

The Intersectionality of Disasters' Effects on Trust in Public Officials\*

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**Objective:** Groups defined by race and ideology are well-known predictors of interpersonal and political trust, but gender-based effects are undecided. I investigate whether disaster experience conditions a difference in political trust between women and men.

**Methods:** Examining the Hurricane Data Set of US public opinion in hurricane-threatened, I analyze intersectionality's influence on disaster-based political trust with a three-way interaction between race, class, and gender.

**Results:** Among disaster survivors, black women trust less than all other race-gender groups, and white men trust the most. The difference between black and white women survivors' political trust is attenuated by education. Education exacerbates race-based political trust among observers. Among observers, there is not a gender-based distinction.

**Conclusion:** Disasters create new identities based on shared experience, and offer a moment in time that illustrates how trust varies along gender-race-class-disaster dimensions. Knowing how trust differs according to intersectionality allows managers to manage critical events better.

Political trust is an exercise in vulnerability. The act of trusting a public official or institution involves yielding individual autonomy to someone else, who is then in charge of making decisions, disseminating information, and performing actions (Reinhardt 2015b; Montgomery, Jordens, and Little 2008). The levels at which one trusts, as well as the way that trust is developed and what it entails, then depends on how vulnerable a person is, and how much vulnerability they are willing to accept. Research shows that a person shares similar levels of vulnerability and patterns of trust with people of similar identities, such as members of one's race or class. In the US, for example, it is commonly found that Whites have higher levels of political trust than Blacks, and that education increases political trust for Whites and decreases it for Blacks (Avery 2006; Marschall and Shah 2007; Groen and Polivka 2010; Fussell, Sastry, and VanLandingham 2010).

Surprisingly, there is no uniformly expected effect on trust from one particular vulnerable identity group: women. Studies contrastingly find political trust to be higher among women (Christensen and Lærgrid 2005), lower among women (Alesina and Ferrara 2002), or either higher or lower depending on the target of trust (Reinhardt 2015a). Yet we know gender to be a salient and powerful identity that shapes political beliefs and attitudes (Ross, Rouse, and Mobley 2019). Why isn't there a research consensus on the differences in trust between women and men?

With this paper, I investigate the conditions under which differences in political trust exist between women and men. I examine the intersection of identity groups with each other, dissecting political trust according to race-class-gender subgroups, and argue that previous studies of political trust do not produce a consensus with respect to the effects of gender on trust because they blur distinctions between black women and white women, and between educated women and uneducated women. I employ the Hurricane Data Set (HDS; Reinhardt 2015b), one of many data

sets exhibiting mixed results regarding gender and political trust (Gawande et al 2010), and intersect identity groups with each other and with disaster experience to see whether and how disaster observers' political trust differs from survivors according to race-class-gender subgroups.

By focusing analysis on the activation of trust in the disaster context, my findings challenge at least two standard beliefs about the effects of identity on political trust. First, I show that when disasters occur and intersectionality is considered, men and women do exhibit different patterns of political trust. Among disaster survivors, white men have the highest levels of political trust, followed by white women, then black men, and finally black women.

Second, I find that adding class and education to the analysis produces unique results. Though my results are consistent with the common finding that increases in education increase the racial disparities in political trust among disaster observers and among all men, I find that women survivors behave differently. As education increases among women survivors, racial disparities decrease; black women survivors become more trusting with higher levels of education.

This article helps systematize our understanding of political trust with respect to identity. In using an analysis that allows race, class, and gender to condition each other, I am able to specify disasters as a condition under which we should expect to see political trust differ along gender lines. This work thus advances and bridges debates in literatures on identity and public opinion.

My findings can also bolster disaster management and mitigation strategies. Citizen political trust has been shown to influence disaster management by affecting individual behavior during preparation, evacuation, sheltering, rebuilding, and recovery (Chrysochoidis, Strada and Krystallis, 2009). High levels of political trust make critical events easier to manage and mitigate disasters' effects. Knowing how political trust varies according to subgroup allows managers to design preparation and resilience policies according to citizen needs.

These findings also contribute to our understanding of political trust in a specific context – disasters – where the performance of political institutions and public officials is tested and socioeconomic drivers of social and political behavior are amplified. With climate change increasing the incidence of extreme weather events, we can expect an increase in the incidence of disasters and a need for better understanding of disaster behavior and reactions. And with *perceptions* of disaster effects increasing even beyond the reality of extreme weather events (Reinhardt 2017), the influence of intersectionality on perceptions becomes even more salient.

Importantly, these findings illustrate how much more exploration there is to be done. With women exhibiting such varying levels of trust from each other and from men, we should investigate how and why that might be the case. Information and communication mechanisms, interactions with public officials, and cultural distinctions are just a few of the factors with potential to alter how disasters affect political trust. Without knowing which mechanisms are at play or to what extent, we have much to learn about how to reach, communicate with, serve, and protect citizen subgroups during crises.

### **Political Trust and Disasters**

Political trust, here defined as an orientation toward public officials or agencies based on character and ability (Reinhardt 2015b; Keele 2007; Miller 1974), is the belief one has that public officials can and will perform their jobs: *A trusts B to do X* (Hardin 2002, p. xx). Trust grows with the belief that an official is capable (*I trust her to do it because she is competent at doing it*), and morally strong enough (*I trust her to do it even if it personally difficult for her to do it*) to do her job (Nicholls and Picou 2013; Levi and Stoker 2000; Ullmann-Margalit 2004; Hardin 2004).

Political trust can be conceptualized as two types. *Diffuse trust* develops as a result of beliefs and socialization. It is typically tied to identity traits such as sex, gender, race, and age (Mishler

and Rose 1997). *Specific trust* is based on recent experiences, such as assessments of government performance during disasters (Citrin 1974; Weatherford 1987; Hetherington and Globetti 2002).

*Disasters* are disruptions to society caused by critical events (Quarantelli, Lagadec, and Boin 2007). Disaster experience conditions specific trust by updating beliefs about public officials' competence at preparing for and managing disasters (Reinhardt 2015b). Studies show that direct experience *surviving* a disaster can make people evaluate managers more positively than *observing* the same disaster, because personal contact supersedes media coverage as a driver of updating beliefs. When people experience a disaster positively they are more likely to exhibit an increase in political trust than when they observe the same disaster from afar (Reinhardt 2015a; 2017).

### **Adding the Disaster Context to Racially-based Political Trust**

We see both diffuse and specific trust develop along racial lines in the US. Abramson (1983) posits that the difference comes from decades of unfair treatment and lack of power for Blacks, which damages their political trust (Marschall and Shah 2007). So social, political, and economic disparities position Blacks to have lower trust than Whites outside of the disaster context. Blacks then experience disasters differently from Whites, based on the same disparities. Blacks are more likely to live in communities that are both damaged by disaster and ignored during rebuilding, more likely to lose their jobs due to disaster, and less likely to return to their homes after evacuation (Elliot and Pais 2008; Reinhardt 2015b). Blacks are thus expected to have lower diffuse trust based on socialization, and lower specific trust due to poorer disaster experience:

*H<sub>1</sub>*: Outside of the disaster experience (i.e., among observers), Blacks will have lower political trust than Whites.

*H<sub>2</sub>*: The disaster experience will lead to larger differences in trust between Blacks and Whites.

### **Considering Gender**

Research has given little evidence or theory to suggest that trust should vary according to gender. Because gender is often estimated as a control variable rather than an explanatory variable of interest, even recent observational studies that find gender to significantly predict trust offer little theoretical foundations for why. Keele (2005) finds that women have higher levels of political trust than men, but offers no explanation for the relationship. Christensen and Lærgrid (2005) argue that higher political trust in women occurs because women are more likely to be employed in the public sector, which makes people more trusting of public officials (see also Huseby 1995). Alesina and Ferrara (2002), on the other hand, find that women have lower political trust, and argue this difference is due to women's experience suffering discrimination throughout history. In contrast to both of these positions, Reinhardt (2015a) finds that gender matters in different ways across different levels of government.

Experimental studies, on the other hand, offer a few indications of what might underpin gender differences in trust. Eckel and Grossman (1999) observe that gender differences in dictator, ultimatum, and other trust games seem to depend on risk. In risk-free situations women are more likely to exhibit 'generous' or 'collectivist' behaviors than men, whereas in higher-risk situations women and men behave similarly (see also Croson and Buchan 1999). These findings support the demonstrated tendency of women to be more risk-averse than men (see Eckel and Grossman 2008).

Reinhardt (2015b) explicitly links risk aversion to disaster-based trust by positing that previous disaster management conditions trust in public officials to manage future disasters, and that citizens will therefore see continuing to live in poorly managed areas as being associated with greater risk of encountering future disasters. Women perceive disasters differently from men, which leads to different perceptions of future disaster risks, and therefore should lead to different adjustments to trust based on disaster experience. Since women are more likely to be risk averse,

the disaster experience pinpoints the potential for a gender-based difference in political trust. We thus arrive at Hypothesis 3:

*H<sub>3</sub>*: Among disaster survivors, women will have lower political trust than men.

### **Considering Intersectionality**

What, then, should we expect when comparing races within gender groups? To address this question, consider the intersection of identity groups. *Intersectionality* is the combination of two or more social identities into one social identity group (Shields 2008). Intersectionality scholarship argues that social categories are interdependent, and that race, class, and gender constitute each other and each other's effects on outcomes. The intersection of education and race is the driver behind the different effects of education on Blacks versus Whites.

Intersecting race with gender has been shown as key to understanding population health (Bauer 2014), political and policy outcomes (Hancock 2007), and class (Brewer, Conrad, and King 2002). Black women are more likely to confront discrimination than white women, and less likely to receive benefits of gender-based social reforms (Gillespie and Perez 2010). Black women are disproportionately represented at all levels of government compared to other race-gender groups (Gamble 2010), and face racial stereotypes and gender stereotypes different from both their white female and black male counterparts (Shields 2008).

The intersection of race and gender should therefore condition black women's experiences, and thus their trust, in ways that cannot be attributed solely to race or to gender. As Blacks, these women are already socialized to have lower trust than white women. As women, their risk aversion makes them less likely to trust than black men. And as black women, their disaster experience is likely to be the least positive. Based on this discussion, we can expect:

*H<sub>4</sub>*: Among disaster survivors, black women will have the lowest political trust of all race-gender

groups.

*H*<sub>5</sub>: Among disaster survivors, white men will have the highest political trust of all race-gender groups.

### **Considering Class**

Consider now how class might fit into this system. In the US, racially distinct trust is easily confounded with class-based trust. Blacks are more likely than Whites to live in substandard housing. Blacks have disproportionately lower education levels (Groen and Polivka 2010; Fussell, Sastry, and VanLandingham 2010). Blacks have lower levels of political trust.

But class and education are not simply mirrors of race. For Whites, higher levels of education and social class seem to generate a more tolerant view of political actors and public officials (Agger, Goldstein, and Pearl 1961), enhancing one's ability to engage in politics (Egerton 2002) and evaluate government performance, thereby increasing trust (Mayne and Hakhverdian 2017). For Blacks, education encourages one to interrogate leaders, heightening the tendency to see flaws (Hibbing and Morse 1995) and challenge authority (Catterberg and Moreno 2005), which leads to a negative relationship between education and trust. Based on the consideration of race and class alone, then, we arrive at Hypothesis 6:

*H*<sub>6</sub>: Outside of the disaster experience (i.e., among observers), education will affect trust positively for Whites and negatively for Blacks.

For disaster survivors, on the other hand, the same pattern may not persist. Reinhardt (2015a) finds that disaster survivors base their political trust on first-hand experience, while observers' political trust is rooted in second-hand information. Survivors with higher levels of education have more resources with which to engage with relief and recovery agencies and find resources needed to re-establish livelihoods and communities, and may therefore also have more positive

experiences on the whole, which will lead to increases in political trust. Conversely, those with lower levels of education should have fewer resources and a less knowledgeable position from which to navigate recovery and rebuilding, and may therefore have experiences that are less positive and more damaging to political trust.

Additionally, though it is true that US media coverage reveals the racial make-up of the social and economic classes most damaged by critical events (Bobo 2006; Falk, Hunt, and Hunt 2006), and portrays disaster survivors in positive or negative lights according to race (Sommers et al 2006), biases in the media are less likely to affect the political trust of disaster survivors than of disaster observers (Reinhardt 2015a, 2017). In the disaster context, education and knowledge are linked to both types of communication about the event (Pudlo, Robinson, and Wedhe 2019) and sustained public attention during the event (see Yeo and Knox 2019). As such, education is no longer expected to exacerbate the difference in trust between black and white survivors. In fact, education should lead to an attenuation of the racially-based difference in political trust. I posit:

*H<sub>7</sub>*: Among disaster survivors, education will lessen the difference in political trust between Blacks and Whites.

In sum, the expectations are as follows. Among those who have not recently survived a disaster, Whites should exhibit higher levels of political trust than Blacks (*H<sub>1</sub>*). Both the disaster experience (*H<sub>2</sub>*) and education (*H<sub>6</sub>*) should exacerbate those differences. Among disaster survivors, we should expect to find more nuanced relationships. Political trust should be lower among women survivors compared to men survivors (*H<sub>3</sub>*), lowest among black women survivors (*H<sub>4</sub>*), and highest among white men survivors (*H<sub>5</sub>*). And education should attenuate, rather than exacerbate, those differences (*H<sub>7</sub>*).

## **DATA AND ANALYSIS**

I test these hypotheses using the Hurricane Data Set (HDS; Reinhardt 2015b), which should allow for focused insights from one time period and geographic region. This 2006 data comes from a survey administered online<sup>i</sup> to people in hurricane-threatened areas of the US. *Hurricane-threatened areas* are defined as counties/parishes from Texas through North Carolina that either border the coast or are separated from the coast by no more than one other county/parish.

My investigation isolates the experiences and perceptions of respondents with respect to the 2004-2006 hurricane seasons. Containing more than 10 major hurricanes that required evacuation, including record breakers Katrina and Rita, these years comprised the deadliest and costliest seasons in 100 years. They displaced over three million people, cost over \$202 billion, and caused 2150 deaths (Lott et al 2013; Stein et al 2011). Respondents displaced by the 2005 hurricane season were included based on their physical home addresses before displacement, meaning post-displacement responses came from 38 states and Puerto Rico.

One potential problem with surveys collected of this population is the inability to validate it based on race, class, or gender. Because of the enormous displacement during these seasons, we do not know the demographics of the population of victims, residents, evacuees, or return migrants. I therefore cannot use these demographics to weight the HDS sample. To resolve this issue, Gawande et al (2010) validate the sample based on answers posed to health questions that were asked in national surveys pre-2004, and again on the HDS survey. Reinhardt (2015c) validates the sample based on hurricane damages for Katrina and Rita, which are nearly identical between the sample and the national average.<sup>ii</sup>

In the sample there are 487 black women, 5068 white women, 86 black men, and 1375 white men. One potential problem is the low occurrence of black men in the sample. I expect the confidence intervals around the estimate of black men's political trust to be quite large, and to

make it difficult to distinguish black men's trust from other race-gender subgroups. Distinctions I do find regarding black men's political trust, then, will be even more remarkable.

### **Dependent Variable**

My central goal is to explore whether the race-class-gender intersection has an effect on political trust, and whether that effect differs according to the disaster context. My dependent variable will be HDS indices representing a respondent's trust in its first responders, including police, fire, and ambulance services. I choose this operationalization for three main reasons.

First, the HDS indices capture multiple dimensions of political trust. Recall that political trust is based on one's *competence* to perform one's job, as well as *credibility*, or believability, and basic character. Following Hardin's "A trusts B to do X, or in matters Y" (2002, p. xx), the indices I employ are based on questions asking a respondent's (A's) evaluation of their local first responders' (B) credibility and believability to perform their duties with respect to disasters (Y).

Second, first responders offer an excellent opportunity for interaction with public officials both in disasters and in general life. We know political trust is updated differently across varying levels of government (Rahn and Rudolph 2005). Previous work tells us that during emergencies, people tend to trust local officials and emergency responders more than federal officials (Wray et al, 2006), perhaps due to their perceived lack of partisanship (Rothstein and Teorell, 2008) or inability to drain funding coffers (Pope and Leland, 2019). As specific trust is updated by the disaster experience, greater levels of interaction with local officials amplify trust (Reinhardt 2015a).

Finally, we should expect political trust to become more differentiated along race and class lines as the level of government decreases. With respect to the federal government, there is a tendency to trust less – and blame more – in the context of disasters (Canales, Pope, and Maestas 2019). Meanwhile, trust in the police varies greatly among races. Focusing on local-level first

responders thus allows me to study trust in officials particularly salient to disaster management, and to divisions in race-based and class-based trust. I gauge trust with HDS indices (0-10) asking about respondents' trust in local police, fire, and ambulance services.

### **Independent Variables**

*Race* is self-identified by the respondent (1 black; 0 else<sup>iii</sup>). The primary indicator of class is a self-identified measure of education (1 college degree or higher; 0 else), though controls for homeownership (1 homeowners; 0 else) and employment (1 employed; 0 else) are also included. Gender is a self-identified dichotomous variable (1 female; 0 else). Disaster experience is measured according to whether one evacuated for a hurricane during the 2004-2005 seasons (1 evacuee; 0 else). *Ideology* is included as a control and measured from -1, "liberal" to 1, "conservative." I control for risk perceptions with an average of a respondent's answers for nine general risk questions. For exact question wording and summary statistics, please consult the Hurricane Data Set (Reinhardt 2015b).

Because the race-gender subgroup samples are unbalanced, and black men represent less than 10% of the sample, an interacted model is more appropriate than a split-sample analysis. The fully interacted ordinary least squares (OLS) estimation of the effects of race-class-gender groups on trust in first responders is:

$$y_i = b_0 + b_1x_i + b_2z_i + b_3w_i + b_4x_iz_i + b_5x_iw_i + b_6z_iz_i + b_7x_iz_iz_i + b_8V_i + e_i$$

Where for any individual  $i$ ,  $y_i$  is the level of trust in a first responder,  $x_i$  is gender,  $z_i$  is race,  $w_i$  is education, and  $V_i$  is a vector of control variables. Gender, race, and education are each interacted with each other, and all three are interacted, to analyze conditional effects. The coefficients therefore merit explanation:  $b_1$  is the effect of being a woman (as opposed to a man) among whites without a college education;  $b_2$  is the effect of being black (as opposed to white) among men

without a college education; and  $b_3$  is the effect of having (as opposed to not having) a college education among white men.  $b_4$  is the effect of being a black woman as opposed to a white man among people without college educations;  $b_5$  is the effect of being an educated woman as opposed to an uneducated man among whites; and  $b_6$  is the effect being an educated black as opposed to an uneducated white among men. Finally,  $b_7$  is the effect of being a college-educated black woman as opposed to an uneducated white man.

## Results

Tables 1 presents estimation results for political trust in first responders, run on samples split between evacuees and non-evacuees. Though the control variables were included in each estimation, for cleaner presentation I do not detail the coefficients for these variables in every model. Instead, I report here that in each model, *risk* is a significant predictor of trust at the  $p < 0.05$  level, with coefficients of 0.05-0.07 for disaster survivors and 0.12-0.13 for observers. *Political ideology* is a significant predictor of trust at the  $p < 0.01$  level, with coefficients of 0.14-0.17 for all respondents. *Homeownership* significantly predicts trust at the  $p < 0.05$  level, with coefficients of 0.13-0.17 for disaster survivors and 0.17-0.22 for observers. *Full time employment* is never a significant predictor. Please contact the author for full results.

*Table 1 about here.*

Begin with Models 1-8, which consider race and education in isolation, in concert, and interacted. Findings are consistent with  $H_{1-2}$ , as we first see that across all models, Blacks have lower political trust than Whites. This effect ranges from -0.33 for observers in the fully interacted model ( $p < 0.01$ ; Model 7) to more than twice as much for survivors in Model 8 -0.86,  $p < 0.001$ ). Second, the effect of race on political trust is greater for disaster survivors than observers, with the largest difference being 0.53 in the fully interacted models ( $p < 0.01$ ).

Models 9-10 add gender to the race-disaster-education mix. Because coefficients in a 3-way interaction can be difficult to interpret, the marginal effects are presented in Figure 1. The left two panels present marginal effects for disaster survivors, and the right two for disaster observers. Within each pair of panels, the left panel presents effects for men, and the right panel for women. Within each panel, the left-hand value represents the effect for those without a college degree, and the right-hand value for those with a college degree. The red lines represent effects for Blacks, and the blue lines for all others. All confidence intervals are 95%.

Results confirm that the intersection of race and gender is an important determinant of political trust. We see results consistent with  $H_{4.5}$ : for all survivors and regardless of education, white males are the most trusting, followed by white females and black females. This relationship is reflected in the coefficient on the race-gender interaction in Model 10 (-1.28;  $p < 0.05$ ). Black males do not have a distinct position in this ranking, which is likely due to the small number of black men in the sample. Estimates do demonstrate that black men have lower trust than white men, and are possibly lower in political trust than white women, but we cannot be sure where black men fall with respect to black women.

The race-gender distinction is also important in driving the effect of education on political trust, though again, these distinctions are less clear than they might be with a larger sample of black men. For survivors, the effect of education on black men is 1.66 ( $p < 0.05$ ) lower than that for white men. For observers, the effect of education for white men is 0.28 ( $p < 0.05$ ).

Further evidence of a gender based distinction in political trust is demonstrated in the effects of education on each race-gender subgroup's trust, where women exhibit results consistent with  $H_7$ , which posits that survivors' education will attenuate racial disparities in political trust. Black women survivors' political trust approaches that of white women survivors as education increases,

indicated by the coefficient for the three-way interaction in Model 10 (2.05;  $p < 0.05$ ). Black and white men survivors, however, behave the same as observers, with education increasing the race-based disparity consistent with  $H_6$ .

<<<<<Insert Figure 1 about here.>>>>>

At least one data constraint should be addressed. The date of the data begs the question as to whether the results are bound by time. After all, in the decade since the hurricane seasons on which this data was collected, disasters have continued to capture national and international attention, and to affect political trust and perceptions of government competence in the US. The question is, have changes since 2006 produced effects that we should expect to differ according to race, gender, and class? Such effects are unlikely, except in one respect: the race and party of the US President. During catastrophic disasters, Americans are likely to give kudos to the President if they share the same party, and to blame the President for any problems if they are members of opposing parties (see Maestas et al 2008). Before the 44<sup>th</sup> presidency of the US, the race of the president was always white. The presidency of Barack Obama represents a unique opportunity to examine the intersection of race and party on disaster-based trust, and may indeed shed light on the findings presented here, but the passage of time itself should not threaten the relevance of these results.

## **Conclusion**

This study has explored whether the race-class-gender intersection has an effect on political trust, and whether that effect differs according to the disaster context, and establishes that research on race-class-gender groups provides important information about patterns of political trust. The results have important implications for the role of shared experiences in forming group identity. Education and disaster experience both construct identity and should be viewed as important dimensions of intersectionality.

These findings imply that the race-class-gender intersection determines trust differently depending on whether or not the respondent has lived through a disaster. To borrow Reinhardt's (2015a) vernacular, evacuees based their political trust on first-hand experience, while non-evacuees must rely on second-hand information. For those with first-hand experience, white men trust their public officials the most, black women trust them the least, and education attenuates the race-based differences in political trust among women. Conversely, for those with only second-hand information, there is no gender-based distinction of political trust, and education exacerbates the race-based distinctions according to expectation. This work thus contributes to the ongoing discussion surrounding survivors' identity, disasters, and their political effects.

Additionally, the disaster experience itself is associated with higher levels of political trust. Building on Reinhardt (2015a; 2017) and Atkeson and Maestas (2012), we have further reason to explore the effects of media on political trust, particularly with respect to observers. For public officials, it may prove beneficial to emphasize disaster management successes by highlighting the survivor experience when seeking further approval and cooperation.

Finally, this study advances studies on intersectionality. We now know that not only is political trust built differently among Blacks than Whites, but that black women require building trust in ways that differ from both black men and white women. This knowledge should help policy makers appreciate women's diverse needs based on identity construction (Davis, 2008). Policy makers and public managers have yet another reason to consider intersectionality when designing plans and considering how equity may be part of the rebuilding and recovery conversation (see Plein 2019).

**Table 1: Determinants of Trust in First Responders**

	M-1	M-2	M-3	M-4	M-5	M-6	M-7	M-8	M-9	M-10
	Obs.	Sur.	Obs.	Sur.	Obs.	Sur.	Obs.	Sur.	Obs.	Sur.
Race	-0.45***	-0.83***			-0.45***	-0.81***	-0.33**	-0.86***	-0.45	0.29
(Black=1)	(0.10)	(0.14)			(0.10)	(0.14)	(0.13)	(0.18)	(0.31)	(0.55)
Education			0.10	-0.25**	0.11	-0.23*	0.13*	-0.24**	0.28*	-0.19
(College=1)			(0.06)	(0.09)	(0.06)	(0.09)	(0.06)	(0.09)	(0.12)	(0.20)
Race*Education							-0.33	0.14	-0.59	-1.66*
n							(0.21)	(0.30)	(0.51)	(0.81)
Gender									-0.01	0.12
(Female=1)									(0.09)	(0.14)
Race*Gender									0.14	-1.28*
									(0.33)	(0.58)
Education*Gender									-0.21	-0.05
n									(0.14)	(0.23)

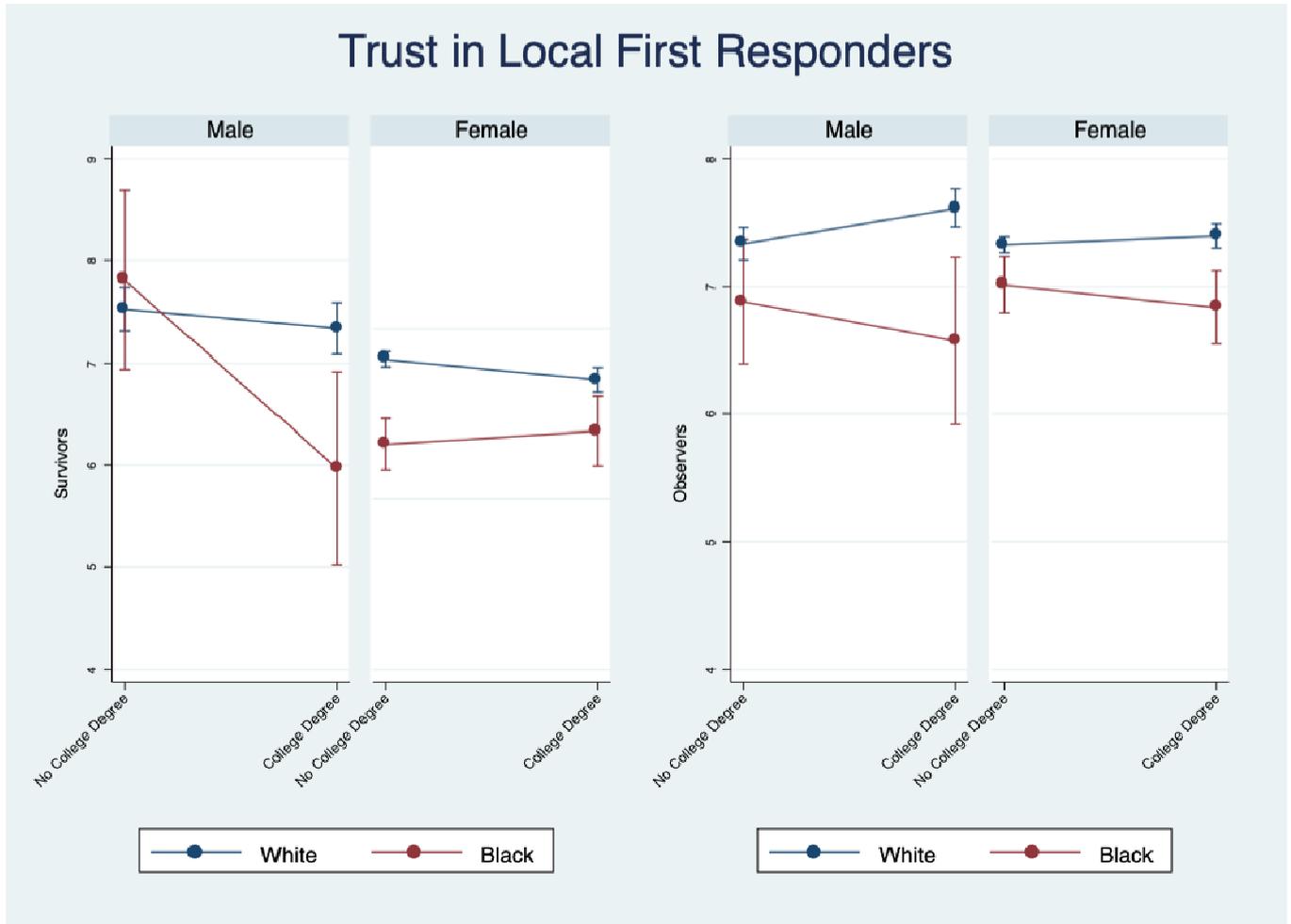
Race*Educatio									0.34	2.05*
n*Gender									(0.56)	(0.87)
Controls	yes***	yes**	yes***	yes*	yes***	yes**	yes***	yes**	yes***	yes**
Constant	6.57***	6.97***	6.48***	7.00***	6.54***	7.05***	6.52***	7.06***	6.52***	6.96***
	(0.10)	(0.18)	(0.10)	(0.18)	(0.10)	(0.18)	(0.10)	(0.18)	(0.12)	(0.21)
Observations	4,689	2,327	4,689	2,327	4,689	2,327	4,689	2,327	4,689	2,327
R-squared	0.03	0.02	0.02	0.01	0.03	0.03	0.03	0.03	0.03	0.03

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Standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

**Figure 1. Trust in Local First Responders by Race, Class, Gender, Experience**



- Abramson, P. (1983). *Political attitudes in America: Formation and Change*. W.H. Freeman.
- Agger, R., Goldstein, M. and Pearl, S. (1961). Political Cynicism: Measurement and Meaning. *Journal of Politics*, 23(3), 477-506.
- Alesina, A., & La Ferrara, E. (2002). Who trusts others? *Journal of public economics*, 85(2), 207-234.
- Atkeson, L. R., & Maestas, C. D. (2012). *Catastrophic politics: How extraordinary events redefine perceptions of government*. Cambridge University Press.
- Avery, J. M. 2006. "The Sources and Consequences of Political Mistrust among African Americans." *American Politics Research* 345 (5): 653-682.
- Bauer, G. R. (2014). Incorporating intersectionality theory into population health research methodology: Challenges and the potential to advance health equity. *Social science & Medicine*, 110, 10-17.
- Bobo, L.D. (2006). Katrina: Unmasking race, poverty, and politics in the 21st century. *Du Bois Review: Social Science Research on Race*,3(1),1-6.
- Brewer, R. M., Conrad, C. A., & King, M. C. (2002). The complexities and potential of theorizing gender, caste, race, and class. *Feminist Economics*, 8(2), 3-17.
- Canales, K. L., Pope, J., and Maestas, C. (2019). Recovering Public Opinions from Social Media *Social Sciences Quarterly*, forthcoming.
- Catterberg, G., and Moreno, A. The individual bases of political trust: Trends in new and established democracies. *International Journal of Public Opinion Research* 18.1(2006), 31-48.
- Christensen, T. and Lærgrid, P. (2005). Trust in government. *Public Performance & Management Review*, 28(4), 487-511.
- Citrin, J. (1974). The political relevance of trust in government. *American Political Science Review*

68(3), 973–988.

Cooper, C.A., Knotts, H.G. and Brennan, K.M. (2008). The importance of trust in government for public administration: The case of zoning. *Public Administration Review*, 68(3), 459-468.

Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43, 1241-1299.

Croson, R., & Buchan, N. (1999). Gender and culture: International experimental evidence from trust games. *American Economic Review*, 89(2), 386-391.

Darr, J., Cate, S., and Moak, D. (2019). Who'll Stop the Rain? *Social Sciences Quarterly*, forthcoming.

Davis, K. (2008). Intersectionality as buzzword: A sociology of science perspective on what makes a feminist theory successful. *Feminist theory*, 9(1), 67-85.

Eckel, C. C., & Grossman, P. J. (2001). Chivalry and solidarity in ultimatum games. *Economic Inquiry*, 39(2), 171-188.

Eckel, C. C., & Grossman, P. J. (2008). Men, women and risk aversion: Experimental evidence. *Handbook of experimental economics results*, 1, 1061-1073.

Egerton, M. (2002). Higher education and civic engagement. *The British Journal of Sociology*, 53(4), 603-620.

Elliott, J., and Pais, J. Race, class, and Hurricane Katrina: Social differences in human responses to disaster. *Social Science Research* 35.2(2006), 295-321.

Falk, William, Matthew Hunt, & Larry Hunt. Hurricane Katrina & New Orleanians' Sense of Place *Du Bois Review* 3(2006), 115-128.

Fussell, E., Sastry, N., and VanLandingham, M. Race, socioeconomic status, & return migration to New Orleans after Hurricane Katrina. *Population Environment* 31(2010):20-42.

- Gamble, K., 2010. Young, Gifted, Black, Female: Why Aren't there more Yvette Clarkes in Congress? *Whose Black Politics?* 293-308.
- Gawande, K., Reinhardt, G. Y., Silva, C. L., & Bearfield, D. (2012). Comparing Discrete Distributions: Survey Validation and Survey Experiments. *Political Analysis*, 21(1), 70-85.
- Gillespie, A., & Perez, A. (2010). 12 Race, Religion, and Post-9/11 America. *Whose Black Politics?: Cases in Post-Racial Black Leadership*, 273.
- Groen, J., & Polivka, A. (2010). Going Home after Katrina. *Demography* 47(4), 821-44.
- Hancock, A. M. (2007). When multiplication doesn't equal quick addition: Examining intersectionality as a research paradigm. *Perspectives on politics*, 5(1), 63-79.
- Hardin, R. (2002). Foreword. In *Trust and trustworthiness*. Russell Sage Foundation: pp. i-xxx.
- Hetherington, Marc J., and Suzanne Globetti. 2002. "Political Trust and Racial Policy Preferences." *American Journal of Political Science* 46(2): 253-275.
- Huseby, B.M. (1995) "Attitudes towards the size of government", in O. Borre and E. Scarbrough (eds), *The Scope of Government*. Oxford: Oxford University Press.
- Kincaid, J., & Cole, R. L. (2010). Citizen attitudes toward issues of federalism in Canada, Mexico, and the United States. *Publius: The Journal of Federalism*, 41(1), 53-75.
- Levi, Margaret, and Laura Stoker. 2000. "Political Trust and Trustworthiness." *Annual Review of Political Science* 3: 475-507.
- Lott, N., Smith, A., Houston, T., Shein, K., and Crouch, J. (2013). Billion Dollar US Weather/Climate Disasters, 1980-2012. National Climatic Data Center.
- Maestas, C.D., Atkeson, L.R., Croom, T. and Bryant, L.A., 2008. Shifting the blame: Federalism, media, and public assignment of blame following Hurricane Katrina. *Publius: The Journal of Federalism*, 38(4), pp.609-632.

- Marschall, M., & Shah, P. R. (2007). The attitudinal effects of minority incorporation: Examining the racial dimensions of trust in urban America. *Urban Affairs Review*, 42(5), 629-658.
- Mayne, Q., & Hakhverdian, A. (2017). 11. Education, socialization, and political trust. *Handbook on Political Trust*, 176.
- Miller, A.H. (1974). Political issues and trust in government: 1964–1970. *American Political Science Review*, 68(03), 951-972.
- Montgomery, Kathleen, Christopher F.C. Jordens and Miles Little. 2008. "How Vulnerability and Trust Interact During Extreme Events." *Administration and Society* 40 (6): 621-644.
- Nicholls, K. and Picou, J. (2013). The impact of Hurricane Katrina on trust in government. *Social Science Quarterly*, 93(2), 344- 61.
- Plein, L. C. (2019). A Framework for Adaptation Strategy. *Social Sciences Quarterly*, forthcoming.
- Pope, J., and Leland, S. (2019). Isn't a Flood a Rainy Day? *Social Sciences Quarterly*, forthcoming.
- Pudlo, J. M., Robinson, S. E., and Wehde, W. (2019). Is There Anybody Out There? Communication of Natural Hazard Warnings at Home and Away. *Social Sciences Quarterly*, forthcoming.
- Rahn, Wendy, and Thomas Rudolph. (2005). A Tale of Political Trust in American Cities. *Public Opinion Quarterly* 69 (4), 530–60.
- Reinhardt, G. Y. (2015). First-Hand Experience and Second-Hand Information: Changing Trust across Three Levels of Government. *Review of Policy Research*, 32(3), 345-364.
- Reinhardt, G.Y. (2015). Race, Trust, and Return Migration: The Political Drivers of Post-Disaster Resettlement. *Political Research Quarterly*, 68(22), 350-362.
- Reinhardt, G. Y. (2017). Imagining worse than reality: comparing beliefs and intentions between

- disaster evacuees and survey respondents. *Journal of Risk Research*, 20(2), 169-194.
- Ross, A., Rouse, S.M., and Mobley, W. (2019). Polarization of climate change beliefs. *Social Sciences Quarterly*, *forthcoming*.
- Rothstein, B. and Teorell, J. (2008). What is Quality of Government: A Theory of Impartial Political Institutions. *Governance. International Journal of Policy and Administration*.
- Shields, S. (2008). Gender: An Intersectionality Perspective. *Sex Roles*, 59(5-6), 301-311.
- Sommers, S.R., Apfelbaum, E.P., Dukes, K.N., Toosi, N., and Wang, E.J. (2006). Race and Media Coverage of Hurricane Katrina. *Analyses of Social Issues and Public Policy* 6(1), 1–17.
- Weatherford, M. Stephen. 1987. "How Does Government Performance Influence Political Support?" *Political Behavior* 9 (1): 5-28.
- Wray, R., Rivers, J., Jupka, K. and Clements, B. (2006). Public perceptions about trust in emergency risk communication. *Int'l Journal of Mass Emergencies and Disasters*, 24(1), 45.
- Yeo, J., and Knox, C. (2019). Massive Flooding versus the Olympics. *Social Sciences Quarterly*, *forthcoming*.

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<sup>i</sup> Survey Sampling International (SSI) fielded a random sample within the target population. The sample for this survey therefore could have included anyone living in a hurricane-threatened area, provided that person was in the SSI database. SSI's survey sampling skills have been utilized throughout the social sciences to collect public opinion and marketing research, and to test questions related to experiments and survey design (e.g., Singer et al 2010; Singer and Couper 2010, 2008; Dale and Strauss 2009; Kennedy 2007; Brick et al 2006, Brick et al 2007).

<sup>ii</sup> It is important to realize that a sample is not representative of a given population because of who is in it, but because of who could have been in it (Schlenger and Cohen Silver 2006, p. 132). This study is therefore limited in that we must infer to a somewhat younger, more educated, more partisan, and more politically engaged population than the general population, because we know this to be generally true about SSI's sample and about internet users (Malhotra and Margolit 2010; Esterling, Neblo, and Lazer 2011). Beyond that, it is impossible to compare the sample with the target population, because no descriptive statistics of the target population are known to researchers or governmental agencies. Within these limits, we are able to infer regarding populations regularly facing the prospect of disaster, those who have survived disaster and catastrophe, and those who have watched the management and recovery from disasters they might one day encounter themselves.

<sup>iii</sup> These results include all non-black races in "else" and, to save space, refers to the entire category as white. Removing all non-whites from "else" does not change the results substantively.