misperceptions by Republicans when the study is attributed to a nonwhite researcher (-0.50 , $p < .05$) and a non-significant one otherwise (0.04 , *n.s.*). This term directly tests whether the effect of a correction from a non-white researcher differs by party affiliation. We observe a substantively similar correction effect for Republicans on *Muslim*, though it is important to be clear that the estimates do not reach conventional levels of statistical significance (0.02 , *n.s.* for a white researcher; -0.88 , $p < .17$ for nonwhite). In general, Republicans report lower misperceptions in response to corrective information about Obama's religion with a black PI, suggesting a social desirability effect.

To present our findings in a more accessible form, Figure 1 displays predicted values for the OLS models in Table 1 for a respondent with median political knowledge. Asterisks indicate statistically significant marginal effects of the correction relative to controls. Interestingly, when a white researcher was present, misperceptions among non-Republicans declined from 1.36 to 1.11 on a three-point scale for *ObamaReligion* where 1=Christian, 2=Don't know, and 3=Muslim. However, a similar effect was only observed for Republicans when a nonwhite researcher was present. In that case, average misperceptions for a GOP respondent with median political knowledge decreased in response to the correction from 1.71 to 1.21.

Figure 1: Predicted effects of correction treatments (Study 1 – Mechanical Turk)



Predicted effects calculated from regressions in Table 1. Asterisks represent statistically significant marginal effects of corrective information ($p < .10$) relative to the relevant control condition.

We interpret these results as indicating that the attribution of the study to a nonwhite researcher activated contextual social desirability concerns among Republicans exposed to the correction. These findings suggest that social desirability concerns can be activated by a combination of informational cues and racial difference rather than researcher/interviewer race alone.

Study 2

Study 2 utilizes a similar 2x2 factorial design that manipulates researcher race (white or black) and corrective information (correction or control), including nearly identical question wording, (fictitious) researcher identities, and outcome variables as in Study 1. The primary difference is that we test our hypothesis on a national probability sample of 1,387 white (non-Hispanic) Republicans – the group most likely to hold the misperception – from the nationally representative Knowledge Networks panel.⁶

Results

As in Study 1, we first check whether our researcher race manipulation was successful. Among those assigned to the white researcher condition, 91% identified Brad Kelly as white (6% as multiracial), while 80% of those in the black researcher condition identified Rasheed Jackson as black or African-American (plus 14% as multiracial). As before, we report two OLS models for each dependent variable in Table 2.⁷

⁶ The other difference of note is that we only use the clip of Obama saying “I am a Christian” described above. As in Study 1, see the appendix for a description of the data collection procedure and sample as well as the questionnaire.

⁷ These models were estimated using survey weights from Knowledge Networks.

Table 2: Interaction models of Obama Muslim myth (Study 2 – natl. white GOP)

	<i>ObamaReligion</i>		<i>Muslim</i>	
Correction	-0.39***	-0.44***	-0.36*	-0.50**
	(0.08)	(0.08)	(0.20)	(0.21)
Nonwhite researcher	-0.09	-0.13	-0.13	-0.18
	(0.08)	(0.08)	(0.21)	(0.21)
Nonwhite x correction	0.04	0.13	-0.11	0.02
	(0.11)	(0.11)	(0.29)	(0.30)
Non-high school graduate		-0.19		-0.10
		(0.23)		(0.55)
Nonwhite x non-HS graduate		0.73***		0.77
		(0.28)		(0.69)
Correction x non-HS graduate		0.71**		1.91***
		(0.34)		(0.70)
Nonwhite x correction x non-HS grad		-1.31***		-1.94**
		(0.41)		(0.90)
Constant	2.12	2.13	4.53	4.54
	(0.05)	(0.05)	(0.14)	(0.14)
R ²	0.05	0.07	0.01	0.03
N	1349	1349	1384	1384

*p < .10, **p < 0.05, ***p < .01 (two-sided) – estimated from OLS regressions using survey weights. Higher values on *ObamaReligion* and *Muslim* represent greater belief that Obama is Muslim.

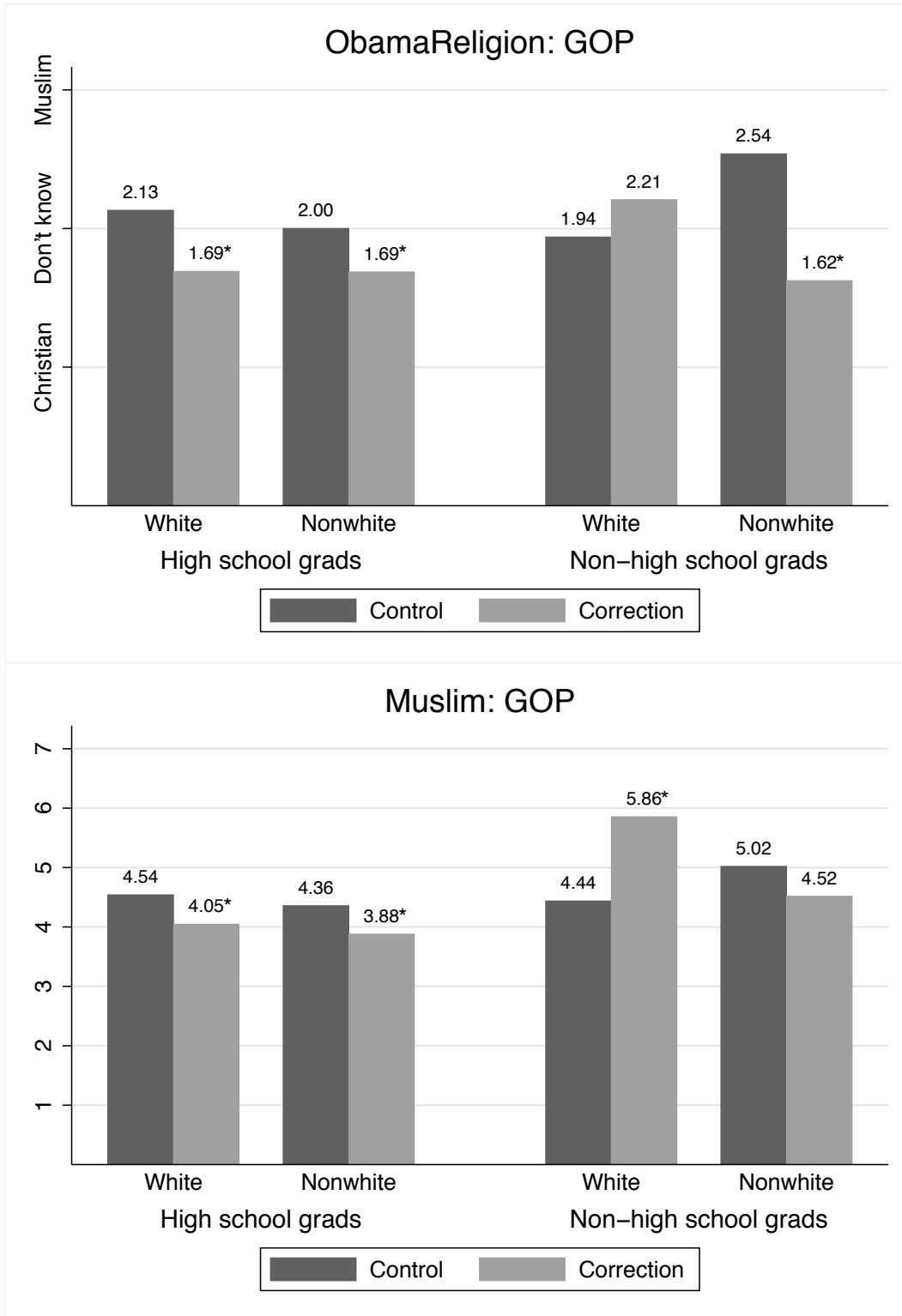
The models we report are somewhat different than Study 1, however. First, because our sample is made up entirely of Republicans, we do not interact our experimental conditions with GOP self-identification. (We also had to exclude political knowledge due

to survey length limitations.) Second, given previous findings, the baseline models in Table 2 interact the two experimental conditions that we randomly manipulated – exposure to a correction treatment and attribution of the study to a nonwhite researcher.

Unlike Study 1, the correction successfully reduced misperceptions for *ObamaReligion* and *Muslim* – an effect that did not appear to vary by researcher race for the sample as a whole. However, we do find a dramatically different result that mirrors Study 1 among respondents who did not graduate from high school ($n=111$). For this subgroup, stated misperceptions decreased more in response to a correction when the study was attributed to a nonwhite researcher, suggesting a social desirability effect similar to Study 1. The fact that this effect was concentrated among a low education subgroup, though unanticipated, is consistent with the fact that less educated people tend to be both the most likely to hold misperceptions about Obama’s religion (Pew 2009) and the least racially tolerant (e.g., Jones 2011).

These effects are illustrated in Figure 2, which graphs predicted values of *ObamaReligion* and *Muslim* from the models in Table 2 by researcher race, correction treatment, and high school graduation status.

Figure 2: Predicted effects of correction treatments (Study 2 – natl. white GOP)



Predicted effects calculated from regressions in Table 2. Asterisks represent statistically significant marginal effects of corrective information ($p < .10$) relative to the relevant control condition.

The corrective affirmation treatment significantly reduced misperceptions among high school graduates for both dependent variables regardless of researcher race. However, the pattern of predicted effects varies sharply by researcher race among those with less than a high school education. In the white researcher condition, the correction did not significantly change *ObamaReligion* and actually increased *Muslim* from 4.44 to 5.86. By contrast, the correction reduced *ObamaReligion* from 2.54 to 1.62 on a three-point scale in the black researcher condition and eliminated the backfire effect on *Muslim*.

Conclusion

The findings reported in this paper suggest that social desirability concerns may be conditional on informational cues about the appropriate answer rather than researcher characteristics alone. Stated misperceptions declined more in response to corrective information when a study was attributed to a nonwhite researcher among subgroups that were likely to hold the false belief in question, suggesting a contextual social desirability effect rather than genuine belief change.

These findings suggest we should broaden our understanding of social desirability bias. While previous studies found that social desirability effects are often stronger among Democrats/liberals (e.g., Finkel et al 1991; Sniderman and Carmines 1997), we found instead in Study 1 that Republicans – the group with negative partisan attitudes toward Barack Obama – were most likely to respond differently to corrective information about the president’s religion when it was attributed to a nonwhite researcher. Study 2 suggests that these effects are concentrated among less educated Republicans, which differs from studies finding social desirability effects among more educated respondents

(e.g., Bernstein, Chadha, and Montjoy 2001; Ansolabehere and Hersh 2012). The correction appeared to provide a cue to respondents who were less likely to be aware of the socially desirable answer.

More generally, our findings suggest that the context in which corrective information about sensitive topics is delivered affects how people perceive and respond to them. In this regard, our results are consistent with a growing body of research showing how the salience or accessibility of race can affect people's beliefs and opinions (e.g., Kosloff et al. 2010, Pyszczynski et al. 2010) – one of many ways in which the contextual salience of identity can shape opinions about race and ethnicity (e.g., Hopkins 2010, Enos 2014).

Of course, our study has limitations. Most notably, the effect found in Study 1 only replicated among low-education Republicans in Study 2, an unanticipated result that should be examined further. Also, this study focuses on a particular misperception. It would be desirable to extend this research to other sensitive misperceptions (e.g., whether Barack Obama was born in this country).

Still, our results suggest that the success of efforts to correct misperceptions about controversial issues may be overstated when social desirability concerns are made salient by contextual factors *and* message content. More research is needed to evaluate the extent of this problem.

Works cited

Ansolabehere, Stephen and Eitan Hersh. 2012. "Validation: What Big Data Reveal About Survey Misreporting and the Real Electorate." *Political Analysis* 20(4): 437-459.

Barreto, Matt A., David P. Redlawsk, and Caroline J. Tolbert. 2009. "Measuring Respondent Agreement/Disagreement with Framing Experiments: Race, Religion and Voting Against Barack Obama in 2008." Paper presented at the annual meeting of the American Political Science Association, September 3-6, 2009, Toronto, ON, Canada.

Berinsky, Adam. Forthcoming. "Rumors and Health Care Reform: Experiments in Political Misinformation." *British Journal of Political Science*.

Berinsky, Adam J., Gregory A. Huber, and Gabriel S. Lenz. 2012. "Evaluating online labor markets for experimental research: Amazon.com's Mechanical Turk." *Political Analysis* 20(3): 351-368.

Berinsky, Adam J., Michele F. Margolis, and Michael W. Sances. 2014. "Separating the Shirkers from the Workers? Making Sure Respondents Pay Attention on Self-Administered Surveys." *American Journal of Political Science*, 58(3): 739-753.

Bernstein, Robert, Anita Chadha and Robert Montjoy. 2001. "Overreporting Voting: Why It Happens and Why It Matters." *Public Opinion Quarterly* 65(1): 22-44.

Bertrand, Emily and Sendhil Mullainathan. 2004. "Are Emily and Greg More Employable Than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination." *American Economic Review* 94(4): 991-1013.

Block, Ray and Chinonye Onwunli. 2010. "Managing Monikers: The Role of Name Presentation in the 2008 Presidential Election." *Presidential Studies Quarterly* 40(3): 464-481

Buhrmester, Michael, Tracy Kwang, and Samuel D. Gosling. 2011. "Amazon's Mechanical Turk: A New Source of Inexpensive, Yet High-Quality Data?" *Perspectives on Psychological Science* 6(1):3-5.

Carmines, Edward G. and Paul M. Sniderman. 1997. *Reaching Beyond Race*. Cambridge, MA: Harvard University Press.

Davis, Darren W and Silver, Brian D. 2003. "Stereotype threat and race of interviewer effects in a survey on political knowledge." *American Journal of Political Science* 47(1): 33-45.

Edwards, Kari, and Edward E. Smith. 1996. "A Disconfirmation Bias in the Evaluation of Arguments." *Journal of Personality and Social Psychology*, 71(1): 5-24.

Enos, Ryan D. 2014. "Causal effect of intergroup contact on exclusionary attitudes." *Proceedings of the National Academy of Sciences* 111(10): 3699-3704.

Finkel, Steven E., Thomas M. Guterbock, and Marian J. Borg. 1991. "Race-of-Interviewer Effects in a Preelection Poll: Virginia 1989." *Public Opinion Quarterly* 55(3): 313-330.

Jones, Jeffrey M. 2011. "Record-High 86% Approve of Black-White Marriages." Gallup.com, September 12, 2011. Downloaded August 16, 2012 from <http://www.gallup.com/poll/149390/record-high-approve-black-white-marriages.aspx>

Hatchett, Shirley and Howard Schuman. 1975/1976. "White Participants and Race-of-Interviewer Effects." *Public Opinion Quarterly*, 39: 523-526.

Heerwig, Jennifer A. and McCabe, Brian J. 2009. "Education and Social Desirability Bias: The Case of a Black Presidential Candidate." *Social Science Quarterly* 90(3): 674-686.

Hopkins, Daniel. 2010. "Politicized Places: Explaining Where and When Immigrants Provoke Local Opposition." *American Political Science Review* 104(1): 40-60.

Horton, John, David Rand, and Richard J. Zeckhauser. 2011. "The online laboratory: Conducting experiments in a real labor market." *Experimental Economics* 14(3): 399-425.

Kosloff, Spee, Jeff Greenbern, Tom Schmader, Tom Dechesne, and David Weise. 2010. "Smearing the Opposition: Implicit and Explicit Stigmatization of the 2008 U.S. Presidential Candidates and the Current U.S. President." *Journal of Experimental Psychology: General* 139(3): 383-398.

Kreuter, Frauke and Stanley Presser and Roger Tourangeau. 2008. "Social desirability bias in CATI, IVR, and Web surveys the effects of mode and question sensitivity." *Public Opinion Quarterly* 72(5): 847-865.

Krysan, Maria and Mick P. Couper. 2003. "Race in the Live and the Virtual Interview: Racial Deference, Social Desirability, and the Activation Effects in Attitude Surveys." *Social Psychology Quarterly*. 66(4): 364-383.

Kuklinski, James H., Paul J. Quirk, Jennifer Jerit, David Schweider, and Robert F. Rich. 2000. "Misinformation and the Currency of Democratic Citizenship." *The Journal of Politics*, 62(3):790-816.

Martin, Jonathan and Amie Parnes. 2008. "McCain: Obama not an Arab, crowd boos." Politico, October 10, 2008. Downloaded February 28, 2017 from <http://www.politico.com/story/2008/10/mccain-obama-not-an-arab-crowd-boos-014479>.

Nyhan, Brendan and Jason Reifler. 2010. "When Corrections Fail: The Persistence of Political Misperceptions." *Political Behavior* 32(2): 303-330.

Nyhan, Brendan and Jason Reifler. 2012. "Misinformation and Fact-checking: Research Findings from Social Science." New America Foundation Media Policy Initiative Research Paper.

Nyhan, Brendan, Jason Reifler, and Peter Ubel. 2013. "The Hazards of Correcting Myths about Health Care Reform." *Medical Care* 51(2): 127-132.

Nyhan, Brendan and Jason Reifler. N.d. "The role of information deficits and identity threat in the prevalence of misperceptions." Unpublished manuscript.

Oppenheimer, Daniel M., Tom Meyvis, and Nicolas Davidenko. 2009. "Instructional manipulation checks: Detecting satisficing to increase statistical power." *Journal of Experimental Social Psychology* 45(4): 867-872.

Orne, Martin T. 1962. "On the social psychology of the psychological experiment: With particular reference to demand characteristics and their implications." *American Psychologist* 17(11): 776-783.

Pew Research Center for the People & the Press. 2008. "McCain Gains On Issues, But Stalls As Candidate of Change." Poll conducted September 9-14, 2008 and released September 18, 2008. Results downloaded February 23, 2009 from <http://people-press.org/report/450/presidential-race-remains-even>

Pew Research Center for the People & the Press. 2009. "No Decline in Belief That Obama is a Muslim." Poll conducted March 9-12, 2009. Results downloaded August 16, 2012 from <http://pewresearch.org/pubs/1176/obama-muslim-opinion-not-changed>

Pew Research Center for the People & the Press. 2010. "Growing Number of Americans say Obama is a Muslim." Poll conducted July 21-August 5, 2010. Results downloaded September 22, 2010 from <http://pewresearch.org/pubs/1701/poll-obama-muslim-christian-church-out-of-politics-political-leaders-religious>

Pew Forum on Religion & Public Life. 2012. "Little Voter Discomfort with Romney's Mormon Religion." Poll conducted June 28-July 9, 2012. Results downloaded August 16, 2012 from <http://www.pewforum.org/Politics-and-Elections/2012-romney-mormonism-obamas-religion.aspx>

Public Religion Research Institute. 2011. "PRRI/RNS Religion News Survey." Poll conducted July 14-17, 2011. Results downloaded April 4, 2012 from <http://publicreligion.org/site/wp-content/uploads/2011/08/July-RNS-Topline.pdf>

Pyszczynski, Tom, Carl Henthorn, Matt Motyl, and Kristel Gerow. 2010. "Is Obama the Anti-Christ? Racial priming, extreme criticisms of Barack Obama, and attitudes toward the 2008 US presidential candidates." *Journal of Experimental Social Psychology* 46: 863-866.

Redlawsk, David P. 2002. "Hot cognition or cool consideration? Testing the effects of motivated reasoning on political decision making." *Journal of Politics* 64(4): 1021-1044.

Smith, David. 2010. "The First Muslim President? Causes and Consequences of the Belief that Barack Obama is a Muslim." Unpublished manuscript.

Taber, Charles S. and Milton Lodge. 2006. "Motivated Skepticism in the Evaluation of Political Beliefs." *American Journal of Political Science*, 50(3): 755-769.

Taber, Charles S., Damon Cann, and Simona Kucsova. 2009. "The Motivated Processing of Political Arguments." *Political Behavior* 31(2): 137-155.

Terkildsen, Nayda. "When White Voters Evaluate Black Candidates: The Processing Implications of Candidate Skin Color, Prejudice, and Self-Monitoring." *American Journal of Political Science* 37(4): 1032-1053.

Appendix

Study 1

Data collection/sample characteristics

Prior to collecting our data, we established several exclusion conditions. We restrict our analyses to white non-Hispanics in order to minimize heterogeneity in how participants respond to researcher race. In addition, because our treatments are administered as online video clips, we only consider respondents who could correctly answer three relatively easy questions about a short non-political video about bird-watching that was administered before the experimental manipulation. Finally, we drop respondents who do not pass an attention filter (answering at least one of two questions correctly about a text that was unrelated to the treatments) – a screening mechanism intended to detect and remove satisficing respondents who do not read study materials carefully (Oppenheimer, Meyvis, and Davidenko 2009; Berinsky, Margolis, and Sances 2014).

The resulting respondent population of attentive non-Hispanic whites was relatively well-educated. Only 9% had a high school degree or less, 41% had some college, 31% had a college degree, and 19% had a post-graduate degree. Democrats were the best-represented group (55% including leaners), followed by Republicans (21%) and pure independents (15%). A plurality of 42% self-identified as Christians.

Obama manipulations

Participants are randomly assigned one of the following four video clips. Each is 10-11 seconds long and contains a close-up shot of Obama talking. The misperception negation and corrective affirmation clips that follow are taken from the same interview and thus have identical camera shots and backdrops.

Prompt: "You will now watch another video. Please pay close attention, as you did with the last video."

1. Control video ("60 Minutes," Feb. 10, 2008)

Transcript (not visible during experiment)

OBAMA: "I had to think about this long and hard at the beginning of this process and say are you deluding yourself or do you really think that you can do all those things."

Excerpt displayed on screen at end of video: "I had to think about this long and hard at the beginning of this process."

1. Misperception negation correction video (Christian Broadcasting Network, Jan. 22, 2007)

Transcript (not visible during experiment)

OBAMA: "I'm unequivocal about this – I am not and never have been of the Muslim faith. I think that those who are of the Muslim faith are deserving of respect and dignity."

Excerpt displayed on screen at end of video: "I'm unequivocal about this – I am not and never have been of the Muslim faith."

1. Corrective affirmation correction video (Christian Broadcasting Network, Jan. 22, 2007)

Transcript (not visible during experiment)

OBAMA: "I want to make sure that your viewers understand that I am a Christian who has belonged to the same church for almost twenty years now."

Excerpt displayed on screen at end of video: "I am a Christian who has belonged to the same church for almost twenty years now."

Explicit dependent variables

"Do you happen to know what Barack Obama's religion is?" (*ObamaReligion*)

- Jewish (2)
- Buddhist (2)
- Christian (1)
- Muslim (3)
- Hindu (2)
- Atheist (2)
- Agnostic (2)
- Something else (2)
- Don't know (2)

"Please indicate whether you agree or disagree with the following statements:"

"Barack Obama is a Muslim." (*Muslim*)

- Strongly agree (7)
- Somewhat agree (6)
- Slightly agree (5)
- Neither agree nor disagree (4)
- Slightly disagree (3)
- Somewhat disagree (2)
- Strongly disagree (1)
- Don't know (4)

Study 2


Data collection/sample characteristics

Knowledge Networks describes their sampling methodology as follows (N.d.): “Panel members are recruited through national random samples, originally by telephone and now almost entirely by postal mail. Households are provided with access to the Internet and hardware if needed. Unlike Internet convenience panels, also known as ‘opt-in’ panels, that includes only individuals with Internet access who volunteer themselves for research, KnowledgePanel recruitment uses dual sampling frames that includes both listed and unlisted telephone numbers, telephone and non-telephone households, and cell- phone-only households, as well as households with and without Internet access.”


Among the white non-Hispanic Republicans that constitute our sample in Study 2, 37% have a high school degree or less, 30% have some college (includes those who have two-year degrees), 20% have four-year degrees, and 12% have a post-graduate degree.⁸ Just over one-third of the sample (36%) identifies as a “strong” Republican.

Header on all pages of the study

**Political Attitudes Study
Mechanical Turk
Rasheed Jackson, Ph.D.
April 2012**



**Political Attitudes Study
Mechanical Turk
Brad Kelly, Ph.D.
April 2012**



Consent document

Study title: Political Attitudes Survey

Principal Investigator: [Rasheed Jackson, Ph.D./Brad Kelly, PhD]

Obama manipulations

⁸ All demographic characteristics of respondents were calculated using survey weights provided by Knowledge Networks

Participants are randomly assigned one of the following four video clips. Each is 10-11 seconds long and contains a close-up shot of Obama talking. The misperception negation and corrective affirmation clips that follow are taken from the same interview and thus have identical camera shots and backdrops.

Prompt: "You will now watch another video. Please pay close attention, as you did with the last video."

1. Control video ("60 Minutes," Feb. 10, 2008)

Transcript (not visible during experiment)

OBAMA: "I had to think about this long and hard at the beginning of this process and say are you deluding yourself or do you really think that you can do all those things."

Excerpt displayed on screen at end of video: "I had to think about this long and hard at the beginning of this process."

1. Misperception negation correction video (Christian Broadcasting Network, Jan. 22, 2007)

Transcript (not visible during experiment)

OBAMA: "I'm unequivocal about this – I am not and never have been of the Muslim faith. I think that those who are of the Muslim faith are deserving of respect and dignity."

Excerpt displayed on screen at end of video: "I'm unequivocal about this – I am not and never have been of the Muslim faith."

1. Corrective affirmation correction video (Christian Broadcasting Network, Jan. 22, 2007)

Transcript (not visible during experiment)

OBAMA: "I want to make sure that your viewers understand that I am a Christian who has belonged to the same church for almost twenty years now."

Excerpt displayed on screen at end of video: "I am a Christian who has belonged to the same church for almost twenty years now."

Manipulation checks

Before this survey is complete, we'd like to ask you some questions about the study.

We would first like to ask you some questions about [Rasheed Jackson/Brad Kelly], the author of this study.

Please indicate whether you agree or disagree with the following statements.

Please check one or more categories below to indicate what race(s) you consider [Rasheed Jackson/Brad Kelly], the researcher conducting this study, to be. (A picture is included above.)

- Asian/Pacific Islander
- White
- Black or African American
- American Indian or Alaska Native
- Multi-racial
- Other

Works cited

Berinsky, Adam J., Michele F. Margolis, and Michael W. Sances. 2014. "Separating the Shirkers from the Workers? Making Sure Respondents Pay Attention on Self-Administered Surveys." *American Journal of Political Science*, 58(3): 739-753.

Knowledge Networks. N.d. "Knowledge Networks Methodology."

Oppenheimer, Daniel M., Tom Meyvis, and Nicolas Davidenko. 2009. "Instructional manipulation checks: Detecting satisficing to increase statistical power." *Journal of Experimental Social Psychology* 45(4): 867-872.