Help Us, Please! Attributions of Governmental Responsibility in the Wake of Hurricane Katrina

Brad T. Gomez
University of Georgia

J. Matthew Wilson
Southern Methodist University

Abstract: The governmental response to the devastation wrought by Hurricane Katrina in August, 2005 was widely perceived to be flawed and inadequate, particularly by residents of the affected areas. However, given the number of actors involved in planning and coordinating relief efforts, both in the private sector and at all levels of government, attributions of responsibility could and did vary widely. Drawing on the Theory of Heterogeneous Attribution that we have articulated elsewhere in other contexts, we explore the relationship between political sophistication and assessments of blame for the delayed governmental response. Using data from a statewide survey of Louisiana residents that we commissioned in May of 2006, we find that citizens at higher levels of political sophistication hold a wider range of actors responsible, and are significantly less likely to find the federal government (and especially the president) chiefly to blame, results that are consistent with our theory.

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On the morning of August 29, 2005, Hurricane Katrina, a strong "category 3" storm with sustained winds of over 125 mph, came ashore just east of New Orleans, Louisiana. One of the most destructive storms ever to strike the United States, Katrina caused widespread devastation across the central Gulf Coast states of Louisiana, Mississippi, and Alabama. Yet, the destruction of property that always accompanies a landfalling major hurricane was in this case augmented by a heart-rending human catastrophe, as the breach of New Orleans' levees and floodwalls flooded over 80% of one of America's most historic cities and left thousands of people in desperate and dangerous situations.[1] In the days that followed, anger built among those directly affected by the storm and among those around the country and the world watching on television, as the response from the world's wealthiest and most powerful nation to a domestic tragedy seemed feeble and chaotic. Nearly 1,000 people were stranded without food or water at New Orleans's Ernest N. Morial Convention Center, approximately 26,000 residents were sheltered in the Louisiana Superdome without electricity or running water, and looting of stores and homes—even by members of the New Orleans Political Department—was rampant. It was a matter of *weeks*, not days, before a modicum of security and order was restored to New Orleans, and before supplies and assistance began to be distributed with relative efficiency. The unnecessary loss of life, over 1,500 in Louisiana alone, and property as a result of this slow, disorganized response was and is a source of considerable bitterness among many Louisianians.[2]

It was perhaps inevitable that, as soon as the immediate needs of rescue and relief were met, attention quickly shifted to assignments of blame. Why was the response to the hurricane so manifestly inadequate? What government official(s) "dropped the ball" and hampered relief efforts? Was federal, state, or local government most guilty of failing Louisiana's citizens in their hour of need? Since there was essentially no debate about *whether* the relief effort was

unsatisfactory, all of the retrospective analysis focused on *why* it had been a failure and *who* was responsible.

Clearly, the political dimension of Hurricane Katrina was and is fundamentally about causal attribution. Many governmental actors, from the Mayor of New Orleans to the Governor of Louisiana to the President of the United States to the Director of the Federal Emergency Management Agency (FEMA), were potential targets for citizens' wrath. To date, several leaders have faced political fallout from the disaster. While New Orleans Mayor Ray Nagin, who faced a record twenty-one challengers, won reelection on May 20, 2006, four of the seven members the New Orleans City Council lost reelection on the same day. The poor response to Katrina is widely cited as a component of President Bush's low approval ratings, which were instrumental in Democratic victories in the 2006 midterms. Finally, on March 20, 2007, Louisiana Governor Kathleen Blanco publicly announced her intention to not run for reelection, in large part because of her perceived failures in the storm's aftermath. As these examples attest, the dynamics of blame assignment are of fundamental political importance.

While the politics of blame is acrimonious, messy, and fraught with uncertainty, it is also essential for a functioning democracy. If the electorate is truly to act as a "rational god of vengeance and reward" (Key 1966), then attributions of responsibility for socio-political outcomes are fundamental to political choice. This is particularly true in a period of widely acknowledged, large-scale governmental failure, exactly the situation presented by the response to Hurricane Katrina. Yet, parceling government responsibility can be quite difficult. While citizens overwhelmingly see natural disaster relief as a responsibility of government (Bucher 1957; Yates 1988), they vary widely in their perceptions of what level(s) of government—not to mention which specific actors—are chiefly responsible (Arceneaux and Stein 2006), particularly

when presented with a concrete and complex situation like Katrina's aftermath. Indeed, a small literature has already begun to develop about attributions of blame for the poor government response to this tragedy, identifying important variables like race, media exposure, and political predispositions that shape who citizens hold accountable (Huddy and Feldman 2006; Maestas and Atkeson 2006).

While these pieces provide valuable insight into the dynamics of attribution and accountability in the wake of a natural disaster, none look closely at what we believe is a critical explanatory variable: political sophistication. As we have argued elsewhere (Gomez and Wilson 2001, 2003, 2006a, 2006b), citizens' levels of political sophistication powerfully shape their causal attributions for socio-political events and conditions, in domains ranging from economic voting to racial attitudes. Our Theory of Heterogeneous Attribution maintains that individuals at varying levels of political sophistication attribute responsibility in systematically different ways. Specifically, political sophistication significantly influences both the *number* and the *nature* of individuals' attributional targets. Given the centrality of attributions of responsibility (in this case, "blame," rather than "credit") to the politics of Hurricane Katrina, we believe our theory can be a useful in explaining political attitudes in this context. Thus, our objectives in this paper are two-fold: to shed light on the important substantive question of who blames whom for the Katrina debacle and why, and to provide further validation and support for our general political-psychological theory in an interesting and especially appropriate context.

Political Sophistication and Causal Attribution

Causal attribution is central to public opinion and political choice, powerfully affecting assessments of leaders (Iyengar 1989), candidate preference (Lau and Sears 1981; Feldman 1982), and a wide range of specific attitudes, including racial ones (Gomez and Wilson 2006b).

Not all citizens, however, construct politically relevant causal attributions in the same way. In various contexts, attributional tendencies have been shown to be affected systematically by a variety of factors, including core values (Feldman 1982; Kinder and Mebane 1983), media usage (Weatherford 1983), and—particularly with regard to Hurricane Katrina—race (Huddy and Feldman 2006).

While all of these factors have been shown to influence causal attributions on a particular issue or set of issues, we have proposed in previous work a more far-reaching influence on attribution patterns, operative across a wide range of disparate issue domains: political sophistication. Our Theory of Heterogeneous Attribution begins from the premise, well established in cognitive psychology, that the amount, clarity, and organization of relevant information strongly conditions an individual's ability to make complex, distal, and diffuse attributions (Zanna, Klosson, and Darley 1976).[3] As a result, individuals with different levels of political sophistication will vary in their ability to make associative linkages between problems and their sources—a pattern suggested by Luskin (1987) and Sniderman (1993). Basically, our contention is that unsophisticated individuals (those with low levels of domain-specific knowledge—see below) will tend to focus on single, obvious causes for events or conditions, generally high-salience attitude objects who are physically and/or conceptually proximate to the issue at hand. This tendency makes low sophisticates more likely to credit/blame themselves for changes in their own economic wellbeing (Gomez and Wilson 2001), to credit/blame the president for changes in the national economy (Gomez and Wilson 2003), and to blame the disadvantaged themselves—specifically African Americans—for social inequalities (Gomez and Wilson 2006b). High sophisticates, by contrast, are much more likely to make complex attributions, dividing credit or blame among multiple actors at varying levels of abstraction. This

general cognitive theory has proven very robust, not only across multiple issue domains, but in populations from different countries as well (Gomez and Wilson 2006a).

This theoretical approach suggests several specific hypotheses with regard to citizens' attributions of responsibility for the Katrina response debacle. They are as follows:

Hypothesis 1: More sophisticated respondents should offer more answers than less sophisticated ones in response to open-ended queries about who deserves blame for the poor response to Hurricane Katrina. Because high sophisticates possess a larger base of political knowledge and exhibit a higher degree of integrative complexity than their low sophisticate counterparts, the former have a tendency to make complex attributions, dividing blame among multiple causal actors. Consequently, the multiplicity of responses to the question of who is to blame should by a direct, positive function of higher levels of political sophistication. Low sophisticates, on the other hand, are likely to limit themselves to a single attribution target.

Hypothesis 2: More sophisticated respondents should be less likely than unsophisticated ones to assign primary blame to the President for the poor Katrina response. A frequent hallmark of unsophisticated political thinking is a tendency to see the President as the sole relevant (perhaps, omnipotent) governmental actor in the U.S. political system. Lippmann (1920) finds a similar pattern in the way that relatively unsophisticated citizens viewed World War I—they tended to reduce the entire allied war effort to the actions and decisions of a single man, the most visible Supreme Commander, France's Marshal Joffre. The President is the one political actor in America with whom virtually everyone is at least passingly familiar, and the President-centric view of political events is often reinforced by media coverage (Iyengar and Kinder 1981). In previous work, we have demonstrated (Gomez and Wilson 2001, 2003) that less sophisticated citizens tend to overstate the President's liability for economic conditions, to

the exclusion of other actors—like Congress, the Federal Reserve, etc. We expect this pattern to prevail with regard to Hurricane Katrina as well. Individuals low in sophistication are likely to narrowly attribute responsibility to the president, while high sophisticates, who may assign some responsibility to the president, are more likely to divvy blame to other actors as well.

Hypothesis 3: More sophisticated respondents will be less likely than less sophisticated ones to locate primary responsibility for the poor hurricane response at the federal government level. This hypothesis is related to Hypothesis 2, but is broader. It rests on the assumption that political sophistication is highly correlated with an understanding of federalism, an appreciation of the fact that powers and responsibilities in the American system are divided among multiple levels of government, not always in a strictly hierarchical way. Federalism, of course, is a fundamental premise of governance in the U.S., but few Americans seem to understand the concept. As one moves from the national level down the political "food chain" to state and local office-holders, citizen familiarity with the players diminishes rapidly.[4] Indeed, Arceneaux and Stein (2006) confirm that citizen ignorance about the responsibilities and powers of local government with regard to disaster preparedness can allow local officials to evade electoral repercussions, especially among less politically knowledgeable voters. We fully expect these less knowledgeable citizens to point the finger at the most familiar and salient level of government, the national one.

Data and Method

To explore the relationship between political sophistication and attributions of responsibility in the wake of Hurricane Katrina, we rely on an original statewide survey of Louisiana residents that we conducted in May and June of 2006 in cooperation with the Survey Research Center of Louisiana State University.[5] We employed a Waksberg-Mitofsky (a.k.a.

"random digit dialing") sampling design to select respondent households, and ended up with 557 completed surveys. In an attempt to mitigate sampling biases, we used the "birthday method," asking to speak to the registered voter in the household who had most recently celebrated a birthday. Despite this precaution, however, our sample produced the almost inevitable under-representation of males, especially black males. Thus, all data analyses reported here employ an inverse probability weighting by race and gender to make our sample conform to the Census Bureau's post-Katrina estimate of the Louisiana population.[6]

The key components of the survey measure our two core concepts of interest: political sophistication and causal attribution. Our concept of political sophistication draws on a definition offered by Sniderman, Brody, and Tetlock (1991, p. 21):

> Political sophistication is a "bundle" concept. It packs together related, if distinguishable, properties including a tendency to pay close attention to politics, to have ready at hand banks of information about it, to understand multiple arguments for and against particular issue positions, and to recognize interrelationships among those arguments.

This definition incorporates several elements of cognitive complexity, including differentiation, integration, and logical reasoning (Neuman 1981; Tetlock 1983). In practice, previous studies have found that a battery of "quiz" items measuring citizen knowledge of politics is the simplest, most reliable way to capture sophistication in the survey setting (see, among many others, Zaller 1992; Delli Carpini and Keeter 1993; Gomez and Wilson 2001). Thus, our survey includes eight political knowledge items, divided equally between the national and state levels, asking people to identify the offices held by Dick Cheney (Vice President; 80% answered correctly), Condoleezza Rice (Secretary of State; 54%), John Roberts (Chief Justice of the Supreme Court; 16%), David Vitter (U.S. Senator from Louisiana; 41%), Mitch Landrieu (Louisiana Lieutenant Governor; 40%), and Charles Foti (Louisiana Attorney General; 18%), and the majority parties in both the

U.S. and Louisiana Houses of Representatives (Republican and Democrat, respectively; 68% and 44%). These combine to form an index running from 0 to 8, which we rescaled to range from 0 to 1.[7] The modal number of items answered correctly was 3, with a mean of 3.5; 9.4% of respondents received the minimum score, while 4.5% received the maximum score.

The next key concept to measure is the causal attributions themselves. Typically, survey studies of attribution rely on closed-ended items in which respondents are presented with a list of actors/causes from which they may select one or more. Our own study employs a variant of this approach; we present respondents with five different actors (President Bush, Louisiana Governor Kathleen Blanco, New Orleans Mayor Ray Nagin, local parish leaders other than the Mayor, and FEMA) and ask whether each was responsible for "a lot of the problems, some of the problems, a few of the problems, or none of the problems" surrounding the Katrina relief effort.[8] In addition to these items, however, we believe that it is very useful to capture respondents' unguided, unprompted attributions of responsibility in an open-ended format. Thus, our survey also includes (*before* the closed-ended attribution items, to avoid priming effects) a question asking respondents "Who was most responsible for the delay in providing necessary relief to the New Orleans area in the days immediately following Hurricane Katrina?". Interviewers recorded exactly what was said in response, and were specifically instructed to allow and record multiple attributions, if the respondent chose to give them. Thus, we are able in our analyses to examine both a structured, specified set of attribution targets and what we believe to be the even more valuable spontaneous causal attributions offered by respondents.

In addition to these key items tapping sophistication and attribution, our survey includes a variety of important control variables that will figure in our models. First, we believe that it is important to distinguish between those respondents who directly experienced the hurricane and

those who did not (as many parts of the state were unaffected). Thus, we asked respondents whether they had experienced property damage as a result of the storm, and whether they had evacuated their homes. We also include a standard array of demographic controls (race, gender, age, education, income), as well as political variables measuring party identification and ideological self-placement (measured on standard NES seven-point scales). These allow for an examination of sophistication's effects net of other correlates, including obvious ones like race, partisanship, and the often-used but poor proxy for sophistication, education.[9]

Results

Before turning to multivariate models of attribution, it is useful to look at some basic frequency distributions from the data to provide an overview of attributions of responsibility have been meted out in Katrina's aftermath. We begin with an analysis of the open-ended attribution question: "Who was most responsible for the delay in providing necessary relief to the New Orleans area in the days immediately following Hurricane Katrina?" Figure 1 presents a graphical tally of respondents' "first mentions" when asked who was most responsible for delays in the relief efforts. Louisiana Governor Kathleen Blanco is the modal response by a wide margin. Nearly one in five respondents blame the Governor primarily. The "federal government" was the second most frequent response, followed by New Orleans Mayor Ray Nagin, President George W. Bush, "state government," and FEMA and its former Director, Mike Brown (surprisingly coming in sixth, at less than 8%).[10] Clearly, the variable shows that there is considerable dispersion in Louisianian's attributions of responsibility.

[INSERT FIGURE 1 HERE]

Figure 2 presents a similar graphical tally of responses to the closed-ended attribution questions. Here, we report the percentage of respondents who believe that each queried actor

was responsible for "a lot of the problems" with the relief effort. The results are similar to the open-ended item in a couple of respects—Governor Blanco draws more criticism than President Bush and Mayor Nagin, and local government leaders other than the Mayor largely escape blame. In one respect, however, there is a striking difference: FEMA, well down the list of respondents' spontaneously offered blame targets, shows up as the number one villain in the closed-ended items, with nearly half the sample holding them responsible for "a lot of the problems." It appears that FEMA is clearly viewed negatively by many in Louisiana, but that it does not occur without prompting to most as a primary target for blame.

[INSERT FIGURE 2 HERE]

Having established the general patterns of blame attribution in Hurricane Katrina's aftermath, we can move to specific tests of our hypotheses involving political sophistication. Recall that Hypothesis 1 posits a positive relationship between political sophistication and the propensity to make diffuse causal attributions (reflected in the number of answers given to the open-ended query). Since the dependent variable here is a tally (with observed values ranging from 0 to 5), we use a Poisson regression, modeling the response count as a function of personal experiences with the storm, party identification, ideology, the standard array of demographics, and political sophistication.[11] Results of the model are presented in Table 1.

[INSERT TABLE 1 HERE]

Overall, the model provides a significant fit to the data, though only a few variables attain statistical significance. Republican partisanship is modestly associated with a higher number of attributions, perhaps because two of the three most central actors, Governor Blanco and Mayor Nagin, are Democrats (and, indeed, Blanco and Nagin are a common blame pairing in our open-ended responses). In addition, there appears to be a modest negative relationship between

evacuation as a result of the storm and the number of blame targets identified—it appears that personal experience sharpens the focus of blame attributions, though the exact nature of this relationship bears more scrutiny. McGraw and Pinney's (1990) work suggests that individuals with direct experience of an event would be likely to exhibit similar behavior to high sophisticates, as described here, yet this result runs counter to this hypothesis. Of course, the focus of our attention is the test of our hypothesis linking political sophistication to the number of attribution targets given by respondents. On this point, the results lend support to our argument. As predicted, high levels of political sophistication are strongly associated with a higher number of spontaneously offered attributions, a result that is by far the most powerful predictor in the model on statistical and substantive grounds.

An estimation of sophistication's effect on the number of spontaneous attributions offered by respondents can be found in Table 2. Here, we calculate the probabilities of individuals at the highest and lowest points on our sophistication scale offering specific numbers of responses to the open-ended attribution item, holding all other variables constant at their means. As might be expected, given our theory, high sophisticates are much less likely than low sophisticates to offer zero attributions (essentially a "don't know" response). Both groups are about equally likely to offer one attribution, but high sophisticates are much more likely to offer two, twice as likely to offer three, and so on. To the extent that this response tally captures differentiated and diffuse attributions, we have very strong support for our first hypothesis.

[INSERT TABLE 2 HERE]

We turn now to Hypothesis 2, which contends that more sophisticated respondents will be less likely to assign blame to the President for the poor response to Hurricane Katrina. We test this claim with a simple probit model of whether or not the respondent mentioned the

President in response to our open-ended attribution query. The dependent variable here codes *any* respondent mention of the President as being equal to 1, not just first mentions (the variable is coded 0 if the respondent does not cite the President at all). This is a coding decision that actually biases the test against our hypothesis. Since high sophisticates tend to offer multiple responses (see above), if they are still less likely to mention the president than low sophisticates, this will provide powerful support for our hypothesis.

As with the previous analysis, we model the probability of assigning blame to the President as a function of personal storm experiences, party identification, ideology, demographics, and, of course, political sophistication. The results are reported in Table 3.

[INSERT TABLE 3 HERE]

Unlike the response count model, this model has several control variables that are strongly predictive. Republicans are significantly less likely to blame President Bush than are Democrats, an unsurprising result.[12] Older respondents and those who evacuated as a result of the storm are also significantly less likely to attribute primary responsibility for the poor response to the President. Even after controlling for these effects, however, political sophistication remains a significant negative predictor of presidential attributions. Just as in the case of the economy (Gomez and Wilson 2001, 2006a), it appears that those who have a more sophisticated understanding of the political system are less likely to focus on its most obvious actor—the President—to the exclusion of others. Once again, a prediction of our theory finds validation; our second hypothesis is strongly supported by the data.

Our third and final hypothesis is related but distinct: that politically sophisticated respondents will be much more cognizant of the workings of federalism and, consequently, much more likely to attribute responsibility to actors at the state and local levels of government than

their less sophisticated counterparts. As a result, high sophisticates should be less likely to focus primary blame for poor disaster relief on the national government. To test this hypothesis, we code all respondents' first responses to the open-ended item into one of five categories: non-governmental (e.g. the Red Cross, the people of New Orleans), local government (e.g. the Mayor, parish leaders), state government (e.g. the Governor, the state police), federal government (e.g. President Bush, FEMA), or "all levels of government" (an answer offered by 12 respondents). We employ a multinomial logit model of the likelihood that an individual's response will fall into each of the four non-federal categories (that is, federal government is the referent, baseline category for the model). Independent variables are the same as have been employed in the previous models, and results are reported in Table 4.

[INSERT TABLE 4 HERE]

Looking across the four columns of the model, several patterns are apparent. First, personal experience of the storm is important, but the two variables that we have used to capture it work in opposite directions. Those who experienced property damage are less likely to shift blame away from the federal government (though the result is only significant *vis-à-vis* state government and "all levels"), while those who evacuated as a result of the storm are consistently *more* likely to blame the federal government. Clearly, more work is needed to sort out the effects of individuals' actual storm experiences on their assessments of blame for the poor response. Unlike in the model of specifically presidential attributions, race is clearly significant here: black respondents are dramatically less likely to blame non-governmental actors, local government, state government, or "all levels" than other respondents (and thus, by implication, much more indicting of the federal government). The partisanship and ideology measures are a mixed bag. Republicans are more likely to blame local government actors *vis-à-vis* the feds,

while conservatives are less likely to blame state government; otherwise, the political variables are insignificant. Finally, after controlling for all of these other factors, political sophistication—our main variable of interest—once again emerges as a powerful predictive variable. Politically sophisticated respondents are significantly more likely to assign primary blame for the Katrina response debacle to non-governmental actors, local government, and state government instead of looking to the national level for a scapegoat. Our third hypothesis, therefore, receives very strong support in this analysis. Political sophisticates are more likely than low sophisticates to assign responsibility to multiple actors across the political landscape.

Conclusion

The delayed, chaotic, and inadequate response to Hurricane Katrina, particularly in the New Orleans area, is almost universally regarded as a failure of government at some level. Given the unanimity of this consensus, the key political question becomes not *whether* blame should be assessed, but *toward whom* that blame should be directed. Our survey of Louisiana residents, conducted about nine months after the storm, shows that while certain actors (most notably the Governor) do get singled out for particularly widespread criticism, there is nothing approaching a consensus on who is most responsible for the failures.

At the same time, however, certain aspects of this diffusion of blame are systematic and predictable. Clearly, race and partisanship strongly color people's judgments of who to hold most accountable. Even when those factors are taken into account, however, citizens' levels of political sophistication play a powerful and consistent role in shaping their causal attributions. While Hurricane Katrina and its aftermath were unique and unprecedented events in many respects, the politics of blame in its wake were not. The same patterns that exist with regard to economic assessments and racial attitudes have clearly asserted themselves here as well. Once

again, we must appreciate the importance of citizen political sophistication if we are truly to understand the dynamics of attributions of responsibility, the "politics of blame," and the roots of governmental accountability.

FIGURE 1. "Who Was Most Responsible for the Delay in Providing Necessary Relief to the New Orleans Area in the Days Immediately Following Hurricane Katrina?" (Open Ended, 1st Mentions).

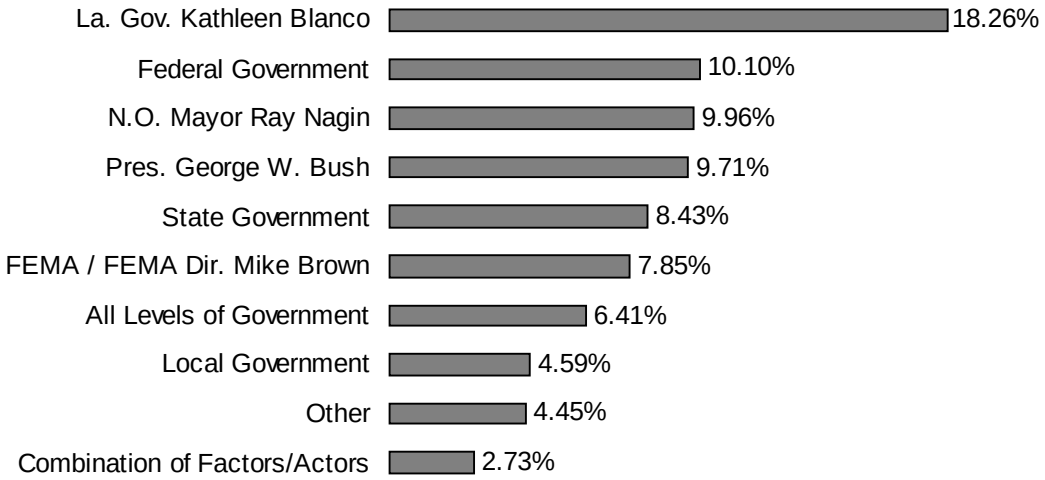

FIGURE 2. Percentage of Respondents Citing that Actor was Responsible for "A Lot of the Problems" Associated with the Relief Effort.

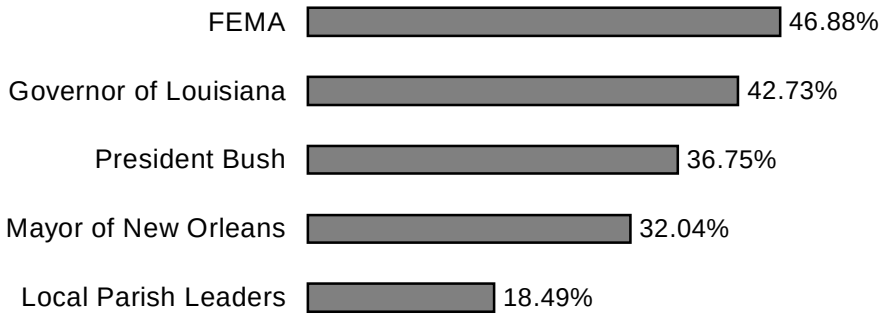

TABLE 1. Poisson Regression of the Number of Attributions of Responsibility for the Delayed Response to Hurricane Katrina.

Variable	**β**	**S.E.**	**exp(β)**
Constant	-.1297	.1709	.8784
Property Damage	.0545	.0697	1.0560
Evacuated	-.1216	.0732†	.8855
Education	-.0099	.0319	.9901
Age	-.0001	.0023	.9999
Gender (Female)	.0184	.0672	1.0186
Race (Black)	.0120	.0938	1.0121
Party Identification (Republican)	.0278	.0182*	1.0282
Ideology (Conservative)	.0063	.0216	1.0063
Political Sophistication	.3607	.1292***	1.4343

Log Pseudo-Likelihood = -594.048
Wald χ^2 = 19.47(9)**
N = 498

Poisson Goodness of Fit χ^2 =253.31 (488)

Note: The exp(β) = $E(Y \mid X_i)$, which represents the expected count change associated with a unit change in X_i.
† $p < .10$, two-tailed; * $p < .10$, one-tailed; ** $p < .05$, one-tailed; *** $p < .01$, one-tailed.

TABLE 2. Probability of Offering Specific Numbers of Attributions, by Sophistication Level.

Number of Responses (*Y*)	**Pr(*Y* = *y*) Low Sophistication**	**Pr(*Y* = *y*) High Sophistication**
0	0.41	0.28
1	0.37	0.36
2	0.16	0.23
3	0.05	0.10
4	0.01	0.03
5	0.00	0.01

Note: Predicted probabilities calculated based on model reported in Table 1. Calculations hold all other variables constant at their means, while holding sophistication across its indicated value (Long 1997, 218).

TABLE 3. Probit Model of Mentioning the President Among Those Most Responsible for Poor Katrina Response.

Variable	**β**	**S.E.**
Constant	.667	.540
Property Damage	.132	.225
Evacuated	-.578	.236***
Education	.119	.092
Age	-.017	.007***
Income	-.038	.050
Gender (Female)	-.093	.209
Race (Black)	-.044	.257
Party Identification (Republican)	-.193	.069***
Ideology (Conservative)	-.027	.066
Political Sophistication	-.804	.442**

Pseudo R^2 = .1505
Wald χ^2 = 35.59(10)***
N = 380

* $p < .10$, one-tailed; ** $p < .05$, one-tailed; *** $p < .01$, one-tailed.

TABLE 4. Multinomial Logit Model of Level of Government Attributions (Base Category=Federal Government).

Variable	**Non-Governmental**	**Local Government**	**State Government**	**"All Levels"**
Constant	-.459 (1.157)	.191 (.932)	2.243 (.916)***	-2.372 (1.587)*
Property Damage	.253 (.539)	.551 (.442)	.905 (.414)**	1.396 (.818)**
Evacuated	-.811 (.564)*	-.660 (.439)*	-.771 (.421)**	-.562 (.741)
Education	-.063 (.217)	.019 (.196)	-.036 (.195)	.173 (.316)
Age	.007 (.013)	.007 (.012)	-.003 (.012)	.013 (.021)
Gender (Female)	.129 (.459)	-.451 (.398)	-.133 (.401)	-.965 (.769)
Race (Black)	-1.199 (.574)**	-1.032 (.476)**	-.636 (.400)*	-1.776 (1.266)*
Party ID (Republican)	.149 (.128)	.218 (.126) **	-.100 (.129)	.405 (.216)**
Ideology (Conservative)	-.030 (.156)	-.101 (.144)	-.266 (.145)**	-.295 (.252)
Political Sophistication	1.823 (.910)**	2.171 (.786)***	1.227 (.834)*	.401 (1.428)

Pseudo R^2 = .1057
Wald χ^2 = 118.76(36)***
N = 404

* $p < .10$, one-tailed; ** $p < .05$, one-tailed; *** $p < .01$, one-tailed

Notes

[1] According to the draft final report of the Army Corps of Engineers' "Interagency Performance Evaluation Taskforce (IPET)," Hurricane Katrina's storm surge caused 50 major breaches in New Orleans' hurricane protection system, severely damaging "168 of the system's 350 miles of protective structures, such as levees and floodwalls" (U.S. Army Corps of Engineers 2006, 3)

[2] Throughout this paper, we will focus our attention on the effects of Hurricane Katrina on southeastern Louisiana, and especially New Orleans. This is not meant to downplay either the significant damage that Katrina did to Mississippi and Alabama nor the devastation that Hurricane Rita visited on southwestern Louisiana soon after. However, it was in response to Katrina's devastation of New Orleans that governmental rescue and relief efforts were seen as most tragically inadequate, and it was this failure that became most salient in the public mind. Therefore, both in our survey and in our discussion here, we focus on attributions of responsibility for that particular failure.

[3] For the fullest presentation of the Theory of Heterogeneous Attribution, see Gomez and Wilson (2001). What follows here is a summary of the theory's most essential elements, particularly as they apply in the case of Hurricane Katrina.

[4] Our own survey, for example, confirms that people are much more likely to correctly identify the Vice President than the Lieutenant Governor. We do not test identifications of specific parish leaders, but suspect that those would be lower still.

[5] Some might ask why we chose to do a sample of Louisiana residents instead of a national sample or a sample of all affected states (Louisiana, Mississippi, and Alabama). The first and easiest answer is that it was within the purview of the L.S.U. Survey Research Center, whose assistance with this project was substantial and invaluable. Beyond that, however, Louisiana was the only state in which national, state, *and* local political leaders all received intense scrutiny in the storm's aftermath, and in which citizens might reasonably hold all three accountable for the rescue and relief failures. In addition, several national surveys measuring attitudes about the response to Katrina already exist, so a survey of the state most dramatically affected by the storm serves as an interesting point of comparison.

[6] According to the U.S. Census Bureau's *American Community Survey*, Louisiana's post-Katrina (October-December 2005) population was 47.2% male (down marginally from 47.4% before the storm) and 28.5% black (down appreciably from 31.6% before the storm). This results in a joint probability distribution of 36% white female, 32.4% white male, 16.6% black female, and 15% black male. Our sample, by contrast, is 51.4% white female, 25.4% white male, 17.1% black female, and 6.1% black male, necessitating a weighting of the data by race and gender. We ran all of our models with weights based on both the pre- and post-Katrina census estimates and, as no substantive differences emerged, report only the models with post-Katrina weightings here.

[7] Factor analysis confirms that all of the knowledge items load on a single significant factor (eigenvalue=2.29), with factor loadings ranging from .43 (Louisiana House control) to .64 (Condoleezza Rice identification).

[8] This question wording and set of attribution targets mimics a set of questions contained in a Wisconsin Public Radio/St. Norbert College survey of Wisconsin residents about Hurricane Katrina done in the fall of 2005. A later phase of this project will compare the attributions and perceptions of Louisiana residents with those of outside observers at some distance from the tragedy.

[9] For a discussion of why education is a poor and sometimes misleading proxy for political sophistication, see Luskin (1987) and Gomez and Wilson (2006b).

[10] Of course, it is possible that some of the 10% who responded "federal government" may have had FEMA at least partially in mind as well.

[11] Diagnostic tests on the underlying data confirm Poisson, rather than negative binomial, as the nature of the distribution. Poisson Goodness of Fit $\chi^2 = 253.31$, d.f = 488, $p < .001$.

[12] This strong partisan effect likely accounts for major difference between our own findings and those of Huddy and Feldman (2006). In this model, race is not a significant predictor of blaming the President, likely because any apparent racial effects are subsumed by Louisiana blacks' overwhelming propensity to be strong Democrats.

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