

**First-Hand Experience and Second-Hand Information:
Changing Trust across Three Levels of Government**

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Abstract:

Little is known about how different sources of information drive citizen trust in government. This paper addresses that deficiency. First-hand and second-hand sources supply different types of information, which can reinforce or cancel each other depending on the level of government being assessed. Using survey data taken a year after Hurricane Katrina, I find that Katrina evacuees have the lowest trust in nearly all officials, while evacuees of other hurricanes have higher local trust than any other group. I also find that increasing attention to second-hand information corresponds with higher trust in local officials, and this effect decreases as the level of government increases. For Katrina evacuees and non-evacuees, the effect decreases so much as to become negative at the federal level. Finally, differences in average trust among evacuees of Katrina, evacuees of other hurricanes, and non-evacuees are largest at the local level and decrease as the level of government increases. Ultimately, first-hand experience with public officials drives trust in local government, but this experience diminishes as the level of government increases, creating opportunity for secondary sources to supply information that conditions trust.

Key Words:

Political trust; government performance; media; disasters; federalism

Extensive work has shown that people are likely to base their trust in public officials on assessments of recent government performance. That is, when citizens believe public officials do a good job, their trust in them tends to rise. Yet there is less agreement on how citizens make these performance assessments. Information to assess performance generally comes from one of two levels: first-hand sources, such as personal experience, or second-hand sources, such as media reports. We know that second-hand sources can distort information in ways that affect performance assessments (Birkland and Waterman 2008), and that individuals make choices about their sources of secondary information that condition their trust (Robinson et al 2013). Yet we do not know whether performance assessments based on personal experience differ from those based on second-hand information. If a systematic difference exists, the level of information on which performance assessments are based is an important and unnoticed determinant of trust.

I examine how first-hand and second-hand information join to affect political trust, and how that relationship differs based on the level of government (local, state, federal). I argue that one's personal experience with public officials, most common at the local level, is predominant in forming the assessments that condition political trust. This experience abates at higher levels of government, creating space for secondary sources to mold trust. At the federal level, personal experience with officials is so uncommon that the media influences nearly all trust assessments. Thus while political trust of local officials is borne mainly of first-hand personal interaction, that of federal officials is based primarily on second-hand information.

From this overarching theory I derive three specific hypotheses, which I test using a survey of hurricane-threatened residents of the Gulf and Southeast Atlantic Coasts. I compare political trust among evacuees of Hurricane Katrina, evacuees of other 2004-2006 hurricanes, and non-evacuees of both hurricanes. Though devastating, disasters are ideal for examining ideas regarding information and trust because they are one of the few policy areas in which all levels of government bear

responsibility. All three hypotheses are confirmed to varying degrees. Assuming evacuation experience generates first-hand performance assessments, I show first that Katrina evacuees' personal experience leads to the lowest trust in nearly all officials, while evacuees of other hurricanes have higher local trust than any other group. Second, I find that increasing respondent attention to second-hand information from media coverage corresponds to higher trust levels in local officials, but that this effect decreases as the level of government increases, so that the effect of attention to media coverage on federal trust is negative. Finally, I find that evacuees of Katrina, evacuees of other hurricanes, and non-evacuees are nearly identical when it comes to federal trust, but that the difference in trust among the three groups increases as the level of government decreases.

This work extends our knowledge of trust, media coverage, and federalism by creating a comprehensive theory that accounts for the interplay among all three factors at once. As possibly the first to theoretically examine how levels of information drive performance assessments, I explain how and when media coverage and personal experience interact to condition trust. This individual-level connection to performance builds on work by Robinson et al (2013) by accounting for information and examining each level of it with a finer lens.

A key implication of this work is that as we move up the chain of government from local to state to federal, second-hand information has a homogenizing effect on political trust. Though previous scholarship has noted media effects on blaming government for management failures (Birkland and Waterman 2008), this new relationship between media coverage and personal experience implies that media coverage has the opportunity to insert itself into the creation of political trust in ways previously unnoted. For evacuees of hurricanes prior to Katrina, their unilaterally higher political trust of local officials suggests that media coverage of officials in other contexts can boost opinions regarding one's own experiences.

Further, consider the segmentation of audiences today; never has it been easier to categorize citizens based on which network gives them their news or which medium is their primary source of information. Those receiving second-hand information from Fox News and MSNBC, found to be the least informative news sources (Cassino, Woolley, and Jenkins 2012), will have differently-formed trust than those listening to NPR. If media outlets are carefully targeted to particular audiences and driven by market considerations, then targeting schemes and marketing strategies are driving political trust, and doing so systematically, according to viewer characteristics.

As the relevance of trust in society increases, so should concern over what causes that trust. Trust is necessary to achieve citizen compliance that begets safety, efficiency, and cooperation (Wang and Kapucu 2008), and if public officials do not perform well that trust is in jeopardy. This work reveals the predictable ways in which assessments are based on experience and perceptions of performance in ways previously unrealized.

What We Do (and Don't) Know about Trust in Government

Trust is often connected to the actions and performance of public officials and institutions (Robinson et al 2013). Scholars have tied trust to citizen (dis)satisfaction with the economy (Chanley, Rudolph, and Rahn 2000; Hetherington 1998; Keele 2005; Keele 2007; Hetherington and Rudolph 2008; Weatherford 1987), reaction to scandals (Keele 2007), crime rates (Kelleher and Wolak 2007), and disaster management (Nicholls and Picou 2013). These links transcend national, state, and local levels (Rahn and Rudolph 2002).

Citizens have two main *levels of information* that fuel government performance assessments: primary information via first-hand experience; and secondary information via sources such as the media. First-hand experience includes interactions with public officials and results of their policies. Personal interactions are straightforward – if an experience goes well, trust is generally boosted; if it goes poorly, trust can be damaged. The relationship between political trust and policies seems to

vary according to the perceived sacrifice or reward associated with a particular policy (Lock, Shapiro, and Jacobs 1999). Policy dissatisfaction begets lower trust (Hetherington 1998; Forbes 2004).

Perceptions of government performance are sometimes more important to forming trust than performance itself (Hetherington 1998; also Keele 2007),ⁱ and secondary information conditions these perceptions.ⁱⁱ Negative coverage can get more attention and viewership, and can harm trust more than positive coverage can help it. Negative events carry more weight than positive events, and sources conveying negative information are viewed as more credible than sources of good news (Slovic 1993). Additionally, media coverage boosts issue salience, and salient issues are more likely to be used to evaluate government's trustworthiness than issues of low salience (Hetherington and Husser 2012).

Trust and Information

Consider an individual-level theory of government performance and trust, where trust is an orientation toward public officials or agencies based on character and ability (Keele 2007; Miller 1974). That is, trust is the belief one has that public officials can and will perform their jobs. Hardin explains: *A trusts B to do X, or in matters Y* (2002, p. xx). Trust is bounded by the tasks one is expected to perform, and increases with the belief that the official is both capable of performing the job (*I trust him to do it because he is competent at doing it*) and has the moral fortitude to do it (*I trust him to do it even if it is a personally difficult thing to do*) when called upon (see Nicholls and Picou 2013; Levi and Stoker 2000; Ullmann-Margalit 2004; Hardin 2004).

Micro-level trust is grounded in a basic evaluation of officials' performance, and that evaluation is based on first-hand experience and second-hand information. Positive evaluations reflect ability and moral fortitude, and will increase trust. Negative evaluations are evidence of inability and/or moral weakness, and will decrease trust.

Trust and Information across Three Levels of Government

The implications of individual-level decisions regarding trust and information should be evident at each level of government, varying predictably because each level of government has different degrees of contact with the citizenry and is covered to varying extents by the media. First, consider first-hand information gathered from personal interactions. Although we are accustomed to seeing voter turnout higher for national elections than for local elections, we can expect citizens to interact personally with public officials primarily at the local level, less so at the state level, and least at the federal level. Roughly 40-55% of citizens contact local governments each year (Thomas and Streib 2003); this is as much as twice the amount that reports contact with national officials (Verba, Schlozman, and Brady 1995). Americans are also twice as likely to participate in local campaigns as national (ibid.). The pattern is likely due to increased familiarity with, or need of specific services from, local officials (Bimber 1999).

Additionally, connecting policies to policy makers should be easiest at the local level. Housing codes, school policies, even welfare distribution are attributed to local housing boards, school boards, and welfare offices or other “street-level bureaucrats” (Lipsky 1981), and it is trust in these specific officials that concerns most citizens (Levi and Stoker 2000). Connecting federal policies to the officials responsible for them can be more difficult. Take, for example, the Affordable Care Act (ACA), enacted in 2010. Although President Barack Obama is often criticized for the policy, the individual facets that came from an extensive bargaining and legislative process are rarely attributable to any one legislator.

In fact, blame for issues such as the ACA is often cast at the President by second-hand sources. As space opens between citizens and their public officials, secondary sources fill the void. When first-hand and second-hand information contradict, second-hand information is dismissed (Schmidt, Gunther, and Liebhart 2004; also Vallone, Ross, and Lepper 1985). Where personal

experiences falter, however, citizens turn to secondary sources (Garnett and Kouzmin 2007). At the same time, national political coverage concentrates primarily on national public figures, rather than state or local officials of any one particular area. These figures generate stories with greater nationwide appeal, and are more likely to attract and keep a wider audience. This coverage provides just the secondary information necessary when first-hand experience is lacking.

In sum, we can expect assessment-based trust to be a function of an inverse relationship between first-hand and second-hand information. The relationship favors personal experience over media influence at the local level, then shifts until reaching the federal level, where trust is determined almost solely by secondary information. Heightened attention toward critical events makes issues like disasters especially relevant to this relationship.

Trust and Disasters

Disasters are unplanned disruptions in social and political mechanisms and systems (Quarantelli, Lagadec, and Boin 2006). When disaster evacuees band together with others during preparation, evacuation, and recovery, the experience can be conducive to social bonding, which is a fundamental basis for trust (Merolla et al 2013).ⁱⁱⁱ Additionally, critical events create uncertainty, forcing those who experience them to trust public officials to provide information, shelters, and resources. Citizens sacrifice their personal autonomy and decision-making power to those in charge, trusting public officials to make decisions on their behalf (Montgomery, Jordens, and Little 2008).

Because disasters activate trust in these officials, the disaster experience can either erode or strengthen political trust. A successfully managed disaster validates and fortifies trust,^{iv} uniting citizens with public officials to overcome fear, rally around a common cause, and rebuild a community. Conversely, poorly-managed disasters diminish trust by exposing the inabilities of government officials to carry out the work they were entrusted to perform (see Troy 2004),^v often

damaging trust more than a well-managed event can bolster it (Slovic 1993). "Trust is fragile. It is typically created rather slowly, but it can be destroyed in an instant" (Slovic 1999, p. 697).

Trust and Disasters across Three Levels of Government

Since disaster mitigation and recovery are the responsibility of all three levels of government, it is possible for one disaster to *both fortify and damage* trust, depending on the level of government and the person assessing performance. That is, one person can have her local trust strengthened, and her federal trust weakened, by the same disaster. And her neighbor, if he experienced local officials or policy effects in a different way, may come through the disaster with different trust assessments.

We can expect, however, that personal experiences will provide information in the same way for people at each level of government. Locally, those experiencing a disaster will have direct contact with first responders and local policy decisions through fortification plans, evacuation, sheltering, and communication networks (Department of Homeland Security 2004). There will be less personal contact with state officials, who will be marshalling resources and coordinating emergency management efforts among communities and levels of government (Schneider 2008). Contact with federal officials will take place only if federal assistance is requested by the state, at which point the Federal Emergency Management Agency (FEMA) can appoint a coordinator of disaster efforts and distribute federal assistance (FEMA 2013; Disaster Mitigation Act of 2000).

Non-evacuees learn of the disaster second-hand via media reports, which tend to focus on negative performance in ways damaging to trust. Disaster coverage favors laymen interviews, shocking quotations and footage, and emotional information (see Atkeson and Maestas 2012; also Perkins and Li 2011; Jha and Izard 2011), which boosts viewership to the detriment of political trust. Viewers receive media reports designed to fill demand, while government updates, dependent on fact-checking and official confirmation, arrive more slowly. "When more information is coming from media than from government, trust begins to shift" toward the media as a reliable source of

information (Wang and Kapucu 2008). If the information differs, distrust in public officials grows, and the mere perception of obfuscation damages trust (Warren 2006).

Like disaster experience, the effect of media coverage on trust depends on the nature of the coverage. Positive reports increase trust, but not as noticeably as negative reports damage it (Slovic 1993). Some reports transfer blame up the governmental chain, directing attention to the federal government (Birkland and Waterman 2008). This (mis)direction, appealing to national audiences and common among national broadcasters, was evident during the coverage of Hurricane Katrina.

Hurricane Katrina: A Special Case

Hurricane Katrina, America's deadliest and costliest hurricane on record, claimed 1833 lives, cost \$146.3 billion, and displaced over 1.5 million people (Lott et al 2013; Stein et al 2011). More than a *disaster*, Hurricane Katrina is considered a *catastrophe*^{vi} because of the complete social and public service disruption to a widespread area (over 90,000 square miles; Forgette, King, and Dettrey 2008). Public offices that would ordinarily coordinate and mitigate matters, such as City Halls and Water and Health Departments, were unavailable. Small towns that would have turned to neighboring cities for help found those cities decimated.^{vii}

In catastrophes like Katrina, widespread devastation causes millions to clamor for information. Evacuees begin to lose patience, and with it goes their trust in public officials. The updates they crave come slowly from official sources, but are all too handily supplied by the media, even though they carry little actual information (Atkeson and Maestas 2012). Because local media has been stymied or destroyed, coverage of catastrophes tends to be more national in character and to last longer than it would with a disaster (Quarantelli 2006). Scarce information combines with a twenty-four-hour news cycle to create errors. Hurricane Katrina was no exception to this pattern: during Katrina's aftermath, CNN falsely reported that gunfire halted a rescue mission, and the *New*

Orleans Times-Picayune wrongly printed that forty murder victims were found in the Convention Center's freezer (Sommers et al 2006).

We should not expect all catastrophes to be poorly managed, or to result in lower trust for those who live through them. But with Hurricane Katrina, considered by many a public management failure (Nicholls and Picou 2013), evacuees were not adequately prepared for the widespread destruction or the long time away from their homes. Many felt these problems could have been rectified or avoided, had their public officials been better prepared at the onset and acted more swiftly during mitigation and recovery. Meanwhile, those absorbing second-hand information received a predictably distorted picture. Birkland and Waterman (2008) elaborate on how media attention deflected blame away from local and state entities and toward national actors, even for issues that were not federal responsibilities. Maestas et al (2008) confirm that those who absorbed some media coverage were more likely to blame the federal government for management failures.

What about state and local trust? Del Pino (2005) reports that citizens evaluate public administration according to the results they see, meaning reports of poor performance in Louisiana and New Orleans can lower performance standards for subnational administrations in general, and raise performance assessments of one's own subnational administrations by comparison. That is, those living outside of Louisiana might have their trust damaged in *Louisiana's* state officials, but trust in *their own* state officials may be boosted in comparison. Similarly, although New Orleans' first responders received negative press, non-evacuees may call to mind their own capable and morally upright first responders in contrast, who Trainor and Barsky (2010) tell us are the norm.

On the whole, the effect of Hurricane Katrina on trust will depend on how each person experienced the hurricane. The first-hand Katrina experience should yield the lowest trust levels. For second-hand non-evacuees, national trust should be negatively affected by attention to media, while state and local trust should be boosted.

Analytical Framework

In general, I suspect citizens who experience public administration first-hand to form different levels of trust than those who observe it through secondary sources. These levels should also vary across local, state, and federal governments, and should depend on how well (poorly) each level of government is perceived to perform. Stark government missteps (successes) should damage (boost) trust. Based on the discussion above, I generate three specific hypotheses regarding disaster evacuees and non-evacuees:

Hypothesis 1a: The more negative the experience, as measured by first-hand Katrina evacuation, the lower the trust.

Hypothesis 1b: The more positive the experience, as measured by first-hand evacuation for non-Katrina hurricanes, the higher the trust.

We know good disaster management boosts trust, but not as dramatically as poor disaster management damages trust (Slovic 1993). We also know media stories focus on negative rather than positive administration stories. I therefore expect evacuees of well-managed disasters to have higher trust than non-evacuees, *ceteris paribus*. Even if non-evacuees are told a disaster was managed well, the first-hand evacuee experience will have a stronger effect on trust than will non-evacuees' secondary information. Meanwhile, we should expect evacuees of poorly managed disasters to have lower trust than non-evacuees. I expect Katrina evacuee trust to be uniformly lower than trust among either non-evacuees or evacuees of other disasters. I expect these relationships to be true at all levels of government.

Hypothesis 2: The higher the level of government, the more negative the effect of attention to media coverage on trust.

We see (above) that national media focuses on national government and negative disaster coverage. Even if some local officials are impugned, non-evacuees in other locations will be more likely to have trust in their own local officials *increase* due to the implicit comparison. Therefore, I expect the most positive relationship (slope) between media and trust to be at the local level. For

state trust, that relationship should be less positive, and federal trust should have the least positive relationship of all. I expect these relationships to be true regardless of evacuation experience.

Hypothesis 3: The higher the level of government, the smaller the difference in trust among the three groups.

I posit that experience with disasters and resultant policy decisions will separate local evacuee trust (Katrina and other hurricanes) from that of non-evacuees. As the level of government increases, evacuee experience with officials and their policies decreases, creating room for the media to frame trust. Evacuee contact with federal officials is most remote, meaning secondary information forms trust in federal officials for non-evacuees and for evacuees of all hurricanes. We should therefore see a convergence or homogenization of political trust between non-evacuees and all evacuees as the level of government increases, because the information on which the groups base their trust is increasingly coming from the same sources.

It may help to see an illustration of the hypothesized relationships. Figure 1 shows three panels. The x-axis gives “attention to media coverage” surrounding a particular disaster. The y-axis is respondent trust in public officials at each level of government. In each panel there are three lines, each representing the relationship between attention to media and trust for people with particular hurricane experience. The solid line shows non-evacuees’ trust, while the dashed and dotted lines are trust of evacuees who experienced poorly managed and well managed hurricanes, respectively.

[Insert Figure 1 Here]

Consider Hypothesis 1. The position of the lines with respect to each other shows the effect of the disaster experience itself: those with a bad evacuation experience have the least trust, indicated by the dashed red line that appears lower than the others, consistently across all levels of government. Those with a good evacuation experience have the most trust, indicated by the dotted green line appearing higher than all other groups’ trust. And those with no evacuation experience have moderate trust, shown by the solid blue line in between the other two groups.

Hypothesis 2 is evident if we compare panels to each other. Each experience group (green, blue, red) keeps the same relationship between media and trust within each graph; that is, the lines within each graph are parallel to each other. But as we move from left to right, we see the slopes within each graph decreasing, growing more negative. This progression indicates that as the level of government increases, the effect of attention to media coverage on trust is becoming more negative.

For Hypothesis 3, we again compare panels to each other, but this time we examine the gaps between the lines for each group. Recall that each line represents the relationship between attention to media coverage and trust for a group with particular hurricane experience. In Panel A, the lines are spaced far apart, indicating that evacuees of poorly managed hurricanes, evacuees of well managed hurricanes, and non-evacuees have very different local trust levels. Panel B shows convergence of the lines toward each other as first-hand information diminishes and media coverage begins to supply more information for all evacuees, meaning trust for everyone begins to be based on the same type of information. In Panel C, the lines are closest together as secondary sources supply almost all information for everyone.

I examine these propositions with two different methodologies. First, a difference of means test clarifies whether Hypotheses 1-3 are worth pursuing. If the media has an influence on trust, we should see different levels of trust among citizens that pay different levels of attention to the media. As a basic indicator of the idea that disaster experience has a relationship with trust, we should see the highest level of trust among evacuees of disasters that were managed well (non-Katrina hurricanes), the lowest level of trust among evacuees of Hurricane Katrina, and trust among non-evacuees in the middle of the two. Although the t-tests will not allow manipulation conditional on level of information, we should still be able to see basic differences between these groups.

The second test, a Seemingly Unrelated Regression (SUR) model, allows for cross-sectional analysis of the variation in trust with controls for individual demographics and partisanship. Using a

SUR model is almost the equivalent of estimating federal, state, and local political trust as separate Ordinary Least Squares (OLS) regression models. The difference is that a SUR model estimates all trust variables, and the coefficients and standard errors of their covariates, at the same time. The SUR model has a number of advantages: (1) it allows the simultaneous estimation of multiple trust dependent variables with some independent variables that are shared and some that are unique to one or more levels of trust; (2) it accounts for the possibility of correlated error terms among the various equations being estimated. If the error terms are not correlated, the SUR estimations will be identical to those that would be given by separate OLS estimations (Zellner 1962).

What remains is to perform a statistical analysis that will estimate the relationship between government performance, attention to media coverage, and trust. This analysis will cover three levels of government, with executives and agencies at each level. Before performing the analysis, I outline the specific measures used, focusing on the measure of trust.

Model, Data, and Estimation

I test these hypotheses in the context of the 2004-2006 hurricane seasons. Containing more than 10 major hurricanes that required evacuation, these years comprised the deadliest and costliest seasons in 100 years, displacing over three million people, costing over \$202 billion, and resulting in 2150 deaths (Lott et al 2013; Stein et al 2011). Survey data was collected in September 2006, one year after Hurricanes Katrina and Rita. The lag between natural event and survey is important as it allows for short-term effects of the disasters to wane. We know extreme emotional and visceral reactions are likely to abate over time (Chong and Druckman 2010; also Bracht and Glass 1968, p. 464), and that perceptions of morbidity and mortality post-disaster are not different from pre-disaster when measured at lengths of twelve or eighteen months afterward (Bourque, Siegel, and Shoaf 2002). Fielding this study a year after the hurricanes makes it is less likely to measure fleeting or ephemeral phenomena, and more likely to capture enduring effects of primary and secondary information.

Data is from an internet survey^{viii} collected in 2006, administered by Survey Sampling International (SSI)^{ix} to residents of hurricane-threatened areas in the US. *Hurricane-threatened areas* were defined as containing respondents with registered addresses in a county or parish that either borders the coast, or is separated from the coast by no more than one other county/parish. The coastal region surveyed spans the US coastline from Texas through North Carolina. As displaced residents, who at the time of the survey lived outside their original home counties/parishes, were included based on their original physical home addresses *before* displacement, responses came in from 38 states and Puerto Rico. Of the 7024 respondents, 2329 (33.16%) reported evacuating for a hurricane during the 2004-2006 hurricane seasons. Of those, 1068 (15.21% of total) had still not returned to their original place of residence, which we take as evidence that the internet sampling frame was useful for contacting a difficult-to-reach population, while still striving for maximum generalizability (details in Appendix A).

There has been much debate and scholarship on the proper measurement of trust. Recall that trust is based on one's ability, or *competence*, at performing one's job, as well as one's *credibility*, or believability, and basic character (Keele 2007; Hardin 2002, 2004; Ullman-Margalit 2004; Levi and Stoker 2000; Nicholls and Picou 2013). Because scholars see trust as a multi-dimensional concept, the use of indices to measure trust is common. Many scholars use the Trust in Government Index from the American National Election Studies (ANES), which offers easily accessible longitudinal data.^x Yet the ANES index does not allow us to ask about trust in specific policies or officials, but rather asks about the "government in Washington" or in the respondent's state. As we aimed to follow Hardin's guidelines that "*A* trusts *B* to do *X*, or in matters *Y*" (2002, p. xx), we opted to create a trust index that asked specifically about *A*'s (the respondent's) assessment of public official *B* (e.g., the president), with respect to *Y*, disasters (full description: Appendix A).

As I am interested in hypotheses pertaining to three levels of government, I will be examining trust for federal, state, and local officials. Since this study is focusing on disasters, each level of government will be divided, with the opportunity to examine trust in the executive and trust in the emergency management agency. This yields six dependent trust variables, one each for the: president; governor; mayor; and federal, state, and local emergency management officials.^{xi} Each variable runs from 0-10, with 10 being the highest level of trust possible. Respondents were given discrete choices, rather than a percentage range, with 5 being the “neutral” option. Since the indices are composites, however, the measures are not discrete (Appendix B lists all descriptive statistics).

I use recent disaster experience as a proxy to measure first-hand experience with public officials and/or their policies. Respondents who evacuated for a hurricane at any point during the 2004-2006 hurricane seasons are given a 1 for overall disaster exposure, and all others are given a 0. As I hypothesize that Hurricane Katrina evacuees underwent a fundamentally different experience from evacuees of other hurricanes, Katrina evacuees are separated out with another dichotomous variable, measuring 1 for Katrina evacuation and 0 otherwise. I choose evacuees rather than all survivors (which would also include those who were affected but did not evacuate), because the evacuees are more likely to have had experience with their local and state officials, and/or the consequences of their policy decisions, via evacuation routes and instructions, possible shelter exposure, and relinquishing/returning to property.

Measuring exposure to the media is notoriously difficult because respondents have problems remembering the amount of exposure they have had, and sometimes report falsely due to embarrassment (see Mutz 2011). I thus use a self-reported measure that captures *attention* to media surrounding Hurricane Katrina events and recovery. Maestas et al (2008) argue that attentiveness is composed of both exposure to and engagement by media coverage, and is therefore a better

measure of the reception of information than a measure of frequency of use. The measure runs from 0-5, with 5 as the highest level of attention.

I also control for partisanship. Keele (2005) finds that Democrats and Republicans trust the President more when he is a member of their party, and Schmidt, Gunther, and Liebhart (2004) find that non-evacuees are more likely to accept second-hand information that conforms to their partisan expectations. Since President Bush appointed the Director of FEMA and was seen interacting with him during Katrina recovery, I expect Republicans to be more trusting of President Bush and FEMA. In state trust regressions, I further control for membership in the governor's party, a dichotomous variable that takes a value of 1 if the respondent and his/her governor share the same party.^{xiii} I expect trust to increase for the governor and his/her appointed state emergency management agency among respondents who share their governor's party. Those who voted for George W. Bush receive a 1 in the dichotomous *Voted for Bush* variable, and are expected to be more trusting of federal officials than those who did not.^{xiii} For ideology, I use a 7-point scale with higher values indicating a stronger preference for government intervention, and thus higher liberalism.^{xiv}

To avoid possible biases from omitted demographic variables, I include standard demographics of education, age, sex, and race (Hetherington 1998; also Keele 2005; Christensen and Læg Reid 2005). Standard expectations are that men trust less than women (Christensen and Læg Reid 2005), and that race can matter in assessing trust of some officials (Rudolph and Popp 2010), particularly in the context of Hurricane Katrina, which the media characterized as a racially-salient event (Nicholls and Picou 2013; Gomez and Wilson 2008).

I should be clear that I am not trying to model *all* influences on individual political trust. Other impressive work incorporates municipal- or community-level factors, using multi-level modeling to determine the most relevant (Rahn and Rudolph 2005; Marschall and Shah 2007; Rahn et al 2009). Rather, I investigate the basic idea that first-hand information, made less common by

moving up levels of government, allows space for the media to step in and provide information that is then used to evaluate government performance and influence trust. As such, I hope to explain a facet of individual-level trust that has not been illuminated previously.

A Visual Analysis

Prior to more complex statistical analyses, I offer a visual comparison of trust levels. When hypotheses involve variables with so many categories, a visual inspection of the variables often provides a useful intuitive test: do the measures in question appear to move according to the hypothesized relationships? If trust and attention to the media appear to move together at all three levels of government, and that movement differs according to the level of government, it would provide some nominal evidence of a linkage among the two concepts. In Figure 2, I plot political trust (averaged over all respondents) and attention paid to media coverage of Hurricane Katrina for each of the 6 officials/agencies of interest.

[Input Figure 2 Here]

The visual pattern is striking, particularly when noting the two dashed lines lowest on the graph. These are the lines for the President and FEMA. For these federal officials, trust appears to decline the more attention one pays to media coverage. For state and local officials, trust appears to either go up or remain unresponsive to attention to coverage.

[Insert Table 1 Here]

Difference of means tests confirm the visual analysis (Table 1). In the top panel, those who paid high attention to the media are compared to those who paid low attention, and the means are analyzed over each official/agency. There are significantly different levels of trust between those who pay high v. low attention to media coverage for every official/agency except the State Emergency Management Agency (State EMA). Those with high attention to coverage have more

trust for state and local officials, but *less* trust for federal officials, than those who pay low attention. What happens when we compare evacuees to non-evacuees?

Figure 3A shows mean values of trust among evacuees of all hurricanes (light blue) next to trust values of non-evacuees (dark blue). At the federal and state levels, evacuees appear to have lower trust levels than non-evacuees, but with respect to local officials, the levels look similar. The second panel in Table 1 can shed light on the relationships. We can see that evacuees have significantly lower means for federal and state officials, but a higher mean of trust for local emergency service providers, and no trust difference for local executives (mayor).

[Insert Figure 3 Here]

But we have not yet examined the caveat that Hurricane Katrina differed from other disasters of the 2004-2006 seasons. Figure 3B compares Katrina evacuees to evacuees of other hurricanes, and allows us to see that Katrina evacuees have lower trust levels for all officials at every level of government. The third panel of Table 1 confirms that these differences are significant, and suggests that this within-evacuee variation is driving the lack of difference between evacuee and non-evacuee trust in the local executive we see in Figure 3A.

In sum, visual patterns and basic statistical evidence suggest differences in trust between those who pay high v. low attention to media coverage of Hurricane Katrina, between disaster non-evacuees and evacuees, and between evacuees of Hurricane Katrina and those of other hurricanes. They also suggest that attention to media coverage has a negative relationship with trust in federal officials, while it may have a positive or null association with trust in state and local officials. With preliminary indication that the hypotheses are worth pursuing, I turn to more complex statistical analysis that considers other potential influences on trust.

Results

Table 2 displays results of the seemingly unrelated regression (SUR) estimated for all six officials/agencies simultaneously: a respondent's president, FEMA, governor, state EMA, mayor, and local emergency services. The model for each is a standard OLS with the partisanship and demographic variables mentioned above, plus controls for state of residence (prior to evacuation, for evacuees), using Louisiana as a baseline. There are dummy variables for evacuation experience and Katrina experience. The attention to media variable is entered on its own, and interacted with both types of evacuation experience, to allow for attention to media coverage to have different effects for evacuees of Katrina, evacuees of other hurricanes, and non-evacuees.

[Insert Table 2 Here]

I will use the Presidential trust regression to help explain interpretation. *Katrina* gives the change in trust for Katrina evacuees (compared to non-evacuees) who pay zero attention to media coverage. This change is .81 ($p < .01$) on the 0-10 scale for President Bush. *Non-Katrina* gives the change in trust for evacuees of other hurricanes who pay no attention to coverage, and this change is insignificant (-.04). The coefficient on *Attention to Media for Non-evacuees* gives the change in trust for a one-unit increase in attention to media (on the 0-5 scale) for non-evacuees only; for trust in President Bush this is -.05 ($p < .05$). The coefficient on *Katrina experience * Media* gives the difference in the change in trust for a one-unit increase of attention, when comparing Katrina evacuees to non-evacuees. If we plotted the relationship between attention to media and trust for non-evacuees, and did the same for Katrina evacuees, the coefficient on *Katrina experience * Media* tells us the difference between the slopes of those two lines. For the President, attention to media coverage does have a negative effect for non-evacuees, and the effect is .22 more negative for Katrina evacuees ($p < .01$). The coefficient on *Non-Katrina experience * Media* gives the difference in the change in trust for a one-unit increase of media attention, when comparing Non-Katrina evacuees to non-evacuees, which is insignificant at -.01.

What is the effect of attention to media coverage, conditional on being a Katrina evacuee? To find out, I add the coefficients for *Media* and *Katrina experience * Media*. The second and third rows of Table 2 give coefficients for linear combinations of attention to coverage and *Katrina* (second row), as well as *non-Katrina* (third row). We can see that for Katrina evacuees, an increase in attention to media by one unit corresponds to a drop in trust of President Bush of .27 ($p < .01$). Although this is entered into the table as a row for the ease of interpretation, we could also derive this coefficient by adding the coefficients for *Media* and *Katrina experience * Media*: $-.05 - .22 = -.27$. Attention to media coverage for evacuees of other hurricanes is insignificant ($-.06, p > .05$).^{xv}

Trust in all officials should be interpreted similarly. For non-evacuees, attention to media corresponds to declining trust at the federal level: a one-unit increase in attention is associated with a .05 drop in trust in the President and a .08 drop in trust in FEMA ($p < .05; p < .01$). At the state and local levels, attention is associated with increases in trust. The increase is smaller at the state level, .12 for the Governor and .15 for State EMA (both $p < .01$), and grows at the local level to .21 for the Mayor and .19 for Local EMA (both $p < .01$). For evacuees of non-Katrina hurricanes, the pattern is similar (third row). Although attention to media has no effect on federal trust, it reflects increases in state and local trust, at almost identical amounts for the Governor (.16, $p < .01$), State EMA (.14, $p < .01$), Mayor (.16, $p < .01$), and Local EMA (.16, $p < .01$). Importantly, these values are not statistically different from those for non-evacuees, which we can see from the lack of statistical significance on the *Non-Katrina experience * Media* variable, for every dependent trust variable.

As preliminary graphs and t-tests indicated, Katrina evacuees differ from non-evacuees and evacuees of other hurricanes. Katrina evacuees' attention to the media corresponds to a decrease in federal trust that is the largest of all the groups (.27 for the President, .36 for FEMA, both $p < .01$). This differs from the relationship between coverage and trust for non-evacuees by -.22 for the President and -.28 for FEMA (both $p < .01$). At the state level, Katrina evacuees exhibit little

relationship between attention to media and trust; the difference between Katrina evacuees and non-evacuees on the relationship between attention and trust of State EMA is a statistically significant -.13 ($p < .05$). Locally, Katrina evacuees are more likely to trust with added attention to media (Mayor: .14; Local EMA: .22, both $p < .01$), though this relationship is not statistically different from that of non-evacuees.

What about the basic differences among the three groups' trust? Coefficients on Katrina experience and Non-Katrina experience show how non-evacuees and the two evacuee groups relate, given no attention to media. Katrina experience appears to have an effect for those who pay no attention to the media only with respect to federal trust. Katrina evacuees who pay no attention to media trust President Bush .81 points more, and trust FEMA .91 points more, than non-evacuees (both $p < .01$). Since paying attention to the media has a negative slope for the Katrina evacuee group for these two targets of trust, we should expect a line depicting this relationship to begin higher than the line for non-evacuees, but then cross it as attention to media increases. For evacuees of other hurricanes, their baseline difference from non-evacuees occurs when trusting FEMA, when they are .32 lower in trust points ($p < .05$), and at the local level, when they are .32 higher in trust points for both the Mayor ($p < .05$) and Local EMA ($p < .01$). We should interpret these differences with caution, considering the small number of respondents who score 0 on attention to media (2.45% of sample).

As expected, the partisanship variables are significant in particular trust regressions. Democrats are associated with lower trust than Independents of President Bush of .75, FEMA of .36, and the Governor of .21 (all $p < .01$). The lower trust of the Governor makes sense, considering governors in all but two of the pre-evacuation states were Republican. Republicans are associated with higher levels of trust in President Bush (1.29, $p < .01$), FEMA (.68, $p < .01$), State EMA (.21, $p < .05$), the Mayor (.52, $p < .01$), and Local EMA (.42, $p < .01$). Being the same party as the governor

in one's pre-evacuation state is associated with increased trust in both the Governor (1.07, $p < .01$) and State EMA (.23, $p < .01$). And having voted for President Bush has a positive link with trust for all officials, with the largest coefficient unsurprisingly going to President Bush himself.

I also expected the demographic variables to exhibit effects in some of the models, though not necessarily all. There has been great debate as to whether personal and group characteristics affect trust, with results depending on the target population and the research question. That said, it is not surprising to find that Blacks are significantly less trusting of their Local EMA (which include the police) than respondents of other races (-.56, $p < .01$),^{xvi} or that men are less trusting than women of FEMA, Governors, State EMA, and Mayors (-.22, -.15, -.15, -.18, all $p < .05$). What might be surprising to some is that trust goes down with age, education, and employment, some of which are expected to rise with trust, as years, education, and work are theorized to make one level-headed and able to assess public officials thoughtfully (Bouckaert and Van de Walle 2001; Christensen & Laegrid 2005). The counterargument, however, is that the added knowledge and flexibility that come with age, education, and job exposure cause or allow one to be more critical of officials, and more informed in that criticism. Considering the reported high levels of attention to media coverage among the sample, this mechanism is likely to be at work behind these negative relationships.

Discussion

To assess the three original hypotheses, I offer marginal effects graphs of the key variables of interest (Figure 4). I want to know whether the marginal effect, on each level of trust, of first-hand hurricane experience is increasing as attention to media coverage increases, and whether the effect is statistically different from zero. The plots of Figure 4 show marginal effects according to hurricane experience, with Katrina evacuee trust in green, trust of other hurricane evacuees in red, and non-evacuee trust in blue. The plots appear in 6 panels, with Panels A and B representing federal trust (President and FEMA), C and D showing state trust (Governor and State EMA), and E

and F showing local trust (Mayor and Local EMA). All other variables are held constant at their means.^{xvii}

[Insert Figure 4 Here]

Figure 4 helps evaluate Hypotheses 1-3. The differences between Katrina evacuees, evacuees of other hurricanes, and non-evacuees are consistent with Hypothesis 1a/b. Katrina evacuees diverge from other groups because Katrina was an experience that negatively affected trust. The negative effect is robust to demographic factors, partisanship, and state controls,^{xviii} and appears at all levels of government. At the federal level it only becomes more pronounced as Katrina evacuees pay more attention to coverage.

Meanwhile, the difference between non-evacuees and evacuees bears out Hypothesis 1b and the potential effects of public administration successes. Increased attention to Hurricane Katrina coverage among evacuees of *previous* hurricanes corresponds to increases in trust similar to those of non-evacuees, except that previous evacuees have higher overall trust levels in their own local officials. It appears that attention to coverage of Hurricane Katrina, in light of their personal evacuation experiences, actually served to bolster trust in their own local officials. This makes sense: media reports during Katrina highlighted the abandonment of posts of New Orleans' first responders. With role abandonment so rare for other evacuees (Trainor and Barsky 2010), they would have better performance of their own officials as a comparison, thus boosting their own local trust, particularly in local emergency management agencies.

Katrina evacuees' trust vividly bears out the prediction of Hypothesis 2, which posited that the slope of the relationship between attention to media and trust would decrease as the level of government increased. The green lines boldly follow this prediction as we begin at Plots E and F and ascend. The slope begins significantly positive, with more attention to coverage corresponding to higher trust in local officials, and then flattens at the state level. As we ascend to the federal level,

the green line falls from left to right, showing a significant drop in political trust as attention to media increases. For other evacuees and non-evacuees, the slope pattern is the same, though the relationship with attention to coverage never actually turns negative. It begins with the highest slope at local trust, decreases with state trust, and flattens at federal trust. All groups support Hypothesis 2: greater attention to coverage corresponds to lower trust at higher levels of government.

Hypothesis 3 posits that the three groups' trust levels should be most different at the local level and most similar at the federal level. To evaluate this hypothesis, we can again begin at the bottom two plots, and work our way up. If Hypothesis 3 is borne out, we should see the three lines in the each plot grow closer together as we move up the page, and become nearly indistinguishable by the time we reach the top. This trend definitely occurs between non-evacuees and evacuees of non-Katrina hurricanes. There is a small gap between non-evacuees and non-Katrina evacuees for Local EMA trust, primarily in the range reflecting a moderate amount of attention to media coverage, and an even smaller gap between the two groups for Mayoral trust, which is barely visible for those who pay an attention level around 2. These differences disappear when we move up to the state level, as confidence intervals for non-evacuees overlap, and at the federal level, the two groups are practically indistinguishable – in Panel A we cannot even see the non-evacuee line or confidence interval, as the non-Katrina evacuee information completely covers it.

The Katrina group begins nearly paralleling the others at the local level, though significantly lower than both. As we move up, Katrina evacuees' trust does not converge with the other two groups. At the state level, the Katrina group's line flattens out, indicating no relationship between attention to media and trust in the Governor or State EMA, and at the federal level, it turns down. While the confidence intervals and line placement make it look like the Katrina group is converging with the others, concluding that they have converged could be a mistake. Considering the size of the confidence intervals around the Katrina group's trust-media line, it is more likely that the overlap

with the other groups in Panels A and B is due to sample size at low levels of media attention, rather than to actual convergence of relationships. It appears that Hypothesis 3 applies to non-evacuees and evacuees of non-Katrina hurricanes, but that Katrina evacuees do not follow the same pattern.

Conclusion

Although previous studies have evaluated Hurricane Katrina's effects on national attributions of blame (Birkland and Waterman 2008; Maestas et al 2008; Gomez and Wilson 2008), to date no one has been able to compare a large sample of non-evacuees and evacuees to see how different experiences and levels of information condition trust at various levels of government. I have shown that information from second-hand sources has a homogenizing effect on trust through its influence on performance assessments. As personal experience with officials and policies wanes, the media steps in to supply information people use to assess government performance. Second-hand information does not cancel first-hand experience, but even the experienced exhibit associations between trust and attention to media, and those associations change as the level of government increases.

Two potential pitfalls with the study must be conceded. First, the sample is voluntary, and though we took steps to minimize non-responses, participation was restricted to people with access to the internet before the hurricanes. Yet the sample does represent a broad cross-section of people. Importantly, it does not need to be generalizable to the entire US; or to people who do not make either first-hand or second-hand performance assessments. It would therefore be inappropriate to target a population with a higher proportion of individuals who had no interest in or experience with hurricanes.^{xix} This study still allows generalizations about assessments and trust, based on observed v. experienced events, among observant individuals.

Second, limitations of the survey instrument prohibit the examination of a few aspects that would be interesting. We do not know how much information respondents received from other

secondary sources, such as friends or coworkers, how often evacuees interacted with public officials, or whether respondents believe government failed. This information would give us a fuller picture of the relationships investigated here, but their absence does not threaten our inferences.

Assessments are the hypothesized mechanism connecting information to trust, but confirmed perceptions of failure are not necessary to test these hypotheses. Establishing that trust varies according to and conditional on information points us firmly toward further exploration.

This work implies that the media's part in crafting trust goes beyond reporting on public officials. Even coverage about national government behavior in another part of the country, reports of state governments that are not one's own, and coverage about local governments far from one's residence can damage or bolster trust in one's officials at home. It is not just coverage about matters at home, but coverage of any event in the country, that affects constituents' assessments and trust. This means public officials are fighting performance issues at home, and performance perception issues caused by officials elsewhere. Considering the widespread coverage of scandals of mayors, attorneys general, and Members of Congress, this widespread effect of one official's news on another's trust gives new meaning to the idea that one bad story can give everyone a bad name.

While previous studies of media influence on attributions of blame during Katrina have focused on prominent national news outlets such as *The New York Times*, many people get their news today from more targeted, and less informative, sources (Cassino, Wooley, and Jenkins 2012). The segmenting of media consumption into predictable groups, and the resultant targeting of media toward those groups, implies that future media coverage will shape trust in different ways for different observers. As these groups continue to use second-hand information to shape their performance assessments, trust will depend on the media outlet and the public official in question much more than it has in the past, making positive first-hand information all the more crucial to provide, if it is to affect trust in ways public officials might hope.

ⁱ Sindall, Sturgis, and Jennings (2012) link trust to perceptions of crime, regardless of the crime rate.

ⁱⁱ Often it can take years for public officials to restore their political trust after a negatively covered event (Tuch and Weitzer 1997; Weitzer 2002; Kaminski and Jefferis 1998).

ⁱⁱⁱ Merolla et al (2013) find that situations encouraging social bonding also encourage both interpersonal and political trust through the release of the hormone oxytocin.

^{iv} Teets (2009) reports how rebuilding after the 2008 Sichuan earthquake created trust. President Barack Obama's decision-making following Hurricane Sandy earned praises from previous opponent Governor Chris Christie (R-NJ) and other citizens (Metzler 2012; Dwoskin 2012).

^v After Japan's March 2011 earthquake/tsunami/nuclear accident, polls revealed trust in national institutions "had plummeted: it now hovers just above that seen in Vladimir Putin's Russia. The nuclear accident clobbered faith in government officials and power companies" (Economist 2012).

^{vi} A catastrophe damages multiple communities, meaning there is no one nearby to help. Emergency personnel cannot perform their functions due to death, injury, or inability to reach those in need. Most or all activities are stopped; including school, worship, recreation, postal service, work, water, healthcare, electricity, phone, internet, and social service of any kind (Quarantelli 2006).

^{vii} It bears noting that disproportionate media attention on New Orleans led to widespread misconceptions regarding Katrina evacuation. Over 1.5 million people evacuated from Louisiana, Mississippi, and Alabama, fewer than 3.8% of which were evacuated after the hurricane (FEMA 2005; Townsend 2006). Evacuations were declared "mandatory" in order to alert the citizenry and to mobilize public resources for evacuation; yet no one was legally required to evacuate, and 28,000 New Orleans residents never left the city (FEMA 2005).

^{viii} We chose the internet sampling frame to reach as many displaced evacuees (and non-evacuees) as possible (see Appendix A for full discussion of population, setting, and measurement validity).

^{ix} SSI, a well-known and respected survey firm similar to Knowledge Networks (KN), fielded a random sample within the target population. We counted nonresponses as “unknown eligibility,” the most restrictive definition, because we did not know whether nonresponse indicated unwillingness, unavailability, or death. By this eligibility estimate, 100% of our nonresponses were eligible to respond, meaning our response rate was AAPOR-1 9.4% (Smith 2009; AAPOR 2009). As Merkle and Edelman (2002) find no relationship between response rate and survey accuracy, and Keeter et al (2006) find that results from surveys with lower response rates were generally statistically indistinguishable from those with much higher response rates, the response rate here is not a concern.

^x The ANES is collected biennially during even-numbered years (1958-2008, minus 1960 and 1962). Derived from Stokes (1962), the questions were designed to gauge “basic evaluative orientations toward the national government,” and ask about honesty, ability, and efficiency of government officials (p. 64). Stokes never mentions *political trust* or *trust in government* in his original analysis.

^{xi} Each respondent was asked about his/her own president, governor, or mayor.

^{xii} This is collinear with *Republican* when the governor is Republican. I retain the basic party control because, as Keele (2005) points out, there may be differences in trust due to party identification.

^{xiii} There are no extra controls for localities. Rahn and Rudolph (2005) acquire detailed local-level controls in their multi-city study, possible in part because they select their sample based on cities with ≥ 40 respondents, limiting their sample to 55 cities. Our random sample contains respondents spread over 1178 cities, only 20 of which have ≥ 40 respondents (15.89% of sample). City-level controls are not methodologically possible.

^{xiv} Erikson, MacKuen, and Stimson (2002) found that people mislabel their ideology, e.g. calling themselves *liberal* when opposing policies of intervention. I thus follow Keele (2005) and measure

ideology with a question regarding support for government intervention in the economy. Higher support indicates more liberal preferences.

^{xv} Coefficients, standard errors, confidence intervals, and p-values were generated with Stata's post-estimation *lincom* command. If \mathbf{B} is the vector of coefficients, \mathbf{V} is the covariance matrix of \mathbf{B} , and $\mathbf{A} = \mathbf{A}^T * \mathbf{B}$ is a vector defining the linear combination, then the variance of the linear combination is $\mathbf{A}^T * \mathbf{V} * \mathbf{A}$. (Judge et al 1985).

^{xvi} Blacks are consistently less likely than other races to trust law enforcement agencies (Kaminski and Jefferis 1998; Sindall, Sturgis, and Jennings 2012; Tuch and Weitzer 1997; Weitzer 2002).

^{xvii} Confidence intervals in Figure 4 might seem large compared to Table 1 because marginal effects' standard errors differ from regression standard errors. Marginal effects calculated with Stata's *margins* command (Buis 2010; Williams 2012).

^{xviii} Variables measuring home ownership, damages, and loss of loved ones and employment were also evaluated. Inclusion did not change any coefficient magnitude, significance, or direction, so are not presented here, but instead developed in tangential research. Correlations between loss measures and attention to media suggest no identification problem between loss and attention (Appendix B).

^{xix} Please see Appendix A for full discussion on generalizability.

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Figure 1: Hypotheses, Illustrated

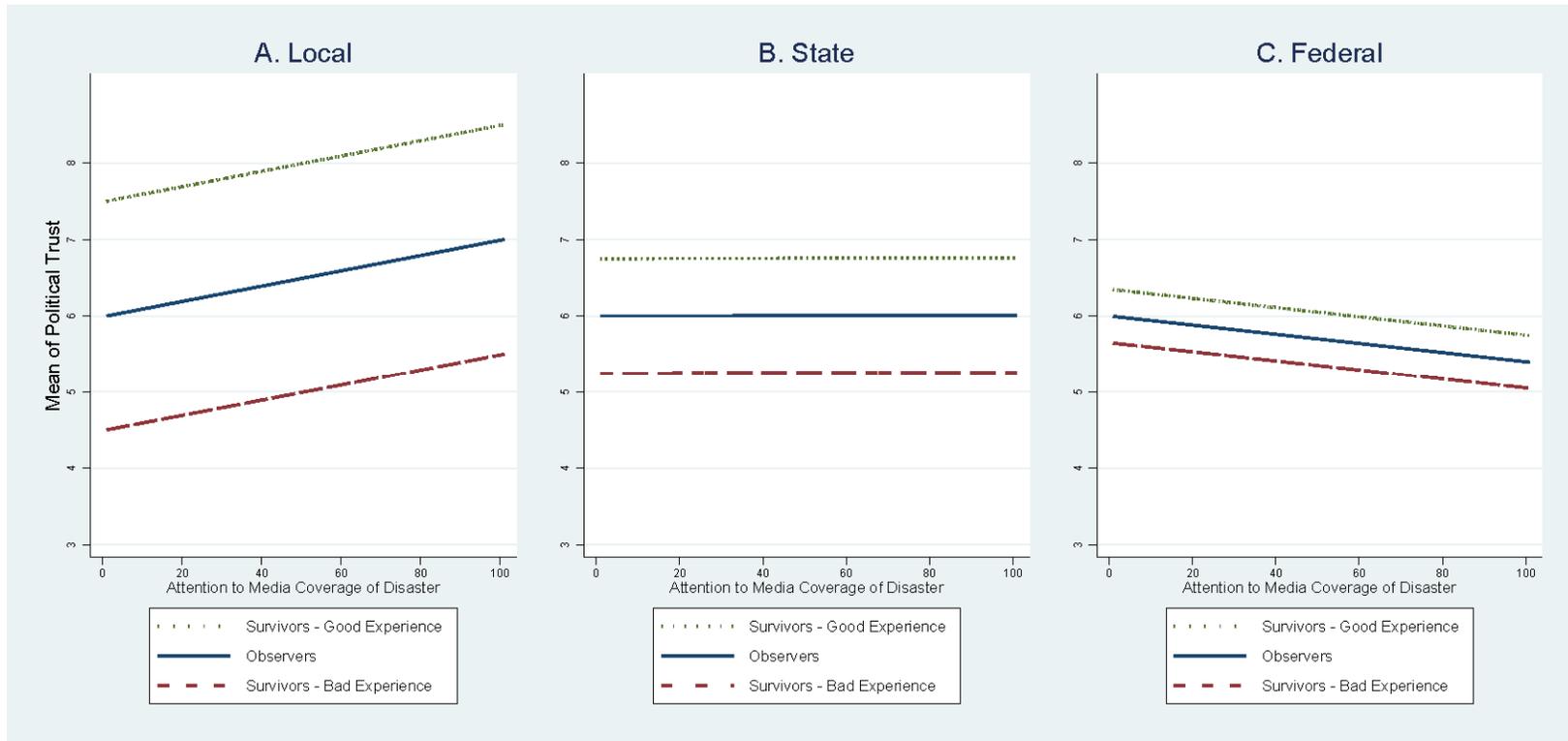
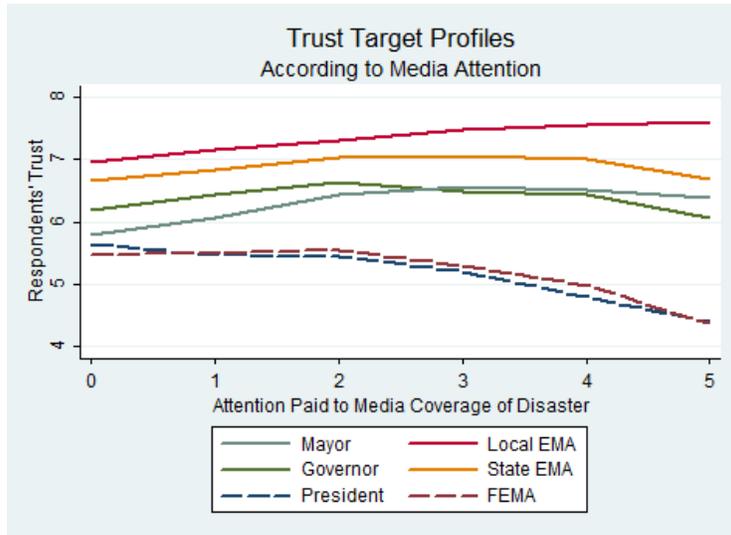


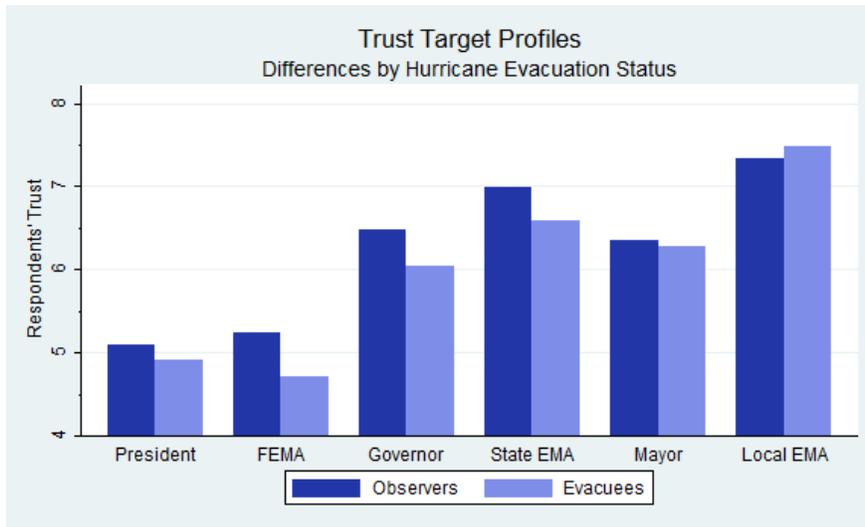
Figure 2: Trust Target Profiles by Media Attention



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Figure 3

Panel 3A: Trust Target Profiles by Evacuation Status



Panel 3B: Trust Target Profiles by Hurricane Experience

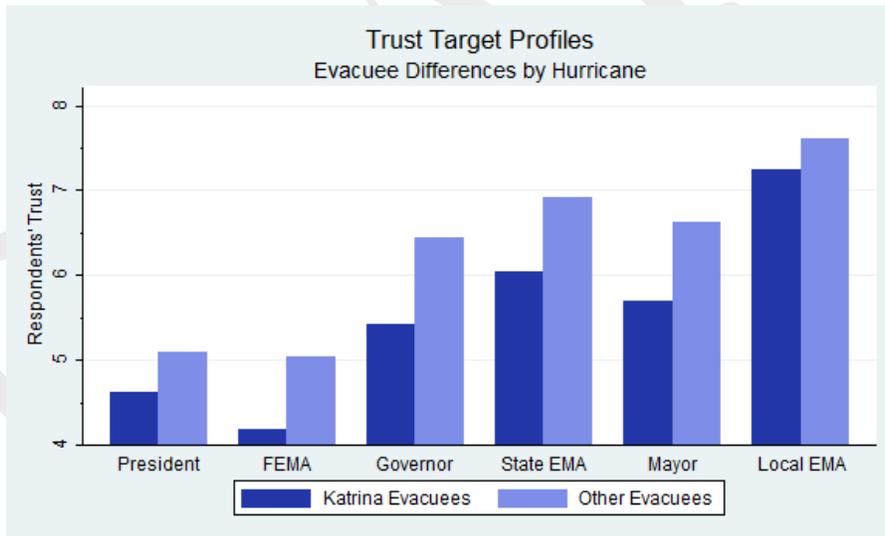


Figure 4: Marginal Effects of Attention to Media Coverage on Trust, by Hurricane Experience



Table 1 Mean Differences of Trust in Government

	Federal		State		Local	
	President	FEMA	Governor	State EMA	Mayor	Local EMA
High Attention to Media	4.19	4.10	5.88	6.52	6.29	7.55
Low Attention to Media	5.66	5.46	6.13	6.63	5.73	6.90
Difference	1.46**	1.35**	0.26*	0.11	-0.56**	-0.65**
N	2235	2235	2235	2235	2235	2235
Evacuees	4.91	4.71	6.05	6.59	6.28	7.49
Non-Evacuees	5.09	5.24	6.48	6.99	6.35	7.34
Difference	0.18*	0.53**	0.43**	0.39**	0.07	-0.15**
N	7016	7016	7016	7016	7016	7016
Evacuees of Other Hurricanes ¹	5.09	5.04	6.44	6.93	6.64	7.62
Evacuees of Hurricane Katrina	4.61	4.15	5.39	6.03	5.68	7.27
Difference	0.49**	0.88**	1.04**	0.90**	0.95**	0.35**
N	2327	2327	2327	2327	2327	2327

Note: Two-tailed tests. Comparison of means between 11-point trust indicators. ** p < 0.01, * p < 0.05

¹"Other Hurricanes" refer to hurricanes in the 2004-2006 seasons other than Katrina, such as Charley, Dennis, Frances, Rita, or Wilma. See Appendix A for details.

Table 2 Estimates of Political Trust in Executives and Emergency Management Agencies at Three Levels of Government

	President	FEMA	Governor	State EMA	Mayor	Local EMA
Attention to Media for Observers	-0.05* (0.02)	-0.08** (0.02)	0.12** (0.02)	0.15** (0.02)	0.21** (0.02)	0.19** (0.02)
Attention to Media for Katrina Survivors	-0.27** (0.07)	-0.36** (0.07)	0.06 (0.06)	0.00 (0.06)	0.14** (0.06)	0.22** (0.05)
Attention to Media for non-Katrina Survivors	-0.06 (0.04)	-0.03 (0.04)	0.16** (0.04)	0.14** (0.03)	0.16** (0.04)	0.16** (0.03)
Katrina Experience	0.81** (0.30)	0.91** (0.32)	0.01 (0.28)	0.20 (0.24)	-0.30 (0.28)	-0.13 (0.21)
Katrina Experience * Media	-0.22** (0.07)	-0.28** (0.07)	-0.04 (0.07)	-0.13* (0.06)	-0.08 (0.07)	0.03 (0.05)
Non-Katrina Experience	-0.04 (0.15)	-0.32* (0.16)	-0.14 (0.14)	-0.03 (0.12)	0.32* (0.14)	0.32** (0.11)
Non-Katrina Experience * Media	-0.01 (0.05)	0.05 (0.05)	0.05 (0.04)	-0.00 (0.04)	-0.06 (0.04)	-0.02 (0.03)
Democrat	-0.75** (0.08)	-0.36** (0.08)	-0.21** (0.08)	0.04 (0.07)	0.03 (0.08)	0.03 (0.06)
Republican	1.29** (0.09)	0.68** (0.09)	-0.25* (0.11)	0.21* (0.09)	0.52** (0.08)	0.42** (0.06)
Governor of Same Party			1.07** (0.09)	0.23** (0.08)		
Voted for Pres. Bush	2.20** (0.07)	0.56** (0.07)	0.78** (0.08)	0.57** (0.07)	- (0.06)	-0.06 (0.04)
Ideology	-0.07** (0.02)	0.02 (0.02)	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)	-0.04** (0.01)
Race	-0.13 (0.12)	0.13 (0.13)	0.07 (0.11)	-0.17 (0.10)	-0.01 (0.11)	-0.56** (0.09)
Sex	-0.12 (0.08)	-0.22** (0.08)	-0.15* (0.07)	-0.15* (0.06)	-0.18* (0.07)	-0.03 (0.06)
Age	-0.01** (0.00)	-0.03** (0.00)	-0.00 (0.00)	-0.01** (0.00)	-0.00 (0.00)	0.01** (0.00)
Education	-0.65** (0.07)	-0.58** (0.07)	-0.34** (0.06)	-0.24** (0.06)	-0.06 (0.06)	-0.07 (0.05)
Employment	-0.23** (0.06)	-0.16* (0.07)	-0.23** (0.06)	-0.09 (0.05)	-0.02 (0.06)	0.02 (0.05)
State Controls	Yes	Yes	Yes	Yes	Yes	Yes
Constant	4.39** (0.19)	4.95** (0.20)	3.47** (0.18)	5.10** (0.16)	4.80** (0.18)	5.91** (0.14)
Observations	7,016	7,016	7,016	7,016	7,016	7,016
R-squared	0.35	0.13	0.19	0.12	0.05	0.06

Notes: Base comparison group for Democrats and Republicans is Independents. Base comparison for state controls is Louisiana. Robust standard errors in parentheses. ** p<0.01, * p<0.05

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